

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Educational Administration: Theses,
Dissertations, and Student Research

Educational Administration, Department of

5-2021

"I Always Felt Like I Belonged:" A Case Study on a First-Generation Focused Student Success Program and Sense of Belonging

Stephanie Zobac

University of Nebraska-Lincoln, szobac2@huskers.unl.edu

Follow this and additional works at: <https://digitalcommons.unl.edu/cehsedaddiss>



Part of the [Higher Education Administration Commons](#)

Zobac, Stephanie, "I Always Felt Like I Belonged:" A Case Study on a First-Generation Focused Student Success Program and Sense of Belonging" (2021). *Educational Administration: Theses, Dissertations, and Student Research*. 338.

<https://digitalcommons.unl.edu/cehsedaddiss/338>

This Article is brought to you for free and open access by the Educational Administration, Department of at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Educational Administration: Theses, Dissertations, and Student Research by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

“I ALWAYS FELT LIKE I BELONGED:” A CASE STUDY
ON A FIRST-GENERATION FOCUSED STUDENT SUCCESS PROGRAM
AND SENSE OF BELONGING

by

Stephanie R. Zobac

A DISSERTATION

Presented to the Faculty of
The Graduate College at the University of Nebraska
In Partial Fulfillment of Requirements
For the Degree of Doctor of Philosophy

Major: Educational Studies
(Educational Leadership and Higher Education)

Under the Supervision of Professor Elizabeth Niehaus

Lincoln, Nebraska

May, 2021

“I ALWAYS FELT LIKE I BELONGED:” A CASE STUDY
ON A FIRST-GENERATION FOCUSED STUDENT SUCCESS PROGRAM
AND SENSE OF BELONGING

Stephanie R. Zobac, Ph.D.

University of Nebraska, 2021

Advisor: Elizabeth Kathleen Niehaus

This qualitative case study explored if and how a first-generation focused student success program fostered sense of belonging amongst first-generation college students. Utilizing the theoretical framework of sense of belonging (Strayhorn, 2012), the following research questions guided this study: (1) How do first-generation students experience a first-generation focused student success program? (2) How do first-generation students experience sense of belonging when participating in a first-generation student success program, if at all? (3) How can institutional policies and practices, in the form of a first-generation student success program support the sense of belonging of first-generation students, if at all? Participants included seven college students involved in a first-generation focused student success program at a small, private liberal arts college in the Midwest. Data collection involved institutional, program, and participant level data. Institutional and program data included document review and an interview with the program director. Participant level data included two individual interviews with each of the seven participants as well as observations of the individuals participating in the program.

After analyzing the data collected to better understand the participants' experience in the program as well as sense of belonging, four themes were constructed from the data: (1) Helping students navigate unfamiliar structures of the institution, particularly during the initial transition to college, (2) Helping students connect with other people on campus to promote a sense of community, (3) Providing a sense of mattering for students, and (4) Promoting a positive self-identification as a "first-gen" student. The findings of this study confirm the importance of first-generation focused student success programs in developing sense of belonging among the first-generation participants. This study discussed the implications of the findings and directions for future practice and research.

Table of Contents

Acknowledgements	ix
List of Tables	xii
List of Appendices	xiv
Chapter 1: Introduction	1
First-Generation College Students	1
Student Success Programs	3
Sense of Belonging	4
Purpose of the Study	7
Definition of Terms	9
Methodology	11
Delimitations	14
Limitations	17
Chapter Summary	19
Chapter 2: Literature Review	21
Who are First-Generation Students	22
Defining “First-Generation College Student”	23
Barriers to Success	26
Pre-College Barriers	27
Academic Preparation	27
College Search, Application, and Selection Process	32
Financial Barriers	35
Rising Tuition	36
Institutional Choice	39
Financial Barriers and Persistence	40
Barriers During Transition to College	41
Separating from Family and Community	42
Navigating Campus	43
Institutional Responsibility to Reduce Barriers	46
Sense of Belonging	48
Foundations of Belonging	48

Sense of Belonging Theory.....	52
Current Research on Sense of Belonging	55
Student Success and Sense of Belonging.....	55
Sense of Belonging and Marginalized Groups	58
Importance of Policy/Practice and Sense of Belonging.....	61
Student Success Programs	62
First-Year Student Success Programs.....	63
Summer Bridge Programs.....	63
First-Year Seminar Courses.....	65
Learning Communities.....	67
Student Success Programs for First-Generation Students	69
Student Success Programs and Sense of Belonging	72
Chapter 3: Methods.....	75
Purpose.....	75
Researcher Positionality.....	77
Researcher Perspective	84
Theoretical Framework.....	86
Research Design.....	87
The Case.....	89
Embedded Cases	90
Embedded Case Selection.....	93
Data Collection	97
Document Review.....	100
Demographic Survey	101
Interviews with Program Administrators.....	103
Interviews with Embedded Unit	104
Observations	108
Data Analysis	111
Institutional Data Analysis.....	113
Case Level Data Analysis	116
Embedded Unit Analysis	119

Within-Case Analysis	122
First-Cycle Coding.....	124
Second-Cycle Coding	126
Cross-Case (Phenomenon Level) Analysis.....	128
Trustworthiness.....	130
Chapter Summary	132
Chapter 4: Findings.....	134
Institutional Context.....	135
Case Context	138
Program History.....	139
Purpose and Outcomes.....	141
Community Building	141
Peers	143
IFG Program Staff.....	144
Faculty and Staff	145
IFG Student Ambassadors	146
Providing Support	147
Student Success Resources.....	147
Financial Resources.....	149
Program Curriculum	150
First-Time, First-Year Students	151
Transfer Students	152
Sophomore Year	152
Junior Year.....	153
Senior Year	154
Coronavirus Context	155
COVID-19 and LAC.....	156
COVID-19 and the IFG Program.....	158
Participants.....	160
Participant Overview	161
Jacob	163

Jenna	164
Katie	166
Kia.....	166
Lizabeth	168
V	169
Zenni	170
Sense of Belonging as a Result of Participating in the IFG Program: Four Themes.....	171
Helping Students Navigate Unfamiliar Structures of the Institution, Particularly During the Initial Transition to College	172
Feeling Lost	173
Program Structure Provided a Foundation to be Successful in Their First Year	177
How to Navigate College.....	178
Navigating Social Structures.....	180
Navigating Academic Structures	182
Helping Students Connect with Other People on Campus to Promote a Sense of Community	184
IFG Community as a Whole	185
Connecting with Peers	189
Faculty Relationships.....	191
Providing a Sense of Matter for Students	195
People Recognize and Care About Me	196
Participants Felt Constantly Supported by the IFG Staff.....	198
Promoting a Positive Self-Identification as a “First-Gen” Student	204
Proud to be a First-Generation College Student	204
Helped Participants Feel They Were Not Alone.....	207
Conclusion	212
Chapter 5: Discussion	216
Discussion	216
Helping First-Generation Students Successfully Navigate College	217
Fostering Sense of Belonging and Community Among First-Generation Students ..	219
Providing a Sense of Matter for First-Generation Students.....	222

Promoting Positive Self-Identification with First-Generation Status	223
Importance of the IFG Program Director and Staff	226
Implications for Practice	228
First-Generation Focused Success Programs	229
Extended Length of Program	230
Staff Dedicated to First-Generation Students	231
Financial Support for First-Generation Students for Participating in Program ...	232
Supporting First-Generation Students When a Program is Unavailable	233
Implications for Research	236
Strengths and Limitations	240
Strengths	240
Limitations	242
Conclusion	247
References	249

Acknowledgements

There are many people I would like to acknowledge, as they played vital roles in my completion of this project. I would first like to thank the seven participants, for their willingness to share their experiences and time with me. Without their commitment to sharing their stories as first-generation students, as well as experiences when participating in a student success program, this research study would not have been possible. Additionally, a significant thank you to Julie Carballo, director of first-generation initiatives, who generously provided her time and expertise throughout this study. To Julie and the participants, thank you for allowing me to share your stories. In doing so, we are contributing to the growing body of research on understanding and better supporting first-generation college students.

To Dr. Elizabeth Niehaus, thank you for allowing me to join the University of Nebraska-Lincoln Department of Education Administration five years ago. Along the way, you have supported and challenged me both in and out of the classroom. As part of your research team, I learned about the research process in a hands-on fashion while gaining valuable research skills and experiences. As a student in your classes, I was challenged to reconsider my ways of thinking and knowing while continuing to improve as a reader, writer, and scholar. Most importantly, as my advisor, you have provided support, critical feedback, guidance, and encouragement. I am grateful to have been paired with you five years ago, and for the growth you have fostered within me. You have been a catalyst for my personal, professional, and—most important—academic growth along the way, and for that I will remain forever grateful.

I would also like to thank the members of my dissertation committee: Dr. Corey Rumann, Dr. Deryl Hatch-Tocaimaza, and Dr. L.J. McElravy. I appreciate your time and attention to detail as you reviewed my dissertation proposal and final dissertation. Our engaging conversations throughout the process, as well as during both the proposal and dissertation defense, helped produce in a stronger final product that will continue advancing our understanding of first-generation students and their experiences. Your feedback has been invaluable throughout this study.

I would also like to thank the entire Educational Administration (EDAD) faculty at University of Nebraska-Lincoln, as well as those within the Department of Agricultural Leadership, Education, and Communication. The courses I completed throughout the program in educational administration and leadership helped me stretch and grow as an academic and professional. The EDAD research-specific courses along with the summer research residency seminars prepared me to complete the rigorous dissertation process. To my classmates who became colleagues and friends, thank you for your support and encouragement along the way. I am thankful for our friendships and the ability to continue those relationships after graduation. And specifically to Dr. Kayla Person, thank you for your advice on the dissertation process and feedback on my dissertation. I appreciate your time and learning from your experiences as a recent EDAD graduate.

Apart from those at UNL, I would like to thank those who mentored me during my undergraduate and graduate studies as well as in my professional career in higher education. I recognize that my academics and career have been inextricably intertwined from the start as your mentorship has guided me in more ways than I can describe. To Dr. Laurie Hamen: thank you for introducing me to the professional world of higher

education, and for encouraging me to pursue my master's degree at Marquette University. You challenged me to spread my wings academically and professionally. Your continued support and encouragement along the way launched me into higher education and continues to motivate me. To Dr. Jody Jessup-Anger: I am grateful for your support, guidance, and feedback during my time both as a Master's student at Marquette University as well as in my search and application process for doctoral programs. Thank you, Dr. Jessup-Anger, for providing me with the foundation to be successful both as a higher education practitioner and scholar. I have continued to draw on the coursework, experiences, and professional development opportunities provided by you and the Department of Educational Policy and Leadership at Marquette. To Dr. Julia Spears: thank you for hiring me as a new professional into a whirlwind of high impact practices, leadership, and curriculum innovation. Your mentorship helped develop my skills as a professional, leader, and academic as we developed and executed numerous programs and published research together. Our engagement with the high impact practices as well as with the research and writing process provided a strong foundation for me as I entered the University of Nebraska-Lincoln Educational Administration program. And to Dr. Caroline St. Clair: thank you for trusting me—along with my fellow diamonds—to build our academic advising unit and navigate through a complicated term-to-semester transition including a complete curriculum overhaul. I continue to hold your mentorship and friendship close, and am forever grateful we connected five years ago.

Finally, thank you to my family and friends who have walked alongside me throughout this process. The last five years have been rewarding, fulfilling, challenging, and time consuming. To my partner, Andrew Zobac, thank you for your endless support

and encouragement along the way. I appreciate your constant support and love, and recognize the additional responsibilities that you graciously absorbed while I read, studied, researched, and wrote. I love you. To my parents, thank you for your continued support of me in everything I do. You have encouraged me to pursue my professional, educational and academic goals, and helped make that happen in so many ways. To my mom, who provided day-to-day support, encouragement, and childcare so I could finish my dissertation, thank you. I would not be graduating this spring, 2021, without your love and support.

List of Tables

Table 3.1

Table 4.1

List of Appendices

Appendix A: Demographic Information Survey & Consent to Participate	
Appendix B: Program Administrator Interview Protocol.....	
Appendix C: Embedded Unit Protocol 1	
Appendix D: Embedded Unit Protocol 2	
Appendix E: Observation Worksheet	

Chapter 1: Introduction

First-Generation College Students

First-generation college students (FGCS) make up approximately 56% of the population of students attending college in the United States (RTI International, 2019a). Defined as students whose parents did not earn a four-year degree (U.S. Department of Education, 2019b; Whitley et al., 2018), first generation students' parents might have attended a two- or four-year institution or even earned an associate's degree, but neither parent earned a bachelor's degree. As such, FGCS might not be able to lean on their parents' educational experiences (O'Shea, 2016) in the way continuing-generation college students (CGCS)—students with at least one parent with a bachelor's degree—can. As a result, first-generation students often face a variety of structural and institutional barriers when pursuing a college education that affect their success compared to continuing-generation students. In addition, FGCS are more likely to come from low-income families (Covarrubias et al., 2019; Engle & Tinto, 2008; Redford & Hoyer, 2017) and attend K-12 schools with fewer resources (Hudley et al., 2009). With fewer resources available at the K-12 level, FGCS often report lower levels of academic preparation as well as the completion of less rigorous courses while in high school (Cataldi et al., 2018) than their continuing-generation peers. Thus, FGCS are more likely to need to overcome pre-college barriers that their CGCS peers in order to successfully apply to and attend college as well as complete a bachelor's degree.

First-generation students face additional financial barriers such as the rapidly increasing cost of college tuition (U.S. Department of Education, 2019a), which has led the cost of a college degree to remain a top concern for first-generation students (Pratt et

al., 2017). Given the financial burden of a college degree, FGCS are more likely to commute to college (Soria & Stebleton, 2012) and to work more hours on and off campus (Prospero & Vohra-Gupta, 2007; RTI International, 2019b) than their continuing generation peers. However, the choice to commute and work more hours limits the opportunities for FGCS to develop feelings of belonging, leading to lower levels of student success and persistence (Pratt et al., 2017).

Barriers related to college transition and acclimation further threaten the success of FGCS. First-generation students often describe feeling less connected to campus (Rubio et al., 2017) and challenged by the independent norms of college compared to the interdependent communities of many FGCS (Stephens et al., 2012; Vasquez-Salgado et al., 2015), both of which can result in lower success rates (Tinto, 1993). Additional barriers experienced by FGCS include difficulty understanding college expectations (Collier & Morgan, 2008), lower levels of academic confidence (Gibbons & Borders, 2010; Reid & Moore, 2008), and feelings of imposter syndrome (Davis, 2012). First-generation students also described strains on family relationships (Longwell-Grice et al., 2016) and reported feeling as though their friends and family members did not understand their college experiences (Azmitia et al., 2018), in turn causing first-generation students to separate from their home communities. In addition to strained relationships, FGCS often feel guilty for pursuing a college degree (Armstrong & Hamilton, 2013; Covarrubias & Fryberg, 2015). Such challenges often result in increased levels of stress as FGCS navigate balancing college and home responsibilities.

