

AN INVESTIGATION OF A FIRST-YEAR SEMINAR PROGRAM AND  
SENSE OF BELONGING: A STUDY OF FIRST-YEAR STUDENTS  
ENROLLED AT A 4-YEAR, PRIVATE INSTITUTION

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**ABSTRACT**

Many institutions of higher education offer first-year seminars; academic courses designed to help new college students successfully transition to the rigors and demands of life inside and outside the classroom. There is a substantial body of research that validates first-year seminars as successful in accomplishing this goal. There are also numerous studies that have investigated what in the literature is termed a “sense of belonging.” This research demonstrates that college students who experience a sense of belonging feel welcomed, included, connected, and part of the community. These students are more likely to succeed and be retained at their institution. While there is extensive literature examining both of these areas separately, there is limited literature that connects them. This dissertation aimed to fill that gap in the literature by investigating synergies between first-year seminars and sense of belonging at a 4-year, private, liberal arts university. Results of the study showed that first-year students experienced sense of belonging through developing relationships with peers and faculty, through being informed about institutional resources and policies, and by feeling part of a supportive community. The first-year seminar program did have a positive effect on first-year students’ desire to graduate from the institution. An implication for practice includes faculty development centered on fostering a sense of belonging, facilitating opportunities for students to form relationships with their peers and faculty, ensuring that classrooms and institutional environments are inclusive and welcoming, and by informing first-year students about the resources and supports available to aid in their transition and retention.

*Keywords:* first-year seminars, sense of belonging, teaching and learning, retention

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**TABLE OF CONTENTS**

|  | Page |
|--|------|
| ABSTRACT.....  | ii   |
| ACKNOWLEDGMENTS .....                                    | iii  |
| LIST OF TABLES .....                                     | vi   |
| LIST OF DIAGRAMS.....                                    | vii  |
| CHAPTER  |      |
| 1. INTRODUCTION .....                                    | 1    |
| Background of Problem .....                              | 4    |
| Statement of Problem and Need for the Study.....         | 5    |
| Purpose of the Study .....                               | 6    |
| Research Questions .....                                 | 8    |
| Significance of the Study .....                          | 8    |
| 2. REVIEW OF RELATED LITERATURE .....                    | 10   |
| Transition to College.....                               | 10   |
| First-Year Seminars .....                                | 13   |
| Sense of Belonging .....                                 | 17   |
| Race and Ethnicity .....                                 | 21   |
| Gender.....  | 23   |
| Online Learning .....                                    | 24   |
| Attrition and Retention .....                            | 27   |
| Validated Instruments Incorporated into this Study ..... | 29   |
| Summary.....   | 36   |

|   |     |
|---|-----|
| 3. RESEARCH DESIGN AND METHODOLOGY .....            | 40  |
| Research Questions .....                            | 40  |
| Purpose of the Study .....                          | 41  |
| Research Methods and Procedures .....               | 41  |
| Summary .....                                       | 50  |
| 4. RESULTS AND FINDINGS .....                       | 51  |
| Research Question #1 .....                          | 52  |
| Research Question #2 .....                          | 61  |
| Research Question #3 .....                          | 74  |
| Summary .....                                       | 76  |
| 5. DISCUSSION .....                                 | 78  |
| Discussion of Findings .....                        | 79  |
| Limitations of the Study .....                      | 85  |
| Implications for Practice and Future Research ..... | 87  |
| Conclusion .....                                    | 91  |
| REFERENCES CITED .....                              | 93  |
| APPENDICES  |     |
| A. FINAL STUDY INSTRUMENT .....                     | 106 |
| B. SURVEYMONKEY INSTRUMENT DESIGN .....             | 110 |
| C. STATEMENT MAPPING .....                          | 115 |
| D. RESEARCH QUESTIONS AND DESIGN ALIGNMENT .....    | 117 |
| E. INITIAL DRAFT OF STUDY INSTRUMENT .....          | 119 |

**LIST OF TABLES**

| Table   | Page |
|---|------|
| 1. Gender of sample .....   | 51   |
| 2. Race/Ethnicity of sample.....  | 52   |
| 3. Students' sense of belonging in the first-year seminar program .....         | 54   |
| 4. Students' sense of belonging at the university .....                         | 56   |
| 5. Students' sense of belonging within the larger institution .....             | 56   |
| 6. Instrument Question 5 .....  | 62   |
| 7. Instrument Question 6 .....  | 62   |
| 8. Instrument Question 7.....   | 63   |
| 9. Instrument Question 29 .....   | 63   |
| 10. Correlations with Question 29 .....   | 68   |
| 11. Comparison of students answering "Yes" to "Maybe or No" on statements ..... | 69   |
| 12. Rotated component matrix .....  | 72   |
| 13. Results of t-tests for Factor 1.....  | 74   |
| 14. Chi square for gender .....   | 75   |
| 15. Differences among race/ethnicity.....                                       | 76   |

**LIST OF DIAGRAMS**

| Diagram  | Page |
|--|------|
| 1. Word cloud from narrative comments in Question 28 ..... | 60   |
| 2. Word cloud from narrative comments in Question 30 ..... | 67   |

## CHAPTER 1 – INTRODUCTION

Students finishing their high school diploma may decide to enter the workforce or elect to further their education. Those deciding to enroll in higher education possess various backgrounds, abilities, ages, genders, races, and socioeconomic statuses (Miller & Lesik, 2014) and choose to attend for a variety of reasons. As noted by Gibney et al. (2011), the primary factors that motivate students to attend college are to enhance employment prospects, explore academic interests, increase social opportunities, satisfy parental expectations, and because college is the typical, customary next step after high school. Many traditional freshmen reference getting a good job and making money as the reasons for attending college (McKinney & Denton, 2006). A college degree has proven long-term benefits for the individual, including economic self-sufficiency and generational wealth (Kuh et al., 2008). According to Baum et al. (2013), the earnings gap between those with college degrees versus those without has widened. The value of a college degree offers personal benefits and positive returns that include higher wages and better careers.

Whatever the motivating factor, furthering one's education not only benefits the individual but also society as a whole. The positive impact on society includes increased tax collection and less reliance on public assistance (Heller, 2013). Further, Baum et al. (2013) noted that federal, state, and local governments receive "increased tax revenues from college graduates and spend less on income support programs for them, providing a direct financial return on investments in postsecondary education" (p. 5). Higher education is a financial value-add for the individual, while the individual also contributes

to local, state, and federal tax revenues resulting in less reliance on governmental assistance programs.

The personal and societal benefits of earning a college degree are documented throughout the literature. Meanwhile, institutions of higher education are under a microscope to increase student success and graduation rates. Student withdrawal results in lost revenue for colleges and universities (O’Keeffe, 2013) and high attrition rates have a negative effect on institutional image (Schnell & Doetskott, 2003). Tuition and fees are a financial lifeline for colleges and universities and low retention rates force institutions to continue to replace students who withdraw (Jamelske, 2009). As noted by Museus et al. (2017), low rates of degree attainment negatively affect the individual, the institution, and society. These ramifications include individuals earning less (Kuh et al., 2008), lost tuition revenue for institutions (O’Keeffe, 2013), and governments collecting less tax revenue while ensuring public assistance programs are funded (Heller, 2013).

Educators and practitioners should consider the campus environments, supports, and outcomes that facilitate student success, persistence, and graduation. Student success, the idea that college students progress, retain, and graduate from their institution, is “predicated upon the extent to which students feel welcomed by institutional environments and climates” (Johnson et al., 2007, p. 526). One reason why college students do not graduate is that they lack a sense of belonging (Slaten et al., 2018). According to Malone et al. (2012), “the motive to belong is central to human existence and culture” (p. 311). Sense of belonging refers to all students’ feeling supported, connected, and accepted (Strayhorn, 2019). For students of color, however, Walton and Cohen (2007) suggest that minority students experience “belonging uncertainty” where

students are uncertain if they, and other students of color, belong. The stigmatization of – people like me do not belong here – creates uncertainty about fit and belongingness and contributes to racial disparities in achievement (Walton & Cohen, 2007).

Additionally, students in online programs complete coursework through virtual instruction and delivery (Stephen & Rockinson-Szapkiw, 2021). The experiences of students taking classes virtually versus those within the brick-and-mortar environment are often different because of teaching methods and levels of faculty engagement. For online students, success in the virtual learning environment is predicated on interactions with their peers and faculty (Herridge et al., 2020). Virtual students that do not experience camaraderie with their faculty and peers often feel isolated and dissatisfied with their online learning (Thomas et al., 2014). Thus, in the online learning environment, student-to-student and student-to-instructor interactions create community, reduce transactional distance, and create a social presence among students and instructors (Chu et al., 2021).

In order to foster a sense of belonging for all incoming students, colleges and universities implement foundational programs that help new students transition effectively into the collegiate environment (McKinney & Denton, 2006). These programs include new student orientation and first-year seminars (Permzadian & Credé, 2016). First-year seminars are designed to help students transition successfully from high school to college (Jenkins-Guarnieri et al., 2015), while sense of belonging cultivates in students an affiliation with their higher education institution (Hurtado & Carter, 1997; Hausmann et al., 2009). Through exploring first-year seminars, sense of belonging, and retention, a question exists: Can first-year seminars contribute positively to institutional retention efforts and foster students' sense of belonging?

### **Background of Problem**

Success for new students is often grounded on the first-year experiences offered in college (Al-Sheeb et al., 2018). In an effort to foster preparedness and awareness of the expectations associated with college, institutions have developed various programs that help new students transition successfully (McKinney & Denton, 2006; Porter & Swing, 2006). Typically, colleges and universities provide new students with an orientation that may take place before the start of the semester and/or as a first-year seminar (Permazadian & Credé, 2016). New student orientation and first-year seminars help new college students transition into the collegiate environment (Al-Sheeb et al., 2018).

These programmatic interventions are a benefit to first-year students. Another concept, sense of belonging, also has positive implications for college students both socially and academically (Morieson et al., 2013). College student success is connected to feeling welcomed within the educational environment (Johnson et al., 2007). Through exploring sense of belonging related to students' academic and social interactions, educators can best support students as they develop a connection to their respective campuses (Hurtado & Carter, 1997). According to Goodenow (1993):

The need for belonging, social support, and acceptance takes on special prominence during adolescence, particularly during early adolescence when young people begin to consider seriously who they are and wish to be, with whom they belong, and where they intend to invest their energies and stake their futures. (p. 81)

Students develop a strong sense of belonging through feeling accepted, valued, and important (Peacock & Cowan, 2019). Through exploring the concept of sense of belonging, it provides an opportunity for faculty, staff, and administrators to consider how sense of belonging can be cultivated within a first-year seminar program.

### **Statement of Problem and Need for the Study**

The literature is rich in exploring sense of belonging and first-year seminars as distinct ideas, yet little research exists that pairs the two concepts together. It is reasonable to assume, despite the lack of literature intentionally linking the topics that a relationship exists between sense of belonging and first-year seminars. Students that possess a strong sense of belonging have an affiliation with their institution (Hurtado & Carter, 1997; Hausmann et al., 2009). They develop bonds with their faculty and peers, the campus environment is welcoming, and there are opportunities for students to join organizations and attend cultural programs (Means & Pyne, 2017). First-year seminars support students' transition to college through engaged faculty, inclusive classrooms and campus communities, and by empowering students to learn and improve upon their adjustment and academic skills (Sobel, 2018).

With an increased accountability to graduate their students, colleges and universities are focused on how best to retain their students (Tovar & Simon, 2010). Student persistence is a priority for institutions of higher education and as a result, a variety of retention efforts, including first-year seminars, have been implemented to help students reach graduation (Tinto, 1998). As one such intervention, the true value of a first-year seminar is the institutions' ability to assess whether participation increases retention and the probability of graduation (Hendel, 2007).

The ultimate benefit of identifying connections between first-year seminars and sense of belonging for students and institutions could result in increased student satisfaction and retention rates. Due to the prevalence of first-year seminar programs and the intended benefits associated with cultivating a sense of belonging, this study explored

the idea that faculty and first-year seminar program administrators can incorporate practices that contribute to fostering students' sense of belonging. This study was designed to ascertain if a first-year seminar program can enhance a student's sense of belonging and positively affect institutional retention efforts.

### **Purpose of the Study**

The transition from high school to college can be a challenge for students. Clark's (2005) research identified four themes of challenges that first-year students face, including overcoming an obstacle, seizing an opportunity, adapting to change, and pursuing a goal. Many new first-year students experience self-doubt and lack confidence upon arriving on campus. These students may feel underprepared, that they do not belong, and uncertain about their ability to succeed (Means & Pyne, 2017). College students' initial campus experiences can affect their future success and long-term outcomes (Woosley, 2003). In order to increase first-year retention rates, institutions can develop strong academic habits, provide a challenging curriculum, and offer numerous resources to provide students support (Wakefield et al., 2016). As noted by Cole et al. (2020), given the financial and social implications, students dread having to make the difficult decision to withdraw from college.

To combat attrition and withdrawal, colleges and universities have the opportunity to focus first-year programming on relationship development and offer adjustment support upon new students' arrival (Woosley, 2003). According to Freeman et al. (2007), when experienced early in students' collegiate tenure, sense of belonging can play an important role in their academic success. Recognizing that the transition to college is one of change and potential discomfort leaving home (Chow & Healey, 2008),

institutions that have supports in place, e.g., first-year seminars, can successfully retain and graduate their students (Permzadian & Credé, 2016).

First-year seminar programs have the opportunity to create and foster an inclusive and welcoming academic environment via course instructors that possess content expertise and interest in developing relationships with their students. In their study of 10 low-income, first-generation students who participated in three semi-structured one-on-one interviews, Means and Pyne (2017) found college faculty to be instrumental in helping students develop their sense of belonging. Characteristics and practices of faculty that foster sense of belonging, particularly for first-year students, include regular outreach, having individualized conversations, possessing a positive attitude and excitement for teaching, and by offering additional support beyond scheduled class time (Means & Pyne, 2017). Further, faculty are able to facilitate opportunities for first-year students to become knowledgeable about campus and academic resources and allow for goal setting and academic planning (Rogerson & Poock, 2013). Faculty can also intentionally incorporate in-course and outside of class relationship building and interactions with their students (Kim & Lundberg, 2016). These practices can enable first-year students to develop a sense of belonging, actively engage in the first-year seminar curriculum, achieve collegiate success, and graduate from the institution.

The primary goal of this study was to identify and determine if the first-year seminar program at the host study institution fosters a sense of belonging in their first-year students. Students that experience a sense of belonging can feel connected to and cared for at their college or university. First-year seminars offer an academic experience and welcoming environment that helps students transition successfully to college through

the facilitation of resources, support, and educational success strategies that can be of benefit throughout students' collegiate careers. When explored jointly, first-year seminars and sense of belonging intersect with one another and can potentially increase student retention and graduation rates.

### **Research Questions**

The research questions for this study are:

1. Does the first-year seminar program foster a sense of belonging among first-year students enrolled at a 4-year, private institution?
2. Did participation in the first-year seminar program positively contribute to students' intention to graduate from the institution?
3. Are there differences in students' sense of belonging based on gender and race/ethnicity?

### **Significance of the Study**

Because of the history and prevalence of first-year seminars on college campuses and their importance to support and facilitate students' transition from high school to college, this research attempts to close a gap in the literature by incorporating sense of belonging. Independently, sense of belonging and first-year seminars are concepts that help students create an affinity and connection to their colleges and universities and contribute to institutional retention efforts. The literature is vast in exploring sense of belonging and first-year seminars as individual ideas, yet minimal research exists that couples the two together. As highlighted within the literature, parallels do exist between sense of belonging and first-year seminars. When students experience a strong sense of belonging, they are engaged in and connected to the campus community, they possess an

affiliation to their institution, and students are more likely to succeed and retain. First-year seminars support students' transition to college through engaged faculty, inclusive classrooms, and by empowering students to learn and develop academic and personal resilience skills that lead to collegiate success. This research was designed to investigate whether institutions that incorporate practices that foster a sense of belonging within their first-year seminar program can positively affect a student's experience and increase their desire to retain.

Chapter 2 will present a review of literature about students' transition from high school to college, as well as offer more details and theoretical underpinnings about first-year seminars and sense of belonging. Additional reviews of literature will focus on retention, race and gender, and online learning. The chapter closes with a brief synopsis of the literature and existing studies that served as the foundation for the development of the study instrument.

## CHAPTER 2 – REVIEW OF RELATED LITERATURE

The purpose of Chapter 2 is to review the literature centered on students' transition from high school to college, the history and intent of first-year seminars, and research about sense of belonging. Literature about retention and race and gender are also included. Further, due to the COVID-19 pandemic, the host institution shifted their first-year seminar program to a virtual modality and as a result, literature about online learning is included. This chapter highlights the challenges associated with new students' adjustment from high school to college and focuses on first-year seminars as an intervention to support new students' transition. In addition to new student orientation programs, first-year seminars are a mainstream academic offering on college campuses designed to help students transition effectively from high school to the rigors of higher education. First-year seminars vary in thematic types and structure; a brief overview will be provided. Additionally, several definitions are included that offer foundational insights into the elements associated with sense of belonging.

### **Transition to College**

The transition to college for new students is often a positive experience; however, it is also a time of mixed emotions and change (Chow & Healey, 2008). New student success is often determined by their ability to effectively transition from high school to college (Clark, 2005). Students transitioning from high school to college may be overwhelmed, having left friends and previous relationships for the unknown and the potential culture shock of higher education (McKinney & Denton, 2006). Morieson et al. (2013) discovered that the transition to college tested students both academically and socially. Students confront various challenges during their transition to college, some

positive and negative, both inside and outside of the classroom (Clark, 2005). Many new students arrive at college with self-doubt and lack confidence to succeed (Means & Pyne, 2017). Hoffman et al. (2003) discovered that students' greatest anxiety as they transitioned to college were academic concerns and time management. Chow and Healey (2008) noted that students' collegiate transition is likely one that represents the first time students are away from home for an extended period. This dislocation from home can cloud new college students' sense of belonging and identity. New students may cope with the stress associated with college life, while also experiencing feelings of loss related to separation from family and friends (Buote et al., 2007). Also, after a period of initial excitement and interest in higher education, students' enthusiasm and motivation for college are often dampened once the academic and social realities are fully experienced (Gibney et al., 2011).

Bowman et al. (2019) stated that new students enter college with varying identities and educational abilities and aspirations that affect students experiencing a sense of belonging, achievement, and desire to persist. Johnson et al. (2007) discovered that for all the racial groups (African Americans, Asian Pacific Americans, Hispanics/Latinos, Whites/Caucasians, and Multiracial/Multiethnic) included in their study of 2,967 first-year students, a successful social and academic transition to college was the result of a strong sense of belonging fostered at their respective campuses. The transition to college, particularly for students of color, requires institutional programmatic efforts that focus on adjustment challenges related to finances, social, and academics (Cole et al., 2020). These students feel underprepared and that they do not belong (Means & Pyne, 2017). Additionally, as stated by Morieson et al. (2013), the transition to

university can be especially challenging for students from low socioeconomic backgrounds and international students. As a result of these challenges, students may withdraw from a college during their first year for various reasons, including family and economic pressures (Wakefield et al., 2016).

In response to help all students transition effectively to college, institutions have implemented several initiatives (Gibney et al., 2011). Typically, colleges and universities provide new students with an orientation that may take place before the start of the semester and/or as a first-year seminar (Permezadian & Credé, 2016). First-year seminars help students acclimate to their new learning environment and provide numerous supportive interventions (Wakefield et al., 2016). Seminars play an important role by introducing students to the academic rigors of college, including helping students adapt and develop new strategies for overcoming challenges (Clark, 2005).

The format and substance of first-year seminars, however, can look different from campus to campus (Hoffman et al., 2003). First-year seminars are traditionally for-credit classes that facilitate a combination of both transitional and academic content to support students' transition from high school to college (Al-Sheeb et al., 2018). Seminars are offered in both small group and large lecture formats (Wakefield et al., 2016) and they can vary in purpose and content, from those focused on academics to those centered on student life and transitional success to seminars that blend both concepts (Hendel, 2007). Some institutions provide a uniform curriculum, regardless of the course section and faculty member, where first-year students generally experience the same material, while other institutions allow for faculty creativity around a specific academic topic (Sobel, 2018). Irrespective of curricular theme, first-year seminars aim to create community and

provide the necessary resources and skill-building opportunities intended to increase student retention and collegiate success.

### **First-Year Seminars**

According to Padgett et al. (2013), first-year seminars have been part of the higher education landscape for the past three decades, and they are designed to support the transition and learning experiences of new students. First-year seminars vary based on content, credits, and pedagogy, and exist at 90% of colleges and universities throughout the United States (Reid et al., 2014). Sobel (2018) defined first-year seminars as “courses designed to teach first-year undergraduates a range of skills for intellectual and practical success in higher education. These courses appear in a range of formats in terms of themes, number of credits, structure, and specific goals” (p. 68). Originally known as freshman courses, John Gardner, an educator and researcher who focused on college student transitions, advocated that these courses be rebranded as first-year seminars with the goal to increase academic performance and retention of first-year students (Reid et al., 2014).

As stated by Permzadian and Credé (2016), “the main objective of a first-year seminar should be helping students adjust academically and socially while also fostering an attachment to the institution” (p. 305). First-year seminars are intended to help students transition from one academic stage, high school, to the next, college (Zerr & Bjerke, 2016) and to assist students as they transition into their new collegiate environment (Jenkins-Guarnieri et al., 2015). Despite seminars varying based on content, credits, and pedagogy, they also have commonality like regular meeting times and consistent instructors (Rogerson & Poock, 2013; Sobel, 2018). First-year seminars

deliver learning opportunities atypical from the rest of the undergraduate curriculum (Padgett et al., 2013). They are customarily structured with a low student to faculty ratio while furthering skill development for students centered on time management, research, writing, promoting campus resources, and building the student-faculty relationship (Sobel, 2018).

As noted by Sobel (2018), “The majority of universities and four-year colleges across the USA offer at least one form of a first-year seminar program” (p. 67).

According to Porter and Swing (2006), five typical formats exist for first-year seminars – transition, special academic, discipline, remedial, and a mixed format. Of the five first-year seminar foci, the most popular are those of the “transition theme,” which support students’ transition to college through both academic skill development and engagement in campus opportunities and resources (Porter & Swing, 2006). The second most incorporated theme is “special academic,” which focuses less on student transition and places more emphasis on an academic topic (Zerr & Bjerke, 2016). Special academic, the theme utilized at the study host institution, allows seminar faculty to shape the course around a specific topic of passion (Sobel, 2018).

McKinney and Denton (2006), who reported on their teaching of a first-year seminar, identified several important objectives of first-year seminars, including to improve students’ academic skills; develop a sense of community; establish relationships between faculty, staff, and students; familiarize students with campus resources; and encourage participation in collaborative learning. Traditional topics of first-year seminars include providing new students with important transitional information related to academic policies and procedures, campus and career resources, academic planning, and

community integration (Rogerson & Pooock, 2013). Typical first-year seminar activities include exposure to campus resources and policies, an introduction to career planning and goal setting, and the cultivation of time management and study skills (Permzadian & Credé, 2016). Porter and Swing (2006) and Clark (2005) noted that first-year seminars can build academic confidence in students through providing assistance with study skills and reviewing academic expectations.

As noted by Permzadian and Credé (2016), students' transition from high school to college often involves numerous academic and social adjustments. Entry into a new collegiate environment triggers stressors that challenge students' coping skills and adjustment strategies (Hoffman et al., 2003). First-year seminars help new students acclimate by providing information about on-campus resources, as well as social support from the course instructor and their peers. Students' ability to successfully integrate and develop relationships with faculty and peers can reduce feelings of isolation (Clark & Cundiff, 2011). First-year seminars are designed to support students' adjustment and are expected to have a positive effect on grades and retention (Permzadian & Credé, 2016) and success during the first year (Porter & Swing, 2006). Seminars also serve as an important course to advance undergraduate education (Padgett et al., 2013) and as a foundation for student success (Wakefield et al., 2016).

Through conducting interviews, observations, and document analysis, Reid et al. (2014) studied three institutions, located in the Southeastern, Intermountain West, and the Southwestern United States, with a first-year seminar program. The authors discovered several commonalities that supported student success. First, the curriculum was rigorous, but not overwhelming for first-year students. Second, each institution promoted academic

and career options and campus resources. Third, the authors discovered that it was important to select the right faculty to teach courses. The desired qualities associated with the ideal faculty included approachability, knowledge about course content, and an exhibited desire to work with students. Finally, first-year seminars were interactive between students and their faculty member.

Despite the prevalence of first-year seminars, little is known about their impact because most studies have focused only on a single institution (Padgett et al., 2013; Porter & Swing, 2006; Reid et al., 2014; Schnell & Doetkott, 2003) and because research has predominantly explored course curricula (Porter & Swing, 2006). Most analyses of the first-year experience center on a single institution, student body, and program (Jamelske, 2009). According to Porter and Swing (2006), “Given the wide-spread adoption of first-year seminars and the substantial investment of resources they represent, understanding how to best target course components to achieved desired outcomes is much needed” (p. 92).

Unfortunately, according to Permzadian and Credé (2016), first-year seminars have only slightly positively affected GPA and retention efforts. There are also conflicting reports regarding first-year seminars improving student retention (Zerr & Bjerke, 2016). Yet, Padgett et al. (2013) are confident that first-year seminars serve an important role in the holistic development of students. Jenkins-Guarnieri et al. (2015) found that students enrolled in a first-year seminar were more likely to retain into the following semester versus students who did not participate in a first-year seminar. First-year seminars can provide evidence that they help students integrate into the social and academic life of the institution, while also improving student persistence and success

(Pittendrigh et al., 2016). As stated by Rogerson and Pooch (2013), “first-year seminars have a clear and positive impact on retention rates” (p. 169). Participation in a first-year seminar increases the probability that a student will graduate (Hendel, 2007), as well as experience higher levels of satisfaction, campus engagement, and higher grades (Jamelske, 2009). Seminars are associated with increased levels of institutional graduation and retention rates (Miller & Lesik, 2014).

Freeman et al. (2007) recommend that first-year seminars create opportunities for relationship building between students and faculty to enhance students’ sense of belonging. For students transitioning to college, sense of belonging is cultivated by university staff helping students feel connected to the institution through regular communication and when appropriate, offering genuine concern and empathy (Meehan & Howells, 2019). When students have positive peer interactions, supportive faculty, and opportunities for involvement, they experience a sense of belonging (Strayhorn, 2019). Research has shown that student interactions with their peers, as well as with faculty, are important toward having positive experiences in higher education (van Herpen et al., 2020). In the social sphere, sense of belonging is fostered when peers engage with one another about topics such as politics, diversity, personal values and beliefs, and religion (Cole et al., 2020). According to Meehan and Howells (2019), college students who feel connected to the people, place, and their academics are likely to feel they belong at their institution.

### **Sense of Belonging**

Within this section are numerous definitions of sense of belonging, as well as literature that identifies the practices associated with fostering a sense of belonging. Prior

to moving forward, however, I want to offer a caveat. The literature uses “sense of belonging” and “a sense of belonging” interchangeably and throughout this paper, I will do the same. Additionally, unless referencing a formal instrument or scale, sense of belonging will not be capitalized.

Hausmann, et al. (2009) describe “students’ sense of belonging as their psychological sense of identification and affiliation with the campus community” (p. 650). According to Tovar and Simon (2010), sense of belonging is “an individual’s sense of identification or positioning in relation to a group or to the college community” (p. 200). Bollen and Hoyle (1990) suggest that sense of belonging is expressed by how someone feels personally connected to a group and the positive morale created because of the relationship. According to Goodenow (1993), sense of belonging in a school or classroom setting is “the extent to which students feel personally accepted, respected, included, and supported by others in the school social environment” (p. 80). Further, Han et al. (2017) describe sense of belonging as one’s identification with and affiliation within a community. Finally, Strayhorn (2019) defines college student sense of belonging as:

students’ perceived social support on campus, a feeling or sensation of connectedness, and the experience of mattering or feeling cared about, accepted, respected, valued by, and important to the campus community or others on campus such as faculty, staff, and peers. (p. 4)

Because of the inclusive nature of this definition, especially regarding one’s sense of feeling included and connected with others, Strayhorn (2019) will serve as the primary, foundational definition guiding this study.

The aforementioned definitions and overarching ideas frame the conversation about college students’ sense of belonging through identifying common themes that emerge from the research, including students’ connectedness and affiliation with their

college and university communities. According to Han et al. (2017), “Given the importance and definition of sense of belonging, researchers have been interested in its role in educational processes and outcomes” (p. 1122). Sense of belonging is a basic human need that increases happiness, wellbeing, and leads to good health (Strayhorn, 2019). On the contrary, students who experience loneliness and anxiety are likely to have a low sense of belonging that can negatively affect academic success (Peacock & Cowan, 2019). Through comprehending students’ sense of belonging, practitioners can be better equipped to recognize the interplay between the student, the community and a student’s campus experience (Johnson et al., 2007). Cultivating sense of belonging can lead to the greater likelihood of student success (Museus et al., 2017).

College students’ sense of belonging is influenced by the way they feel connected to their campus environment (Johnson et al., 2007). Museus et al. (2017) found that through acknowledging the relationship between campus environments and sense of belonging, educators can improve student outcomes and success. Students who connect with others, the campus environment, and with their academic major are more likely to experience a sense of belonging (Meehan & Howells, 2019). As noted by Hausmann et al. (2009), students integrated within the campus community are likely to possess a strong sense of belonging and persist at the institution. Their study results showed that students with a high sense of belonging were committed to the institution and they intended to remain enrolled (Hausmann et al., 2009). A greater sense of belonging at the institution is reflected in student satisfaction and persistence (Hoffman et al., 2003).

Hurtado and Carter (1997) suggest that students’ sense of belonging may be affected by both social and academic experiences. The authors contend that sense of

belonging allows practitioners to assess whether academic or social interactions crystalize one's "affiliation and identity with their colleges" (p. 328). Means and Pyne (2017) uncovered institutional supports that positively affected sense of belonging such as identity-based student organizations, community within the residence halls, supportive faculty, and available academic support services. Residential students who form close friendships with peers develop a sense of belonging and help students feel connected with campus life (Means & Pyne, 2017). Students who lived on-campus and felt both social and academic support, experience belongingness (Duran et al., 2020). Regardless of students living on-campus, new friendships promote students' sense of belonging by providing peer support and assistance, as well as an outlet for fun and enjoyment (Buote et al., 2007).

Freeman et al. (2007) surveyed 238 first-semester, first-year students at a four-year university in the southeast United States and discovered that students who experienced a strong sense of belonging in the classroom were more confident, participative, and interested in the course material. Further, Freeman et al. (2007) found that instructors who were friendly, enthusiastic, and provided good examples of course topics created an academic environment where students felt they belonged. In their study, Means and Pyne (2017) concluded that college faculty are instrumental when helping students develop their sense of belonging. Faculty who have positive interactions with students can have a beneficial effect on sense of belonging (Kim & Lundberg, 2016).

Positive peer and faculty interactions that make the campus environment feel more socially and academically supportive shape students' connection to their institution (Hausmann et al., 2009). These connections help to foster a students' sense of belonging

(Johnson et al., 2007). Ultimately, educators fail if they are not concerned about students' sense of belonging (Strayhorn, 2019). According to Hoffman et al. (2003):

Gaining a greater clarity regarding factors important to the development of sense of belonging can help institutional policy planners evaluate the effectiveness of retention programs on their campuses, design more effective intervention strategies, and identify students at risk for departure. (p. 228)

Academically, students who feel valued, accepted, and important to the classroom environment, develop a strong sense of belonging (Peacock & Cowan, 2019). Students seeking belonging may attempt to experience it through various opportunities and interests. Duran et al. (2020) note that students who get involved in activities foster their sense of belonging. "In pursuit of belonging, some people have joined clubs and places of worship, while others have run marathons, cycled in support of a cure, married their partner, gone to college, changed academic majors, studied abroad, handled snakes, and even connected with cults" (Strayhorn, 2019, p. 16). As Walton and Cohen (2007) state, before deciding to take on, continue, or quit a pursuit, individuals often ask themselves – do I belong?

### **Race and Ethnicity**

Race and racism can be a factor that negatively affects sense of belonging, especially for African American students (Duran et al., 2020). Institutions of higher education that foster, enhance, and advance sense of belonging for all students must "investigate their institutional structures that promote exclusion or inclusion for underrepresented students and should work to develop solutions and opportunities that address issues around equity and social justice" (Means & Pyne, 2017, p. 921). Walton and Cohen (2007) suggest that minority students experience "belonging uncertainty" where these students are uncertain if they, and other students of color, belong in the

collegiate environment. This stigmatization often creates uncertainty about fit and belongingness (Walton & Cohen, 2007).

Johnson et al. (2007) discovered that students of all racial backgrounds who transitioned effectively to college felt a sense of belonging at the institution. However, in their study, Johnson et al. (2007) learned that first-year students of color expressed lesser feelings of sense of belonging compared to their White peers. As noted by Meeuwisse et al. (2010) and Duran et al. (2020), adapting to the college environment is easier for students from the majority versus minority students. According to Strayhorn (2019), students of color often feel marginalized and experience a lack of sense of belonging on predominantly White campuses. “Social identities such as race/ethnicity, gender, class, sexual orientation, and religion converge and intersect in ways that simultaneously influence sense of belonging” (Strayhorn, 2019, p. 37). Diversity can positively affect students’ sense of belonging through interactions with diverse peers that lead to attitudinal and developmental growth (Johnson et al., 2007). Experience with diverse peers may result in attitudinal or developmental shifts that also affect a students’ sense of belonging (Johnson et al., 2007).

Different strategies are needed when fostering sense of belonging for African American students versus their White counterparts (Hausmann et al., 2009). For Latino students, Hurtado and Carter (1997) learned that student perceptions of a hostile campus environment negatively affect sense of belonging. As noted in Chapter 1, Johnson et al. (2007) surveyed 2,967 first-year students from 34 different colleges and universities and found that African American, Asian Pacific American, and Hispanic/Latino students experienced a lower sense of belonging than their White/Caucasian peers. Specifically for

Asian Pacific American students, sense of belonging was enhanced through activities that promoted their cultural heritage (Johnson et al., 2007).

Diversity experiences for both White and students of color positively correlated to participation in other racial group activities and presented an ability to learn about other cultures (Johnson et al., 2007). For students that live in the residence hall environment, Shook and Clay (2012) found that the random assignment of interracial roommates, as opposed to same-race roommates, resulted in a stronger sense of belonging and higher GPA's for minority students. Prejudice, discrimination, marginalization, and isolation all create a negative campus climate that runs counter to fostering sense of belonging (Museus et al., 2017) and as noted by Strayhorn (2019), "the absence of belonging is marginalization, isolation, or alienation from others" (p. 29).

### **Gender**

According to Aelenei et al. (2019), a higher population of women attend college compared to men; however, women experience a lower sense of belonging in various academic contexts. Literature about sense of belonging and gender is relatively limited, with research primarily exploring college women's lack of sense of belonging in the STEM (science, technology, engineering, and mathematics) fields of study (Aelenei et al., 2019; Sax et al., 2018).

Due to structural and historical sexism in the computing and mathematics fields, women often feel unwelcomed and lack a sense of belonging (Sax et al., 2018).

Understanding the structural inequities about why women are not interested in or persist in the computing fields requires further investigation (Sax et al., 2018); however, a lack of desire to remain in the field may result from a lack of sense of belonging (Good,

Rattan, & Dweck, 2012). According to Pietri et al. (2019), it is important to reduce bias against women and affirm their belonging and fit in STEM fields. Negative stereotypes about women's ability in math, compared to that of men, contribute to a lack of feeling accepted and valued (Good et al., 2012).

In their study, Sax et al. (2018) discovered that women in an introductory computing course had experienced a decline in sense of belonging as the course progressed. As a result of this regression, it is vital to address inequities and unfair treatment, while promoting women's success in STEM (Pietri et al., 2019) and to foster a supportive student environment to advance sense of belonging (Sax et al., 2018). For women in the STEM fields, it is important that they view themselves and are viewed by others as being inside the discipline, rather than on the periphery (Good et al., 2012). According to Good et al. (2012), "Learning environments that foster a culture of potentiality in which anyone can develop their skills may create room for many more females to feel they belong" (p. 715).

### **Online Learning**

The coronavirus pandemic forced the host institution to shift first-year seminar teaching and learning online. Some researchers have argued that online learning facilitates access for students of all ages, backgrounds, and demographics (Thomas et al., 2014) and levels the playing field providing educational entree to all learners (Peacock et al., 2020). Additionally, according to researchers, online learning also allows flexibility for students to tend to other responsibilities, like professional and family commitments (O'Shea et al., 2015). Online students may struggle, however, due to technology challenges, time management, and motivation, but when executed correctly, online

education and engagement can develop students' critical thinking skills, resulting in higher grades and independent ownership over their learning (O'Shea et al., 2015). Whether in-person or online, learners desire comfort, safety, and respect before they can effectively tend to their studies (Peacock & Cowan, 2019). Online learners "need to develop strong feelings of being welcomed, accepted, needed, and valued" (Peacock & Cowan, 2019, p. 74). That said, online engagement is different from in-person teaching and learning (O'Shea et al., 2015).

"Online learners in a new and potentially alienating environment, remote from the physical campus and separated physically from their peers, seem to be especially in need of a sense of belonging" (Peacock et al., 2020, p. 30). In any online learning experience, it is important to foster student engagement; however, little is known about a sense of belonging on the part of online learners (Peacock et al., 2020). As noted by Peacock and Cowan (2019), research is limited in terms of understanding the causes and impacts of sense of belonging in an online learning environment.

According to Peacock and Cowan (2019), "Having, or not having, sense of belonging clearly will make a significant impact on learners, who we hope can flourish in online educational spaces" (p. 68). Online students who possess a sense of belonging are comfortable in their learning environment and engaged in their studies (Peacock et al., 2020). To increase online learners' sense of belonging, resources and supports must be offered to ensure students do not feel alone or abandoned in the virtual space (Peacock & Cowan, 2019). Students who lack a sense of belonging may be anxious and disconnected, which negatively affects their collegiate experience (Peacock et al., 2020). Online

students can also feel disengaged from their instructors due to poor, inconsistent, and non-responsive communication (O'Shea et al., 2015).

Peacock et al. (2020) administered questionnaires and conducted interviews with 12 online learners. Respondents believed experiencing a sense of belonging to be important, associating sense of belonging with being part of a community, part of a group, and being engaged with the curriculum. Feelings of having a strong sense of belonging were important to the students as they were not physically on campus. Peacock et al. (2020) discovered that students were likely to persist in the course because they developed resilience skills to face obstacles and challenges. The authors also found that study participants believed sense of belonging to be important because it prevented isolation and allowed students to feel part of a community of learners, especially since the students were not physically present on campus (Peacock et al., 2020).

Sense of belonging can be cultivated for online learners through initial introductions, interactive and engaging discussion posts, multi-media instruction, collaborative activities, and group work (Peacock et al., 2020). Online learners also found it valuable to retrieve course materials and review discussions after class and that online discussions encouraged contrasting discourse to enhance conversations (Peacock et al., 2020). Faculty presence and availability in online learning is vital to creating an engaging learning experience that contributes to students' sense of belonging (Thomas et al., 2014). Further, the quality of and timeliness of faculty support is deemed a positive factor contributing to sense of belonging (Peacock et al., 2020). Through conducting interviews and focus groups, Thomas et al. (2014) discovered that satisfaction with online learning was enhanced by the sense of belonging students experienced with their faculty and peers

through community development and collaboration. Specific practices implemented by faculty included conducting ice breakers, collaborative activities and group work, and lectures held through use of video conferencing technology (Thomas et al., 2014).

Faculty teaching online courses must develop community and sense of belonging, which is of particular importance for first-year students (Thomas et al., 2014).

In their study, O'Shea et al. (2015) learned that online students felt disengaged from their faculty when communication was poor or sporadic and when the teacher was absent. Conversely, students who had a positive experience found their faculty to be responsive, active, and engaged in the online environment. Additionally, according to Thomas et al. (2014), "fostering belonging and inclusion can play a role in improving retention by motivating students to continue studying" (p. 70), but for underrepresented students, especially during the first year of online studies, these students are at a higher risk of dropout (Thomas et al., 2014).

### **Attrition and Retention**

College student attrition is a major concern across the nation (Miller & Lesik, 2014; O'Keeffe, 2013; Rogerson & Poock, 2013) and throughout the world (O'Keeffe, 2013). Attrition occurs most frequently during students' first year (Tinto, 1998) and unfortunately, numerous students leave college before completing their degrees (Kuh et al., 2008). First-year students experience a variety of challenges, difficulties, and stressors that negatively affect students' adjustment, often resulting in withdrawal (Buote et al., 2007). It is essential for colleges and universities to identify which programs and interventions support student success and persistence (Schnell & Doetkott, 2003).

As stated by Meehan and Howells (2019), the goal for institutions of higher education is to ensure that students are educated and retained. It is the responsibility of colleges and universities to create a warm, welcoming campus environment where students feel acceptance and belonging to improve retention (O’Keeffe, 2013). Johnson et al. (2007) believe a shared responsibility between the institution and the student helps to foster a sense of belonging. Students who do not experience a sense of belonging, according to O’Keeffe (2013), are likely to withdraw from college. Hausmann et al. (2009) discovered that “sense of belonging had a direct, positive effect on students’ institutional commitment and significant effects on intentions to persist” (p. 665). The greater a students’ commitment and satisfaction, the more likely a student is to retain at the institution (Hoffman et al., 2003).

Universities are increasingly concerned about student retention and success (Meehan & Howells, 2019). In fact, only about 48% of students complete their degree requirements within five years (Morrow & Ackerman, 2012). Further, retention is of particular importance as students of color retain at lower rates than the overall student population (Museus et al., 2017). In this challenging higher education fiscal climate, first-year seminars can serve as a means to combat withdrawal and increase retention rates (Schnell & Doetkott, 2003). According to Permzadian and Credé (2016), first-year seminars are a retention tool utilized to provide students with the knowledge, skills, and capability to successfully transition to and grow at college, while overcoming challenges associated throughout the first year. Because first-year seminars support persistence, students are able to develop intellectually, personally, and professionally because of remaining in college (Jenkins-Guarnieri et al., 2015). As noted by Porter and Swing

(2006), “stopping out, dropping out, or transferring out has a negative impact on the cost of higher education and degree attainment” (p. 91).