Although FGCS might not face each of the aforementioned barriers, they are more likely than CGCS to confront barriers when pursuing higher education (Whitley et

al., 2018). As a result of the additional barriers they may face, research indicates that FGCS often have lower levels of persistence and degree completion rates than their continuing generation peers (Ishitani, 2003; Lee et al., 2004; Pratt et al., 2017; Soria & Stebleton, 2012; Toutkoushian et al., 2019). Research also indicates first-generation students often report lower levels of sense of belonging, a key student success indicator (Strayhorn, 2012, 2019). Therefore, research calls for higher education administrators to develop policies and programs that support FGCS (Rubio, 2017; Soria & Stebleton, 2012) by better fostering sense of belonging, and therefore the success, of first-generation students.

Student Success Programs

College administrators often provide programs specifically designed to support the success of college students. For example, intervention programs aim to reduce binge drinking (Cleveland et al., 2012; Mallett et al., 2013; Scott-Sheldon et al., 2014). Additional programs endeavor to support the success of specific student populations such as racial and ethnic minorities (Abrica et al., 2020; Cerezo & McWhirter, 2012) or students who are at-risk of dropping out of college (Bir & Myrick, 2015; Strayhorn, 2011). Recently, institutions have started to develop programs that focus specifically on supporting first-generation students (Petty, 2014) with the purpose of supporting the success of FGCS. However, limited research has been conducted on first-generation student success programs, with almost no research exploring whether such programs support sense of belonging, a key student success indicator, among FGCS. Moreover, Strayhorn (2012) emphasized that little to no research explores how institutional practices support students' sense of belonging in general. With colleges dedicating valuable

resources to develop support program for first-generation students, it is important to better understand if and how they work. Therefore, research on sense of belonging of FGCS, with specific focus on how institutional practices support and foster sense of belonging among FGCS, can help direct college administrators as they develop policies and practices that support the success of first-generation students.

Sense of Belonging

Sense of belonging (Strayhorn, 2012) is connected to student success and draws upon three well known theories: Maslow's theory of hierarchy of human needs, Schlossberg's (1989) theory of mattering and marginality, and Tinto's (1975, 1987, 1993) theory of departure. With its foundation built on these three theories it is evident that sense of belonging can be traced back through decades of research and reflects elements of each of these theories. Founded on Maslow's (1943) hierarchy of human needs, belonging initially indicated a person having strong relationships with others leading to the feeling of "a place in his group" (p. 381). Third in the hierarchy, Maslow suggested that once the first two needs—physiological needs and safety—were met, humans must then secure a feeling of belonging before they can achieve the final two needs: self-esteem and self-actualization (Maslow, 1943). Following Maslow, Schlossberg's (1989) theory of mattering and marginality indicates that it is necessary that people feel as though they matter—or belong—in their environment. Schlossberg extended this further to explain that mattering is of the utmost important in times of transition or if an individual feels marginalized. Schlossberg's theory suggests it is critical that first-generation students feel they matter—or belong—at the institution, especially in times of transition such as when they enter the institution or are considering changing majors.

Along with Schlossberg's theory, Tinto's (1975, 1987, 1993) theory of departure focused on the student experience while transitioning to college. To fully integrate into the campus community, Tinto suggested students must separate from their home communities; those who do not fully separate from their home communities are at greater risk of departing. Tinto also asserted that students must integrate both socially and academically into the institution to transition successfully (e.g., to belong). All three theories speak to the importance of students feeling a sense of belonging during their transition to college in order for students to be successful.

Strayhorn (2012) developed the sense of belonging theory based on the aforementioned theories as well as numerous research studies. Sense of belonging, or a "student's perceived social support on campus, a feeling or sensation of connectedness, the experience of mattering or feeling cared about" (Strayhorn, 2012, p. 3), refers to the feelings of connectedness a student has within their campus community and influences student success. Strayhorn's sense of belonging theory includes seven postulates:

1. Sense of belonging is a basic human need.
2. Sense of belonging is a fundamental motive, sufficient to drive human behavior.
3. Sense of belonging takes on heightened importance (a) in certain contexts... (b) at certain times...as well as (c) among certain populations.
4. Sense of belonging is related to, and seemingly a consequence of, mattering.
5. Social identities intersect and affect college students' sense of belonging.
6. Sense of belonging engenders other positive outcomes.
7. Sense of belonging must be satisfied on a continual basis and likely changes as

circumstances, conditions, and contexts change. (pp. 18-23)

Across the postulates it is evident that sense of belonging is tied to student success as Strayhorn asserted that sense of belonging drives human behavior. Strayhorn further explained that it is critical that students feel they matter in order to feel a sense of belonging. Additionally, Strayhorn stated that sense of belonging is more important among certain contexts, at certain times, or among certain populations including those more likely to feel marginalized (p. 17). Strayhorn suggested that sense of belonging is important during times of transition, and among populations who are marginalized or inclined to feel marginalized such as first-generation students. Strayhorn (2012) stated that current research often fails to “explain the mechanisms” (p. 14)—such as institutional practices and policies—through which college administrators endeavor to foster sense of belonging among students.

Current research corroborates the importance of sense of belonging and student success (Hausmann et al., 2007; Meeuwisse et al., 2010; Zumbrunn et al., 2014). Research further explores sense of belonging and marginalized students, often finding that marginalized student groups have lower perceived levels of belonging than non-marginalized students (Garcia & Garza, 2016; Hurtado & Carter, 1997). For example, lower levels of belonging were found amongst first-generation college students (Strayhorn, 2012) than among their continuing-generation peers. The clear connection between sense of belonging and first-generation student success (Irlbeck et al., 2014; Strayhorn, 2012) supports the need for additional understanding of how first-generation students experience belonging. Therefore, it is important to ascertain whether participation in a first-generation focused student success program fosters sense of

belonging, which is a key indicator of student success. Moreover, it is necessary to understand how institutional policies and practices support sense of belonging (Strayhorn, 2012), if at all.

Purpose of the Study

Although significant research explores sense of belonging (García & Garza, 2016; Hausmann et al., 2007; Meeuwisse et al., 2010; Strayhorn et al., 2016), more limited research explores sense of belonging and first-generation students (Engle & Tinto, 2008). Moreover, while research has explored intervention and student success programs in general such as first-year seminars (Ben-Avie et al., 2012; Permzadian, & Crede, 2015; Pittendrigh et al., 2016) and summer bridge programs (Cabrera et al., 2013; Murphy et al., 2010; Strayhorn, 2011), limited research has considered the effects of student success programs on first-generation students specifically. Furthermore, limited to no research has explored first-generation focused student success programs. With many aforementioned barriers potentially hindering the success and sense of belonging of FGCS compared to their continuing generation peers (Cataldi et al., 2018; Covarrubias et al., 2018; Stephens et al., 2014), it is necessary to explore how a first-generation student success program might support the sense of belonging, and therefore support the overall success, of FGCS.

In addition to better understanding the sense of belonging of first-generation students, Strayhorn (2012) indicated that most research on sense of belonging focuses on the student perspective, explaining that limited research, if any, explored how institutional practices and policies influence college students' sense of belonging, if at all. With institutions being encouraged to increase support for first-generation students

through structured programming (Soria & Stebleton, 2012), it is necessary to better understand how institutional practices foster sense of belonging among students—specifically first-generation students—in order to better support the success of college students. Moreover, since the development and implementation of student success programs requires institutions to dedicate resources—monetary, employees, time, etc—it is even more necessary to better understand how such programs work, if at all. The purpose of this study was to explore if and how a first-generation focused student success program fostered sense of belonging in order to increase our understanding of how institutional practices supported the success of FGCS. The following research questions guided this study:

1. How do first-generation students experience a first-generation focused student success program?
2. How do first-generation students experience sense of belonging when participating in an first-generation student success program, if at all?
3. How can institutional policies and practices, in the form of a first-generation student success program, support the sense of belonging of first-generation students, if at all?
 - A. What program practices (e.g., events, workshops) best support sense of sense of belonging of first-generation students?
 - B. How do administrators of the student success program foster sense of belonging among first-generation students, if at all?

Definition of Terms

To gain a better understanding of the experiences of first-generation college students participating in a first-generation focused student success program, definitions of key terms must be defined. These key terms include first-generation college student (FGCS), continuing generation college student (CGCS), sense of belonging, and student success program.

- *First-generation college student (FGCS)* is a term with multiple definitions, each of which is based on the education level of the student's parent(s). For the purpose of this study, *first-generation college students (FGCS)* are defined according to the U.S. Department of Education (2019b) as students whose parent or parents did not earn a four-year, bachelor's degree (U.S. Department of Education, 2019c). This the most inclusive definition of FGCS as a student's parent(s) might have completed all but one requirement of a bachelor's degree at a four-year institution and the student is still considered first-generation if no bachelor's degree was earned. In addition, the definition of "neither parent has completed a four-year degree" (I Am First-Generation (IFG, pseudonym) website, 2019) is also the foundation of the definition used in the case under investigation in this study; however, the student success program under review in this study expands the definition to include students whose parents earned a bachelor's degree in a country other than the United States as their parents are likely unfamiliar with higher education in the U.S. The Center for First-Generation Student Success supports the inclusion of students whose parents earned their degrees outside the United States, explaining that "many colleges and universities

are beginning to consider students with parents who attended international universities as first-gen” (NASPA, 2019).

- *Continuing-generation college student (CGCS)* shares the same complexity as the aforementioned FGCS term, as they are inextricably linked together. For the purposes of this study CGCS will include the opposite set of students as FGCS: students with one or more parents having earned a four-year, bachelor’s degree (U.S. Department of Education, 2019b) at an institution in the United States.
- *Sense of belonging* has been researched throughout the last few decades and has numerous definitions (see Hurtado & Carter, 1997; Schlossberg, 1984; Schlossberg et al., 1989) related to the concepts of community, mattering, and membership. This study draws upon Strayhorn’s (2012, 2019) theory of sense of belonging, which draws from Maslow’s (1943) theory of hierarchy of human needs, Tinto’s (1975) theory of departure, and Schlossberg’s (1989) theory of mattering and marginality. With foundations on three well known theories, Strayhorn (2012) provides the following definition of sense of belonging:

Sense of belonging is framed as a basic human need and motivation, sufficient to influence behavior. In terms of college, sense of belonging refers to students’ perceived social support on campus, a feeling or sensation of connectedness, the experience of mattering or feeling cared about, accepted, respected, valued by, and important to the group (e.g., campus community) or others on campus (e.g., faculty, peers). It’s a cognitive evaluation that typically leads to an affective response or behavior. (p. 3)

- *Intervention program* refers, in general, to structured programming that supports student success. Intervention programs are administered in numerous formats (e.g., first-year seminars, summer bridge programs, programs for specific student populations) and focus on a variety of outcomes such as skill development (Conley et al., 2013), successful transition to an institution (Strayhorn, 2012; Suzuki et al., 2012), and connecting students to resources (IFG website, 2019).

Methodology

I used the qualitative approach of instrumental case study to explore a single case with embedded units (Stake, 2006) to gain a better understanding of how a first-generation intervention program—the case—supports the sense of belonging of first-generation students—the embedded units. I specifically selected case study methodology as it allows me to study to the “complexity of a single case” (Stake, 1995, p. xi) or “bounded system” (p. 2). For this study, the case was bounded by the I Am First-Generation (IFG) program, a student success program that aimed to build community and promote success skills amongst first-generation students with the purpose of increasing student success. The IFG program is one of the more comprehensive programs in the country (Carballo, 2020) and endeavors to increase sense of belonging, a key student success indicator, among first-generation students. The use of embedded units—the first-generation students—allowed me to further understand the case through the experiences of a handful of IFG program participants. Furthermore, case study methodology was useful as “the context [was] relevant to the phenomenon” (Schoch, 2019, p. 245). Case study methodology allowed me to better understand the phenomenon as case studies require prolonged exposure (Creswell, 2012) and the use of multiple data sources

(Creswell, & Poth, 2019; Stake 1995) to gain a more complete understanding of the case and phenomenon under review. In doing so, I was able to explore how institutional policies and practices supported the case—the FGCS intervention program—and therefore also supported the success of FGCS, if at all.

To better understand the phenomena under review—FGCS belonging—I utilized Strayhorn’s (2012) conceptual framework of sense of belonging. Strayhorn asserted that “a college student’s need for belonging must be satisfied before any higher-order needs such as knowledge and self-actualization...can be achieved” (p. 18) and “may also be particularly significant for students who are marginalized in college contexts such as...first-generation students” (p. 17). In this way, Strayhorn emphasized that students—especially students who are marginalized are inclined to feel marginalized such as first-generation students— must feel they belong and matter on campus in order for to be successful in college.

I collected and analyzed data in an ongoing manner throughout the research process, as is typical with case studies (Miles et al., 2014; Saldaña, 2016; Stake, 1995). First, to understand the context of the case (Stake, 2006), I collected and analyzed data at the institutional level by reviewing documents pertaining to the institution and its support of first-generation students. I analyzed institutional-level documents by memoing during the initial data collection phase, skimming the documents and memos for key words pertaining to the case (e.g., belonging, involvement), and looking for patterns. Next, I collected and analyzed data at the case level by reviewing documents related directly to the IFG program, as well as interviewing the program directors. Data analysis followed the same steps as previously mentioned with regard to institutional data.

Finally, I interviewed and observed seven embedded units—first-generation students participating in the IFG program—which Stake (2006) considered sufficient to gain a thorough understanding of the interactivity between “programs and their situations” (p. 21). Following Stake’s (2006) suggestions, I utilized a demographic survey to select students with differing experiences. Participants were selected using the demographic survey results based on a variety of characteristics intended to diversify the participant pool, with specific attention paid to the number of years the student has participated in the program (two, three, or four years), socioeconomic status, and commuter or resident status. These specific demographics were likely to affect the student experience on campus and with the program, as FGCS often face barriers related to finances which might be different across socioeconomic statuses, navigating campus which might be affected by years in the program and whether the student lives on campus or commutes, and the overall experience students have in college (Baker & Robnett, 2012). I also worked with the IFG program director to email students in their second, third, or fourth year in the program in order to interview students who could reflect on their experiences before the coronavirus pandemic (COVID) in addition to their current experiences in the program. The aims of such purposeful sampling were to recruit participants who would agree to be observed and interviewed, as without their willingness I would not be able to collect rich data (Stake, 2006).

I collected data from embedded units through observations and interviews, and analyzed data in an ongoing, “spiral” (Creswell, 2012) manner. For example, I memoed after observing and transcribing observation notes, which guided subsequent interviews and vice versa. My jottings (Saldaña, 2016) allowed me to begin developing initial

findings, but also guided future observations and interviews as well. I also analyzed embedded unit data within-case and cross-case (Stake, 2006). Using my notes and memos from observations and interviews, as well as interview transcripts, I used a two-cycle coding method to develop themes from each unit. Finally, I conducted cross-case data analysis, working to identify similarities and differences in sense of belonging among program participants.