Considering the potential challenges new students may experience, the first 10 weeks of the first semester are especially important as students transition to college life (Tinto, 1998). Further, according to Clark (2005), students who successfully complete their first year of college is a result of intentional effort, overcoming obstacles and adapting to change, and through effectively negotiating challenges both inside and external to the collegiate environment. As highlighted throughout the literature, first-year seminars aim to provide an initial transitional, academic experience designed for new students (Rogerson & Poock, 2013). College students who connect to the people, place, and their academics are likely to feel they belong at the institution (Meehan & Howells, 2019). First-year seminars help to transition students to college successfully, and a sense of belonging allows students to experience a welcoming campus environment. Parallels exist between the two ideas that are explored throughout this study.

### **Validated Instruments Incorporated into this Study**

Several researchers have conducted existing studies connected to college student persistence and adjustment, sense of belonging, and first-year seminars. These studies, as introduced and highlighted in the following paragraphs, have proven helpful in the development of the final instrument (see Appendix A) for this study. The intentional selection of items for the study instrument were based on first-year seminars, sense of belonging, and retention. The following instruments have been validated and tested by the following authors: Bollen and Hoyle (1990); Cabrera et al. (1992); Freeman et al. (2007); Goodenow (1993); Hausmann et al. (2009); Hoffman et al. (2003); Hurtado and

Carter (1997); Malone et al. (2012); Pascarella and Terenzini (1980); Porter and Swing (2006); and Slaten et al. (2018). Appendix C maps the works of these authors to the statements utilized in this study instrument. A brief synopsis of each study and their research is identified as follows.

**Bollen and Hoyle (1990).** Bollen and Hoyle (1990) explored the concept of cohesion, which they defined as an individual's relationship to a group through their perceived sense of belonging and feelings of morale. The authors "view sense of belonging as fundamental to the existence of a group" (Bollen & Hoyle, 1990, p. 484). For the purpose of this study, the first-year seminar serves as a group of first-year students within a special-academic themed seminar. Bollen and Hoyle (1990) suggest that group members view themselves as belonging to the group, with associated feeling of affection and satisfaction. In order to test the validity of the Perceived Cohesion Scale (PCS), the authors collected data from a random sample of 102 undergraduates at a private liberal arts institution in the Northeast United States, as well as 110 residents of a mid-sized city in the Northeast. Bollen and Hoyle (1990) believed that studying two distinct and unique populations validated their understanding of cohesion. The authors found the PCS to be a measure with "high reliability, validity, and some degree of invariance in different groups" (Bollen & Hoyle, 1990, p. 500). "I feel that I am a member ..." and "I feel a sense of belonging ..." were the items adapted for the instrument related to membership and feelings of belonging within the campus community.

**Cabrera et al. (1992).** Cabrera et al. (1992) adopted their instrument from the Student Integration Model (via Tinto, 1975) and the Student Attrition Model (via Bean,

1980). According to Cabrera et al. (1992), “Both models regard persistence as the result of a complex set of interactions over time” (p. 145). Agreement exists among the models that precollege characteristics reflect students’ ability to adjust at the institution and that a relationship, or lack thereof, between the student and institution, affects persistence. The authors suggest that their study results should encourage researchers to consider the association between institutional, personal, and external factors that affect persistence. The interactions of these factors were viewed as essential to incorporate as items of the instrument. “I feel a sense of belonging ...” related to institutional quality and fit of the Attrition Model, while “My first-year seminar allowed me to establish close friendships” connected to social integration of the Integration Model.

**Freeman et al. (2007).** Freeman et al. (2007) adapted three previously used instruments for their study including the Psychological Sense of School Membership (via Goodenow, 1993), the Motivational Strategies for Learning Questionnaire (via Garcia & Pintrich, 1996), and the Student Perceptions of Learning and Teaching questionnaire (via McKeachie, 1994). For the purposes of their study, elements from the Psychological Sense of School Membership instrument were utilized to explore students’ sense of belonging. Freeman et al. (2007) discovered that sense of belonging and academic motivation are linked, that faculty characteristics affect students’ sense of belonging inside the classroom, and that certain variables do positively affect students’ institutional sense of belonging. Course instructors play a valuable role through expressing warmth, openness, and encouragement. These components inspired statements related to the “faculty displayed interest in me” and faculty “supported my transition to college” to be included in the final study instrument.

**Goodenow (1993).** According to Goodenow (1993), the need to belong and feel supported is especially important during adolescence, “when young people begin to consider seriously who they are and wish to be, with whom they belong, and where they intend to invest their energies and stake their futures” (p. 81). Goodenow (1993) created the 18-item Psychological Sense of School Membership (PSSM) scale. The PSSM was tested on high school students in both urban and suburban settings and was proven as a valid and reliable measure of sense of belonging. The PSSM was instrumental to including the following statements in the final instrument: “I am a member of the campus community,” “I wish I were at a different school,” “Sometimes I feel as if I don’t belong,” and “I can really be myself”. I felt it important to include these items to understand first-year students’ sense of membership at the institution.

**Hausmann et al. (2009).** The study from Hausmann et al. (2009) utilized the following instruments: integrated model of student retention (via Cabrera, Nora, & Castaneda, 1993), measure of social and academic integration (via Pascarella & Terenzini, 1980), and the sense of belonging subscale from Bollen and Hoyle (1990). Results from the work of Hausmann et al. (2009) highlight that a sense of belonging affects students’ commitment to the institution, their intention to persist, and that institutions of higher education “should include elements aimed at making students feel like valued members of the university community” (p. 667). The idea of feeling valued was incorporated in the instrument via two statements that were reverse coded, “I have felt excluded ...” and “I have felt insulted or threatened ...”. The literature about sense of belonging reinforces the importance of individuals feeling included. These two

statements allowed me to assess first-year students' feelings of inclusion within the community.

**Hoffman et al. (2003).** Hoffman et al. (2003) initially developed an 85-item instrument to assess sense of belonging that focused on two measures – student/peer relationships and student/faculty relationships. The final scale evolved from a review of the literature, focus groups, and a refinement of items that resulted in the 26-item Sense of Belonging (SoB) instrument. Through use of the SoB, freshman seminars were found to help students integrate their academic and social experiences through supportive peer relationships and compassionate faculty. Though study items were not taken direct from the SoB, several peer and faculty items were integrated, including to “establish close friendships,” “faculty display interest,” and the first-year seminar “faculty member supported my transition”.

**Hurtado and Carter (1997).** Hurtado and Carter (1997) incorporated data from study subjects' completion of the pre-college Student Descriptive Questionnaire. The primary survey instrument was the National Survey of Hispanic Students (NSHS) that also included the Sense of Belonging Scale (via Bollen & Hoyle, 1990). According to Hurtado and Carter (1997), studying sense of belonging is important to understanding how social interactions, particularly for Latino students, affect students' affiliation and identity with their college or university. Further, Hurtado and Carter (1997) recommend that future research explore sense of belonging specific to academic majors and areas of study, as well as exploration of outside the classroom experiences in co-curricular organizations and on-campus living. In this context of this study, several items from Hurtado and Carter (1997) were included: “I feel that I am a member of the campus

community,” “I have felt excluded from school activities,” “I feel a sense of belonging,” “I feel lonely or homesick,” and “I have felt insulted or threatened.” When attempting to understand the experience of students of color at XYZ University, these items were particularly poignant to include.

**Malone et al. (2012).** Malone et al. (2012) created the General Belongingness Scale (GBS) to assess belonging through a balance of negatively and positively worded items. The final GBS consists of 12 items grouped into two categories: acceptance/inclusion and rejection/exclusion. According to the authors, through the exercise of developing and analyzing the scale, the balanced use of negatively and positively worded items increased validity of the instrument (Malone et al., 2012). The acceptance/inclusion and rejection/exclusion buckets allowed me to determine which GBS statements to incorporate into the instrument for this study. “I feel a sense of belonging” came from the acceptance/inclusion category, while “I feel like an outsider” was taken from the collection of rejection/exclusion items.

**Pascarella and Terenzini (1980).** Pascarella and Terenzini (1980) developed a valid instrument based on the work of Tinto (1975) to determine whether freshman were more likely to persist or voluntarily drop out of college. According to the authors, Tinto’s model is based on understanding persistence through the lens of students’ interactions in the curricular and co-curricular environments. Pascarella and Terenzini (1980) discovered that the student-faculty relationship, both inside and outside the classroom, had a positive effect on students’ decision to persist or withdraw. Five scales were utilized to predict first-year student persistence. The specific elements included in this study included “The school provided opportunities and experiences to meet new people ...” (Scale 1, Peer-

Group Interactions) and “The staff and faculty display interest in me” (Scale 3, Faculty Concern for Student Development and Teaching).

**Porter and Swing (2006).** The First-Year Initiative (FYI) survey was used by Porter and Swing (2006) to better understand students’ self-reporting about their participation in a one-semester, first-year seminar. According to Porter and Swing (2006), the “purpose of the survey was to give institutions formative evaluations of their first-year seminars in a way that would encourage continuous improvement” (p. 93). Survey statements sought student data and perspectives about study skills and academic engagement, campus policies and engagement, peer connections, and health education. Several elements from the FYI were valuable additions to this study instrument. “The school has provided me with resources and/or support ...” and “My first-year seminar did not improve my understanding of campus policies or supports” were drawn from the FYI focused on campus policies. “My first-year seminar allowed me to establish close friendships,” “The school has provided opportunities and experiences that allow me to meet new people,” and “My first-year seminar did not improve my ability to get to know students in my class” came from the FYI peer connections factor. Finally, from the campus engagement category, “My first-year seminar increased the degree to which I assumed leadership roles ...” was included.

**Slaten et al. (2018).** Slaten et al. (2018) hypothesized that students who do not experience belonging within the academic environment are likely to perform academically worse than their peers. The authors initially created the University Belonging Questionnaire (UBQ) as a 40-item instrument, but after 421 undergraduates at a Midwestern United States institution completed the internet-based survey, the UBQ was

reduced to 24 items centered on three factors: university affiliation (12 items), university support and acceptance (eight items), and faculty and staff relations (four items) (Slaten et al., 2018). Study results showed that three factors correlated strongly and produced a valid and reliable instrument measuring college student belonging. From the UBQ, all three factors were included within the study instrument. “My first-year seminar has fostered a sense of community,” “The school has provided me opportunities and experiences that allow me to meet people,” and “I feel at home on this campus” were derived from the university affiliation factor, while “The school has provided me with resources and/or support ...” came from the university support and acceptance factor. Finally, “The staff and faculty display interest in me” came from the faculty and staff relations factor.

### **Summary**

Chapter 2 presented a review of the literature that framed key elements associated with this study, including college student transition, first-year seminars, sense of belonging, race and gender, attrition and retention, and online learning. Additionally, an overview was provided of the 11 studies that served as the foundation for the development of the study instrument. The utility of these studies was important to ensure the final instrument captured first-year students’ responses about their first-year seminar experience, as well as their feelings of being integrated into the larger campus community. The 11 studies all contributed to the final instrument, with the mapping of each instrument item to the respective study as listed in Appendix C.

Also as noted in this chapter, some first-year college students experience a seamless transition to their new collegiate educational environment and surroundings,

while others struggle away from home (Chow & Healey, 2008) and are ill prepared for the demands of college (Morieson et al., 2013). First-year seminars have had a longstanding presence in higher education (Rogerson & Poock, 2013), having been established to help students adjust academically and socially to their new community (Morieson et al., 2013). Students experience a sense of belonging in environments where they are valued, included, welcomed, and cared for (Johnson et al., 2007).

Institutions that incorporate practices related to fostering a sense of belonging and also offer first-year seminars can positively affect students' collegiate experiences and promote retention. Favorable faculty and peer interactions play an important role helping students feel welcomed and supported in college (Johnson et al., 2007). Through recognizing new students' departure from high school and home and that their transition to college is one of change (Chow & Healey, 2008), institutions that implement intentional programming, like first-year seminars and attempt to foster students' sense of belonging, can potentially retain and graduate their students. Hausmann et al. (2009) stated that when students develop an integrated social and academic connection to the institution, they cultivate their sense of belonging which results in an increased commitment toward persistence. Campus environments that provide support structures, including scholarships, social identity-based student organizations, community within the residence halls, faculty involvement, peer interactions, and necessary academic services, enhance students' sense of belonging (Means & Pyne, 2017).

The work of Padgett et al. (2013) support "the implementation of and ongoing investment in first-year seminars as a flexible and impactful practice for first-year students" (p. 146). In order to create conditions for success, students need a sense of

belonging to transition successfully from high school to college (McKinney & Denton, 2016) because stronger levels of belonging and lower levels of isolation equate to increased institutional retention rates (Morrow & Ackerman, 2012). Students with “a sense of identification and affiliation with a community” experience a sense of belonging (Han et al., 2017, p. 1122). When students belong, a fit and connectedness to their campus environment exists, and when students engage within their first-year seminar, students are more likely to reap the rewards of collegiate success.

A gap in the current literature exists in identifying first-year seminars as a specific space where new students can foster their sense of belonging. This study surveyed first-year students enrolled in a first-year seminar program at a 4-year private higher education institution. The goal was to ascertain whether study participants experienced a sense of belonging because of their first-year seminar. This study is important because it intends to offer new insights into synergies between first-year seminars and sense of belonging.

Having identified similarities between the expected outcomes of first-year seminars and sense of belonging, an opportunity exists to study sense of belonging within the context of a first-year seminar program. Additional research is needed to explore the connection between students’ sense of belonging and the first-year seminar experience, thus the impetus for this study. The literature has highlighted numerous benefits of higher education institutions hosting first-year seminars as a positive intervention for first-year students. Sense of belonging instills in students a connection to their college or university where they feel included and welcomed. First-year seminars as a program and sense of belonging as a concept aim to create conditions for students to retain and graduate from their institutions. The literature makes these claims; however, we do not fully understand

how first-year seminars may advance a sense of belonging or how sense of belonging may enhance the first-year seminar experience. Looking ahead, Chapter 3 follows with information about the study design and methodology and the research questions are reiterated. Additionally, a brief overview of the purpose, participants, study host site, procedures, and introduction to the data analysis is offered.

### CHAPTER 3 – RESEARCH DESIGN AND METHODOLOGY

This chapter provides an overview of study design and methodology. It restates the purpose of the study and identifies research methods, procedures, participants, the host site, and provides additional detail regarding data collection and analysis. To address the proposed study questions, quantitative methods were predominantly used to survey first-year students enrolled in a first-year seminar at a 4-year, private institution. The instrument (refer to Appendix A) collected anonymous data to assess students' sense of belonging within their first-year seminar program. Study participants were able to identify their gender and race, select a response to each of three prompts regarding their intention and desire to graduate from XYZ University, and respond to a series of 19 statements based on a 5-point Likert scale. Further, two optional, open-ended prompts were available to participants to offer additional narrative insights to support their responses to the Likert scale questionnaire.

#### **Research Questions**

The research questions for this study are:

1. Does the first-year seminar program foster a sense of belonging among first-year students enrolled at a 4-year, private institution?
2. Did participation in the first-year seminar program positively contribute to students' intention to graduate from the institution?
3. Are there differences in students' sense of belonging based on gender and race?

In Appendix D, all instrument statements are mapped to each research question.

### **Purpose of the Study**

The purpose of this study was to identify whether a sense of belonging is fostered within a first-year seminar program, whether the first-year seminar program contributed to students' intention to retain and graduate from the host institution, and finally, if any differences existed among study participants based on their race or gender. Through executing this study, a primary goal was to help first-year seminar administrators and faculty recognize practices that can cultivate a sense of belonging in first-year students. First-year seminars are designed to introduce new college students transitioning from high school to the academic environment, while also informing first-year students of the resources and supports available to instill a foundation to adjust successfully. Throughout first-year students' transition, colleges and universities have an opportunity to foster a sense of belonging that can help students feel both connected to and cared for at the institution. A first-year seminar experience that promotes and purposely develops a sense of belonging can facilitate first-year students feeling at home on campus or virtually, ultimately retaining and graduating students from their college or university.

### **Research Methods and Procedures**

Quantitative and qualitative analyses methods were used and the study was conducted ethically, honestly, and without harm to participants; based on probability and neutral objectivity (Mertens, 2014). Quantitative research is appropriate for this study because it allowed me to collect numerical data through a survey distributed efficiently via email and the internet. The instrument (refer to Appendix A) collected anonymous data, including brief demographic information (gender and race), to assess students' sense of belonging within their first-year seminar program. Participants acknowledged

that they were 18 years of age or older and agreed to the considerations of an informed consent. Participants then responded to several prompts and a series of statements based on a 5-point Likert scale. Further, though not a true mixed-method study, two optional, open-ended opportunities were available to participants to provide additional narrative insights to support their yes-no and yes-no-maybe responses (see Appendix A, prompts 28 and 30).

**Study Participants.** The sample consisted of full-time, undergraduate, first-year students at a private, 4-year liberal arts higher education institution located in the Northeast United States. To participate in the study, respondents had to be at least 18 years of age and agree to the informed consent. Further, the study was limited to enrolled first-year students in a fall 2020 first-year seminar. Because the purpose of the study was to assess students' sense of belonging in their first-year seminar program, it was necessary to exclude participants who did not meet these criteria. A total of 466 students were eligible to participate, with 99 students completing enough of the survey to be included in the data analysis. Upon launching the study, it was my goal to solicit involvement from as many eligible respondents as possible who met the minimum criteria.

**Research Site.** XYZ University (XYZ) is located in a suburban community in the Northeast United States. As a Carnegie Classification Master's Larger Programs institution, XYZ University is a 4-year, private, majority undergraduate, selective institution (Carnegie Classification of Institutions of Higher Education, n.d.). The University's mission is fulfilled through an intentional combination of academic and co-

curricular offerings, a focus on personal learning experiences, and by providing opportunities to gain professional experience.

**Study Procedures.** After receiving Institutional Review Board (IRB) approval from Temple University and gaining a letter of support and approval from XYZ University, the survey was distributed via email to first-year students through their first-year seminar faculty. I communicated directly with the institution's Director of the First-Year Academic Experience. This communication included an overview of the study, a QR code to access the instrument, and information about incentives. The Director of the First-Year Academic Experience then forwarded this information to faculty teaching a fall 2020 first-year seminar and strongly encouraged faculty to circulate the survey and endorse student involvement and completion.

The survey was conducted via an anonymous, online SurveyMonkey instrument that launched on Monday, November 30, 2020, and closed on Friday, December 18, 2020. It was anticipated that the survey would take approximately five minutes to complete and could be executed on a personal computer or mobile device. Faculty were reminded to encourage student survey completion at least three times throughout the duration of time that the study was open. At the conclusion of the survey, respondents were invited to take part in an optional raffle via a separate Google form for one of five \$20 Amazon e-gift cards. In no way were individual responses tied back to the participant. Data from students who entered the raffle were not associated to their individual survey responses. For those who completed the Google form, email addresses were randomized and five winners were selected and notified. E-gift cards were awarded on January 1, 2021.

No participant was excluded for any reason related to gender, age, race, economic status, or any protected class. Students were only excluded if they were not at least 18 years of age and/or not currently enrolled in a first-year seminar at the institution. Respondents were informed of study procedures, as well as any potential risks and benefits prior to asking for their consent. Individuals were not permitted to advance in the survey without granting permission via the online consent form. Participation was completely voluntary. Further, subjects were informed that they could withdraw at any point and in doing so, would not experience any penalty or loss of benefits to which they were otherwise entitled. No vulnerable populations were included in this study.

**Role of the Researcher.** I am a seasoned student affairs practitioner with over 20 years of experience, having also served for two semesters as an adjunct faculty member teaching an academic-themed first-year seminar. I have earned a master's degree in College Student Personnel and am in the process of completing a terminal, Ed.D. degree. In my current administrative position, I supervise professional staff, serve as the chief student affairs officer, oversee six functional areas, and report directly to the college president. Because of my experience and expertise, I held myself accountable to be aware and cognizant of any bias, preconceived opinions and personal values as the study progressed. This study was guided by standards of evidence, quality, documentation, and data analysis (Mertens, 2014). These factors qualify me to conduct this study.

**Data Collection.** In this study, data were collected from college students about how their first-year seminar experience may or may not have increased their sense of belonging. The primary source of data collection was via an online survey instrument. According to Mertens (2014), there are several advantages and disadvantages of this

survey data collection method. Advantages include the ability to administer to a large sample and return a sizable amount of data, surveys are inexpensive and anonymous, and allow for relative ease of analyzing data. On the other hand, surveys are impersonal, may not return thoughtful and careful responses, and they do not capture the full story (Mertens, 2014).

The online SurveyMonkey instrument was distributed via email. This method allowed me to survey a student population, ensure anonymity, and administer at a nominal cost. Once the survey launched, data collection remained open for 19 days. Throughout this open collection period, several reminders were sent via email to first-year seminar faculty in order to boost the overall response rate. Additionally, survey administration garnered important support from the host institution's Director of First-Year Academic Experience.

While data were being collected, SurveyMonkey stored the data in a personal, password-protected account. No other individuals had access to the data or my password. Reliability was examined to ensure that the quality of the data was useful and significant (Mertens, 2014). In this study, the same, consistent survey was used for all participants, who were all traditional, full-time first-year students. Additionally, the instrument was constructed utilizing statements from previously reliable and validated studies. Further, study results were validated by the response rate and sample size. According to Mertens (2014), "any study can have statistically significant results if a large enough sample size is used" (p. 430). To ensure significance was attained in the data, effect size is reported in Table 4.11. Though not a large overall sample, statistical results were valid and significant. A combination of first-year seminar faculty and support from program

administration, as well as frequent email reminders to study subjects, helped increase the number of responses.

**Instrumentation and Data Analysis.** The final survey, “Study of Students’ Sense of Belonging in a First-Year Seminar,” is identified as Appendix A. Appendix B provides the overall survey design, skip logic, and flow of the instrument. The questionnaire is a 19-statement instrument scored on a 5-point Likert scale. Additionally, the survey collected anonymous student demographic information, including gender and race; allowed participants to select a response to each of three prompts regarding their intention and desire to graduate from XYZ University; and offered two optional, open-ended prompts to gather narrative data.

In terms of quantitative measurement, researchers have three options in regard to instrumentation: use an existing, adapt an existing, or create their own (Mertens, 2014). Items within the study instrument are derived from existing surveys. Appendix C maps the existing literature to each instrument item and includes the works and adaption of Bollen and Hoyle (1990); Cabrera et al. (1992); Freeman et al. (2007); Goodenow (1993); Hausmann et al. (2009); Hoffman et al. (2003); Hurtado and Carter (1997); Malone et al. (2012); Pascarella and Terenzini (1980); Porter and Swing (2006); and Slaten et al. (2017). Instrument items utilized for this study were selected from these aforementioned studies as reliable instruments drawn from the literature. The connection of the items to the literature are evidence of face validity. Further, the items selected reflect a desire to learn more about first-year students’ experience within their first-year seminar and at the institution. I also conducted pilot testing, as explained in the following section, which provided evidence of some practical reliability. I circulated the instrument

to my professional network, asking colleagues to test and review the instrument to ensure the technology worked and that the flow of the survey was clear, coherent, and logical.

Mertens (2014) identified three common ways to examine statistical data, including descriptive, correlational, and inferential. Descriptive statistics describe data using mean, median, mode, and standard deviation, while correlational statistics examine the relationship between two or more variables (Mertens, 2014). Correlational methods were used to determine if any relationships might exist among race and gender, sense of belonging, and intention to graduate. In the context of this study, through primarily analyzing 5-point Likert scale results, the primary data were examined with a combination of descriptive and correlational methods. As noted by Emerson (2017), the number of Likert response items are commonly odd, offering the respondent a neutral choice, with an equal number of positive and negative options. These options create an “equal sense of distance between” (Emerson, 2017, p. 488) items. That said, there is debate in the academy about treating Likert scale data as interval because the interval distance cannot be presumed to be equal (Jamieson, 2004). Considering Likert scales as ordinal, however, prevents a more powerful and appropriate analysis and understanding of data (Carifio & Perla, 2008). Because the Likert scales utilized in this study are consistently distributed (see the 5-point Likert Scale key in Appendix D), I am able to calculate means and make appropriate inferences about the data (Norman, 2010).

As also shown in Appendix D, each Likert scale statement is bucketed into two themes: First-Year Seminars and General Sense of Belonging on Campus. Within these themes, each Likert scale statement is scored as positive or negative for the data analysis. The negative scores are then converted and flipped so that all scores can be analyzed

equitably. According to Emerson (2017), “It is good practice for researchers using Likert items to phrase items differently so that respondents do not assume that a given number always means the same thing” (p. 488). The survey was intentionally designed to allow the participant to consider each statement individually, as well as reflect on sense of belonging in the context of their time at the university.

For example, a key tenet of experiencing a sense of belonging is through opportunities that allow individuals to get to know others and develop personal relationships. By including these statements within the first-year seminar theme, I was able to determine if sense of belonging was fostered through friendships that may have developed. In addition, the first-year seminar serves as a microcosm of the larger institution. Through asking first-year students if they felt at home and included on a broad scale, it allowed me to identify any dichotomies between the first-year seminar and larger university experience. Additional commentary about the themes is included in Chapter 5. Further, because the survey instrument allowed students to respond to two optional, open-ended questions, I reviewed the narrative comments to extrapolate any themes. I also used word clouds as a visual representation to present the qualitative data.

**Pilot Testing.** I reached out to 20 individuals from my professional network to review and offer feedback of the original, draft instrument (see Appendix E). These colleagues worked directly and indirectly with first-year programs, served in assessment roles as institutional researchers, in capacities that advised and oversaw Greek Life, and four were Deans/Associate Deans of Student Affairs. Fourteen colleagues responded with valuable feedback that improved the flow, look, feel, and contents of the final instrument (see Appendix A). Changes to Appendix E included:

- All questions, including Likert scale statements, were each included on a separate SurveyMonkey page for ease of viewing, especially on a mobile device
- Added skip logic to the Age and Participant Consents pages
- Moved “Prefer not to answer” after “Other” so as to make someone not feel further marginalized in questions 3 and 4
- Flipped questions 6 and 7 and added skip logic
- Removed comment boxes from questions 5, 6, and 7 to reduce narrative data analysis
- Removed question 8 because it would not provide any pertinent data as all first-year seminars at the host institution were intended to be academic-themed in nature
- For statement 10, “resources and supports” was adjusted to “resources and/or supports”
- For statement 19, “has” was removed
- Removed question 21 as “comfortable” is subjective and due to the coronavirus pandemic, the academic classroom was virtual with no physical space
- Added “Yes” and “No” options to questions 29 and 30, and added an opportunity for students to respond to two open-ended prompts
- Utilized the SurveyMonkey custom thank you screen to include the thank you message and instructions to participate in the raffle

These adjustments further refined the instrument and led to the final version as found in Appendix A.

### **Summary**

This chapter discussed the procedures associated with implementing a study of first-year students and their sense of belonging within their first-year seminar program and at XYZ University. Study participants were first-year students enrolled in a first-year seminar at a private, 4-year institution. Chapter 3 described the final instrument (see Appendix A), the mapping of how the instrument was derived (see Appendix C), and how the initial instrument (see Appendix E) evolved into the final version (see Appendix A) as a result of a successful pilot testing exercise. The final instrument was anonymous and collected minimal demographic information that included race and gender. Additionally, participants responded to three questions about their intent and desire to graduate from XYZ University, as well as a series of 5-point Likert scale statements and the optional opportunity to share narrative insights to two open-ended prompts. To incentivize and increase the response rate, participants had the option of entering a raffle to win one of five \$20 Amazon e-gift cards. Chapters 1-3 introduced the three research questions; presented a review of literature about students' transition to college, first-year seminars, and sense of belonging; and provided an overview and rationale for the study, as well as instrument design and methodology.

## CHAPTER 4 – RESULTS AND FINDINGS

Chapter 4 illuminates the results and findings of each research question of this study, which explored sense of belonging and intention to graduate among a group of first-year students enrolled in the first-year seminar program at a small, private higher education institution located in the Northeast United States. A total of 466 first-year students were enrolled in a fall 2020 first-year seminar at the institution and were eligible to participate. Of these, 109 students began the survey, with 99 students completing enough of the survey to be included in the data analysis. The response rate was 21%. In the following tables, there will be cases where the sample size is less than 99 since some students left some of the questions blank. In these instances, the missing data will be noted. Because the gender and race of the entire undergraduate student population at the host institution is primarily female and White, it was important to identify any differences between the study sample and the student body. Based on the students who started the study, the following tables identify the gender (Table 4.1) and race/ethnicity (Table 4.2) of the sample.

**Table 4.1***Gender of sample*

|                      | Frequency | Sample % |
|----------------------|-----------|----------|
| Female               | 73        | 73.7     |
| Male                 | 22        | 22.2     |
| Non-binary           | 3         | 3.0      |
| Prefer not to answer | 1         | 1.0      |

**Table 4.2***Race/Ethnicity of sample*

|                        | Frequency | Sample % |
|------------------------|-----------|----------|
| Asian/Pacific Islander | 9         | 9.1      |
| Black/African American | 6         | 6.1      |
| Latina/Latino          | 8         | 8.1      |
| Multiracial            | 6         | 6.1      |
| Native American        | 1         | 1.0      |
| Other                  | 1         | 1.0      |
| White                  | 68        | 68.7     |

As Table 4.1 and Table 4.2 show, study participants were predominantly female (73.7%) and White (68.7%). Because the other gender groups are limited, only respondents who identified as female and male are used in the data analysis relevant to gender differences. About race, 69% of study participants identified as White, while the largest non-White group were Asian/Pacific Islanders at 9%. For all subsequent analyses conducted about race, the group was divided into White and non-White. According to the Assistant Vice President for Enrollment Management at the XYZ University, the fall 2020 census data for the entire undergraduate population was 67.6% female and 57.6% White (personal communication, March 16, 2021). The study sample had more female and White participants than the overall student body.

Three central research questions frame this study. Each research question will be identified and data from the study will be utilized to support the analysis.

**Research Question #1: Does the first-year seminar program foster a sense of belonging among first-year students enrolled at a 4-year, private institution?**

As noted in the literature review (see Chapter 2), first-year seminars are intended to orient and acclimate new first-year students to the rigors of college, while helping them feel welcomed, included, and that they belong in their new environment (Jenkins-

Guarnieri et al., 2015; Permzadian & Credé, 2016). First-year seminars, at their core, have the opportunity to foster a sense of belonging in new students. For the purpose of this study, sense of belonging is defined by Strayhorn (2019) as:

students' perceived social support on campus, a feeling or sensation of connectedness, and the experience of mattering or feeling cared about, accepted, respected, valued by, and important to the campus community or others on campus such as faculty, staff, and peers. (p. 4)

At the host institution in the fall 2020, there were 24 special-academic themed, online first-year seminars with approximately 18-20 students per section. Seminars at the XYZ University met approximately three hours per week, split between two or three sessions during the week. Research question #1 aimed to realize whether the first-year seminar program, as a whole, fostered a sense of belonging among participants.

For data analysis purposes, all subsequent tables are based on a 5-point Likert scale. Since there is some controversy in the academy about the analysis and interpretation of data from Likert scales, a brief comment is necessary to introduce the decisions I made in this dissertation. The issue with data from Likert scales centers on whether these data are ordinal or interval. If the assumption is made that the data are ordinal, then parametric statistics such as the mean and standard deviation are not appropriate. I made the decision for this dissertation to assume that the data are interval. This is consistent with other studies and is supported by research (Sullivan & Artino, 2013). In addition, the rating of "3" indicates that the respondent neither "agrees nor disagrees" with the statement. As such, I also made the decision that a mean of 3.5 or above will be considered a positive response. This is admittedly arbitrary but is a reasonable standard by which to interpret the data. All tables that describe participants' responses include a complete listing of all data for transparency.

Several Likert scale statements were worded negatively and their means converted. According to Emerson (2017), “It is good practice for researchers using Likert items to phrase items differently so that respondents do not assume that a given number always means the same thing” (p. 488). Converting the mean is recoding a negative statement and flipping the point value associated. For example, “Strongly Disagree” is typically assigned a value of one, but when converting the mean, that value becomes five. Converting the mean allows the data to be compared consistently versus the other statements. The “Q#” in Table 4.3, Table. 4.5, and Table 4.11 refers to each actual question/statement number from the instrument.

Six statements focused on students’ first-year seminar experience and sense of belonging. The statements, descriptive data, and means are listed in Table 4.3.

**Table 4.3**

*Students’ sense of belonging in the first-year seminar program*

| Q#  | Statement  | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree | Mean | Converted Mean |
|-----|--|-------------------|----------|----------------------------|-------|----------------|------|----------------|
| 13. | My First-Year Seminar allowed me to establish close friendships.                       | 7                 | 24       | 31                         | 27    | 5              | 2.99 |                |
| 16. | My First-Year seminar did not improve my understanding of campus policies or supports. | 23                | 41       | 15                         | 13    | 2              | 2.26 | 3.74           |
| 19. | My First-Year Seminar faculty member supported my transition to college.               | 1                 | 4        | 10                         | 55    | 24             | 4.03 |                |

**Table 4.3 (con't)***Students' sense of belonging in the first-year seminar program*

| Q#  | Statement  | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree | Mean | Converted Mean |
|-----|--|-------------------|----------|----------------------------|-------|----------------|------|----------------|
| 22. | My First-Year Seminar did not improve my ability to get to know students in my class.  | 21                | 38       | 17                         | 17    | 1              | 2.35 | 3.65           |
| 24. | My First-Year Seminar increased the degree to which I assumed leadership roles in campus-sponsored organizations and/or volunteered my time for worthwhile causes. | 5                 | 19       | 43                         | 22    | 4              | 3.01 |                |

Reviewing the data in Table 4.3, the mean of statement 22 supported the idea that first-year students were able to form relationships with their classmates. That said, the mean of statement 13 was unexceptional, with the data showing an indifference from students about their ability to develop close relationships with one another. Similarly, the first-year seminar experience also did not strongly facilitate opportunities for students to explore leadership and service experiences (Q#24).

Positively, the first-year seminar experience helped students understand campus policies and resources (Q#16). Despite first-year students feeling that they did not form close relationships with peers, participants did believe their first-year seminar created community (Q#21). Data show that respondents felt their faculty were positive champions of their transition into college (Q#19).

Further, question 27 (Did your First-Year Seminar contribute to your sense of belonging at this University?) validated students' general feeling that their first-year seminar fostered their sense of belonging at the institution. See Table 4.4.

**Table 4.4**

*Students' sense of belonging at the university*

| Answer Choices | Frequency | Percent of Sample |
|----------------|-----------|-------------------|
| Yes            | 72        | 72.7%             |
| No             | 20        | 20.2%             |
| Missing        | 7         | 7.1%              |

Participants believed their first-year seminar experience fostered their sense of belonging at the XYZ University. This claim is further supported by several additional instrument statements that focused on sense of belonging and the institution/community, at large. These statements and their means are noted in Table 4.5.

**Table 4.5**

*Students' sense of belonging within the larger institution*

| Q# | Statement  | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree | Mean | Converted Mean |
|----|--|-------------------|----------|----------------------------|-------|----------------|------|----------------|
| 8. | I feel that I am a member of the campus community.   | 4                 | 5        | 19                         | 60    | 8              | 3.66 |                |
| 9. | The school has provided me with resources and/or support to assist me in seeking help when needed. | 2                 | 2        | 7                          | 51    | 33             | 4.17 |                |

**Table 4.5 (con't)***Students' sense of belonging within the larger institution*

| Q#  | Statement   | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree | Mean | Converted Mean |
|-----|---|-------------------|----------|----------------------------|-------|----------------|------|----------------|
| 11. | I feel a sense of belonging within the campus community.                                | 2                 | 8        | 23                         | 48    | 13             | 3.66 |                |
| 12. | I feel lonely or homesick.  | 29                | 25       | 29                         | 9     | 2              | 2.26 | 3.74           |
| 14. | The school has provided opportunities and experiences that allow me to meet new people. | 4                 | 7        | 19                         | 50    | 14             | 3.67 |                |
| 15. | The staff and faculty display interest in me.   | 0                 | 9        | 7                          | 59    | 19             | 3.94 |                |
| 17. | I wish I were at a different school.  | 36                | 31       | 22                         | 4     | 1              | 1.97 | 4.03           |
| 18. | Sometimes I feel as if I don't belong at this University.                               | 27                | 35       | 17                         | 14    | 1              | 2.22 | 3.77           |
| 23. | I feel like an outsider.  | 18                | 45       | 19                         | 10    | 2              | 2.29 | 3.71           |
| 25. | I can really be myself at this school.  | 1                 | 4        | 20                         | 52    | 16             | 3.84 |                |
| 26. | I feel at home on this campus.  | 2                 | 4        | 54                         | 27    | 6              | 3.33 |                |

The strongest declarations of sense of belonging centered on students' perception that they received resources, support, and assistance when needed (Q#9) and that faculty

and staff showed interest in them (Q#15). First-year students felt both part of the campus community (Q#8) and that they belonged (Q#11, Q#18). Students did not feel lonely or homesick (Q#12, Q#14). The data also confirm that participants were pleased with their choice of attending the host institution (Q#17), they felt included and not as an outsider (Q#23), and first-year students believed they could be their authentic self (Q#25). One interesting data point, particularly in light of all these aforementioned positive ratings, was that first-year students did not affirmatively feel at home on the campus (Q#26).

Additionally, question 28 afforded an optional opportunity for participants to offer their narrative insights. They were asked: Please provide your comments as to why your First-Year Seminar did or did not contribute to your sense of belonging. Several comments focused on the importance of peer relationships and faculty involvement that fostered a sense of belonging. To summarize Strayhorn (2019), sense of belonging is the ability for students to feel supported, connected, cared for, and included by faculty, staff, and their peers.

Respondents discussed feeling comfortable in the first-year seminar environment where they enjoyed the family atmosphere. Pseudonyms are used to protect one's identity, but the quotes incorporated are direct and unchanged from respondents. As noted by Jami, "This class was like a family. We felt comfortable talking with each other and sharing ideas and stories." This sense of relationship satisfaction was especially important to students during the COVID-19 pandemic and while learning virtually.

According to Vern:

While it's been incredibly hard to connect to other students and teachers during a global pandemic my first year seminar does a fantastic job at connecting students. The opportunity to talk to other students and discuss things besides just coursework fosters a sense of community that makes the course interesting,

engaging, and welcoming, and encourages me to participate and motivates me to complete my schoolwork.

Faculty and staff play an essential role in fostering students' sense of belonging.

As authority figures leading and facilitating the academic environment, they have an opportunity to create conditions for dialogue and connection. As stated by Vanessa:

My professor encouraged friendships and connections. She also took interest in us and allowed us to speak our minds; we were included in conversations, not ignored. My professor not only taught us academic information, but she also aided in our transition into college.

Finally, feeling supported and equipped with transitional resources help first-year students belong. The first-year seminar contributed to his sense of belonging, as noted by Harry:

Because it allowed an easy transition, especially during these hard times with COVID. It also allowed me to meet new people that have some of the same interests as me and I also learned where to find resources if I have questions or need help with anything.

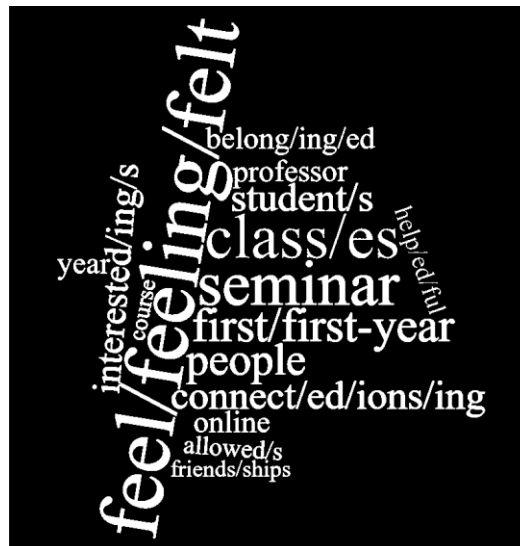
These quotes highlight key themes about the relationships developed among students and faculty and that the first-year seminar facilitated a comfortable learning environment where students felt connected and cared for. The seminar helped students build relationships with one another and throughout the broader college community, while supporting first-year students' transition to the college. That said, not all reflections were positive. The coronavirus pandemic forced the institution to pivot to online classes, which challenged some first-year students to feel connected to one another, the course material, and the larger community.

Several students called the first-year seminar "a complete waste of time" and said, "there was a huge disconnect, I have grown to resent this university." For some students, the virtual learning environment and lack of a physical presence on campus was

perceived as not conducive to fostering a sense of belonging. As noted by Luke, “It is hard to say that you belong at University when you are all just in a zoom room.” Also, Jessica stated, “We literally are not on campus so how can I belong somewhere I’m not even living at.” For some first-year students, there were disconnects about feeling a sense of belonging in a virtual learning setting, but connections were made among students. Overall, comments from question 28 are visually represented in a word cloud (Diagram 4.1). Word clouds allow for data visualization and highlight the most utilized words as the largest among all narrative comments.

#### **Diagram 4.1**

*Word cloud from narrative comments in Question 28*



Through exploring word counts, common words, and themes from narrative responses, Diagram 4.1 highlights the most utilized words from respondents. “Feel,” “felt,” and “feeling” were used 36 times. The context of this usage was that most first-year students felt welcomed, included, heard, connected, and that they belonged. “Class” or “classes” and “seminar” had 27 references as the next most utilized words. Class and classes focused on the course itself and narratives alluded to completion, how each

session began and was facilitated, the environment of the course and its openness to dialogue and discussion, and mentions to other students enrolled in the class. Seminar referenced the first-year seminar. The fourth most used words, “first” and “first-year,” are connected to one another in the context of the seminar. Finally, the fifth most used word was “people.” People referred to others met through the first-year seminar experience, new friendships forged, and relationships made between students and faculty.