Delimitations

As I was developing this study, I had to make a number of choices and decisions regarding what to purposefully include and exclude. First, I intentionally focused only on first-generation students for a number of reasons. Under the most inclusive definition—students whose parents have not earned a four-year degree (RTI International, 2019a)—first-generation students account for over half of the current student population, making FGCS an important group of students for college administrators to better understand. In addition, research has indicated that FGCS may face a number of barriers that can hinder success (Covarrubias et al., 2018; Pratt, et al., 2017; Stephens et al, 2014; Toutkoushian et al., 2019) beyond those experienced by their continuing generation peers. Additionally, I purposefully chose to not to analyze other marginalized identities. Although first-generation students often identify with at least one other marginalized identity (Whitley et al., 2018), the institution that houses the IFG program reflects many privileged identities as the student population is predominately White, upper-middle class, and Christian. It was beyond the scope of this study and this researcher to address so many competing identities. Therefore, I chose to focus primarily on the first-generation student status and purposefully did not include other marginalized identities in the study.

However, I allowed participants the space needed to reflect on their personal identities as they desired and saw relevant. In doing so, I delimited the study to first-generation students to better understand the ways in which an intervention program might support their involvement and belonging (key success indicators), with the purpose of supporting the success of over half the student population.

The second delimitation of this study was my focus on one student success program, the “I am First-Generation” (IFG) program, which is facilitated at Liberal Arts College (LAC), a small, private, liberal arts institution located in the Midwest. I chose to limit this study to a single case to gain a deeper, more complete understanding of the role this specific student success program plays in the experiences of FGCS as well as their sense of belonging, if at all. The case—the IFG program—specifically served first-generation students with the goal of developing a community among first-generation students, faculty and staff (IFG website, 2020), therefore endeavoring to increase the sense of belonging of FGCS on campus (IFG website, 2019). Moreover, the IFG program researched in this study is one of the most comprehensive first-generation focused success programs in the country (Carballo, 2020). While the majority of first-generation success programs last a few weeks (i.e., a summer bridge program), for the duration the first-semester of college, or perhaps span the full first-year of college, the IFG program offers four full years of programming that begin when a student first arrives on campus and culminates the day of commencement with a first-generation specific celebration and pinning ceremony (Carballo, 2020). Therefore, I have delimited this study to this single case as it was important to intentionally investigate the experiences of FGCS participating in the IFG program to determine how a comprehensive, four-year

intervention program can support sense of belonging of first-generation students, and in doing so better understand how a first-generation focused student success program fosters student belonging and success for FGCS, if at all.

A third delimitation was my decision to focus on sense of belonging. While student success programs include a variety of outcomes including transitioning to college, student success skills, and social learning, (Hatch et al., 2018), the IFG program under review in this study also emphasizes the importance of community, stating that participants have “access to a network of first-generation peers, faculty, and staff” in addition to being intentionally designed to “help facilitate interactions between first-gen students and faculty” (IFG website, 2021). In doing so, the IFG program not only emphasizes the importance of community and relationships but helps foster sense of belonging within the program and on campus. Moreover, sense of belonging is a key student success indicator (Gopalan & Brady, 2019; Newman et al., 2015; Wilson et al., 2015; Zumbrunn et al., 2014). Strayhorn (2012) explained that sense of belonging is “a basic human need and motivation, sufficient to influence behavior” (p. 3) in which those behaviors can lead to student success and persistence or the decision to depart from the institution. Additionally, Strayhorn also explained that little is known about how institutional practices foster sense of belonging, if at all. Therefore, it is important to understand sense of belonging among first-generation students to support their success, in addition to better understanding how the IFG program fosters sense of belonging, if at all.

A fourth delimitation was my selection of embedded units included in this study. The IFG program provided the bounding for the case, with over 500 students participating in the IFG program (IFG Website, 2019) of the approximately 1,000 first-

generation student who attend LAC (“At a Glance, 2020). As such, I chose to limit the number of embedded units to study in-depth in order to better understand the phenomenon, ultimately selecting seven participants to interview and observe. I endeavored to fully understand each individual “mini-case” (Stake, 2006, p. 26), their experience within the case itself, and how participation within the case affects sense of belonging and involvement of each embedded unit, if at all. With only one intervention program and a handful of embedded units included in this study, the results were meant to develop a deeper understanding of a few students’ experiences and were not meant to be generalized.

Limitations

All research is subject to limitations, and this study was no exception. For example, this study was conducted over the course of one fourteen-week semester, meaning the study was not longitudinal in nature. While I collected data over one semester, participation in the intervention program typically lasts two to eight semesters (Carballo, 2020). It is possible the sense of belonging of the participants might change, develop, or dissipate over the course of their participation in ways that only a longitudinal study could ascertain.

Another limitation is this case study relies heavily on interviews as a method to collect data from embedded units. However, interviews rely on self-reported data and perceptions. During interviews I asked students how they perceived their belonging as a result of participating in the intervention program. It is possible the participants perceived the concept of belonging differently. In addition, students might not have felt comfortable opening up fully to me, as an outsider. I worked to build rapport with the participants

(Maxwell, 2013; Merriam & Tisdell, 2016), so they trusted me and would speak openly about their experiences in the IFG program with me. While I felt a strong sense of rapport with the participants, it is possible they still were not fully open with me about their experiences in the IFG program or perceived belonging. To counter the shortcomings of interviews, I collected additional data through observations and document review. However, as a non-first-generation student, it is possible I overlooked aspects of the program that are critical to the experiences of the first-generation student participants while collecting and reviewing documents or observing workshops, as qualitative research is inherently limited by its subjectivity (Merriam & Tisdell, 2016). Thus, it is possible I misinterpreted portions of the IFG program, document review, or observations of the participants. Although I memoed frequently about my observations and interpretations, as well as inquiring about my observations during interviews with the participants to corroborate what I noticed, my personal biases as a continuing-generation student might have affected my observation and document review.

A third limitation was this study does not focus on the various social identities of the participants (e.g., race, ethnicity, socioeconomic status). While current research often focuses on the intersectionality of social identities among first-generation students (Castillo-Montoya, 2017; Hébert, 2018; Nguyen & Nguyen, 2018) or when considering sense of belonging and college students (Rainey et al., 2018; Strayhorn, 2012), it was beyond the scope of this study to do so. Instead, this study focused on first-generation students as the primary social identity to better understand the overall experiences of first-generation students participating in a student success program as well as their sense of belonging, if at all.

Chapter Summary

This chapter provided an overview of the purpose of this study: to better understand the experiences and sense of belonging of students participating in a first-generation student success program. Although research indicated that sense of belonging is an important student success indicator (Strayhorn, 2012), little is known about the role that intervention programs might play in fostering the belonging of FGCS. In addition, with first-generation students making up over half of the student population (RTI International, 2019a) it is important to better understand how an intervention program affects the belonging of FGCS, if at all. Therefore, this study explored how a first-generation intervention program fostered sense of belonging among first-generation students, in order to increase our understanding of how institutional practices and policies supported the belonging and success of FGCS.

In the following chapter—chapter two—I provide an overview of the extant literature on first-generation students (who they are and the barriers they face), as well as sense of belonging and the connection to first-generation student experiences and outcomes. Throughout chapter two, I highlighted key studies that support the need to better understand first-generation students, sense of belonging, and student success programs. Next, in chapter three I provide a detailed description of the methodology I followed for this study, which utilized a qualitative case study methodology with embedded units. Chapter four presents my findings, starting with an overview of the institution and case as well as a brief introduction of each of my participants before presenting the results from data analysis. Lastly, in chapter five I provide a discussion of

how the findings pertain to the current research, as well as implications for practice and research, limitations, and the conclusion to this study.

Chapter 2: Literature Review

Sense of belonging (Strayhorn, 2012) is directly linked to student success.

Research indicates that sense of belonging is of particular importance to marginalized student populations such as first-generation college students (FGCS), who are less likely to feel as though they belong on campus (Strayhorn, 2012). As such, colleges and universities have started to develop student success programs for first-generation students, yet little is known about the effect of these programs. While research has explored sense of belonging and first-generation students independently, limited research has explored these concepts together. Furthermore, little to no research considers student success indicators in relation to first-generation students participating in a first-generation focused student success program, as well as their sense of belonging.

Of the extant recent research on first-generation students, the majority of studies approach FGCS from a deficit perspective. For example, current research focuses on common challenges first-generation students face (Wilbur & Roscigno, 2016) such as more limited financial support (Covarrubias et al, 2019; Stephens et al, 2014), lower levels of academic and social involvement (Mehta et al., 2011; Pike et al., 2003), and lower academic success rates (Pratt et al., 2017; Soria & Stebleton, 2012), compared to continuing generation college students (CGCS). Limited research focuses on the structural issues that are likely to contribute to the many challenges FGCS experience when navigating higher education, or on how institutional supports such as FGCS intervention programs help first-generation students navigate barriers to success. To account for this gap in the research, this literature review explores the aforementioned

challenges commonly described in FGCS literature, with an eye toward the structural and institutional barriers likely to cause such challenges.

I start the following literature review by exploring who first-generation students are and the structural and institutional challenges FGCS face when preparing for, searching for, transitioning to, and attending college. I then review the literature on sense of belonging as a key academic success indicator. Lastly, I discuss the research on student success programs, with a specific emphasis on first-year and first-generation intervention programs. Throughout these sections I highlight the short comings of research conducted on first-generation students, sense of belonging, and college intervention programs, as well as the limited to no research conducted on how first-generation intervention programs support sense of belonging, thus further justifying the purpose of this study.

Who are First-Generation Students?

With upwards of eight definitions identified (Toutkoushian et al., 2019; Whitley et al., 2018), the range for who qualifies as first-generation spans from 22 to 77 percent of students depending on which definition is applied (Sharpe, 2017). However, the most common definitions include 30-56% of students. Approximately one third of first-time, first-year students identify as the first in their family to attend postsecondary education (Cataldi et al., 2018; Whitley et al., 2018). However, the number of FGCS almost doubles when a slightly more flexible definition of first-generation is introduced. The Center for First-Generation Student Success, run by the Student Affairs Professionals in Higher Education (NASPA) organization, asserted that upwards of 56% of all first-time college students had one or both biological parents who had not earned a bachelor's degree (RTI

International, 2019a). This definition allows for students to be identified as FGCS even if their parents have completed some postsecondary education but have not completed a bachelor's degree. Following this more flexible definition of first-generation students, over half of first-time college students fall into the FGCS category. With over one half of all college students falling in the most flexible definition of FGCS, it is important to understand more about FGCS and the barriers they might face with regard to student success in college.

Defining “First-Generation College Student”

Numerous definitions of first-generation college student (FGCS) exist throughout the extant literature (Whitley et al., 2018). While research has identified numerous definitions of FGCS, first-generation students are typically defined in one of two ways. First, FGCS are often defined as neither parent having enrolled in postsecondary education (Cataldi et al., 2018; Ishitani, 2006). This definition restricts the first-generation student status to families in which neither parent attended college or completed any postsecondary coursework. In limiting the definition of first-generation students this way, the first definition means that if one parent completed one college-level course their children would then be considered continuing-generation. However, if a parent completed only a few college level courses, it is possible they still lack familiarity and experience with the processes and policies associated with college search, application, enrollment, and completion. Therefore, this definition likely excludes students who would benefit from being included in the first-generation student category if colleges offered additional support and resources to FGCS.

The second, and most inclusive, definition considers first-generation students to be those where neither parent earned a bachelor's degree (Billson & Terry, 1982; Stephens et al., 2012; Whitley et al., 2018). With regard to this definition, both parents could have been one course away from earning their bachelor's degree before stopping and their children would still be considered first-generation. Likewise, even if one or more of their siblings have attended and graduated from college a student is still considered a FGCS as long as neither parent has earned a bachelor's degree. Given its inclusiveness, the federal Higher Education Act and TRiO programs have adopted this definition of FGCS for their programs and policies (Toutkoushian et al., 2019; U.S. Department of Education, 2019c). In addition, research on FGCS often applies this more flexible definition (Inkelas et al., 2007). Additional definitions of first-generation students fall between the two extremes of parents who have completed no college coursework and parents who have not completed a bachelor's degree. For example, some definitions consider whether one or both parents have earned an associate's degree. Others define FGCS as students with at least one parent with a high school diploma or less (Williams, 2017).

Regardless of how FGCS is defined, research indicates that students with two parents who have earned bachelor's degrees fare far better in college than students whose parents have more limited or no college experience (Lee et al., 2004; Toutkoushian et al., 2019). With so many definitions of first-generation college student, recent research has started to investigate the various definitions of first-generation student and the differences across varying groups of FGCS. For example, Toutkoushian et al. (2019) explored eight definitions of FGCS in relation to college graduation rates and found that the risk of not

completing a four-year degree varies by how first-generation student is defined. The study found that students with two parents who had completed bachelor's degrees were significantly more likely to complete their college degree than students who had one or no parent with a college degree. The research by Toutkoushian et al. suggested that students with only one parent who did not earn a bachelor's degree were at greater risk of not completing college than students with two parents with four-year degrees. Likewise, students with neither parent having earned a bachelor's degree were at even greater risk of not completing a bachelor's degree than students with one or both parents who had earned degrees from four-year institutions (Toutkoushian et al., 2019). The research by Toutkoushian indicates that first-generation students are less likely to complete a bachelor's degree than their peers.

For the purpose of this study, the most inclusive definition of first-generation student—neither parent nor guardian having earned a bachelor's degree—will be utilized. Not only is this the most inclusive definition of first-generation college students, this is the definition adhered to by the federal government (U.S. Department of Education, 2019c) and by leading higher education organizations such as TRiO and NASPA. Moreover, NASPA's Center for First-Generation Student Success—a leading organization that focuses on first-generation students, programs, services, research, and policy development at the college level ("Center for First-Generation Student Success," 2018)—operates under the most inclusive definition of first-generation: neither parent having earned a four-year degree. However, the case under review allows for additional inclusiveness in the program's definition of first-generation college student by including students who had one or both parent earn a bachelor's degree outside of the United States

as they are unlikely to be familiar with the U.S. system of higher education (Carballo, 2020), and therefore are likely to face the same barriers as students whose parents have not earned a bachelor's degree at all.

Barriers to Success

Current research on first-generation students tends to approach the subject from a deficit perspective. The majority of research on first-generation students focuses primarily on ways in which first-generation students are less ready for college or less capable of achieving success in college than their continuing-generation peers. For example, many research studies point to the fact that FGCS often have lower academic success and persistence rates (Choy, 2001; Pratt et al., 2017; Soria & Stebleton, 2012), lower levels of involvement on campus (Pike et al., 2003), and more limited financial support (Covarrubias et al., 2019; Stephens, et al., 2014) compared to continuing-generation students. Additionally, research often highlights the lack of academic preparedness (Cataldi et al., 2018; Reid & Moore, 2008) and more limited family support (Dennis et al., 2005; Stephens et al., 2014) as reasons first-generation students might struggle in college. While first-generation students may experience some or none of these challenges, it is important to recognize common challenges as research suggests that first-generation students are more likely than their continuing generation peers to have to navigate at least one of these aforementioned challenges (Whitley et al., 2018). However, current research often fails to address the structural barriers that lead to these challenges. Research often indirectly or directly indicates that the problem is with first-generation students instead of caused by the structural and institutional barriers that can impede the college success for FGCS. The following section explores a number of structural and

institutional barriers FGCS might experience that are likely to challenge their success in college, specifically focusing on the barriers related to pre-college experiences, financial challenges, and transition to college.

Pre-College Barriers

Prior to starting in college, FGCS face structural barriers ranging from attending average or below average K-12 schools to the barriers caused by the complexities of the college search and application processes (Falcon, 2015). Not surprisingly, FGCS have to navigate more structural and institutional barriers than their continuing generation peers. Moreover, first-generation students often experience more than one structural barrier throughout their upbringing (Whitley et al., 2018), each of which influence their college search and selection process and compound on one another. The following section describes a few of the most prominent pre-college barriers discussed in the literature as they relate to FGCS and college success, including academic preparation as well as the college search, application, and selection process.

Academic Preparation. Research often points to the lower levels of academic preparation of FGCS as a primary reason for their lower levels of college success associated with FGCS. Studies are quick to point out that FGCS often earn lower high school GPAs and standardized test scores compared to their CGCS peers (Atherton, 2014; Balemian & Feng, 2013; Redford & Hoyer, 2017). Such studies often suggest that FGCS have lower academic abilities than CGCS or link their lower levels of academic success in high school to lower levels of academic success in college (Atherton, 2014; Cataldi et al., 2018). However, such arguments fail to consider the structural barriers responsible for the potentially lower levels of academic preparation of FGCS. For

example, the education level of a student's parents is one of the best predictors of success in school (Bainbridge & Lasley, 2002; Gofen, 2009). Since the parents of FGCS did not earn a four-year degree, FGCS already start with additional challenges as the education level of their parents is lower than that of CGCS. For example, Gofen (2009) conducted a qualitative study to better understand the experiences of 50 first-generation students—25 men and 25 women. Through semi-structured interviews, Gofen ascertained how the first-generation students worked to break the intergenerational cycle of not graduating from college. While Gofen found that FGCS came from families with lower family capital, the majority of students interviewed stated that family support—or support from at least one family member—was critical to their educational success. While their parents were not able to share their personal experiences from completing a bachelor's degree, the FGCS included in Gofen's study indicated that their parents were supportive of their pursuit of a college degree and essential to their success in college. Likewise, research conducted by Barry et al., (2008) found that first-generation students noted the same level of support from their parents with regard to the student attending college as continuing-generation students noted they received from their parents. Therefore, research indicates that FGCS often receive similar levels of support from their parents as CGCS despite their parents not having completed a bachelor's degree.

Even with the support of family, FGCS face additional barriers as they are more likely to attend schools with fewer resources for kindergarten through 12th grade (Hudley et al., 2009), further hindering their academic preparation. Research indicates that FGCS were more likely to be from lower income families (Mehta et al., 2011; Engle & Tinto, 2008). Engle and Tinto (2008) found that FGCS households were more likely to have

annual incomes under the poverty line of \$25,000 (Engle & Tinto, 2008). The challenges compound as lower income families are more likely to live in less wealthy areas, and are therefore more likely attend K-12 schools with fewer resources and lower academic performance levels (Hudley et al., 2009). As such, FGCS often have access to fewer educational resources.

With more limited resources, research indicates that FGCS are more likely to complete less rigorous, college-preparation coursework (Cataldi et al, 2018; Cushman, 2007; Jenkins et al., 2009). For example, Cataldi et al. (2018) reviewed the course completion of high school graduates, determining that first-generation students were less likely to complete higher level mathematics courses than CGCS. Mathematics is a known predictor of future academic success (Duncan et al., 2007; Kowski, 2013), meaning that if FGCS complete fewer high level math courses due to limited resources and access, they are less likely to achieve higher levels of academic success when compared to students who are able to complete higher level math courses. Moreover, the aforementioned structural barriers further disadvantage FGCS as they tend to earn lower scores on standardized tests including the ACT and SAT (Atherton, 2014; Balemian & Feng, 2013; Bui, 2002).

To better understand the academic preparedness of FGCS, Atherton (2014) analyzed SAT and high school GPA for 6,000 first-year students from 2- and 4-year institutions participating in the Cooperative Institutional Research Program survey. The authors compared students whose parents had both not graduated from college, students who had one parent graduate from college, and students who had both parents graduate from college to determine the levels of academic preparedness in relation to parent

education level. Atherton found that FGCS had lower standardized test scores, including lower standardized math scores. Along with concerns related to the standardized test scores of FGCS, Atherton also found a significant difference in high school GPA for FGCS and CGCS with two parents who had earned bachelor's degrees. In addition, Redford and Hoyer (2017) found that FGCS thought about taking college entrance exams such as the SAT and ACT less frequently than CGCS. With lower GPAs and standardized test scores, FGCS might have a more difficult time applying and being accepted to college.

Further adding to the barriers related to academic preparedness, FGCS were less likely than CGCS to complete college-preparation coursework, including dual-credit and advanced placement (AP) courses (Cataldi et al., 2018). Research suggests that FGCS often have fewer opportunities to complete more rigorous, college-level coursework, so are less likely to enter college with pre-earned college credits from AP examinations and dual credit programs (Jenkins et al., 2009). Advantages of completing dual and AP credit include reducing college costs as credits are earned prior to attending and reducing the time to degree completion, which further reduces costs and allows for full-time work to begin (Tobolowsky & Allen, 2016). This further disadvantages FGCS before they have even set foot on their college campus as students who complete fewer AP and dual credits need to pay for and earn more college credits post-high school, while their CGCS peers are more likely to start college having already earned college credits, which saves time and money. One possible result of completing less rigorous coursework in high school is that FGCS often describe being less prepared to succeed academically in college (Cushman, 2007; Martinez & Klopott, 2005) compared to CGCS. This is

reflected in the higher percentage of FGCS who enrolled in remedial courses in college. Chen (2005) found that 55 percent of FGCS enrolled in at least one remedial course in college, while only 27 percent of CGCS did so. Therefore, the structural barriers that limit the academic opportunities of FGCS in high school likely continue to affect the academic achievement of FGCS in college.

However, Vega's (2016) research points out that sometimes FGCS have strong academic foundations despite research indicating otherwise. While research suggests FGCS often do not have as much access to college level coursework in high school, and therefore are less likely to complete college level coursework (Cataldi et al., 2018; Jenkins et al., 2009), Vega found that seven of the participants completed rigorous college-level coursework while in high school in one particular study. The findings of this study contradict the aforementioned research as the majority of students reviewed by Vega had completed college level coursework. While these results are specific to the institution and population included in Vega's study and cannot be generalized, they do indicate that FGCS are capable of successfully completing rigorous high school coursework. Therefore, when provided with equivalent resources and opportunities, Vega (2016) found that FGCS are likely to achieve high levels of academic success, but access to rigorous, college-preparation coursework is critical.

Further supporting the academic abilities of first-generation students, FGCS have also been found to have high levels of motivation and resilience (Covarrubias et al., 2019; Dennis et al., 2005; Irlbeck et al., 2014; Kutty, 2014). Byrd and MacDonald (2005) found that this motivation often comes from FGCS observing their parents working less-than-appealing jobs, such as manual labor. After conducting semi-structured interviews with

eight FGCS who were in their third or fourth year of college. The authors found that students “were motivated to do better than their parents” and “all eight participants pointed to the desire to improve career opportunities as a primary motivation for enrolling in college” (Byrd & MacDonald, 2005, p. 30). Participants further described wanting to be able to pursue careers that allowed for advancement and promotions, and were therefore not “dead-end jobs” or “unsatisfying careers” (p. 30). Despite not always having the best access to K-12 education, FGCS described being academically motivated to achieve better employment opportunities than their parents who often had limited employment opportunities as a result of their lower levels of education. Moreover, Garrison and Gardner (2012) found that FGCS were goal-oriented and proactive. In a qualitative study of three students attending a four-year state institution in Utah, Garrison and Gardner found that the FGCS remained focused on the goal of graduating and sought resources whenever possible. Research by Covarrubias et al. (2019) further supports the resilience of FGCS. Although the students could not lean on their parents for a full understanding of attending and completing college, these students sought resources whenever possible, were positive about their experiences despite challenges, and remained focused on earning a four-year degree.

College Search, Application, and Selection Process. The college search and application process also present structural barriers for FGCS. Prior to beginning a college search, FGCS are often less likely to be expected to complete postsecondary education (Lohfink & Paulsen, 2005). Moreover, FGCS who are interested in attending college are more likely to delay pursuing postsecondary education than CGCS (Chen, 2005; Engle, 2007; Engle & Tinto, 2008; Inkelas et al., 2007), often due to financial constraints.

Delaying enrollment in college is associated with lower levels of bachelor's degree attainment for FGCS (Chen, 2005). Therefore, because FGCS are more likely to delay pursuing postsecondary education due to personal or financial concerns, FGCS also have an increased likelihood of not earning a bachelor's degree which can result in lower earning potential. To counter this challenge, Engle (2007) suggested that colleges and universities provide more financial aid for first-generation students to reduce the financial burden of attending college. In doing so, the institutional structure of increased financial aid can help to reduce the need for FGCS to delay pursuing their postsecondary education due to financial issues.

The college search process might also be more bound by location for FGCS than for CGCS. First-generation students often choose to stay closer to home with the purpose of remaining physically near their close-knit families (Bryan & Simmons, 2009) or to be able to continue supporting their family (Covarrubias et al., 2019). While location is not necessarily a negative way to select an institution, research indicates that the number of colleges and universities tends to vary geographically by community along the lines of race and class. Hillman (2016) found that White and Asian communities with higher educational attainment levels tend to have more options for postsecondary education, while communities with larger Hispanic and Black populations and lower levels of educational attainment had fewer education opportunities. Referred to as "education deserts" (p. 988), Hillman explained that these areas with few educational opportunities are "disproportionately located in the nations' poorest and most racially minoritized communities," which means "geography can be destiny when opportunities richly available for some communities are rare or even nonexistent in others" (p. 988).

Since FGCS are more likely to come from low-income families (Engle & Tinto, 2008) and therefore lower income communities, they are more likely to be located in an area with fewer educational opportunities. Therefore, if FGCS limit their college search to their surrounding community, they are more likely to be at a disadvantage compared to their CGCS peers who are more likely to maintain a wider search parameter and pursue more institutional options.

First-generation students face additional structural barriers with regard to applying to college as they are less likely to receive college-related information from their parents (Bryan & Simmons, 2009; Dennis et al., 2005; Rubio et al, 2017). For example, first-generation students “cannot benefit from their parents’ college-going experience—a valuable source of cultural capital that helps students navigate college” (Cataldi et al., 2018, p. 2). Parental support is an important part of the college search process, but the parents of FGCS lack experience with higher education compared to parents of continuing-generation students so are not able to provide the same support as parents of CGCS. Rubio et al. (2017) further confirmed the importance of parental support in the college search process, explaining that aside from cost of tuition, lack of information about college—including financial aid and required documentation—was the second most common barrier to FGCS when searching for and attending college. While parents of FGCS can provide emotional support, their potential lack of familiarity and personal experience with searching for, attending, and completing college limits the “instrumental support” (Dennis et al., 2005, p. 234) they can provide. Consequently, FGCS must navigate the complicated college search and application process without the

added instrumental support noted in the literature (Dennis et al., 2005) from parents from which CGCS benefit.

With potentially less support available from their parents as they did not complete a bachelor's degree, FGCS might turn to the institutions to assist in the search and application process. While their parents might be supportive of their college pursuit overall, FGCS might seek resources and assistance needed to successfully navigate the unfamiliar structures of higher education. Whitley et al. (2018) found that 80% of institutions now ask for first-generation status on their applications or during the admission process. However, FGCS might not identify as first-generation on college applications because they are unfamiliar with the term or know what it means ("Center for First-Generation Student Success," 2019). Ironically, the lack of knowledge surrounding the first-generation student vernacular and the college search process might mean FGCS are not connected to pre-existing resources or scholarship opportunities directed at first-generation students.

Financial Barriers

While the aforementioned research depicts structural barriers that can affect FGCS, the financial barriers affecting FGCS are also significant. Research conducted by Engle and Tinto (2008) indicated that only 34 percent of low-income, first-generation college students earned their bachelor's at public four-year institutions over the course of six years, compared to 66 percent of their peers (continuing generation and/or middle- and upper-class students). This substantial 32 percent gap between lower-income, first-generation students and their peers widened more significantly at private, four-year institutions. Engle and Tinto found that 43 percent of low-income, first-generation

students attending private, four-year not-for-profit institutions earned their bachelor's degree after six years. In contrast, 80 percent of CGCS—37 percent more than FGCS—attending four-year institutions earned their bachelor's degree. With lower degree attainment rates for students who are both first-generation and of lower socioeconomic status, it is important to better understand the barriers to success often facing this FGCS. The following section explores the various financial barriers that FGCS must navigate throughout the college process.

Rising Tuition. Access to higher education has expanded throughout the last century, yet the costs associated with pursuing a college degree have also increased. The rapidly increasing cost of higher education is, in part, a result of recent economic downturns which led to significant budget reductions from the state and federal government (Barr & McClellan, 2011; McKeown-Moak, 2013), as well as lower levels of private donations. To make up for the reduction in funding, higher education institutions have increased tuition annually (Barr & McClellan, 2011). According to the National Center for Education Statistics, “between 2006–07 and 2016–17, prices for undergraduate tuition, fees, room, and board at public institutions rose 31 percent, and prices at private nonprofit institutions rose 24 percent, after adjustment for inflation” (U.S. Department of Education, 2019a, n.p.). Moreover, for first-time, full-time undergraduate students the cost of attending a public institution was \$13,800 while a private nonprofit institution cost \$26,800 after grant and scholarship aid (U.S. Department of Education, 2019b). As the cost of college increases rapidly and the cost of attending a private not-for-profit institution nears \$30,000, the cost of attending college remains among the top concerns of college students (Mehta et al., 2011; Pratt et al., 2017).

With tuition providing one of the main sources of revenue for postsecondary institutions, it is not surprising this structural issue negatively affects FGCS. First-generation students are often more affected by the rising cost of attending college as they are more likely to come from low-income families (Covarrubias et al., 2019; Engle & Tinto, 2008; Inkelas et al., 2007; Redford & Hoyer, 2017; Soria & Stebleton, 2013, Stephens et al., 2014). Research suggests that approximately 24 percent of students pursuing post-secondary education qualify as both low-income and first-generation students (Engle & Tinto, 2008; Yeh, 2010). This combination—low income and first generation—makes intuitive sense as FGCS are more likely to come from families with lower earning potentials due to the fact that their parents did not graduate from college (Engle & Tinto, 2008). As a result, first-generation students tend to report lower parental median incomes than continuing-generation students. The NASPA Center for First-generation Student Success reported that the median parental income among dependent FGCS students was \$41,000 while the median parental income of CGCS was more than double that amount at \$90,000 (RTI International, 2019a). This financial difference is an evident structural barrier as FGCS families earned \$49,000 less per year than CGCS families. Therefore, the challenges compound for FGCS as their parents have not earned a bachelor's degree, which leads to lower family income and additional financial challenges for FGCS as they navigate the college search, application, and selection process.