**Research Question #2: Did participation in the first-year seminar program positively contribute to students’ intention to graduate from the institution?**

First-year seminars are intended to help first-year students adapt and adjust to their new environment and the rigors of college by supporting their transition. This study also sought to investigate any relationship between the first-year seminar experience and students’ intention to graduate from the host institution. If first-year seminars foster a sense of belonging and support students as they transition from high school to college, this study aimed to discover if participation in a first-year seminar contributed to students’ decision to remain and graduate from XYZ University. Three instrument questions and a culminating question were included to capture participants’ intentions to graduate from the institution. These questions were designed to: establish a baseline about first-year students’ intentions to graduate from the institution; understand, at the point of taking the survey, whether the student still intended to graduate from the university; determine if the first-year seminar experience had any effect on students’ intention to remain at the institution; and finally, identify if the first-year seminar positively affected students’ desire to graduate from the university. These questions build upon one another and the data are identified in Table 4.6 through Table 4.9.

**Table 4.6***Instrument Question 5*

**When you enrolled at XYZ University, did you intend to graduate from this University?**

| Response | Frequency | Percent of Sample |
|----------|-----------|-------------------|
| Yes      | 96        | 97.0%             |
| No       | 3         | 3.0%              |

The purpose of Table 4.6 was to gather a baseline understanding of participants' intentions to graduate when they enrolled at the host institution. Resoundingly, 97% of respondents disclosed their intention to graduate from the institution upon matriculation.

**Table 4.7***Instrument Question 6*

**Do you still intend to graduate from XYZ University?**

| Response              | Frequency | Percent of Sample |
|-----------------------|-----------|-------------------|
| Yes                   | 81        | 81.8%             |
| No                    | 2         | 2.0%              |
| Maybe                 | 13        | 13.1%             |
| Missing (No Response) | 3         | 3.0%              |

Table 4.7 reports study participants' intention to graduate from the institution at the time of their survey response. Respondents were given a "maybe" option answer choice. Comparing Table 4.6 to Table 4.7 shows first-year students' shift in their intention to graduate from the institution. Ninety-seven percent of participants intended to graduate upon their enrollment in Table 4.6, while that rate dropped 15.2% in Table 4.7.

**Table 4.8***Instrument Question 7***Did your First-Year Seminar positively affect your decision to remain at XYZ University?**

| Response              | Frequency | Percent of Sample |
|-----------------------|-----------|-------------------|
| Yes                   | 78        | 78.8%             |
| No                    | 14        | 14.1%             |
| Missing (No Response) | 7         | 7.1%              |

Table 4.8 shows that participation in a first-year seminar was a positive experience and affirmed first-year students' intentions to remain enrolled at the institution. While 14.1% of first-year students reported the first-year seminar experience did not have a positive effect, 78.8% of respondents believed the experience did positively affect their decision to remain enrolled at XYZ. Although 14.1% indicates a relatively small amount, it is a sizable percentage that may interest the institution to find out why these study participants' first-year seminar experience did not positively affect their decision to remain enrolled.

**Table 4.9***Instrument Question 29***Did your First-Year Seminar positively affect your desire to graduate from this University?**

| Response                      | Frequency | Percent of Sample |
|-------------------------------|-----------|-------------------|
| Yes                           | 52        | 52.5%             |
| No                            | 2         | 2.0%              |
| Neither positive nor negative | 36        | 36.4%             |
| Missing (No Response)         | 9         | 9.1%              |

Lastly, Table 4.9 drills down further asking respondents about the effect their first-year seminar experience had on their desire to graduate from the institution. With a

“neither positive nor negative” answer choice available, 52.5% of study participants responded “Yes” that their first-year seminar had a positive effect on their decision to graduate from the institution. Conversely, 38.4% of participants were ambivalent or negative about the effect their first-year seminar experience had on their intention to graduate from the institution.

In summary, Tables 4.6 through Table 4.9 show an interesting trajectory and several dichotomies of first-year students’ responses. Table 4.6 makes clear students’ intentions to graduate from the institution upon their enrollment. Then, upon matriculation and attendance, Table 4.7 shows a dip in first-year students’ intention to graduate from XYZ University. Tables 4.8 and 4.9 specifically ask first-year students about whether their first-year seminar experience had a positive effect on their decision to remain and graduate from the institution. Interestingly, Table 4.8 highlights a 78.8% affirmation that the first-year seminar affected first-year students’ decision to remain at the institution, while Table 4.9 shows the first-year seminar experience had a 52.5% positive effect on students’ desire to graduate from the university. Based on the self-reported data, respondents intended to remain and graduate from the host institution and the first-year seminar, at the time of survey completion, had a positive effect on students’ desire to stay and graduate from the college.

Study participants also had the optional opportunity to offer their narrative insights in response to question 29 (see Table 4.9). Question 30 asked: Please provide your comments as to why your First-Year Seminar did or did not affect your decision to graduate from this University. With the idea that the first-year seminar experience can

support retention efforts, several quotes highlight the benefits of the first-year seminar experience and first-year students' intention to graduate from the institution.

Interestingly, study participants cited elements of sense of belonging to reinforce their desire to graduate from the institution. Respondents noted that the community “created within this seminar was strong” and “when you're in a class that makes you feel a sense of community, it doesn't prompt you to look for other schools.” That feeling of community was significant as first-year students considered the effect that the first-year seminar experience had on their desire to retain. Sam referenced feeling included by stating, “It [first-year seminar] made me want to graduate from XYZ because it made me feel included and like I'm another person not just a name on a piece of paper.” Jason experienced a level of comfort due to relationships fostered with faculty and students, stating “I now know that XYZ is a University where I can be comfortable being myself.”

Feeling supported is an essential component of sense of belonging. That support can come from peer and faculty interactions and resources and transitional information provided by the institution. College students who feel they belong, look for and utilize campus resources to further their success at the institution (Strayhorn, 2012; Yeager et al., 2016, as cited in Gopalan & Brady, 2020). First-year seminars serve a vital role to help acclimate first-year students to college by promoting support interventions and department services. As noted by Virginia, her first-year seminar affected her “decision to graduate from this university because I feel like most of the people here will support and provide resources to help me grow.” Finally, Martha wrote more broadly about how the university at large was a positive factor in her decision to graduate from XYZ. “Being so passionate about making sure everyone belongs is something I didn't really see at any

other college so the fact that XYZ is so welcoming makes me want to be known for graduating here.”

These comments underscore that a positive first-year seminar experience can help retain students and set first-year students on a trajectory toward graduation. The narratives also note the importance of creating a community within the seminar and within the broader institutional context. It is imperative that both the micro and macro-environments allow first-year students to be themselves and to feel included and welcomed in order to foster a sense of belonging. There were, however, several indifferent comments and quotes about the first-year seminar experience and students' intent to graduate.

Feelings of ambivalence were not the majority, but through several quotes, the first-year seminar was described as a “break from my academic classes this fall” and “it was a simple class ... nothing difficult about it.” This perceived lack of academic rigor emerges as a negative experience for students. Still others were planning to graduate from the institution regardless of their first-year seminar. According to Kathy, “I was going to graduate from this University regardless of my first year seminar.” Javier echoes Kathy's sentiments by saying that the first-year seminar “did not affect my decision either way.” Lastly, Steven seems noncommittal about his time at the institution regardless of his first-year seminar experience. “I have no real opinion on whether I still want to stay here or not, this seminar didn't contribute to this lack of an opinion.”

Fifty-three percent (see Table 4.9) of first-year students reported that the first-year seminar experience did have a positive effect upon their decision to graduate from the institution. That said, as noted in the narratives above, some first-year students were

planning to graduate from the institution regardless of their first-year seminar experience. Others remarked that the first-year seminar lacked academic rigor and the seminar did not have a bearing on their decision to graduate. Overall, comments from question 30 are visually represented in the following word cloud (see Diagram 4.2). The word cloud highlights the most used words in responses.

#### Diagram 4.2

*Word cloud from narrative comments in Question 30*



Visually, Diagram 4.2 highlights “class/es”, “graduate/ion/ing”, “feel/ing”, and “want/ing” as the most utilized words, often in concert with one another. Specific to “class/es,” students discussed how the class helped them get to know their fellow students and faculty, feel a sense of community, identify a perceived lack of academic rigor, and that the class was enjoyable. “Graduated/ion/ing” related to the seminar inspiring students to graduate from the institution and on the opposite end of the spectrum, the seminar also had little effect on students’ intention to graduate. “Feel” and “feeling” referred to students feeling included, connected, inspired, and supported; at home at the institution; that they were part of a positive educational environment; and that they belonged.

Finally, students expressed that XYZ is where they “wanted” to be and graduate from, that faculty want what is best for them, and that students wanted to pass the class. The narratives were generally positive, reinforcing students’ desire to graduate from XYZ.

Next, Pearson Correlations were computed among questions 5, 6, 7, and 29.

Questions 5 and 7 were recoded as Yes = 1 and No = 0. For question 6, it was recoded so that No = 0, Maybe = 1, and Yes = 2. Question 29 was recoded as No = 0, Neither Positively or Negatively = 1, and Yes = 2. The correlations are identified in Table 4.10.

**Table 4.10**

*Correlations with Question 29*

| Survey Question   | Correlation with Q29: Did your First-Year Seminar positively affect your desire to graduate from this University? |
|---|---|
| Q5: When you enrolled at XYZ University, did you intend to graduate from this University? | .076  |
| Q6: Do you still intend to graduate from XYZ University?                                  | .256*   |
| Q7: Did the First-Year Seminar positively affect your desire to remain at XYZ University? | .383**  |

\* $p < .05$ ; \*\* $p < .01$

Table 4.10 shows two-tailed significance between questions 6 and 29 and questions 7 and 29. The correlation of questions 6 and 29 supports a relationship among first-year students who identified an intention to graduate from the institution and an affirmation that their first-year seminar experience positively affected their intention to graduate. The correlation of questions 7 and 29 confirms a specific and consistent relationship that the first-year seminar experience had a positive effect on first-year students’ intention to remain and graduate from the institution.

Drilling down further, question 6 asked whether the student still intended to graduate from the institution, which was dichotomized into Yes versus Maybe or No. The analysis for this question involved comparing the means of these two groups on all of the relevant questions in the survey. Since this involved multiple analyses on the same data set, a multiple analysis of variance (MANOVA) was conducted as the first step in this analysis to reduce the chances of making Type I errors. If this omnibus analysis was significant, then each question from the sense of belonging scale was used as the dependent variable in separate sample t-tests.

The omnibus MANOVA result was significant with a large effect size (Wilks' Lambda = .599,  $p = .000$ , partial eta squared = .401). Table 4.11 presents the means, standard deviations, significance level of the t-tests and Cohen's d, which references effect size. Effect size measures the strength of the relationship between the two variables. Cohen uses the following metric: .2 as small, .5 as medium, and .8 as large. Cohen's d is only reported when the t-test was statistically significant.

**Table 4.11**

*Comparison of students answering "Yes" to "Maybe or No" on statements*

| Q#  | Statement  | StillIntend | N  | Mean | Std. Deviation | Signif- icance | Cohen's d |
|-----|--|-------------|----|------|----------------|----------------|-----------|
| 8.  | I feel that I am a member of the campus community.   | MaybeorNo   | 15 | 3.13 | 1.125          | .005           | .801      |
|     |  | Yes         | 79 | 3.78 | .728           |                |           |
| 9.  | The school has provided me with resources and/or support to assist me in seeking help when needed. | MaybeorNo   | 15 | 3.47 | 1.246          | .000           | .765      |
|     |  | Yes         | 78 | 4.31 | .631           |                |           |
| 10. | I have felt excluded from school activities because of my race or ethnicity.                       | MaybeorNo   | 15 | 1.67 | .900           | NS             | -         |
|     |  | Yes         | 78 | 1.45 | .696           |                |           |
| 11. | I feel a sense of belonging within the campus community.   | MaybeorNo   | 15 | 3.13 | 1.246          | .009           | .863      |
|     |  | Yes         | 77 | 3.78 | .772           |                |           |