First-generation students cite the cost of tuition as the top concern related to attending and persisting in college (Azmitia et al., 2018; Rubio et al., 2017). To help assuage this concern, many FGCS rely on financial aid and grant funding to help cover

the cost of tuition and other college-related expenses (e.g., books, housing). Research conducted by Lohfink and Paulsen (2005) found that while grant aid did not affect the persistence of CGCS, it did positively influence the persistence of FGCS. As tuition continues to rise, FGCS are likely to be further challenged by the complex financial aid and tuition process. First-generation students are less likely to receive as much help from their parents as CGCS when navigating the financial aid process (Feeney & Heroff, 2013). Moreover, first-generation students are less likely to complete the Free Application for Federal Student Aid (King, 2004), which in turn limits the amount of financial aid they can receive. The National Association for College Admission Counseling found that low-income and first-generation students were largely unaware of the cost of higher education, while almost half of students surveyed were unaware of the FAFSA (Bidwell, 2018). Consequently, while FGCS might benefit from additional financial aid, their lack of understanding of financial aid sources further hinders the financial support they are likely to receive.

To address the structural challenges associated with family income and financial barriers, colleges might consider how additional financial support for FGCS might positively affect the persistence and success of this first-generation students. Improving the persistence and degree attainment of FGCS is critical as both first- and continuing-generation students who successfully graduated with a bachelor's degree were employed at almost identical rates (68 and 69 percent respectively) (Cataldi et al., 2018). Given this finding, it is necessary to better support first-generation students through college to degree attainment to provide a level playing field for job placement and employment.

Institutional Choice. Research indicates that FGCS are more likely to choose an institution due to its financial affordability and ability to commute to save money compared to their CGCS peers. Along with the desire to commute to save money as mentioned above, Lohfink and Paulsen (2005) identified the following additional financial reasons that FGCS might select a particular institution: “receiving more financial aid, tuition being low, and other living costs being less than at other institutions” (p. 412). Moreover, Lohfink and Paulsen found that timeline to degree completion and being able to work while attending school were also important financial factors that influenced the institutional choice of FGCS. Given these factors taken into consideration, first-generation students appear to be more concerned with lowering the cost of their college education than their CGCS peers. The combination of the higher possibility of financial constraints as well as the aforementioned importance being closer to family directly influence the institutional choice of FGCS. As a result, FGCS are less likely to attend selective institutions than their CGCS peers, even when equally qualified (Lohfink & Paulsen, 2005; Pascarella et al., 2004). In a study comparing first-generation and continuing-generation students, Lohfink and Paulsen (2005) found that FGCS were 12% less likely to select an institution based on reputation and selectivity—defined as an institution being in the 25th percentile and up in standardized test score—of the institution than CGCS peers. Instead, FGCS are more likely to attend community college or a local institution (Pascarella et al., 2004).

Attending a community college can be a smart choice for any student. However, research indicated that low-income, first-generation students who started at community college were five times less likely to complete a bachelor’s degree than more advantaged

students (higher income and/or continuing generation) (Engle & Tinto, 2008). Therefore, the financial barriers that influence institutional choice of FGCS might unintentionally limit the ability of FGCS to successfully transition to a 4-year institution and subsequently complete a bachelor's degree. While a bachelor's degree might not be best for all students, the National Center for Education Statistics (U.S. Department of Education, 2019a) indicated that in 2017 "For young adults ages 25–34 who worked full time, year round, higher educational attainment was associated with higher median earnings" (n.p.). Therefore, FGCS might decide to attend community college due to short term financial constraints. Students who stop during or after community college often experience long term challenges including earning a lower median income than students who graduate from a four-year institution. The lower median income, in turn, might result in the children of current FGCS opting to attend community college due to continued financial constraints, therefore unintentionally continuing the intergenerational cycle of FGCS and lower family income.

Financial Barriers and Persistence. With various financial challenges possibly affecting FGCS, the financial structure of higher education creates numerous compounding barriers that FGCS must overcome in order to attend and graduate from college. This is evident as Pratt et al. (2017) found that financial concerns were a strong predictor of first-to-second year retention of FGCS. Likewise, Engle and Tinto (2008) found that students who are both first-generation and low-income were "nearly four times more likely—26 to 7 percent—to leave higher education after the first year than students who had neither of these risk factors" (p. 2). The more limited financial resources of many families of FGCS negatively affect the retention of first-generation students.

Research further indicated that FGCS from families with higher income levels were more likely to persist in college than peers with lower levels of family income (Lohfink & Paulsen, 2005). Thus, colleges must be aware of the additional challenges faced by students who are both first-generation and low-income and provide additional support for first-generation students, if possible.

To counter these challenges, researchers have explored ways in which colleges and universities can reduce structural and institutional barriers. Lohfink and Paulsen (2005) found that work study programs were positively associated with first-to-second year persistence for FGCS, providing both financial support and a connection to campus. In addition, Katrevich and Aruguete (2017) suggested that colleges consider increasing financial aid available for FGCS, which would hopefully reduce the number of hours FGCS work. The additional institutional support of work study opportunities and increased financial aid would allow FGCS to reduce the number of hours they work on or off campus, instead allowing for increased academic and social involvement on campus which in turn could increase student success.

Barriers During Transition to College

Research within higher education points to the importance of supporting students during their transition to college. Foundational student development theories further indicate the need to support belonging during the first year as students transition to college (Maslow, 1954; Schlossberg, 1989; Tinto, 1993). Contemporary research also supports the need to support FGCS during their transition to college as they report higher feelings of disconnectedness than CGCS (Covarrubias & Fryberg, 2015; Rubio et al., 2017). However, many structural and institutional barriers exist that challenge the

transition of FGCS and threaten the success of FGCS as unsupported transitions to college often result in lower academic success and higher departure rates (Tinto, 1993).

This section reviews common structural challenges that influence the transition of FGCS, including difficulties navigating campus; separating from their families and home communities; and transitioning to college academically and socially.

Separating from Family and Community. Families play an important role in the success of FGCS (Azmitia, et al., 2018; Covarrubias et al., 2019). Whether commuting or living on campus, FGCS must navigate two separate communities: home and college. Research indicates that FGCS feel their parents and friends from home do not understand their college experiences, and therefore limit their discussions related to college while at home (Azmitia et al., 2018; Vasquez-Salgado et al., 2015). Azmitia et al. (2018) reviewed data from a longitudinal study of a public state university in California. With a study population that was 42% FGCS, the authors considered the many challenges that FGCS experienced during their transition to college. The authors found that FGCS felt disconnected from their home and communities and as though they were unable to discuss their college experiences with family and friends. In limiting their conversations about college, FGCS are less likely to receive necessary support from family and friends from home.

The combination of campus and home responsibilities often adds additional guilt, pressure, and stress to FGCS (Covarrubias & Fryberg, 2015; Vasquez-Salgado et al., 2015). Research suggests that first-generation students feel guilty for leaving their families or achieving more than their family members academically (Armstrong & Hamilton, 2013; Covarrubias & Fryberg, 2015; Tate et al., 2013). Although first-

generation students often feel an obligation to their family to be successful (Tate et al., 2015) they continued to struggle with feelings of guilt or stress as the first in their family to pursue their postsecondary education. Such guilt leads to additional strains on family relationships (Longwell-Grice et al., 2016), which are necessary support systems for FGCS (Covarrubias et al., 2019). To better understand how separation from family affected first-generation students, Longwell-Grice et al. (2016) reviewed the findings from three qualitative studies that collected data through semi-structured interviews. Longwell-Grice et al. found that first-generation students experienced high levels of stress as they developed their “identity as a college student” (p. 36). In addition, FGCS reported feeling challenged to incorporate their new identity when “bringing their...student identity home” (Longwell-Grice et al., 2016, p. 36). Given the difficulties navigating home and college life, FGCS often struggled to balance how their family viewed them with their developing identity as a college student. FGCS who provided critical financial and emotional support for their families and communities felt additional guilt when attending college because they had less time to dedicate to their families once attending college. Covarrubias et al. (2019) found that FGCS often play a critical role in maintaining the household, including providing emotional and financial support; advocating for parents; acting as translators when necessary; and care taking of siblings, parents, and grandparents. FGCS cited attending college as a source of guilt as they were unable to act as a primary caretaker while at school, which made the decision to attend and complete a degree more challenging.

Navigating Campus. Upon arriving at college, first-generation students often face a variety of institutional barriers when learning to navigate campus, further

aggravating the challenges experienced by FGCS. For example, the cultural mismatch between the interdependent home communities of many FGCS and the independent norms of college disadvantages FGCS (Covarrubias et al., 2019; Dennis et al., 2005; Stephens et al., 2012b; Vasquez-Salgado et al., 2015). Vasquez-Salgado et al. (2015) found that the interdependence of Latino first-generation students means they often prioritized the needs of their families and home communities over their personal and academic needs. However, the independent mindset of college faculty and staff assumes that students will also operate from places of independence not interdependence as do many FGCS. Faculty and staff misunderstood the competing responsibilities when first-generation students prioritized family commitments—care taking, working to support their family, family obligations—over school. Likewise, in a qualitative study of 34 low-income, minority FGCS, Covarrubias et al. (2019) found that the FGCS demonstrated “self-reliant behaviors related to survival and making ends meet [that] were recognized as ‘street smarts’ rather than ‘book smarts’” (p. 403). The focus of the FGCS on their home communities was not recognized as valuable by the institution, and discouraged FGCS from engaging more in depth with the institution. These studies suggest that the classic independent norms of colleges and universities work against the interdependent mindset of FGCS and cause additional stress and disconnection.

Along with barriers related to the expectations of independence, FGCS often struggle with the implicit expectations of college faculty and staff. First-generation students are more likely not to understand the amount of time needed to dedicate to their academics. In a study of FGCS and CGCS related to college expectations, Collier and Morgan (2007) conducted two focus groups with faculty members as well as eight focus

groups of students: six comprised of first-generation students only and two comprised of continuing generation students only. Collier and Morgan found that FGCS reported being advised to adjust their expectations related to the amount of time they needed to set aside for coursework. Moreover, the study found that FGCS were more likely to cite their additional responsibilities, such as work, as taking more time away from academics, while CGCS were less likely to discuss the difficulties of balancing their additional responsibilities. Additionally, FGCS had more difficulty understanding faculty expectations via the syllabus than CGCS (Collier & Morgan, 2007). FGCS desired more detail in their syllabi, or admitted to not reading and understanding the importance of the syllabus. Instead, FGSC indicated that they rely more heavily on faculty statements made during class or through announcements. This means if faculty do not verbally indicate their expectations or assignment and exam specifications, FGCS are more likely to miss requirements and expectations than CGCS.

With difficulties separating from their home community as well as understanding the expectations of their new college community, it is not surprising the FGCS often feel unprepared to attend college. Gibbons and Borders (2010) found that first-generation students tended to be less confident in their ability to be successful in a postsecondary setting. Furthermore, research suggests that first-generation students feel less academically prepared for college than continuing generation peers (Martinez & Klopott, 2005; Reid & Moore, 2008). For example, Reid and Moore (2008) conducted a qualitative study of 13 first-generation students to explore their perceived college readiness and academic preparation. Through interviews and biographic questionnaires, the researchers found that first-generation students from urban upbringings “attending

private liberal arts colleges and... most selective of the state universities all felt unprepared for the rigor of the coursework at their college” (Reid & Moore, 2008, p. 251). Such lower levels of confidence and feelings of under preparedness often result in feelings of imposter syndrome (Davis, 2012). FGCS often feel as though they do not belong in college and are therefore more inadequate than their CGCS peers. Regardless of their abilities, research indicates that FGCS are likely to feel ill-equipped to successfully navigate college environments.

Institutional Responsibility to Reduce Barriers. Deficit based research as described above is apparent with article titles including “Why do first-generation students fail?” (Mehta et al., 2011) and “Motivating first-generation students to academic success and college completion” (Petty, 2014). Such titles and research suggest that first-generation students are more likely to fail or have lower levels of motivation than their continuing-generation peers. However, it is evident from the aforementioned literature that FGCS are motivated, resilient, and capable of achieving academic success (Byrd & MacDonald 2005; Covarrubias et al., 2019; Irlbeck et al., 2014; Kutty, 2014) yet face additional structural barriers when pursuing a college education that can result in lower GPAs, persistence, and graduation (Cataldi et al., 2018; Choy, 2001; Pratt et al., 2017; Ting, 2003; Vuong et al., 2010). Soria and Stebleton (2012) asserted that numerous barriers can compound, creating complex and difficult sets of challenges to navigate as FGCS transition to college. However, Soria and Stebleton (2012) also provided suggestions related to program and policy development to better support FGCS, stating that:

Additional programs, services, and structures are often needed to help students reduce the size of each step during the adjustment to the postsecondary education experience. In turn, this added support will help first-generation students feel a greater sense of control and responsibility during the college transition [to college]. (p. 12)

First-generation student programming aims to directly support FGCS during their transition to college, as well as throughout their progress toward degree. This is especially important as FGCS are less likely to seek assistance, specifically with regard to academics, when struggling (“The Center,” 2017). As such, it is necessary for higher education institutions to better support FGCS by helping to reduce or remove barriers, when possible.

In addition to recognizing the abilities of FGCS, NASPA’s First-Gen report suggests that colleges and universities should shift their focus “from college ready to student ready” by focusing less “on whether students are college-ready [and] becoming student-ready by changing policies, processes, and practices to improve services and reduce barriers to success” (Whitley et al., 2018, p. 8). NASPA asserts that colleges are responsible for the success of their students and directly puts the responsibility on college administrators and faculty to provide support for students at varying levels of college readiness to ensure the institution supports all students as best possible. To do so, Rubio et al. (2017) asserted that colleges need to work to connect students with resources and interventions to better support their transition to college. In doing so, higher education institutions can better meet students where they are at despite having varying levels of academic preparedness. This frame of mind also shifts the responsibility of academic

success from the student to the institution and is critical in better supporting the success of FGCS.

Sense of Belonging

Sense of belonging is associated with college student success outcomes and has been researched extensively throughout the last few decades (Hausman et al, 2007; Hoffman et al., 2002; Hurtado & Carter, 1997; Strayhorn, 2012). Most recently, Strayhorn (2012) developed a sense of belonging theory that connects belonging with student success. Drawing upon numerous foundational theories (Maslow, 1943, 1954; Schlossberg, 1984, 1989; Schlossberg et al., 1989; Tinto, 1993), Strayhorn's theory asserts that belonging is necessary for student success, and specifically accounts for marginalized populations or populations who are inclined to feel marginalized in certain contexts such as first-generation college students (Strayhorn, 2006, 2012, 2019). This section explores the history of belonging-based research, Strayhorn's theory of sense of belonging, current research on sense of belonging, and the importance of sense of belonging to first-generation students.

Foundations of Belonging

Maslow's research on human motivation and needs provides the foundation for sense of belonging research. Maslow's (1943, 1954) theory of human motivation and hierarchy of human needs stated that there are five basic human needs. Those needs are hierarchical (Maslow, 1954), meaning the first need must be satisfied in order for the next to be reached. The first two needs include physiological needs such as food and water, as well as safety. The third need—love and belonging—provides the foundation for this section of literature review. Maslow (1943) asserted that if the first two basic needs—

physiological and safety—are “fairly well gratified, then there will emerge the love and affection and belongingness needs” (p. 380). The need for belonging includes:

hunger for affectionate relations with people in general, namely, for a place in his group, and he will drive with great intensity to achieve this goal. He will want to attain such a place more than anything else in the world. (p. 381)

Belonging, therefore, is a foundational need that humans seek to fulfill. Third in the hierarchy, love and belongingness must be fulfilled before a person can work toward the fourth and fifth tiers of self-esteem and self-actualization respectively. Without belonging, individuals might not be satisfied or able to reach the two higher levels of basic needs.

Following Maslow’s hierarchy of human needs, subsequent research has sought to connect belonging to college student development and success. Schlossberg (1984) developed the 4 Ss of transition, which include situation, self, supports, and strategies. As the situation changes (e.g., a first-year student starts attending college for the first time) it is important that they perceive support from peers, faculty, and/or the institution. In other words, it is important that the student experience a sense of belonging associated with the institution they are attending. Building off of the Ss, Schlossberg et al. (1989) developed the theory of mattering and marginality, which asserted that it is important that students feel like they matter—or belong—to an institution or someone else. Schlossberg suggested that mattering is of heightened importance when the individual feels marginalized (e.g., racial/ethnic minorities, first-generation students) and/or is in transition, stating,

Every time an individual changes roles or experiences a transition, the potential for feeling marginal arises. The larger the difference between the former role and the new role the more marginal the person may feel, especially if there are no norms for the new roles. (Schlossberg, 1989, n.p.)

Such feelings of marginality “can be a temporary condition during transition” (Schlossberg, 1989, n.p.) or a more permanent feeling in which the individual does not feel a sense of belonging. In the opposite sense, mattering includes feelings of importance to others and that others are concerned with an individual’s well-being; in other words, mattering means that one feels a sense of belonging.

Apart from Schlossberg’s theory of mattering and marginality, Tinto’s (1975, 1987, 1993) departure theory explored the student experience upon transitioning to college. Tinto asserted that students must fully depart or separate from their home communities to integrate successfully into their campus community. Tinto suggested that students must successfully detach from their home cultures and communities or they are at higher risk of departing from the institution. Tinto suggested that only after disconnecting from their home community would students be able to develop a sense of academic and social connectedness, or belonging, associated with the institution they were attending.

Although it is the most researched and referenced theory regarding college students (Braxton & Hirschy, 2005), Tinto’s departure theory is also widely criticized. Higher education scholars point out the cultural bias of the theory as well as its overemphasis on the students’ roles in achieving academic and social integration

(Museus, 2014). For example, Museus (2014) described that students of color are more likely to come from

cultures and communities that are markedly different from those found on their college campuses. [therefore] expecting undergraduates of color to sever ties with their cultural heritages places an unfair burden on these students to dissociate from communities of the past that are important in their lives and assimilate into the cultures of predominately White institutions. (p. 196)

With the students' home communities differing greatly from their college environment, Museus suggested that requiring students of color to separate from their home communities creates a structural barrier for students of color. Therefore, Tinto's theory puts the onus on the student to successfully transition to the college environment, with no direct responsibility assigned to college administrators and faculty members to assist in the students' transition to college.

To correct for some of the shortcomings of Tinto's departure theory, subsequent research has tested the viability of departure theory with regard to marginalized populations. Hurtado and Carter (1997) applied student departure theory to Latino students to determine whether certain student experiences are associated with the sense of belonging of Latino students. Using data from the National Survey of Hispanic Students (NSHS), Hurtado and Carter followed up with 287 college sophomores who previously completed the NSHS in 1990. Comparing the results of the survey from 1990 and 1991, the authors found that conversations with peers about course content while outside of class, as well as participation in certain community organizations—religious and social (e.g., sororities and fraternities)—were strongly associated with Latino students' sense of

belonging. However, students who perceived a hostile racial campus climate had lower levels of sense of belonging. Hurtado and Carter determined that group cohesion and the student perception of a more welcoming campus climate were critical to student sense of belonging and persistence.

Sense of Belonging Theory

Throughout the extant literature, sense of belonging describes how connected a student feels to their campus community or to the individuals (e.g., peers, faculty) at their college (Schlossberg, 1989; Tinto, 1993). Drawing from the belonging-based research described previously (Maslow, 1943, Tinto, 1975, Schlossberg, 1989), Strayhorn (2012) more recently defined sense of belonging as the

Perceived social support on campus, a feeling or sensation of connectedness, the experience of mattering or feeling cared about, accepted, respected, valued by, and important to the group (e.g., campus community) or others on campus (e.g., faculty, peers). It's a cognitive evaluation that typically leads to an affective behavior. (p. 3)

At the most basic level, sense of belonging is exactly as it sounds: students must feel they belong somewhere within their institution. In addition, Strayhorn's sense of belonging specifically emphasizes the importance of groups. He explained that sense of belonging is reciprocal, in that "under optimal conditions, members feel that the group is important to them and that they are important to the group. The group satisfies the needs of the individual—in exchange for membership, they will be cared for and supported" (p. 3). To establish sense of belonging the individual student must connect with a group, and feel the group is worth being connected to as well.

To help better explain sense of belonging, Strayhorn offered seven core elements that explain the foundation of sense of belonging as well as the intricacies of the concept. Based on an extensive review of the literature, Strayhorn (2012) determined that sense of belonging is comprised of seven key elements:

1. Sense of belonging is a basic human need.
2. Sense of belonging is a fundamental motive, sufficient to drive human behavior.
3. Sense of belonging takes on heightened importance (a) in certain contexts... (b) at certain times...as well as (c) among certain populations.
4. Sense of belonging is related to, and seemingly a consequence of, mattering.
5. Social identities intersect and affect college students' sense of belonging.
6. Sense of belonging engenders other positive outcomes.
7. Sense of belonging must be satisfied on a continual basis and likely changes as circumstances, conditions, and contexts change. (pp. 18-23)

Strayhorn's core elements reference belonging as a basic human need (Maslow) and as it relates to mattering (Schlossberg). Moreover, Strayhorn sought to advance the finding that academic and social integration affects students' decisions to depart or persist (Tinto, 1993) by applying Tinto's retention theory to marginalized groups (e.g., racial and ethnic minorities, first-generation students). Therefore, it is evident that Strayhorn's core elements were founded directly on the aforementioned theories by Maslow, Schlossberg, and Tinto.

Strayhorn (2012) confirmed that his theory drew from many of the foundational theories of belonging, but advanced the previous theories by confirming that sense of

belonging has a greater effect on marginalized populations. For example, core element three states that “sense of belonging takes on heightened importance (a) in certain contexts... (b) at certain times...as well as (c) among certain populations” (p. 20). Strayhorn further suggested that sense of belonging “takes on heightened importance in contexts where individuals are inclined to feel isolated, alienated, lonely, or invisible” (p. 10) and “may be particularly significant for students who are marginalized in college contexts” (p. 17). Similar to Tinto’s (1993) departure theory, Strayhorn indicated that when transitioning to college, the new *context* of the college campus and environment can make sense of belonging more important for students during their *transition* to college. In addition, he explained that marginalized populations are more likely to feel alienated in the new context of the college campus, therefore making sense of belonging even more important. Strayhorn’s research, as highlighted in subsequent chapters of his *College Students’ Sense of Belonging: A Key to Educational Success for All Students* book, found that sense of belonging was important for marginalized populations such as Latino and Hispanic students; Black students; gay students; and, students of color pursuing majors in science, technology, engineering, and mathematics (STEM; Strayhorn, 2012).

College administrators and researchers alike have drawn from Strayhorn’s (2012) core elements to determine how sense of belonging influences student success. He attested that sense of belonging is important because it leads to positive student outcomes. Core element number six—positive outcomes—describes sense of belonging as leading to “a plethora of positive and/or prosocial outcomes such as engagement, achievement, wellbeing, happiness, and optimal functioning (in a particular context or

domain), to name a few” (Strayhorn, 2012, p. 22). While research often places the responsibility on the student to achieve positive success outcomes, Strayhorn suggested that campus administrators could foster a sense of belonging by working to create a welcoming campus environment. Strayhorn’s sense of belonging theory requires college administrators and faculty members to play an active role in fostering the sense of belonging of all students.

Current Research on Sense of Belonging

Recent research has used Strayhorn’s (2012) conceptual framework to further study sense of belonging. Most of the recent studies on sense of belonging have explored how the construct affects student success outcomes (e.g., persistence, GPA). Additional research considers whether and how sense of belonging applies to various marginalized student populations (e.g., Black male students, students with disabilities). However, limited research has been conducted on sense of belonging and first-generation students. This section concludes with an overview of the limited research and discussion regarding the importance of policies and practices in fostering sense of belonging.

Student Success and Sense of Belonging

Ample research connects sense of belonging and student success (Hausmann et al., 2007; Strayhorn, 2012; Zumbrunn et al., 2014). Research often focuses on sense of belonging and academic achievement, including grades (Meeuwisse et al., 2010; Rhee, 2008; Shook & Clay, 2012; Strayhorn, 2008; Zumbrunn et al., 2014), academic engagement (Gopalan & Brady, 2019; Wilson et al., 2015; Zumbrunn et al., 2014), and retention and persistence (Morrow & Ackermann, 2012). For example, Zumbrunn et al. (2014) found that a supportive classroom environment fostered sense of belonging among

students. The authors conducted a mixed methods study with 212 undergraduates and 4 instructors. The quantitative portion of the study included a demographic questionnaire and student surveys designed to gauge belongingness, self-efficacy, and instructor academic and social support. The four instructors completed a survey to assess student engagement. Interviews were then conducted to further understand how the participants' experiences with instructors and peers affected their perceived sense of belonging. Zumbrunn et al. found that students who felt supported by their peers and instructors indicated higher levels of belonging. Furthermore, belonging affected motivation, which subsequently affected academic achievement.

Apart from academic success, research often considers how sense of belonging affects retention and persistence (Gopalan & Brady; 2019; Hausmann et al., 2007; Maestas et al., 2007; O'Keefe, 2013; Rhee 2008; Thomas, 2012). Research conducted by Hausmann et al. (2007) explored the sense of belonging of first-year students and its connection to the persistence of White and African American students. The researchers collected three surveys throughout the first year of college from full-time, first-year, non-transfer students. After completing the first survey, the researchers divided the 365 respondents into three groups: one to test enhanced belonging and two control groups. The first group "was designed to increase sense of belonging in students" by sending communications from university administrators and leaders, as well as gifts (e.g. magnets, decals), to promote that the students were "valued members of the university community" (p. 808). The second group received communication and gifts from a psychology faculty member with no indication of community or the university logo as a means to determine if receiving any communication or gifts was enough to increase

belonging. The final group received no gifts of communications, only completing the three surveys for the study. While the researchers found that background characteristics such as race, gender, and college entrance exams were not predictors of sense of belonging, the results indicated that peer and faculty interactions and parental support predicted student persistence. In addition, Hausmann et al. found that “students in the enhanced sense of belonging group experienced a less rapid decline in sense of belonging over time compared to both of the control groups combined” (p. 824) in both the second and third surveys, and were more likely to persist. These findings support prior research that suggests that social and academic integration is important to sense of belonging, which is further associated with the student success outcome of persistence.

Additional research on sense of belonging and persistence specifically focuses on the importance of relationships—both with peer and faculty—in fostering sense of belonging among college students (García & Garza, 2016; Glass et al., 2015; Hoffman et al., 2002; Meeuwisse et al., 2010; Newman et al., 2015). Newman et al. (2015) utilized data from the Community College Survey of Men to determine causes of perceived sense of belonging. Their sample was delimited to Black male participants and included 364 Black/African American respondents attending 17 different community colleges. The researchers explored numerous predictors (e.g., student-faculty engagement) and interaction effects (e.g., gender and race stereotypes) and found that the participants’ “perception of sense of belonging increased the more students received validating messages from faculty members” (Newman et al., 2015, p. 573). Moreover, interaction with faculty members in- and outside the classroom also predicted sense of belonging for Black men. These findings suggest that both formal and informal interactions with

faculty members can have positive effects on perceived sense of belonging for Black male students.

Some studies explore additional student success factors associated with sense of belonging. While limited, it is worth noting that additional research has examined sense of belonging and mental health (Fink, 2014; Gopalan & Brady, 2019), psychological adjustment (Gummadam et al., 2016), and academic self-concept (Curtin et al., 2013). In addition, research has explored sense of belonging and specific campus programs including living-learning communities (Spanierman et al., 2013), academic advising (Lau et al., 2018; Strayhorn, 2015b) and Greek sororities and fraternities (Giacalone, 2018; Garcia, 2019a; Garcia, 2019b). For example, Spanierman et al. (2013) completed a qualitative study comprised of 344 undergraduate students attending a large Midwestern university with approximately half of the study participants residing in a living-learning community (LLC). After administering, collecting, and analyzing questionnaire data, Spanierman et al. found that students participating in the LLC indicated higher levels of sense of belonging within the context of their residence hall than students not participating in the LLC. However, LLC students did not report increased belonging on campus in general when compared to non-LLC students.

Sense of Belonging and Marginalized Groups

Research on sense of belonging often explores the differences in outcomes among privileged and marginalized student groups (Johnson et al., 2007; Vaccaro & Newman, 2016; Vaccaro & Newman, 2017). Such research is important as marginalized groups often report feeling lower levels of sense of belonging compared to their peers (Gopalan & Brady, 2019; Ribera et al., 2017), which, in turn, can lead to lower levels of success for

marginalized students (Arbona & Nora, 2007; Strayhorn, 2012). Research on sense of belonging and marginalized students includes studies that focus on Black male students (Newman et al., 2015; Strayhorn, 2013; Strayhorn, 2015a; Strayhorn & Tillman-Kelly, 2013; Strayhorn et al., 2015; Wood & Harris, 2015); Latino students (Abrica et al., 2020; Dueñas & Gloria, 2020; Garcia, 2017; Garcia, 2019a; Garcia, 2019b; Garcia & Garza, 2016; Pak, 2018), Native American students (Strayhorn et al., 2016; Tachine et al., 2017), international students (Curtin et al., 2013; Glass et al., 2015; Lau et al., 2018; Yao, 2015; Yao 2016), students with disabilities (Vaccaro et al., 2015; Vaccaro & Newman, 2016), student veterans (Durdella & Kim, 2012) and first-generation students (Means & Pyne, 2017). For example, Garcia and Garza (2016) analyzed data from the Community College Survey of Student Engagement to explore how the social and academic integration of Latino males attending community colleges affected their sense of belonging and persistence, if at all. With almost 7,000 Latino male respondents (N = 6,824), the researchers found that the strongest predictor of sense of belonging was “an integrated factor with both academic and social aspects” (p. 48). This finding indicates that both social and academic integration are important to the sense of belonging of Latino males.