**Table 4.11 (con't)***Comparison of students answering "Yes" to "Maybe or No" on statements*

| Q#  | Statement  | StillIntend | N  | Mean | Std. Deviation | Significance | Cohen's d |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |
|-----|--|-------------|----|------|----------------|--------------|-----------|-----|--|-----------|----|------|-------|------|------|-----|----|------|-------|-----|--|-----------|----|------|-------|------|------|-----|----|------|-------|-----|--|-----------|----|------|-------|------|------|-----|----|------|-------|-----|--|-----------|----|------|-------|------|------|-----|----|------|-------|-----|--|-----------|----|------|-------|------|------|-----|----|------|-------|-----|--|-----------|----|------|-------|------|------|-----|----|------|-------|-----|--|-----------|----|------|-------|------|------|-----|----|------|-------|-----|--|-----------|----|------|-------|------|------|-----|----|------|-------|-----|--|-----------|----|------|-------|------|------|-----|----|------|-------|-----|--|-----------|----|------|-------|------|------|-----|----|------|-------|-----|--|-----------|----|------|------|------|------|-----|----|------|------|-----|--|-----------|----|------|------|------|------|
| 12. | I feel lonely or homesick.   | MaybeorNo   | 15 | 2.07 | 1.100          | NS           | -         |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |
|     |  | Yes         | 77 | 2.30 | 1.065          |              |           | 13. | My First-Year Seminar allowed me to establish close friendships.   | MaybeorNo | 15 | 2.47 | 1.060 | .033 | 1.02 | Yes | 77 | 3.09 | 1.015 | 14. | The school has provided opportunities and experiences that allow me to meet new people.  | MaybeorNo | 15 | 3.07 | .961  | .004 | .897 | Yes | 77 | 3.82 | .884  | 15. | The staff and faculty display interest in me.  | MaybeorNo | 15 | 3.60 | .828  | NS   | -    | Yes | 77 | 4.01 | .803  | 16. | My First-Year Seminar did not improve my understanding of campus policies or supports.   | MaybeorNo | 15 | 2.67 | 1.113 | NS   | -    | Yes | 77 | 2.17 | 1.031 | 17. | I wish I were at a different school.   | MaybeorNo | 15 | 2.93 | .799  | .000 | .787 | Yes | 77 | 1.74 | .785  | 18. | Sometimes I feel as if I don't belong at this University.  | MaybeorNo | 15 | 3.07 | .884  | .000 | .960 | Yes | 77 | 2.03 | .973  | 19. | My First-Year Seminar faculty member supported my transition to college.   | MaybeorNo | 15 | 3.73 | .799  | NS   | -    | Yes | 77 | 4.06 | .784  | 20. | I have felt insulted or threatened by other students, faculty, or staff because of my race or ethnicity.   | MaybeorNo | 15 | 1.33 | .617  | NS   | -    | Yes | 77 | 1.30 | .540  | 21. | My First-Year Seminar has fostered a sense of community.   | MaybeorNo | 15 | 3.33 | 1.113 | .027 | .885 | Yes | 77 | 3.90 | .836  | 22. | My First-Year Seminar did not improve my ability to get to know students in my class.  | MaybeorNo | 15 | 2.53 | 1.060 | NS   | -    | Yes | 77 | 2.30 | 1.052 | 23. | I feel like an outsider.   | MaybeorNo | 15 | 2.93 | .961 | .004 | .937 | Yes | 77 | 2.16 | .933 | 24. | My First-Year Seminar increased the degree to which I assumed leadership roles in campus-sponsored organizations and/or volunteered my time for worthwhile causes. | MaybeorNo | 15 | 2.60 | .986 | .045 | .886 |
| 13. | My First-Year Seminar allowed me to establish close friendships.   | MaybeorNo   | 15 | 2.47 | 1.060          | .033         | 1.02      |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |
|     |  | Yes         | 77 | 3.09 | 1.015          |              |           | 14. | The school has provided opportunities and experiences that allow me to meet new people.  | MaybeorNo | 15 | 3.07 | .961  | .004 | .897 | Yes | 77 | 3.82 | .884  | 15. | The staff and faculty display interest in me.  | MaybeorNo | 15 | 3.60 | .828  | NS   | -    | Yes | 77 | 4.01 | .803  | 16. | My First-Year Seminar did not improve my understanding of campus policies or supports.   | MaybeorNo | 15 | 2.67 | 1.113 | NS   | -    | Yes | 77 | 2.17 | 1.031 | 17. | I wish I were at a different school.   | MaybeorNo | 15 | 2.93 | .799  | .000 | .787 | Yes | 77 | 1.74 | .785  | 18. | Sometimes I feel as if I don't belong at this University.  | MaybeorNo | 15 | 3.07 | .884  | .000 | .960 | Yes | 77 | 2.03 | .973  | 19. | My First-Year Seminar faculty member supported my transition to college.   | MaybeorNo | 15 | 3.73 | .799  | NS   | -    | Yes | 77 | 4.06 | .784  | 20. | I have felt insulted or threatened by other students, faculty, or staff because of my race or ethnicity.   | MaybeorNo | 15 | 1.33 | .617  | NS   | -    | Yes | 77 | 1.30 | .540  | 21. | My First-Year Seminar has fostered a sense of community.   | MaybeorNo | 15 | 3.33 | 1.113 | .027 | .885 | Yes | 77 | 3.90 | .836  | 22. | My First-Year Seminar did not improve my ability to get to know students in my class.  | MaybeorNo | 15 | 2.53 | 1.060 | NS   | -    | Yes | 77 | 2.30 | 1.052 | 23. | I feel like an outsider.   | MaybeorNo | 15 | 2.93 | .961  | .004 | .937 | Yes | 77 | 2.16 | .933  | 24. | My First-Year Seminar increased the degree to which I assumed leadership roles in campus-sponsored organizations and/or volunteered my time for worthwhile causes. | MaybeorNo | 15 | 2.60 | .986 | .045 | .886 | Yes | 76 | 3.11 | .858 |     |  |           |    |      |      |      |      |
| 14. | The school has provided opportunities and experiences that allow me to meet new people.  | MaybeorNo   | 15 | 3.07 | .961           | .004         | .897      |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |
|     |  | Yes         | 77 | 3.82 | .884           |              |           | 15. | The staff and faculty display interest in me.  | MaybeorNo | 15 | 3.60 | .828  | NS   | -    | Yes | 77 | 4.01 | .803  | 16. | My First-Year Seminar did not improve my understanding of campus policies or supports.   | MaybeorNo | 15 | 2.67 | 1.113 | NS   | -    | Yes | 77 | 2.17 | 1.031 | 17. | I wish I were at a different school.   | MaybeorNo | 15 | 2.93 | .799  | .000 | .787 | Yes | 77 | 1.74 | .785  | 18. | Sometimes I feel as if I don't belong at this University.  | MaybeorNo | 15 | 3.07 | .884  | .000 | .960 | Yes | 77 | 2.03 | .973  | 19. | My First-Year Seminar faculty member supported my transition to college.   | MaybeorNo | 15 | 3.73 | .799  | NS   | -    | Yes | 77 | 4.06 | .784  | 20. | I have felt insulted or threatened by other students, faculty, or staff because of my race or ethnicity.   | MaybeorNo | 15 | 1.33 | .617  | NS   | -    | Yes | 77 | 1.30 | .540  | 21. | My First-Year Seminar has fostered a sense of community.   | MaybeorNo | 15 | 3.33 | 1.113 | .027 | .885 | Yes | 77 | 3.90 | .836  | 22. | My First-Year Seminar did not improve my ability to get to know students in my class.  | MaybeorNo | 15 | 2.53 | 1.060 | NS   | -    | Yes | 77 | 2.30 | 1.052 | 23. | I feel like an outsider.   | MaybeorNo | 15 | 2.93 | .961  | .004 | .937 | Yes | 77 | 2.16 | .933  | 24. | My First-Year Seminar increased the degree to which I assumed leadership roles in campus-sponsored organizations and/or volunteered my time for worthwhile causes. | MaybeorNo | 15 | 2.60 | .986  | .045 | .886 | Yes | 76 | 3.11 | .858  |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |
| 15. | The staff and faculty display interest in me.  | MaybeorNo   | 15 | 3.60 | .828           | NS           | -         |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |
|     |  | Yes         | 77 | 4.01 | .803           |              |           | 16. | My First-Year Seminar did not improve my understanding of campus policies or supports.   | MaybeorNo | 15 | 2.67 | 1.113 | NS   | -    | Yes | 77 | 2.17 | 1.031 | 17. | I wish I were at a different school.   | MaybeorNo | 15 | 2.93 | .799  | .000 | .787 | Yes | 77 | 1.74 | .785  | 18. | Sometimes I feel as if I don't belong at this University.  | MaybeorNo | 15 | 3.07 | .884  | .000 | .960 | Yes | 77 | 2.03 | .973  | 19. | My First-Year Seminar faculty member supported my transition to college.   | MaybeorNo | 15 | 3.73 | .799  | NS   | -    | Yes | 77 | 4.06 | .784  | 20. | I have felt insulted or threatened by other students, faculty, or staff because of my race or ethnicity.   | MaybeorNo | 15 | 1.33 | .617  | NS   | -    | Yes | 77 | 1.30 | .540  | 21. | My First-Year Seminar has fostered a sense of community.   | MaybeorNo | 15 | 3.33 | 1.113 | .027 | .885 | Yes | 77 | 3.90 | .836  | 22. | My First-Year Seminar did not improve my ability to get to know students in my class.  | MaybeorNo | 15 | 2.53 | 1.060 | NS   | -    | Yes | 77 | 2.30 | 1.052 | 23. | I feel like an outsider.   | MaybeorNo | 15 | 2.93 | .961  | .004 | .937 | Yes | 77 | 2.16 | .933  | 24. | My First-Year Seminar increased the degree to which I assumed leadership roles in campus-sponsored organizations and/or volunteered my time for worthwhile causes. | MaybeorNo | 15 | 2.60 | .986  | .045 | .886 | Yes | 76 | 3.11 | .858  |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |
| 16. | My First-Year Seminar did not improve my understanding of campus policies or supports.   | MaybeorNo   | 15 | 2.67 | 1.113          | NS           | -         |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |
|     |  | Yes         | 77 | 2.17 | 1.031          |              |           | 17. | I wish I were at a different school.   | MaybeorNo | 15 | 2.93 | .799  | .000 | .787 | Yes | 77 | 1.74 | .785  | 18. | Sometimes I feel as if I don't belong at this University.  | MaybeorNo | 15 | 3.07 | .884  | .000 | .960 | Yes | 77 | 2.03 | .973  | 19. | My First-Year Seminar faculty member supported my transition to college.   | MaybeorNo | 15 | 3.73 | .799  | NS   | -    | Yes | 77 | 4.06 | .784  | 20. | I have felt insulted or threatened by other students, faculty, or staff because of my race or ethnicity.   | MaybeorNo | 15 | 1.33 | .617  | NS   | -    | Yes | 77 | 1.30 | .540  | 21. | My First-Year Seminar has fostered a sense of community.   | MaybeorNo | 15 | 3.33 | 1.113 | .027 | .885 | Yes | 77 | 3.90 | .836  | 22. | My First-Year Seminar did not improve my ability to get to know students in my class.  | MaybeorNo | 15 | 2.53 | 1.060 | NS   | -    | Yes | 77 | 2.30 | 1.052 | 23. | I feel like an outsider.   | MaybeorNo | 15 | 2.93 | .961  | .004 | .937 | Yes | 77 | 2.16 | .933  | 24. | My First-Year Seminar increased the degree to which I assumed leadership roles in campus-sponsored organizations and/or volunteered my time for worthwhile causes. | MaybeorNo | 15 | 2.60 | .986  | .045 | .886 | Yes | 76 | 3.11 | .858  |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |
| 17. | I wish I were at a different school.   | MaybeorNo   | 15 | 2.93 | .799           | .000         | .787      |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |
|     |  | Yes         | 77 | 1.74 | .785           |              |           | 18. | Sometimes I feel as if I don't belong at this University.  | MaybeorNo | 15 | 3.07 | .884  | .000 | .960 | Yes | 77 | 2.03 | .973  | 19. | My First-Year Seminar faculty member supported my transition to college.   | MaybeorNo | 15 | 3.73 | .799  | NS   | -    | Yes | 77 | 4.06 | .784  | 20. | I have felt insulted or threatened by other students, faculty, or staff because of my race or ethnicity.   | MaybeorNo | 15 | 1.33 | .617  | NS   | -    | Yes | 77 | 1.30 | .540  | 21. | My First-Year Seminar has fostered a sense of community.   | MaybeorNo | 15 | 3.33 | 1.113 | .027 | .885 | Yes | 77 | 3.90 | .836  | 22. | My First-Year Seminar did not improve my ability to get to know students in my class.  | MaybeorNo | 15 | 2.53 | 1.060 | NS   | -    | Yes | 77 | 2.30 | 1.052 | 23. | I feel like an outsider.   | MaybeorNo | 15 | 2.93 | .961  | .004 | .937 | Yes | 77 | 2.16 | .933  | 24. | My First-Year Seminar increased the degree to which I assumed leadership roles in campus-sponsored organizations and/or volunteered my time for worthwhile causes. | MaybeorNo | 15 | 2.60 | .986  | .045 | .886 | Yes | 76 | 3.11 | .858  |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |
| 18. | Sometimes I feel as if I don't belong at this University.  | MaybeorNo   | 15 | 3.07 | .884           | .000         | .960      |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |
|     |  | Yes         | 77 | 2.03 | .973           |              |           | 19. | My First-Year Seminar faculty member supported my transition to college.   | MaybeorNo | 15 | 3.73 | .799  | NS   | -    | Yes | 77 | 4.06 | .784  | 20. | I have felt insulted or threatened by other students, faculty, or staff because of my race or ethnicity.   | MaybeorNo | 15 | 1.33 | .617  | NS   | -    | Yes | 77 | 1.30 | .540  | 21. | My First-Year Seminar has fostered a sense of community.   | MaybeorNo | 15 | 3.33 | 1.113 | .027 | .885 | Yes | 77 | 3.90 | .836  | 22. | My First-Year Seminar did not improve my ability to get to know students in my class.  | MaybeorNo | 15 | 2.53 | 1.060 | NS   | -    | Yes | 77 | 2.30 | 1.052 | 23. | I feel like an outsider.   | MaybeorNo | 15 | 2.93 | .961  | .004 | .937 | Yes | 77 | 2.16 | .933  | 24. | My First-Year Seminar increased the degree to which I assumed leadership roles in campus-sponsored organizations and/or volunteered my time for worthwhile causes. | MaybeorNo | 15 | 2.60 | .986  | .045 | .886 | Yes | 76 | 3.11 | .858  |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |
| 19. | My First-Year Seminar faculty member supported my transition to college.   | MaybeorNo   | 15 | 3.73 | .799           | NS           | -         |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |
|     |  | Yes         | 77 | 4.06 | .784           |              |           | 20. | I have felt insulted or threatened by other students, faculty, or staff because of my race or ethnicity.   | MaybeorNo | 15 | 1.33 | .617  | NS   | -    | Yes | 77 | 1.30 | .540  | 21. | My First-Year Seminar has fostered a sense of community.   | MaybeorNo | 15 | 3.33 | 1.113 | .027 | .885 | Yes | 77 | 3.90 | .836  | 22. | My First-Year Seminar did not improve my ability to get to know students in my class.  | MaybeorNo | 15 | 2.53 | 1.060 | NS   | -    | Yes | 77 | 2.30 | 1.052 | 23. | I feel like an outsider.   | MaybeorNo | 15 | 2.93 | .961  | .004 | .937 | Yes | 77 | 2.16 | .933  | 24. | My First-Year Seminar increased the degree to which I assumed leadership roles in campus-sponsored organizations and/or volunteered my time for worthwhile causes. | MaybeorNo | 15 | 2.60 | .986  | .045 | .886 | Yes | 76 | 3.11 | .858  |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |
| 20. | I have felt insulted or threatened by other students, faculty, or staff because of my race or ethnicity.   | MaybeorNo   | 15 | 1.33 | .617           | NS           | -         |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |
|     |  | Yes         | 77 | 1.30 | .540           |              |           | 21. | My First-Year Seminar has fostered a sense of community.   | MaybeorNo | 15 | 3.33 | 1.113 | .027 | .885 | Yes | 77 | 3.90 | .836  | 22. | My First-Year Seminar did not improve my ability to get to know students in my class.  | MaybeorNo | 15 | 2.53 | 1.060 | NS   | -    | Yes | 77 | 2.30 | 1.052 | 23. | I feel like an outsider.   | MaybeorNo | 15 | 2.93 | .961  | .004 | .937 | Yes | 77 | 2.16 | .933  | 24. | My First-Year Seminar increased the degree to which I assumed leadership roles in campus-sponsored organizations and/or volunteered my time for worthwhile causes. | MaybeorNo | 15 | 2.60 | .986  | .045 | .886 | Yes | 76 | 3.11 | .858  |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |
| 21. | My First-Year Seminar has fostered a sense of community.   | MaybeorNo   | 15 | 3.33 | 1.113          | .027         | .885      |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |
|     |  | Yes         | 77 | 3.90 | .836           |              |           | 22. | My First-Year Seminar did not improve my ability to get to know students in my class.  | MaybeorNo | 15 | 2.53 | 1.060 | NS   | -    | Yes | 77 | 2.30 | 1.052 | 23. | I feel like an outsider.   | MaybeorNo | 15 | 2.93 | .961  | .004 | .937 | Yes | 77 | 2.16 | .933  | 24. | My First-Year Seminar increased the degree to which I assumed leadership roles in campus-sponsored organizations and/or volunteered my time for worthwhile causes. | MaybeorNo | 15 | 2.60 | .986  | .045 | .886 | Yes | 76 | 3.11 | .858  |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |
| 22. | My First-Year Seminar did not improve my ability to get to know students in my class.  | MaybeorNo   | 15 | 2.53 | 1.060          | NS           | -         |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |
|     |  | Yes         | 77 | 2.30 | 1.052          |              |           | 23. | I feel like an outsider.   | MaybeorNo | 15 | 2.93 | .961  | .004 | .937 | Yes | 77 | 2.16 | .933  | 24. | My First-Year Seminar increased the degree to which I assumed leadership roles in campus-sponsored organizations and/or volunteered my time for worthwhile causes. | MaybeorNo | 15 | 2.60 | .986  | .045 | .886 | Yes | 76 | 3.11 | .858  |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |
| 23. | I feel like an outsider.   | MaybeorNo   | 15 | 2.93 | .961           | .004         | .937      |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |
|     |  | Yes         | 77 | 2.16 | .933           |              |           | 24. | My First-Year Seminar increased the degree to which I assumed leadership roles in campus-sponsored organizations and/or volunteered my time for worthwhile causes. | MaybeorNo | 15 | 2.60 | .986  | .045 | .886 | Yes | 76 | 3.11 | .858  |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |
| 24. | My First-Year Seminar increased the degree to which I assumed leadership roles in campus-sponsored organizations and/or volunteered my time for worthwhile causes. | MaybeorNo   | 15 | 2.60 | .986           | .045         | .886      |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |
|     |  | Yes         | 76 | 3.11 | .858           |              |           |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |       |      |      |     |    |      |       |     |  |           |    |      |      |      |      |     |    |      |      |     |  |           |    |      |      |      |      |

**Table 4.11 (con't)**

*Comparison of students answering “Yes” to “Maybe or No” on statements*

| Q#  | Statement                              | StillIntend | N  | Mean | Std. Deviation | Significance | Cohen's d |
|-----|--|-------------|----|------|----------------|--------------|-----------|
| 25. | I can really be myself at this school. | MaybeorNo   | 15 | 3.33 | .816           | .008         | .771      |
|     |  | Yes         | 76 | 3.92 | .762           |              |           |
| 26. | I feel at home on this campus.         | MaybeorNo   | 15 | 2.93 | .704           | .013         | .700      |
|     |  | Yes         | 76 | 3.43 | .699           |              |           |

Questions 8, 9, 11, 13, 14, 17, 18, 21, 23, 24, 25, and 26 are statistically significant, while questions 10, 12, 15, 16, 19, 20, and 22 are not significant (NS). Specifically assessing instrument items related to the first-year seminar experience illustrates a correlation with intent to graduate from XYZ University. First-year seminars that help new students develop friendships, create a sense of community, and increase opportunities for first-year students to engage in leadership and volunteerism translate into student commitment to graduate from the institution. Though not directly related to the research question, colleges and universities that help first-year students feel part of the larger community, provide resources and assistance, foster a sense of belonging, facilitate opportunities for students to develop new and close relationships, and allow students to be their unique and authentic selves will likely translate to increased retention and graduation rates. Additionally, as shown in Table 4.11, a large effect size is noted among all the statistically significant variables. This large effect size shows a strong relationship between the statement and “Yes” responses from participants.

**Factor Analysis of the Questionnaire.** As mentioned in Chapter 3, the questionnaire was designed to contain two themes: questions asking specifically about the first-year seminar and questions relating to a general sense of belonging. As an exploratory analysis and for possible use of this questionnaire for future research, the

statements in Table 4.11 were factor analyzed using a principal components analysis followed by a varimax rotation. This produced four factors in Table 4.12 with eigenvalues over one that accounted for 64.6% of the variance.

**Table 4.12***Rotated component matrix*

|  | Component    |              |       |       |
|--|--------------|--------------|-------|-------|
|  | 1            | 2            | 3     | 4     |
| I feel a sense of belonging within the campus community.   | <b>.821</b>  | .097         | -.171 | -.101 |
| I feel that I am a member of the campus community.   | <b>.782</b>  | .126         | -.217 | .129  |
| The school has provided me with resources and/or support to assist me in seeking help when needed.   | <b>.768</b>  | .173         | .046  | -.045 |
| I wish I were at a different school.   | <b>-.737</b> | -.234        | .102  | .255  |
| Sometimes I feel as if I don't belong at this University.  | <b>-.706</b> | -.217        | .216  | .256  |
| I feel at home on this campus.   | <b>.702</b>  | .248         | .030  | .184  |
| I feel like an outsider.   | <b>-.620</b> | -.319        | .227  | .390  |
| The school has provided opportunities and experiences that allow me to meet new people.  | <b>.607</b>  | .467         | -.031 | .046  |
| The staff and faculty display interest in me.  | <b>.585</b>  | .233         | -.004 | -.518 |
| I can really be myself at this school.   | <b>.540</b>  | .270         | -.233 | -.098 |
| My First-Year Seminar did not improve my ability to get to know students in my class.  | -.139        | <b>-.838</b> | .139  | .159  |
| My First-Year Seminar has fostered a sense of community.   | .390         | <b>.732</b>  | -.001 | .036  |
| My First-Year Seminar allowed me to establish close friendships.   | .089         | <b>.723</b>  | -.033 | -.040 |
| My First-Year Seminar increased the degree to which I assumed leadership roles in campus-sponsored organizations and/or volunteered my time for worthwhile causes. | .513         | <b>.521</b>  | .143  | .048  |
| My First-Year Seminar did not improve my understanding of campus policies or supports.   | -.455        | <b>-.521</b> | .207  | .265  |
| My First-Year Seminar faculty member supported my transition to college.   | .445         | <b>.464</b>  | -.069 | -.272 |

**Table 4.12 (con't)***Rotated component matrix*

|  | Component |       |             |             |
|--|-----------|-------|-------------|-------------|
|  | 1         | 2     | 3           | 4           |
| I have felt excluded from school activities because of my race or ethnicity.                             | -.129     | .014  | <b>.869</b> | .078        |
| I have felt insulted or threatened by other students, faculty, or staff because of my race or ethnicity. | -.124     | -.126 | <b>.854</b> | -.027       |
| I feel lonely or homesick.   | .035      | -.041 | .015        | <b>.879</b> |

As shown in Table 4.12, the factor analysis of the questions produced four factors. Factor 1 (Component 1) in bold concern a sense of belonging, while all of the bold items in Factor 2 (Component 2) concern the first-year seminar. As such, this analysis basically validates the two parts of the questionnaire. The two exceptions are the statements about race, which constitute a unique factor (Component 3), and the single item about feeling lonely or homesick (Component 4). It is not surprising that the two statements asking about race are a unique factor since these two questions are similar and to some extent different from the other questions. It is somewhat more surprising that the item about loneliness does not load on Factor 1.

As a further extension of this analysis, factor scores were computed for the factors and then converted to T-scores. As before, the two groups (Yes and Maybe or No) were compared as was done in Table 4.11. The only significant difference was for Factor 1. These results are presented in Table 4.13.

**Table 4.13***Results of t-tests for Factor 1*

| Group   | Mean  | Standard Deviation | t-test | Significance | Cohen's d |
|---|-------|--------------------|--------|--------------|-----------|
| Still Intend to Graduate                      | 51.94 | 7.29               |        |              |           |
| Do not Still Intend to Graduate or are Unsure | 41.15 | 14.21              | 4.40   | .000         | .86       |

The results of the t-test in Table 4.13 indicate significance and a large effect size of Factor 1. These results exhibit a relationship between first-year students who experienced a sense of belonging and their intention to graduate from the institution. This analysis shows that fostering a sense of belonging can contribute positively to retention efforts.

**Research Question #3: Are there differences in students' sense of belonging based on gender and race?**

As noted earlier in this chapter, the sample of this study is predominantly female and White. It is important, however, to explore any differences that may exist among the sample, particularly first-year students' and their gender and race. Table 4.1 identifies the sample as 74% female and 22% male and Table 4.2 notes participants' race as 69% White and 31% non-White.

**Differences as a Function of Gender.** As an initial analysis for gender, males and females were compared on their answers to all the questions on the survey as presented previously in Table 4.11. The omnibus MANOVA test was not significant (Wilks lambda = .951,  $p = .556$ ) and none of the individual questions were significant. An additional analysis was conducted on the question asking if the first-year seminar

contributed to students' sense of belonging. This was analyzed by chi square with the results presented in Table 4.14.

**Table 4.14**

*Chi square for gender*

**I identify as: \* Did your First-Year Seminar contribute to your sense of belonging at this University?**

| Gender | No            | Yes           |
|--------|---------------|---------------|
| Female | 11<br>(16.2%) | 57<br>(83.8%) |
| Male   | 8<br>(40.0%)  | 12<br>(60.0%) |

Chi square = 5.18,  $p = .023$

Table 4.14 illustrates a significant difference between males and females. A higher percentage of females believed their first-year seminar contributed to their sense of belonging at the institution. The difference, however, is small. Overall, therefore, there are only minimal differences between males and females in their sense of belonging or their evaluation of the first-year seminar.

**Differences Among Races.** As before, the questions from the survey were analyzed comparing Whites to Non-Whites. The omnibus MANOVA was significant (Wilks' lambda = .664,  $p = .002$ , partial eta squared = .399). There were two questions where there were significant differences. These results are presented in Table 4.15.

**Table 4.15***Differences among race/ethnicity*

|   | Race/Ethnicity | N  | Mean | Std. Deviation |
|---|----------------|----|------|----------------|
| I have felt excluded from school activities because of my race or ethnicity.            | White          | 65 | 1.32 | .533           |
|   | Non-White      | 30 | 1.83 | .950           |
| The school has provided opportunities and experiences that allow me to meet new people. | White          | 64 | 3.53 | .959           |
|   | Non-White      | 30 | 3.97 | .928           |

t for first question = 3.35.  $p = .001$ . Cohen's  $d = .739$

t for second question = 2.07,  $p = .041$ , Cohen's  $d = .436$

Table 4.15 presents two significant differences between White and non-White students enrolled in the first-year seminar program. The results, however, are somewhat contradictory. As the minority on a predominantly White campus, it is not surprising that non-White students felt excluded because of their race. Interestingly, however, non-White students believed the institution provided enough opportunities for them to meet new people.

Whites and Non-Whites were compared on their answer to the question about whether the first-year seminar had contributed to their sense of belonging (as was done for gender in Table 4.14). The chi square was not significant.

### Summary

As shown in Appendix D, study instrument statements were organized and bucketed into two themes – First-Year Seminars and General Sense of Belonging on Campus. The intention behind this structure was to identify the belonging practices that resonated with first-year students' within the micro classroom environment (i.e., within

the first-year seminar) and at the macro, institutional-level. The purpose of statements within the first-year seminar theme aimed to identify whether relationships and community were developed, and if students became aware of policies and involvement opportunities. Clearly, XYZ University faculty excelled at connecting with their students by supporting their transition. Community was created where opportunities were facilitated for students to get to know one another and gain a greater understanding of the resources and expectations at the institution. Conversely, deep peer-to-peer relationships were not necessarily established and first-year students were unable to increase their involvement in co-curricular experiences, both of which help foster students' sense of belonging.

The General Sense of Belonging theme explored how first-year students did or did not experience a sense of belonging within a broader institutional context. Despite students having their first semester of college online due to the coronavirus pandemic, this collection of statements was scored favorably by respondents. First-year students received the resources necessary to succeed at the institution, they were satisfied with their decision to enroll at XYZ, and students recognized the efforts of faculty and staff to take an interest in them. Data revealed that students felt they belonged and included, and they were comfortable being themselves. Students were not alone as they were able to meet and interact with one another. First-year students experienced belonging at XYZ University through having opportunities to develop relationships with their peers and faculty.

This paper concludes with Chapter 5, which offers an overview of the findings, identifies the limitations, and discusses the implications for practice and future research.

## CHAPTER 5 – DISCUSSION

The purpose of this research study was to understand if a first-year seminar program at a small, private, 4-year liberal arts institution fostered a sense of belonging in their first-year students. Additionally, first-year students' intent to graduate was included in the data analysis and any differences among gender and race/ethnicity were explored. As a reminder, the definition of sense of belonging that framed this study was provided by Strayhorn (2019):

students' perceived social support on campus, a feeling or sensation of connectedness, and the experience of mattering or feeling cared about, accepted, respected, valued by, and important to the campus community or others on campus such as faculty, staff, and peers. (p. 4)

This definition served as a focal point of the study instrument as study participants were instructed to utilize this definition when reflecting upon their responses.

Along with Strayhorn's (2019) definition and research, this dissertation employed various literature associated with sense of belonging and provided definition and detail about the history and purpose of first-year seminars. Additional literature focused on college student transition, retention, online learning, and race/ethnicity and gender. Chapter 5 examines the three research questions that guided the study and incorporates data from Chapter 4 to answer each question, utilizing pertinent literature to support the findings. The limitations section highlights several areas of deficiency, including the overall response rate, coronavirus pandemic, the tactics used to promote the survey, and retrospective modifications that could have enhanced the study instrument. Finally, this chapter closes by articulating implications for practice and illuminating gaps in the literature. This study can be of benefit to first-year experience faculty and program administrators through implementing practices centered on fostering students' sense of

belonging. These practices can ensure first-year students feel welcomed, connected, supported, and valued, advancing student success and retention.