Although a number of studies have recently been conducted on the sense of belonging of racially and ethnically diverse students, fewer studies have been conducted on sense of belonging and first-generation college students. Strayhorn (2012) noted that “sense of belonging may also be particularly significant for students who are marginalized in college contexts such as women, racial and ethnic minorities, low-income students, *first-generation students* [emphasis added], and gay students, to name a

few” (p. 17). However, few studies have focused specifically on sense of belonging and first-generation students. A handful of studies have explored first-generation students, sense of belonging, and low-income status (Smith & Lucena, 2015; Means & Pyne, 2017). For example, Means and Pyne (2017) conducted a qualitative case study on 10 low-income, first-generation, first-year college students. Although the participants attended seven different institutions—nine in state and one out-of-state—the participants discussed common themes during interviews. Participants noted that institutional support through social-identity based student organizations, supportive faculty members, and learning centers fostered sense of belonging in low-income, first-generation, first-year students. Specifically, students mentioned the patience and understanding of faculty and staff was critical to their sense of belonging. A few other studies have investigated first-generation status, sense of belonging, and other factors such as grit (Grisier, 2018; Verdin et al., 2018), social capital (Soria & Stebleton, 2013), and connections to family (Bradbury & Mather, 2009).

A subset of research on sense of belonging and marginalized students explores the effects of campus culture and campus climate on the sense of belonging of various student populations (Cramer, 2017; Stebleton et al., 2014). For example, Cramer (2017) noted that first-year Latino male students indicated that culture shock was prevalent when arriving at their predominately White institution, with one participant explaining that he “had been used to the racially diverse population in his hometown and wished he had been prepared for that experience” (p. 104) as he transitioned to campus. Moreover, the Latino students noted that White students were less likely to approach students of color, resulting in segregation between students and less sense of belonging (Cramer, 2017). In

a separate study on Filipino American students' sense of belonging in relation to cultural differences, Museus and Maramba (2011) found that the "incongruence between students' cultures of origin and cultures of immersion, or the dissonance associated with the incongruence, [posed] major challenges for those individuals" (p. 250) such as lower student persistence and success. The authors found that the campus culture was different from the home culture of Filipino American students, resulting in culture shock and reduced sense of belonging for participants in the study. Both studies suggest additional research on campus climate and sense of belonging is necessary (Cramer, 2017; Museus & Maramba, 2011).

Importance of Policy/Practice and Sense of Belonging

Given the positive outcomes associated with sense of belonging, colleges and universities must develop policies and practices that foster sense of belonging. For example, participation in high impact practices (HIPs), including learning communities and undergraduate research, has been linked to increased sense of belonging among historically underrepresented groups (Ribera et al., 2017). Moreover, the campus climate and context has been connected to sense of belonging as well. Research has explored whether residence hall spaces can foster sense of belonging (Samura, 2016; Shook & Clay, 2012). For example, a study by Shook and Clay (2012) found that minority students who were randomly paired with a roommate who identified as White reported higher levels of belonging at the end of the first-year, stating that "students in interracial rooms reported a stronger sense of belonging at their university across both sessions than minority students in same-race rooms" (p. 1171). Shook and Clay further found that the sense of belonging of minority residences partially mediated the GPA of the minority

student. However, room assignment did not affect the GPA of the majority students.

Therefore, college administrators and faculty members must consider the development and support of policies and practices that foster sense of belonging, to best support student success.

Student Success Programs

Student success programs on college campuses exist to support positive student outcomes. For example, campuses often offer a variety of alcohol intervention programs meant to reduce binge-drinking amongst college students (Cleveland et al., 2012; LaBrie, et al., 2010; Mallett et al., 2013; Scott-Sheldon et al., 2014; Turrisi & Ray, 2010; Werch et al., 2000). Apart from alcohol interventions, additional intervention programs strive to foster student success. A variety of formats exist with regard to student success intervention programs including first-year seminars, summer bridge programs, and shared learning experiences. While the majority of student success programs are open to all first-year students, some intervention programs are only open to certain student populations such as racial and ethnic minorities (Blackwell et al., 2007; Cerezo & McWhirter, 2012) or students deemed at-risk of departing from the institution (Bir & Myrick, 2015; Strayhorn, 2011). Along these same lines, institutions are starting to develop student success programs specifically for first-generation students to aid in a successful transition to college (Petty, 2014).

Research indicates that such intervention programs can lead to a variety of student success outcomes including improved rates of retention, degree attainment, and academic performance (Whitley et al., 2018), and are associated with increased sense of belonging (Soria & Stubblefield, 2015; Strayhorn, 2012) which further support student success

outcomes. The following section reviews literature related to intervention programs in general as well as the more limited research and literature surrounding first-generation intervention programs.

First-Year Student Success Programs

To assist in the transition to college, many institutions have implemented first-year intervention programs. These intervention programs include summer bridge programs, shared learning experiences, and first-year seminar courses and aim to counter the challenges experienced by students entering their first year at an institution. In addition, some interventions focus specifically on marginalized student populations such as first-generation students, to provide support during transition while also augmenting the strengths of first-generation students. The following section reviews various forms of first-year seminar courses that include both first- and continuing-generation students, as well as one intervention geared solely toward first-generation students.

Summer Bridge Programs

Summer bridge programs aim to assist first-year students as they transition from high school to college (Cabrera et al., 2013). Unlike many of the intervention programs described in the following sections, bridge programs are a unique format for student interventions as they typically provide programming in the weeks prior to the start of a student's first semester in college (Ashley et al., 2017). While some summer bridge programs are open to all students, many focus on specific student populations such as students pursuing Science, Technology, Engineering, or Math (STEM) majors (Ashley et al., 2017; Lane, 2016; Tomasko et al., 2016) or students who are considered to be at high risk for departing from the college (e.g., minority, low-income) (Bir & Myrick, Garcia &

Paz, 2009; Means & Pyne, 2017; Murphy et al., 2010; Slade et al., 2015; Strayhorn, 2011; Strayhorn et al., 2015; Wathington et al., 2016). Research on summer bridge programs indicates they are associated with increased academic success indicators such as persistence and graduation (Wachen et al., 2018) and GPA (Kodama et al., 2018). For example, Wachen et al. conducted a quantitative study on a five- to six-week summer program that required incoming students to reside on campus and complete labs focused on mathematics and English writing. The authors found that participants of the summer bridge program were more likely to persist to the second year of college and had higher graduation rates than students of similar demographics who did not participate in the program.

Beyond academic success, summer bridge programs lead to increased sense of belonging (Strayhorn et al., 2015; Suzuki et al., 2012; Tomasko et al., 2016) and improved transition to college (Lane, 2016; Salzman et al., 2019; Strayhorn et al., 2015), which in turn fosters student success. Strayhorn et al. (2015) researched a summer bridge program that required students to arrive four days before the start of the academic year. The program consisted of academic and personal development sessions. The authors utilized a pre-test and post-test to measure students' perceived well-being, sense of belonging, and confidence after participating in the intervention program. The results of the study suggested that intervention programs increased the well-being of the participants, which was associated with positive transition to college. In addition, participants expressed increased confidence, which was associated with increased sense of belonging at the institution. Therefore, the intervention program supported the development of well-being, confidence, and sense of belonging of participations.

Likewise, Suzuki et al (2012) found that a summer bridge program led to sense of belonging and increased confidence about college expectations when compared to a control group of peers who did not participate. These studies indicate that in addition to academic success, intervention programs can further support the sense of belonging, confidence, and well-being of students.

First-Year Experience Programs

Offered at a majority of four-year institutions surveyed (Tobolowsky et al, 2008), first-year seminars continue to increase in popularity. Research suggests that first-year seminars increase academic success indicators, including GPA (Barton & Donahue, 2009; Klatt & Ray, 2014; Permzadian, & Crede, 2015; Swanson et al., 2017; Tampke & Durodoye, 2013), retention and persistence rates (Ben-Avie et al., 2012; Permzadian, & Crede, 2015; Pittendrigh et al., 2016; Swanson et al., 2017), credit hours earned (Ben-Avie et al., 2012) and graduation rates (Clark & Cundiff, 2011). For example, Ben-Avie et al. (2012) studied the effects of first-year seminar participation as a part of a “comprehensive First-Year Experience [FYE] program” which included “a revamped New Student Orientation, mandatory academic learning communities, increased academic support work, and increased opportunities for student involvement” (p. 143). While all 1,125 first-year students participated in the orientation, learning communities, academic support, and involvement components, only half the students (561) registered for a FYE seminar. The students self-selected into the FYE seminars at orientation until space was full, meaning students who attended later orientation dates might not have access to the opportunity to register for an FYE seminar. Despite the possible self-selection bias, the authors noted that the demographics and academic profiles were

almost identical for students registered for the FYE seminar and those who chose not to register or were not able to register due to lack of availability. The authors found that students who participated in the FYE seminar had higher GPA, retention rates, and credit hours earned. Such studies demonstrate first-year seminars contribute to higher levels of academic success (Barton & Donahue, 2009; Ben-Avie et al., 2012; Permzadian, & Crede, 2015).

In addition to increased academic success for participants, research supports other benefits for first-year seminars as well. Research suggests that students who participate in first-year seminar experiences benefit from increased motivation (Jessup-Anger, 2011), building relationships with peers, faculty, and staff (Keup & Barefoot, 2005; Cuseo, 2010), better academic and social integration (Lafferty, 2015) and increased connections with campus resources (Keup & Barefoot, 2005; Lafferty, 2015) when compared with students who did not participate in a first-year seminar. Using a case study approach, Jessup-Anger (2011) explored the experiences of students participating in a one credit hour first-year seminar at a large, research university in the Midwest. While motivational barriers were evident at the beginning of the course, Jessup-Anger found that as students connected the first-year seminar course materials to their personal lives, the seminar course improved their self-awareness and enhanced their learning, resulting in increased motivation to learn in first-year students. Further supporting the positive influence of first-year seminar courses, the students also noted that these benefits affected their experiences in other courses as well, thereby improving student success in the first semester. These studies (e.g., Jessup-Anger, 2011; Senyshyn, 2018) support the plethora of benefits related to first-year seminar courses and student success. The majority of

studies on first-year experience programs or seminars focused on student success indicators that did not include sense of belonging.

Learning Communities

Shared learning experiences such as learning communities and service-learning account for another form of first-year interventions. Participation in learning communities—whether residential or otherwise—increases student success (Inkelas et al., 2007; Jehangir et al., 2012), increased peer and faculty interactions (Inkelas & Weisman, 2003; Inkelas et al., 2006), and increased satisfaction with college (Brower & Inkelas, 2010). Moreover, learning communities can be designed to specifically support first-year students (Potts & Schults, 2008) or students of all years (i.e. first-year through senior year) (Pike et al., 2011). Research indicates that students participating in learning communities have higher retention rates (Potts & Schults, 2008; Zobac et al., 2014; Zobac et al., 2016) and GPA (Zobac et al., 2014; Zobac et al., 2016) than students not participating in learning communities. A study conducted by Zobac et al. (2014) explored the success of 273 first-year students participating in non-residential learning communities at a large, public research institution in the Midwest. The results indicated that the GPA and retention of first-year students was higher when participating in non-residential learning communities when compared to peers with similar academic indicators (e.g., ACT, SAT, high school GPA). Likewise, Potts and Schults (2008) found that students participating in a learning community that included first-year seminar were retained at 91%, which was 15% higher than the retention rate for students participating in a first-year seminar alone.

While research indicates learning communities foster academic success for first-year students in general (Zobac et al., 2014), additional research explores learning communities and specific student populations such as racial and ethnic minorities (Huerta & Bray, 2013) and first-generation students (Inkelas et al., 2007; Jehangir et al. (2012). For example, Inkelas et al. (2007) found preliminary evidence that participating in a living learning community (LLC) was beneficial to first-generation college students. Using data collected from the National Study of Living-Learning Programs (NSLLP), the authors compared students living in an LLC to those living on campus but not in an LLC. The LLCs included in this study included both first- and continuing-generation college students. Although the effects of LLC participation were only low to moderate, Inkelas et al. found that first-generation students participating in an LLC reported “statistically significantly higher estimates of ease with academic and social transitions to college compared to first-generation students who were not participants” (p. 423). Similarly, research conducted by Jehangir et al. (2012) found that participation in a multicultural learning community positively impacted the intrapersonal development of first-generation, low-income students. While the intervention programs did not specifically target first-generation students, the studies by Inkelas et al. (2007) and Jehangir et al. (2012) support the benefits of learning community participation for first-generations students. Similar to the research on first-year experience programs, research on learning community interventions tended to not focus specifically on sense of belonging, but instead focused on academic and social success, retention, persistence, and student development.

Student Success Programs for First-Generation Students

Across the literature it is evident that student success intervention programs have numerous benefits for students including increased academic success (Ben-Avie et al., 2012; Pittendrigh, et al., 2016; Tampke & Durodoye, 2013), as well as aiding in students' transition to college (Lafferty, 2015) and development of relationships with peers, faculty, and staff (Cuseo, 2010; Keup & Barefoot, 2005). Given the benefits of student success intervention programs in general, in addition to the positive outcomes of intervention programs for marginalized populations (Abrica et al., 2020; Means & Pyne, 2017; Slade et al., 2015; Strayhorn et al., 2015; Wathington et al., 2016), it is not surprising that institutions have recently started developing intervention programs for first-generation students specifically (De La Rosa, 2012; Guzman Oliver & King, 2018; Wibrowski et al, 2016). Wibrowski et al. (2016) studied a skills-learning intervention program for first-generation students. The study focused specifically on the motivation, self-regulation, and academic achievement of ethnically diverse students. Using a pre-test and post-test during the first-year of college, Wibrowski et al. found that students participating in the intervention program reported increased motivation and study skills when comparing the pre- and post-test. Moreover, the first-generation students participating in the intervention program reported academic achievement that was similar to or higher than their peers who were not participating in the program.

An older study by Folger et al. (2004) explored a first-year, first-generation intervention program in which first-generation students participated in six weeks of small group intervention facilitated by program administrators. The small groups met weekly from October to December during the students' first semester of college; the meetings

lasted 90-minutes and were focused on connecting the first-year, first-generation students with faculty, staff, and peers as well as campus resources. Results of the study indicated that students who participated in the intervention program had higher first- and second-semester GPAs than first-year, first-generation students who did not participate in the program. Likewise, students who participated in the intervention had higher first-to-second year retention rates compared to the control group. These findings suggest that a first-generation focused intervention program can have positive effects on the success of FGCS.

A handful of studies have explored intervention programs that target low-income, first-generation students (De La Rosa, 2012; Perna, 2015). Research conducted by De La Rosa (2012) suggested that low-income and first-generation students struggle to learn and act on financial aid knowledge. De La Rosa explained this gap in financial aid knowledge in that first-generation students cannot always rely on the experiences of their parents, as their parents did not graduate from college—or perhaps did not attend college at all—and are, therefore, more likely to lack familiarity with the financial aid process. To better understand the complexities of financial literacy for first-generation and low-income students, De La Rosa surveyed 375 first-year students who participated in a summer bridge program aimed to support low-income, first-generation students, with 59% of respondents identifying as first-generation. Although financial challenges still plagued the students, by the end of the intervention program “participants were less likely to see financial challenges as a difficulty” (p. 8). This reduction in financial challenges is significant as financial insecurity can result in first-generation college students

withdrawing from college at a higher rate than continuing generation students (Eitel & Martin, 2009).