### **Discussion of Findings**

As noted by Goodenow (1993), sense of belonging is cultivated in an educational setting when students are “accepted, included, and supported” (p. 80). Faculty have a primary role in this responsibility, especially as first-year students acclimate to the college environment. Freeman et al. (2007) discovered that faculty who are welcoming of first-year students and passionate about teaching can foster students’ sense of belonging. At the host institution, first-year seminar faculty played an essential role promoting a sense of belonging by providing various supports as new students transitioned to college. Faculty helped students acclimate to their new environment through informing them about the institutional resources available and the policies expected of students as members of the university community. Through offering personalized support, providing access to campus and academic resources, and engaging first-year students outside of class, students’ sense of belonging is cultivated, improving retention and student success (Bartell & Boswell, 2019).

#### **Research Question #1: Does the first-year seminar program foster a sense of belonging among first-year students enrolled at a 4-year, private institution?**

First-year seminars are designed to teach first-year students “skills for intellectual and practical success in higher education” (Sobel, 2018, p. 68) and they intend to help students transition successfully from high school to college (Jenkins-Guarnieri et al., 2015; Zerr & Bjerke, 2016). Respondents believed their faculty to be generally successful at creating community within their course section. Table 4.3 shows participants’ positive impressions of their first-year seminar experience, including students’ understanding of

campus policies and resources, the transitional support received from their faculty, feelings of being part of a community within the seminar, and having the opportunity to get to know other students in the class. These positive responses parallel best practices within the literature and reflect key components that the first-year seminar fostered students' sense of belonging, helping them gain valuable social support and connections.

That said, the mean of item 13 in Table 4.3 was unexceptional, which could be the result of two factors – the online format of the class and/or because the faculty did not facilitate the necessary opportunities for students to build relationships with one another. As noted by Peacock and Cowan (2019), online instructors who were enthusiastic about teaching and the subject matter fostered a sense of belonging in their students. Additionally, in Table 4.5, the mean of statement 26 did not affirm students feeling at home on campus. I attribute this mean to be a result of students in the online, virtual learning environment due to the coronavirus pandemic. First-year students were already “home” or at another location not physically on campus. That said, Thomas et al. (2014) stressed that faculty teaching online courses with first-year students must cultivate community and sense of belonging.

Despite the assumed challenges of online learning and the coronavirus pandemic, reflecting upon Strayhorn's (2019) definition of sense of belonging about social support, connectedness, and acceptance, first-year students confirmed feeling as such. As we focus on the online learning experience of the sample, we are reminded by Peacock and Cowan (2019) that, “Having, or not having, sense of belonging clearly will make a significant impact on learners, who we hope can flourish in online educational spaces” (p. 68). For online learners to succeed, students must feel welcomed, accepted, and valued

(Peacock & Cowan, 2019), which reduce anxiety and boredom that can negatively affect online academic performance (Peacock et al., 2020). Similar to the online first-year seminar experience at XYZ University, when faculty incorporated institutional resources and support in the curriculum, Herridge and McNaughton (2020) discovered that students in an online new student orientation program “show a stronger relationship between knowledge of institutional support and sense of belonging” versus those students participating in an in-person orientation (p. 25).

In Table 4.3, first-year students reported receiving support from their professor, they experienced feeling a sense of community, and were aware of the institutional policies and expectations as a member of XYZ University. These outcomes allowed first-year students to feel welcomed and connected to the seminar and institution. Further, the quantitative data were reinforced by the qualitative narrative comments. First-year students experienced an educational setting of support, connections made with peers and faculty, and respondents felt they belonged. As summed up by Peter, “My professor made it a better transition to campus and even online schooling, they made us feel included,” and Jennifer stated, “My first-year seminar was somewhere I felt safe and connected.”

**Research Question #2: Did participation in the first-year seminar program positively contribute to students’ intention to graduate from the institution?**

Institutions of higher education have developed various programs to help students transition successfully from high school to college (McKinney & Denton, 2006), one of which is first-year seminars. Not only do first-year seminars serve the purpose of helping students transition, but they also instill the necessary academic skills for students to retain and eventually graduate from the institution (Clark, 2005). First-year seminars are often viewed as a medium to provide first-year students the necessary skills and coping

mechanisms to bolster retention (Permazdian & Credé, 2016). In this study, data in Tables 4.6 through Table 4.9 represented participants' intentions to graduate from the institution and if the first-year seminar experience had a positive effect on their intention to graduate from the institution.

The survey instrument was designed to gauge intention to graduate upon matriculation (see Table 4.6, 97% affirmative) and if, at the time of survey completion, students remained committed to graduate from the university (see Table 4.7, 81.8% affirmative). There is a recession of 15% in intent to graduate at initial enrollment versus the conclusion of students' initial semester. Though not as high a percentage as the aforementioned tables, Table 4.8 shows a 78.8% favorable position that the first-year seminar experience had a positive effect on persistence. Finally, Table 4.9 represented participants' perceptions of their first-year seminar experience and its effect on their desire to graduate from the institution. In this case, responses were 52.5% positive, while 38.4% were negative or indifferent.

Without specific data available to explain this downward trend, possible reasons for the percentage decrease could be institutional fit, the coronavirus pandemic, online learning, and/or the first-year seminar was a negative experience for some students. Table 4.10 shows a significant correlation between participation in the first-year seminar, intent to graduate, and the positive influence of the first-year seminar. These correlations quantify an affirmative relationship between the first-year seminar and students' intentions (at the time of survey administration) to graduate and that the seminar was a reason for students remaining enrolled. Further, Table 4.10 affirms intent to graduate from the institution and that the first-year seminar had a positive effect on that decision.

Table 4.11 correlates answers to question 6, “Do you still intend to graduate from XYZ University?”, with each instrument statement. Respondents had the choice of answering question 6 as “Yes,” “No,” or “Maybe.” Grouping Maybe and No together in comparison to Yes responses highlights several significant relationships between a positive first-year seminar experience and intent to graduate. These include first-year students who were able to establish close friendships, recognize a sense of community within their seminar, and who were exposed to opportunities to engage in student organizations and volunteerism. Students who intended to graduate from the institution had a favorable first-year seminar experience.

Retaining students is very important, financially and statistically, to colleges and universities and first-year seminars serve as an intervention in that effort (Schnell & Doetkott, 2003). In Table 4.12, a factor analysis showed that the first-year seminar created community and that students were able to develop close relationships and feel connected with their faculty member. Table 4.12 highlights a cluster of statements that related to students' general sense of belonging at XYZ University. Those factor scores were then converted to T-scores, comparing students' current intentions to graduate from the institution. As shown in Table 4.13, a relationship exists between those students who experienced a sense of belonging and those first-year students intending to graduate from XYZ University. There is a significant difference in the means of over 10 points. Jimmy said of the first-year seminar, “it helped to make this feel like the school I want to be at,” while Kathy stated that the seminar “made me want to graduate from XYZ University because it made me feel included.”

**Research Question #3: Are there differences in students' sense of belonging based on gender and race/ethnicity?**

Particularly for students of color, Johnson et al. (2007) discovered that sense of belonging was incredibly important during a student's academic and social transition to college. A student's identity, race/ethnicity, gender, sexual orientation, and religion affect sense of belonging (Strayhorn, 2019). Because of the lack of diversity in gender and race/ethnicity of the sample, there were limited correlations extracted from the data. As mentioned previously, the sample is predominantly White women. Table 4.14 is a cross tabulation of gender and participants' perception that their first-year seminar contributed to their sense of belonging at the institution. 83.8% of women believed their first-year seminar contributed to their sense of belonging, while males were at 60%. Table 4.14 shows that women are more likely than men to say that their first-year seminar contributed to their sense of belonging. It should be noted that more women participated in the survey and, overall, more women are enrolled at the college. However, the data provide the institution an opportunity to emphasize engagement interventions with the male student population and intentionally incorporate the necessary tenets and best practices to improve their sense of belonging.

Table 4.15 highlights two key, significant differences between White and non-White students. A separate samples t-test was performed of the instrument statements. The means provided two significant results. Non-White students within the sample tended to feel more excluded from activities due to their race/ethnicity. This effect size was large. Despite feeling excluded, non-White students did believe that the school provided opportunities and experiences to meet new people. This effect size was medium. It is an interesting dichotomy that non-White students felt excluded from activities; but

more so than White students, non-White students met new people. In a study that focused on sense of belonging during the COVID-19 pandemic, according to Potts (2021), marginalized students “articulated the struggle they found when needing in-person experiences to feel connected to students who looked like them and to feel accepted by majority-identity students” (p. 220). These data can be utilized by XYZ University, a predominantly White institution, to ensure that students of color are not marginalized from the White population. In order to foster a sense of belonging for non-White students, the results noted in Table 4.15 will require the institution to be mindful that students of color feel included. According to Bollen and Hoyle (1990), if students feel connected and included, they experience a sense of belonging. As stated by Strayhorn (2019), “the absence of belonging is marginalization, isolation, or alienation from others” (p. 29).

### **Limitations of the Study**

This study encountered several limitations. Typically, first-year seminars at the host institution are in-person. Beyond the in-class academic coursework, there are traditional complimentary, community-building activities that include face-to-face icebreakers and group work, off-campus trips, guest speakers, class attendance at on-campus events, and shared meals. Because of the coronavirus pandemic, the institution had to pivot all fall 2020 first-year seminars to the online, virtual format. Courses were delivered via Zoom and Canvas. For XYZ University, first-year seminars had never been taught online. As noted within the study findings, some first-year students felt connected to each other and the course material, while other students experienced a disconnect and did not achieve a sense of belonging in the virtual learning environment.

Another limitation was the host institution's requirement that all promotion, reminders, and general communication about the survey be delivered via the Director of First-Year Academic Experience. Once the Director of First-Year Academic Experience received my communication about the study, I entrusted her to forward the information to the first-year seminar faculty. The last task in the chain of promoting the survey was relying on faculty to send study invitations and reminders to their first-year students. The lack of direct access to the sample did not guarantee regular messaging to first-year students, thus potentially hampering the response rate.

The study instrument was created based upon previously validated studies involving sense of belonging, first-year seminars, and retention. Survey statements were mapped from previous studies as shown in Appendix C. These studies were administered to participants enrolled in brick-and-mortar classes. Thus, this study instrument was not necessarily constructed for an online, virtual first-year seminar. Some of the study statements and questions could have been more directed specifically toward the experience of online learners.

Finally, the primary limitation was the overall response rate. As previously referenced, the coronavirus pandemic and indirect communication to study participants served as challenges to increase the response rate. The study was administered in late-November, early-December of the fall 2020 semester and despite best efforts to communicate reminders and offer participants incentives, the overall response rate was relatively low. Additionally, in retrospect, distributing the survey at the end of a trying first semester for new students during a pandemic may have led to lower participation.

Though the study still produced significant results, the less than ideal response rate also constrained and limited data manipulation about gender and race/ethnicity.

### **Implications for Practice and Future Research**

The literature is vast about first-year seminars and their history and impact on the first-year experience. There is a gap, however, in the literature exploring sense of belonging in the context of and in concert with first-year seminars. This dissertation helps further the conversation and provide evidence-based research about sense of belonging as a concept that advances first-year students' connection to and affiliation with their institution. Opportunities exist for continued research about sense of belonging, first-year seminars, and retention, particularly at a variety of institutional types, including 2-year, 4-year publics, and larger private colleges and universities. The literature has documented a prevalence of first-year seminars existing throughout higher education (Reid et al., 2014) and that fostering a sense of belonging is attributed to college students feeling welcomed and included at their colleges and universities (Strayhorn, 2019). It is recommended that additional research be conducted about these synergies.

I also encourage opportunities for professional development for faculty, staff, and first-year seminar program administrators to understand and incorporate sense of belonging into their curricula and teaching methods. Han et al. (2017) recommend formal training for faculty and staff to engage in interventions that promote belonging. Ongoing faculty development is an important practice for the success of a first-year seminar program as the course is only as good as the individual teaching it (Friedman et al., 2019). First-year seminars can most benefit students when consistent, ongoing training and professional development is available to faculty to enhance and support their

instruction (Scanlon, & Dvorak, 2019). According to Smith and Barrett (2019), “Given the potential of these early relationships to shape students’ sense of belonging, it is critical that instructional staff and faculty in first-year seminars approach their work developmentally, with an intention to build relationships and rapport” (p. 20).

First-year seminars can play a vital role through improving student persistence and success (Pittendrigh et al., 2016). Jenkins-Guarnieri et al. (2015) found that students enrolled in a first-year seminar are likely to remain enrolled the following semester as opposed to students not taking a seminar. Additionally, considering the current higher education climate of declining enrollments, along with stretched and limited fiscal resources, the intentional cultivation of a sense of belonging within the first-year seminar curriculum could be of benefit to help institutions attract and retain new and returning students. According to Schnell and Doetkott (2003), first-year seminars serve as a mechanism to increase retention. It makes both financial and marketing sense to focus on retaining current students as increased retention also positively affects rankings and reputation for institutions. Beyond exploring sense of belonging among first-year students, additional research is needed to study various classifications of students, including continuing and transfer students, as well as investigating subpopulations like adult learners, commuters, residents, student-athletes, students of color, etc.

Due to the coronavirus pandemic, further investigation is required of how college students, specifically first-time, first-year students, and their sense of belonging was impacted. The traditional brick and mortar on-campus experience was denied to college students throughout the country and more specifically, to participants of this study. In the past, XYZ University only offered the first-year seminar experience through in-person

instruction. The COVID-19 pandemic disrupted the traditional ways that college students connect with their peers and institution, complicating students' ability to experience a sense of belonging (Potts, 2021).

The study does endorse, however, that a sense of belonging can be fostered through a virtual learning modality and that students can be retained. The COVID-19 pandemic has created a new frontier for education and as a result, online elements are likely to continue after the pandemic has passed (Chu et al., 2021). If online first-year seminars at XYZ University are offered in the future, Daigle and Stuvland (2021) recommend that these online classes be delivered asynchronously and synchronously, prioritizing cultivation of a learning environment that allows students to experience the social presence of others. Unfortunately, this study was unable to compare and contrast the experience of first-year students in the virtual environment versus students completing their seminar in-person. The host institution may want to consider offering both virtual and brick and mortar first-year seminars and then analyze any differences between the experiences.

Faculty can have an instrumental responsibility to foster a sense of belonging in their students through welcoming, including, and supporting first-year students as they transition from high school to college. This paper highlighted several teaching and classroom management practices that resonated with study participants. As supported by the literature, numerous best practices exist that can be implemented by faculty to ensure their first-year students transition successfully and feel included within the seminar and the larger institutional communities. In the online learning environment, sense of belonging is fostered through faculty presence and availability (Thomas et al., 2014) and

scheduling times throughout the week to meet with students (Daigle & Stuvland, 2021); the high quality and timeliness of support provided to students (Peacock et al., 2020); through faculty conducting ice breakers, collaborative activities and group work, and lectures using video conferencing technology (Thomas et al., 2014); responsive, active, and engaged faculty (O'Shea et al., 2015); and through students experiencing camaraderie with faculty and peers to reduce isolation and dissatisfaction (Thomas et al., 2014).

Similar teaching strategies and faculty characteristics also advance sense of belonging for in-person learning. Sense of belonging is fostered through regular outreach and individualized conversations, a positive attitude and excitement for teaching, and by offering additional support beyond class time (Means & Pyne, 2017); inclusive classrooms that empower students to learn (Sobel, 2018); through providing opportunities for first-year students to become knowledgeable about campus and academic resources, and allowing time for goal setting and academic planning (Rogerson & Poock, 2013); promoting academic, career, and campus resources (Reid et al., 2014); having approachable faculty knowledgeable about course content and who possess a desire to work with students (Reid et al., 2014); welcoming and passionate faculty (Freeman et al., 2007); through intentionally incorporating in-course and outside of class relationship-building and interactions with students (Kim & Lundberg, 2016); and by creating opportunities for relationship development between students and faculty to enhance students' sense of belonging (Freeman et al., 2007).

Whether faculty are teaching online or in-person, the aforementioned best practices can help students foster their sense of belonging. Connecting these teaching

practices to institutional retention efforts, the faculty-student relationship is important to foster sense of belonging and increase retention (Thomas et al., 2014). Students who decide to remain in college often do so because of developing a connection with a member of institutional faculty or staff (O’Keeffe, 2013). In addition, according to Pascarella and Ternzini (1980), the student-faculty relationship, both inside and outside the classroom, affects students’ decision to persist or withdraw.

### **Conclusion**

Despite the challenges associated with the coronavirus pandemic and virtual learning, both quantitative and qualitative data indicated that the first-year seminar program at the host institution fostered a sense of belonging among first-year students. Although deep, meaningful relationships were not established among all students, especially considering the virtual learning that took place, study participants were exposed to and informed of campus policies and resources that helped students become more knowledgeable of the institutional expectations and assistance available. First-year students believed their first-year seminar created community and connection, and participants affirmed that their faculty helped acclimate students into the collegiate environment, supporting their transition from high school.

First-year seminars exist on 90% of college campuses in the United States (Reid et al., 2014; Sobel, 2018) and have been part of the curriculum for over three decades (Padgett et al., 2013). These courses are of benefit to first-year students, helping them to improve academic performance, become a member of a community, and develop relationships among peers, faculty, and staff (McKinney & Denton, 2006). A key tenet of sense of belonging mirrors the purpose of first-year seminars, to cultivate community and

interpersonal relationships (Permzadian & Credé, 2016). Further, first-year seminars serve as a retention tool (Permzadian & Credé, 2016), while sense of belonging aims to do the same, facilitating students' feeling of institutional membership and connection (Bollen & Hoyle, 1990). Despite the limited literature connecting the two concepts, through institutions of higher education intentionally implementing strategies to foster a sense of belonging, first-year students can feel better connected to and possess an affiliation with their institution, view themselves as included members of the community, and experience valuable support from faculty, staff, and peers in their quest to graduate.

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APPENDIX A

**FINAL: STUDY OF STUDENTS’ SENSE OF BELONGING IN A FIRST-YEAR SEMINAR**

1. Age Consent: To participate in this survey, you must be at least 18 years of age. Confirm that you are at least 18 years of age by selecting “YES”. If you are younger than 18 years of age, select “NO” and you will not be permitted to participate in this study. Yes No
  
2. Participant Consent: By selecting “YES”, I grant digital acknowledgement and consent to participate in the research survey, “Study of Students’ Sense of Belonging in a First-Year Seminar”. I have read the above information and I voluntarily agree to participate in this research study. Select “No” if you do not wish to move forward in this research project. Yes No

| Demographic & Retention Statements/Questions  | Response Options  |
|---|---|
| 3. I identify as:   | Female<br>Male<br>Non-binary<br>Prefer not to answer<br>Other (please specify)  |
| 4. Select your race/ethnicity:  | Asian/Pacific Islander<br>Black/African American<br>Latino/Latina<br>Multiracial<br>Native American/Indigenous<br>White<br>Prefer not to answer<br>Other (please specify) |
| 5. When you enrolled at XYZ University, did you intend to graduate from this University?    | Yes<br>No   |
| 6. Do you still intend to graduate from XYZ University?                                     | Yes<br>No<br>Maybe  |
| 7. Did your First-Year Seminar positively affect your decision to remain at XYZ University? | Yes<br>No   |

Statements: Based on the scale of Strongly Disagree to Strongly Agree, please click a circle to indicate your response. The asterisk (\*) indicates that a response is required. For questions that refer to “sense of belonging”, sense of belonging is defined as “students’ perceived social support on campus, a feeling or sensation of connectedness, and the experience of mattering or feeling cared about, accepted, respected, valued by, and

important to the campus community or others on campus such as faculty, staff, and peers” (Strayhorn, 2019, p. 4).

| Likert Scale responses   | 1 -<br>Strongly<br>Disagree | 2 -<br>Disagree | 3 -<br>Neither<br>Disagree<br>or Agree | 4 -<br>Agree | 5 -<br>Strongly<br>Agree |
|--|-----------------------------|-----------------|--|--------------|--------------------------|
| 8. I feel that I am a member of the campus community.  |                             |                 |  |              |                          |
| 9. The school has provided me with resources and/or support to assist me in seeking help when needed.        |                             |                 |  |              |                          |
| 10. I have felt excluded from school activities because of my race or ethnicity.                             |                             |                 |  |              |                          |
| 11. I feel a sense of belonging within the campus community.   |                             |                 |  |              |                          |
| 12. I feel lonely or homesick.   |                             |                 |  |              |                          |
| 13. My First-Year Seminar allowed me to establish close friendships.   |                             |                 |  |              |                          |
| 14. The school has provided opportunities and experiences that allow me to meet new people.                  |                             |                 |  |              |                          |
| 15. The staff and faculty display interest in me.  |                             |                 |  |              |                          |
| 16. My First-Year Seminar did not improve my understanding of campus policies or supports.                   |                             |                 |  |              |                          |
| 17. I wish I were at a different school.   |                             |                 |  |              |                          |
| 18. Sometimes I feel as if I don't belong at this University.  |                             |                 |  |              |                          |
| 19. My First-Year Seminar faculty member supported my transition to college.                                 |                             |                 |  |              |                          |
| 20. I have felt insulted or threatened by other students, faculty, or staff because of my race or ethnicity. |                             |                 |  |              |                          |

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|--|--|--|--|--|--|
| 21. My First-Year Seminar has fostered a sense of community.   |  |  |  |  |  |
| 22. My First-Year Seminar did not improve my ability to get to know students in my class.  |  |  |  |  |  |
| 23. I feel like an outsider.   |  |  |  |  |  |
| 24. My First-Year Seminar increased the degree to which I assumed leadership roles in campus-sponsored organizations and/or volunteered my time for worthwhile causes. |  |  |  |  |  |
| 25. I can really be myself at this school.   |  |  |  |  |  |
| 26. I feel at home on this campus.   |  |  |  |  |  |

Opportunity for Comments: As a reminder, for the purposes of this study, sense of belonging is defined as “students’ perceived social support on campus, a feeling or sensation of connectedness, and the experience of mattering or feeling cared about, accepted, respected, valued by, and important to the campus community or others on campus such as faculty, staff, and peers” (Strayhorn, 2019, p. 4).

In this final section, you have the option of providing the researcher with your open-ended narrative insights. To complete the study, please click the “SUBMIT” button at the bottom of the final page. After you submit, you will have the opportunity to participate in a raffle to win a \$20 Amazon gift card.

27. Did your First-Year Seminar contribute to your sense of belonging at this University?  
 Yes    No

28. Please provide your comments as to why your First-Year Seminar did or did not contribute to your sense of belonging:

29. Did your First-Year Seminar positively affect your desire to graduate from this University?  
 Yes    No    Maybe

30. Please provide your comments as to why your First-Year Seminar did or did not affect your decision to graduate from this University:

Prev

Submit

Thank you for completing the survey, "Students' Sense of Belonging in a First-Year Seminar". To be entered into the raffle to win one (1) of five (5) \$20 Amazon gift cards, please copy and paste the below link into your web browser. In no way will your survey responses be connected to your participation in the raffle. If you win an Amazon gift card, you will be contacted via email by the researcher to coordinate receipt of the prize.

If you are not interested in participating in the raffle, you may close this window.

To enter the raffle, copy and paste or type this web address into your web browser  
<http://tiny.cc/FYS>

Thank you for your participation in this study!

APPENDIX B

**SURVEYMONKEY DESIGN: STUDY OF STUDENTS’ SENSE OF BELONGING  
IN A FIRST-YEAR SEMINAR**

**Page 1: Age Consent**

1. Age Consent: To participate in this survey, you must be at least 18 years of age. Confirm that you are at least 18 years of age by selecting “YES”. If you are younger than 18 years of age, select “NO” and you will not be permitted to participate in this study. Yes No

*If Yes, redirects to page 2, Participant Consent*

*If No, redirects to disqualification page and student can no longer participate in study*

**Page 2: Participant Consent**

2. Participant Consent: By selecting “YES”, I grant digital acknowledgement and consent to participate in the research survey, “Study of Students’ Sense of Belonging in a First-Year Seminar”. I have read the above information and I voluntarily agree to participate in this research study. Select “No” if you do not wish to move forward in this research project. Yes No

*If Yes, redirects to page 3, Demographic Information*

*If No, redirects to disqualification page and student can no longer participate in study*

**Page 3: Demographic Information**

| Demographic & Retention Statements/Questions   | Response Options  |
|--|---|
| 3. I identify as:  | Female<br>Male<br>Non-binary<br>Prefer not to answer<br>Other (please specify)  |
| 4. Select your race/ethnicity:   | Asian/Pacific Islander<br>Black/African American<br>Latino/Latina<br>Multiracial<br>Native American/Indigenous<br>White<br>Prefer not to answer<br>Other (please specify) |
| 5. When you enrolled at XYZ University, did you intend to graduate from this University? | Yes [ <i>redirects to page 4</i> ]<br>No [ <i>redirects to page 6: Statements</i> ]   |

**Page 4:**

|   |   |
|---|---|
| 6. Do you still intend to graduate from XYZ University? | Yes [ <i>redirects to page 5</i> ]<br>No [ <i>redirects to page 6: Statements</i> ]<br>Maybe [ <i>redirects to page 5</i> ] |
|---|---|

**Page 5:**

|   |           |
|---|-----------|
| 7. Did your First-Year Seminar positively affect your decision to remain at XYZ University? | Yes<br>No |
|---|-----------|

**Page 6: Statements**

Statements: Based on the scale of Strongly Disagree to Strongly Agree, please click a circle to indicate your response. The asterisk (\*) indicates that a response is required. For questions that refer to “sense of belonging”, sense of belonging is defined as “students’ perceived social support on campus, a feeling or sensation of connectedness, and the experience of mattering or feeling cared about, accepted, respected, valued by, and important to the campus community or others on campus such as faculty, staff, and peers” (Strayhorn, 2019, p. 4).

**Pages 7-25: 19 Likert Scale Statements, 5-point scale**

| Likert Scale responses  | 1 - Strongly Disagree | 2 - Disagree | 3 - Neither Disagree or Agree | 4 - Agree | 5 - Strongly Agree |
|---|-----------------------|--------------|-------------------------------|-----------|--------------------|
| 8. I feel that I am a member of the campus community.   |                       |              |                               |           |                    |
| 9. The school has provided me with resources and/or support to assist me in seeking help when needed. |                       |              |                               |           |                    |
| 10. I have felt excluded from school activities because of my race or ethnicity.                      |                       |              |                               |           |                    |
| 11. I feel a sense of belonging within the campus community.  |                       |              |                               |           |                    |
| 12. I feel lonely or homesick.  |                       |              |                               |           |                    |
| 13. My First-Year Seminar allowed me to establish close friendships.                                  |                       |              |                               |           |                    |
| 14. The school has provided opportunities and experiences   |                       |              |                               |           |                    |

|  |  |  |  |  |  |
|--|--|--|--|--|--|
| that allow me to meet new people.  |  |  |  |  |  |
| 15. The staff and faculty display interest in me.  |  |  |  |  |  |
| 16. My First-Year Seminar did not improve my understanding of campus policies or supports.   |  |  |  |  |  |
| 17. I wish I were at a different school.   |  |  |  |  |  |
| 18. Sometimes I feel as if I don't belong at this University.  |  |  |  |  |  |
| 19. My First-Year Seminar faculty member supported my transition to college.   |  |  |  |  |  |
| 20. I have felt insulted or threatened by other students, faculty, or staff because of my race or ethnicity.   |  |  |  |  |  |
| 21. My First-Year Seminar has fostered a sense of community.   |  |  |  |  |  |
| 22. My First-Year Seminar did not improve my ability to get to know students in my class.  |  |  |  |  |  |
| 23. I feel like an outsider.   |  |  |  |  |  |
| 24. My First-Year Seminar increased the degree to which I assumed leadership roles in campus-sponsored organizations and/or volunteered my time for worthwhile causes. |  |  |  |  |  |
| 25. I can really be myself at this school.   |  |  |  |  |  |
| 26. I feel at home on this campus.   |  |  |  |  |  |

**Page 26: Opportunity for Comments**

Opportunity for Comments: As a reminder, for the purposes of this study, sense of belonging is defined as “students’ perceived social support on campus, a feeling or sensation of connectedness, and the experience of mattering or feeling cared about, accepted, respected, valued by, and important to the campus community or others on campus such as faculty, staff, and peers” (Strayhorn, 2019, p. 4).

In this final section, you have the option of providing the researcher with your open-ended narrative insights. To complete the study, please click the "SUBMIT" button at the bottom of the final page. After you submit, you will have the opportunity to participate in a raffle to win a \$20 Amazon gift card.

**Page 27:**

27. Did your First-Year Seminar contribute to your sense of belonging at this University?  
Yes    No

28. Please provide your comments as to why your First-Year Seminar did or did not contribute to your sense of belonging:

**Page 28:**

29. Did your First-Year Seminar positively affect your desire to graduate from this University?  
Yes    No    Maybe

30. Please provide your comments as to why your First-Year Seminar did or did not affect your decision to graduate from this University:

Prev

Submit

**Custom Thank You Screen**

Thank you for completing the survey, "Students' Sense of Belonging in a First-Year Seminar". To be entered into the raffle to win one (1) of five (5) \$20 Amazon gift cards, please copy and paste the below link into your web browser. In no way will your survey responses be connected to your participation in the raffle. If you win an Amazon gift card, you will be contacted via email by the researcher to coordinate receipt of the prize.

If you are not interested in participating in the raffle, you may close this window.

To enter the raffle, copy and paste or type this web address into your web browser  
<http://tiny.cc/FYS>

Thank you for your participation in this study!

**Raffle Entry Form**

Available via a Google Form (<http://tiny.cc/FYS> -- link is no longer active as form is closed)

Thank you for completing the survey, "Students' Sense of Belonging in a First-Year Seminar". To be entered in the raffle to win one (1) of five (5) \$20 Amazon e-gift cards,

please provide your contact information below. In no way will your survey responses be connected to your participation in the raffle. If you win, you will be contacted via email by the researcher to coordinate receipt of the e-gift card.

First Name:

Last Name:

Email Address:

Cell Phone Number:

## APPENDIX C

## STATEMENT MAPPING

| Statement  | Authors   |
|--|---|
| 8. I feel that I am a member of the campus community.  | Bollen and Hoyle (1990)<br>Goodenow (1993)<br>Hurtado and Carter (1997)   |
| 9. The school has provided me with resources and/or support to assist me in seeking help when needed.        | Porter and Swing (2006)<br>Slaten, Elison, Deemer, Hughes, and Shemwell (2017)                                    |
| 10. I have felt excluded from school activities because of my race or ethnicity.                             | Hausemann et al. (2009)<br>Hurtado and Carter (1997)  |
| 11. I feel a sense of belonging within the campus community.   | Bollen and Hoyle (1990)<br>Cabrera et al. (1992)<br>Hurtado and Carter (1997)<br>Malone, Pillow, and Osman (2012) |
| 12. I feel lonely or homesick.   | Hoffman et al. (2003)<br>Hurtado and Carter (1997)  |
| 13. My First-Year Seminar allowed me to establish close friendships.   | Cabrera et al. (1992)<br>Hoffman et al. (2003)<br>Porter and Swing (2006)   |
| 14. The school has provided opportunities and experiences that allow me to meet new people.                  | Pascarella and Terenzini (1980)<br>Porter and Swing (2006)<br>Slaten et al. (2017)                                |
| 15. The staff and faculty display interest in me.  | Freeman et al. (2007)<br>Hoffman et al. (2003)<br>Pascarella and Terenzini (1980)<br>Slaten et al. (2017)         |
| 16. My First-Year Seminar did not improve my understanding of campus policies or supports.                   | Porter and Swing (2006)   |
| 17. I wish I were at a different school.   | Goodenow (1993)   |
| 18. Sometimes I feel as if I don't belong at this University.  | Goodenow (1993)   |
| 19. My First-Year Seminar faculty member supported my transition to college.                                 | Freeman et al. (2007)<br>Hoffman et al. (2003)  |
| 20. I have felt insulted or threatened by other students, faculty, or staff because of my race or ethnicity. | Hausemann et al. (2009)<br>Hurtado and Carter (1997)  |
| 21. My First-Year Seminar has fostered a sense of community.   | Slaten et al. (2017)  |

|  |                                  |
|--|----------------------------------|
| 22. My First-Year Seminar did not improve my ability to get to know students in my class.  | Porter and Swing (2006)          |
| 23. I feel like an outsider.   | Malone, Pillow, and Osman (2012) |
| 24. My First-Year Seminar increased the degree to which I assumed leadership roles in campus-sponsored organizations and/or volunteered my time for worthwhile causes. | Porter and Swing (2006)          |
| 25. I can really be myself at this school.   | Goodenow (1993)                  |
| 26. I feel at home on this campus.   | Slaten et al. (2017)             |

## APPENDIX D

**RESEARCH QUESTIONS AND DESIGN ALIGNMENT**

The research questions for this study are:

1. Does the first-year seminar program foster a sense of belonging among first-year students enrolled at a 4-year, private institution?
  - a. Likert Scale statements 8, 9, 11, 13, 14, 15, 16, 19, 21, 22, 24, 25 & 26
    - i. Hypothesis #1: The first-year seminar program does not foster a sense of belonging among first-year students enrolled at a 4-year, private institution.
    - ii. Null hypothesis #1: The first-year seminar program fosters a sense of belonging among first-year students enrolled at a 4-year, private institution.
  - b. Open-ended question 28
2. Did participation in the first-year seminar program positively contribute to students' intention to graduate from the institution?
  - a. Demographic statements 5, 6, & 7
    - i. Hypothesis #2: Participation in the first-year seminar program did not positively contribute to students' intention to graduate from the institution.
    - ii. Null hypothesis #2: Participation in the first-year seminar program contributed positively to students' intention to graduate from the institution.
  - b. Open-ended question 30
3. Are there differences in students' sense of belonging based on gender and race/ethnicity?
  - a. Demographic statements 3 & 4
  - b. Likert Scale statements 10, 12, 13, 15, 16, 17, 18, 20, 22, 23, & 25
    - i. Hypothesis #3a: There are no differences in students' sense of belonging based on gender.
    - ii. Null hypothesis #3a: There are differences in students' sense of belonging based on gender.
    - iii. Hypothesis #3b: There are no differences in students' sense of belonging based on race/ethnicity.
    - iv. Null hypothesis #3b: There are differences in students' sense of belonging based on race/ethnicity.
  - c. Open-ended questions 28 & 30

**Themes for analysis and discussion:**

- First-Year Seminars
- General sense of belonging
- Demographics: Gender & Race/Ethnicity

| <b>Theme 1:<br/>First-Year Seminars</b>   | <b>Theme 2:<br/>General Sense of Belonging on Campus</b>   |
|---|--|
| 13. (+) My first-year seminar allowed me to establish close friendships.<br>16. (-) My first-year seminar did not improve my understanding of campus policies or supports.<br>19. (+) My first-year seminar faculty member supported my transition to college.<br>20. (-) I have felt insulted or threatened by other students, faculty, or staff because of my race or ethnicity.<br>21. (+) My first-year seminar has fostered a sense of community.<br>22. (-) My first-year seminar did not improve my ability to get to know students in my class.<br>24. (+) My first-year seminar increased the degree to which I assumed leadership roles in campus-sponsored organizations and/or volunteered my time for worthwhile causes. | 8. (+) I feel that I am a member of the campus community.<br>9. (+) The school has provided me with resources and/or support to assist me in seeking help when I needed it.<br>10. (-) I have felt excluded from school activities because of my race or ethnicity.<br>11. (+) I feel a sense of belonging within the campus community.<br>12. (-) I feel lonely or homesick.<br>14. (+) The school has provided opportunities and experiences that allow me to meet new people.<br>15. (+) The staff and faculty display interest in me.<br>17. (-) I wish I were at a different school.<br>18. (-) Sometimes I feel as if I don't belong at this University.<br>23. (-) I feel like an outsider.<br>25. (+) I can really be myself at this school.<br>26. (+) I feel at home on this campus. |

| 5-point Likert scale key: |                       |              |                               |              |                       |
|---------------------------|-----------------------|--------------|-------------------------------|--------------|-----------------------|
| +                         | 5 = Strongly Agree    | 4 = Agree    | 3 = Neither Disagree or Agree | 2 = Disagree | 1 = Strongly Disagree |
| -                         | 5 = Strongly Disagree | 4 = Disagree | 3 = Neither Disagree or Agree | 2 = Agree    | 1 = Strongly Agree    |

APPENDIX E

**INITIAL DRAFT: STUDY OF STUDENTS’ SENSE OF BELONGING IN A FIRST-YEAR SEMINAR**

1. Age Consent: To participate in this survey, you must be at least 18 years of age. Confirm that you are at least 18 years of age by selecting “YES”. If you are younger than 18 years of age, select “NO” and you will not be permitted to participate in this study. Yes No
  
2. Participant Consent: By selecting “YES”, I grant digital acknowledgement and consent to participate in the research survey, “Study of Students’ Sense of Belonging in a First-Year Seminar”. I have read the above information and I voluntarily agree to participate in this research study. Select “No” if you do not wish to move forward in this research project. Yes No

| Demographic & Retention Statements/Questions  | Response Options   |
|---|--|
| 3. I identify as:   | Female<br>Male<br>Non-binary<br>Prefer not to answer<br>Other (please specify)   |
| 4. Select your race/ethnicity:  | American Indian<br>Asian/Pacific Islander<br>Black/African American<br>Latino/Latina<br>Multiracial<br>White<br>Prefer not to answer<br>Other (please specify) |
| 5. When you enrolled at XYZ University, did you intend to graduate from this University?    | Yes<br>No<br>Please feel free to explain your answer choice:   |
| 6. Did your first-year seminar positively affect your decision to remain at XYZ University? | Yes<br>No<br>Please feel free to explain your answer choice:   |
| 7. Do you intend to graduate from XYZ University?   | Yes<br>No<br>Maybe<br>Please feel free to explain your answer choice:  |

Statements: Based on the scale of Strongly Disagree to Strongly Agree, please click a circle to indicate your response. The asterisk (\*) indicates that a response is required. For questions that refer to “sense of belonging”, sense of belonging is defined as “students’ perceived social support on campus, a feeling or sensation of connectedness, and the experience of mattering or feeling cared about, accepted, respected, valued by, and important to the campus community or others on campus such as faculty, staff, and peers” (Strayhorn, 2019, p. 4).

| Likert Scale responses  | 1 -<br>Strongly<br>Disagree | 2 -<br>Disagree | 3 -<br>Neither<br>Disagree<br>or Agree | 4 -<br>Agree | 5 -<br>Strongly<br>Agree |
|---|-----------------------------|-----------------|--|--------------|--------------------------|
| 8. My first-year seminar focused on an academic topic other than college transition; adjustment and study skills may have been addressed but the majority of assignments and course time explored a selected topic. |                             |                 |  |              |                          |
| 9. I feel that I am a member of the campus community.   |                             |                 |  |              |                          |
| 10. The school has provided me with resources and supports to assist me in seeking help when needed.  |                             |                 |  |              |                          |
| 11. I have felt excluded from school activities because of my race or ethnicity.  |                             |                 |  |              |                          |
| 12. I feel a sense of belonging within the campus community.  |                             |                 |  |              |                          |
| 13. I feel lonely or homesick.  |                             |                 |  |              |                          |
| 14. My first-year seminar allowed me to establish close friendships.  |                             |                 |  |              |                          |
| 15. The school has provided opportunities and experiences that allow me to meet new people.   |                             |                 |  |              |                          |
| 16. The staff and faculty display interest in me.   |                             |                 |  |              |                          |
| 17. My first-year seminar did not improve my understanding of campus policies or supports.  |                             |                 |  |              |                          |

|  |  |  |  |  |  |
|--|--|--|--|--|--|
| 18. I wish I were at a different school.   |  |  |  |  |  |
| 19. Sometimes I feel as if I don't belong here.  |  |  |  |  |  |
| 20. My first-year seminar faculty member has supported my transition to college.   |  |  |  |  |  |
| 21. I am comfortable in my first-year seminar classroom.   |  |  |  |  |  |
| 22. I have felt insulted or threatened by other students, faculty, or staff because of my race or ethnicity.   |  |  |  |  |  |
| 23. My first-year seminar has fostered a sense of community.   |  |  |  |  |  |
| 24. My first-year seminar did not improve my ability to get to know students in my class.  |  |  |  |  |  |
| 25. I feel like an outsider.   |  |  |  |  |  |
| 26. My first-year seminar increased the degree to which I assumed leadership roles in campus-sponsored organizations and/or volunteered my time for worthwhile causes. |  |  |  |  |  |
| 27. I can really be myself at this school.   |  |  |  |  |  |
| 28. I feel at home on this campus.   |  |  |  |  |  |

Optional, open-ended questions: As a reminder, for the purposes of this study, sense of belonging is defined as “students’ perceived social support on campus, a feeling or sensation of connectedness, and the experience of mattering or feeling cared about, accepted, respected, valued by, and important to the campus community or others on campus such as faculty, staff, and peers” (Strayhorn, 2019, p. 4).

In this final section, you have the option of providing the researcher with your open-ended narrative insights. To complete the study and register your survey responses, please click the “SUBMIT” button. When you submit, you will see the thank you screen and have the optional opportunity to participate in a raffle for a \$20 Amazon gift card.

29. Did your first-year seminar contribute to your sense of belonging at this University? Why or why not?

30. Did your first-year seminar affect, positively or negatively, your desire to graduate from this University? Why or why not?

Thank you for completing the survey, "Students' Sense of Belonging in a First-Year Seminar". To be entered into the raffle to win one (1) of five (5), \$20 Amazon gift cards, please copy and paste the below link into your web browser. In no way will your survey responses be tied to your participation in the raffle. If you win an Amazon gift card, you will be contacted via email by the researcher to coordinate receipt of the prize.

If you are not interested in participating in the raffle, you may close this window.

To enter the raffle, copy and paste this link in your web browser <http://rb.gy/d1eopw>

Thank you for your participation in this study!

Submit