Summer bridge programs also support first-generation students. For example, Clauss-Ehlers and Wibrowski (2007) studied an Education Opportunity Fund (EOF) program that served as a six-week summer academic institution for students identified as first- and second-generation college students. The intervention focused on resilience, social integration, and social identities (specifically ethnicity). Using a pre-test post-test design, Clauss-Ehlers and Wibrowski found that “the summer EOF academic institute was associated with significant increases in resilience and social support from program staff and peers [with...] moderate effect sizes for resilience” (p. 581). Likewise, Cramer (2017) found that first-generation, low-income students who participated in a summer bridge program had a positive experience but struggled with college level coursework regardless of program participation. However, the participants continued to benefit from ongoing relationships with summer bridge program staff who remained a critical support system for the students.

While all different in formats with different positive outcomes, each of the first-generation intervention programs described above positively affected the first-generation students who participated. Given the importance of student success intervention programming on first-year college students, research calls for academic and student affairs to work together to support intervention programs (DeAngelo, 2014). In response to lower performance indicators for first-generation students and additional structural barriers, institutions have started to add first-generation coordinator positions to oversee the development and implementation of first-generation intervention and support

programs (Whitley et al., 2018). However, limited research has been conducted on these up-and-coming programs to determine whether such institutional policies and practices in the form of student success programs successfully achieve their desired outcomes, and if so how. Moreover, little to no research explores how intervention programs foster sense of belonging among first-generation students, if at all.

Student Success Programs and Sense of Belonging

Although ample research exists that considers student success programs or sense of belonging (see above), limited research explores student success programs and sense of belonging, a key student success indicator (Strayhorn, 2012). For example, in a review of the literature over the last decade, limited research was found on first-year experience programs and sense of belonging as well as learning communities and sense of belonging. However, some research was found to explore participation in summer bridge programs and student sense of belonging but predominately focused on summer bridge programs for students studying science, technology, engineering, and math (STEM). For example, research studies indicated that participation in a summer bridge program led to increased sense of belonging among STEM students (Pritchard et al., 2016; Stolle-McAllister et al., 2011; Tomako et al., 2013; Tomasko et al., 2016).

Additional, yet limited, research focuses on social belonging programs (Mattanah et al., 2012; Walton & Cohen, 2011). These studies do not specifically speak to sense of belonging as a construct, but instead explore the importance of social belonging and student success. For example, research by Mattanah et al., (2012) explored whether a “peer-led social support program could improve psychosocial adjustment during the first year of college” (p. 94). The findings of the study suggested that a peer-led intervention

can increase the perceived social support among students as they transition to college. A separate study by Patterson Silver Wolf et al. (2017) explored a brief social belonging intervention. Following a quasi-experimental design, the researchers found that students who watched a short, 13-minute video on belonging in college earned higher GPAs than students who did not watch the intervention video; however, retention was the same among the intervention and control groups. These studies focus on a portion of sense of belonging—social belonging—but do not provide insight into the more complex theoretical foundations provided by Strayhorn's (2012) sense of belonging theory. However, the researchers do not specifically mention sense of belonging in the aforementioned studies.

Additionally, studies that explore student success programs and sense of belonging have produced conflicting findings, with some research indicating that student success programs support sense of belonging (Araujo et al., 2014) while other studies suggest that such programs have no effect on sense of belonging (van Herpen et al., 2020). For example, Araujo et al. (2014) explored The Belonging Project, which includes a series of transition programs aimed at creating sense of belonging among a cohort, as well as belonging within the school and among wider global networks throughout the first year of college. Although low cost, the participants reported increased feelings of belonging as a result of their participation in various initiatives throughout the first year. Conversely, van Herpen et al. (2020) conducted a quasi-experimental study on first-time, first-year college students at a law-focused institution in the Netherlands and found that participation in a pre-college intervention did not affect sense of belonging. For the purposes of this study, students volunteered to participate in a four-day pre-college

program designed to foster increased faculty and peer interaction, sense of belonging, and academic success. The researchers found that students who participated in the pre-college program showed no differences in sense of belonging compared to peers who did not participate in the program. However, program participants did report better formal interactions with faculty and peers, as well as better informal interactions with peers, which are key components of sense of belonging although the researchers found no significant difference in sense of belonging as measured by the Sense of Belonging scale developed by Meeuwisse et al (2010).

Given the limited research on sense of belonging and student success, as well as the mixed findings, it is necessary to further explore student success programs and sense of belonging. In doing so, we can better understand the role student success programs play in helping students develop sense of belonging, if at all.

Chapter 3: Methods

In this section I provide an overview of the methods I used for this study. I start this chapter by revisiting the purpose of the study as it guided the methodology before describing my positionality and research perspective. I then overview the theoretical framework on which the data collection and analysis depend. I dedicate the majority of this chapter to the research and design, including a description of the institution and case and an overview of the embedded units and how I selected the embedded units, followed by the data collection and analysis processes. Lastly, I discuss the study's trustworthiness before providing a short conclusion.

Purpose

Sense of belonging is key contributor to student success in college (Hausmann et al., 2007; Meeuwisse et al., 2010; Strayhorn, 2012; Zumbrunn et al., 2014). Research on sense of belonging indicates it might be particularly important for marginalized populations, including first-generation students (Means & Pyne, 2017; Strayhorn, 2012). Yet research indicates that first-generation students lag behind their continuing-generation peers with regard to feeling as though they belong on campus (Strayhorn, 2012). To counter such possible challenges, institutions have started creating student success programs to better support first-generation college students (FGCS). However, little to no research explores how first-generation students experience such success programs. Moreover, Strayhorn (2012) indicated that while most research on sense of belonging focuses on the student perspective, limited to no research explores how institutional practices and policies influence college students' sense of belonging. Strayhorn further explained that “even when scholars make feeble attempts to note the

role of institutional environments, they rarely, if ever, explain the mechanisms by which those environments affect sense of belonging” (p. 14). With a recent push to develop first-generation specific support programs at institutions (Whitley et al., 2018), it is critical that college administrators understand how such programs work to foster sense of belonging—a key contributor to student success—if at all. Therefore, it is necessary to study how institutional practices and mechanisms, such as first-generation focused student success programs, affect sense of belonging of first-generation students, if at all. In doing so, we can further our understanding of how first-generation focused student success programs may lead to belonging, and therefore student success of first-generation students.

This study explored if and how a first-generation focused student success program fostered sense of belonging of FGCS, in order to better understand how institutional practices supported first-generation student success, if at all. The following research questions guided this study:

1. How do first-generation students experience a first-generation focused student success program?
 2. How do first-generation students experience sense of belonging when participating in a first-generation student success program, if at all?
 3. How can institutional policies and practices, in the form of a first-generation student success program, support the sense of belonging of first-generation students, if at all?
- A. What program practices (e.g., events, workshops) best support sense of sense of belonging of first-generation students?

B. How do administrators of the student success program foster sense of belonging among first-generation students, if at all?

Researcher Positionality

Qualitative research requires that the researcher play a central role in the research process, including data collection and construction of knowledge. To do so, the researcher must assume an important role as “the researcher is the primary instrument for data collection and analysis” (Merriam & Tisdell, 2016, p. 16) when following a qualitative methodology. Because of the central role I played in this research study, it was necessary for me to reflect on, and remain aware of, my experiences, beliefs, assumptions, biases and goals throughout this study. Moreover, I worked to remain away of the potential advantages and disadvantages that these attributes might bring (Maxwell, 2013) as I conducted this study.

I identify as a White, upper-middle class woman, raised and living in the Midwest. Both of my parents graduated from college and earned subsequent degrees (Master’s and Juris Doctorate). As such, I grew up knowing I would attend college, with the biggest unknown being which colleges I would apply to and where I would eventually choose to attend. From a young age, I recognized I would likely continue my education to the Master’s level, and once in college I knew I would eventually earn a terminal degree in my field (although at that time, my field remained undecided). Thus, I am keenly aware that I am not a first-generation student as I have, from an early age, been made aware of the role higher education would play in my life as well as the many steps I would need to take to obtain my degree.

Since this study explores first-generation students, I believe it necessary to dive deeper into my continuing-generation status as it sets me apart from my participants. My continuing-generation student status privileged me in the college search and selection process. Since both of my parents earned a bachelor's degree and beyond, I had never doubted that I would apply and be accepted to a four-year institution, live on campus, and graduate within four years (barring unforeseen circumstances). As college graduates, both of my parents were able to draw from their personal experiences with college to help guide me throughout my search and application process. For example, my mother was my primary support during my college search process, assisting with coordinating college searches, reminding me of priority application deadlines, and helping facilitate communication with college coaches as I explored the option of playing volleyball at the collegiate level. Although I was expected to complete the college applications and make the final decision of where to attend on my own, I knew my parents supported each of my applications and would support my final choice of college. In addition, as questions arose during the search and application process, I was able to ask my parents for advice and guidance. The most difficult part of the college application process was selecting my institution.

In addition to the emotional and informational support I received throughout my college search process, I received significant financial support as well. Both of my parents held white collar jobs which allowed them to start college funds for my brother and me. As such, my parents had expressed that financial assistance was available for me to attend college. While the financial aid package remained an important part of my college decisions, my parent's financial support allowed me to search for numerous four-

year institutions regardless of initial sticker price. In addition, I was able to select a college I believed to be the best fit for me without fixating solely on the cost to attend. Further supporting me as I navigated the financial portion of my college decision, my mother completed the FAFSA and helped me seek additional scholarships at my institution to reduce the overall cost of my tuition as well as room and board. Throughout my four years of college and subsequent two years of Master's coursework, I never looked at or helped fill out the FAFSA. In addition, I remained largely unaware of the tuition bills and payments during my undergraduate experience, only becoming more aware of my tuition and expenses when I started my graduate studies with Marquette as I pursued my Master's degree.

It was clear to me that my college search and acceptance, as well as my four years of undergraduate education, differ in many ways from the experiences of first-generation students. Research indicates that first-generation students are more likely “to delay entry into postsecondary education, to begin college at two-year institutions, to commute to campus, to take classes part-time and discontinuously while working full-time, and to need remedial coursework” (Engle, 2007, p. 26). I experienced none of these challenges as my parents were able to share their experiences and understanding of higher education, as well as financial support, with me throughout my undergraduate and Master's experiences. In addition, I was able to prioritize my academics over work as I was not responsible for the cost of attendance.

Although less directly related to the undergraduate students I studied, my search for a doctoral program as I pursued my PhD was further out of my comfort zone and more closely parallels some of the challenges first-generation students might experience

in their initial college search process. After working in higher education for almost five years, I decided I was ready to pursue my final degree. While my mother earned a terminal degree, her Juris Doctorate search was more in line with my Master's search as she went straight from her undergraduate studies to law school and has been working in law since then. Although my mother earned her doctorate degree, neither of my parents had applied to doctorate of philosophy programs specifically or within the field of education. However, I was fortunate to be able to draw upon my previous two application processes (undergraduate and graduate school) to help guide my search while still relying on my parents for support. Moreover, I had learned from a few mistakes along the way such as applying late to my mother's program which limited my institution options. I also drew from my professional work within higher education and relied on mentors I've developed through work as well. Familiar with college and university options, I knew I wanted to conduct a national search for flagship institutions that offered a specific degree taught in an online-only format.

I entered this search with far more experience and knowledge about the search process than my first two searches, but was also more on my own in conducting the search as I could not rely on my parents in the same way I had for my first two searches. I wasn't sure where to start, so I Googled each state and a series of keywords including "online" "PhD" and "higher education" to get an idea of where I might apply. I created a list of programs that fit my initial criteria, and then narrowed my options down after reviewing curriculum, program requirements (e.g., synchronous versus asynchronous courses, cost), arriving at four institutions I was most interested in applying to, and ultimately being accepted to and attending my top choice. While the process was more

self-driven than my previous searches, it was still guided by my previous experiences and support from my parents.

In addition to the college search and application process, I believe it is also of value to briefly explore my undergraduate experiences as it seems sense of belonging was a contributing factors to my success. The primary factor in my sense of belonging was competing on my institution's varsity volleyball team throughout my four years. Being a college athlete introduced me to peers who shared the same passion for the sport as I did, and also to other athletes who shared a love of being active and part of a team. As an athlete, I came to campus a few weeks before classes to start practices, which allowed me to become acclimated to the institution and environment. At this time, I also met my roommate who was a varsity athlete on a different athletic team. Like me, my roommate was from an affluent local suburb and was raised in a two parent, highly educated household. We roomed together all four years of college, a relationship that was important to my security and sense of belonging on campus. My involvement with college athletics and subsequent sense of belonging provided a foundation for me to excel during college. My time as a student-athlete resulted in formative peer, faculty, and staff relationships; co-curricular travel opportunities (e.g., for athletics as well as spring break service trips coordinated by athletics); and, national awards that recognized my time and success as both a student and an athlete.

In addition to my athletic involvement, I was active in student organizations, service trips, the honors program, and study abroad opportunities. Some of these involvements I sought out on my own, such as various student organizations including the campus activities board. Neither of my parents were active on their college campuses,

so this was a new experience for all of us. The support and encouragement I received from my parents to find student organizations and adventures that fueled my belonging was an impetus for me to continue exploring new options on campus. Given my co-curricular involvement on campus and my success both athletically and academically, my senior year I was honored with a prestigious award that acknowledged my involvement and contributions to campus. I was also invited to participate in a group focused on mentoring young student affairs professionals. Both of these culminating experiences catapulted me into a master's program and career in higher education. Looking back, I recognize my hard work and talent contributed greatly to my success, as did the guidance and support I received from my parents starting with the college application process and continuing through the completion of my doctorate of philosophy.

Although I am not a first-generation college student, my current work in higher education has sparked my interest in better understanding the experiences of FGCS. My professional work has centered around helping students succeed on campus which often stems from their feeling of belonging and community. Currently, I serve as an Associate Director of Academic Advising at Liberal Arts College (LAC) where this case study was conducted. In my role as Associate Director I spend significant time working one-on-one with students to help them succeed academically and personally. Our conversations often also include themes of belonging. Recently, I have been surprised by the number of students who have self-identified as first-generation during advising appointments, often saying either "I am first-generation" or "my parents didn't attend college." The students who identify as such are often looking for a campus connection, mentor, or friend, and are disclosing this information in the hope that I am able to connect them to resources and

services that can support their success. In addition, a number of students also mention to me that they are actively participating in a first-generation focused student success program. Likewise, some students have heard of the first-generation focused intervention program on our campus and want more information about how to join and the benefits of doing so. The clear need for support for this population is a significant factor driving my research interest.

Finally, my professional experience teaching master's level higher education courses further adds to my interest in better understanding the experiences of college students. Since starting this dissertation, I have had the opportunity to teach college student development theory twice, which remains one of my favorite higher education courses. Not only does this course focus on better understanding the experiences of college students and their development, but it covers multiple theories referenced throughout this research project (e.g., Schlossberg's (1984) marginality and mattering, Strayhorn' (2012) sense of belonging, Tinto's (1993) departure theory), which provide the theoretical framework for this study. Throughout the courses I led discussions and lectures that challenged students to consider student development theory and its applications and limitations related to college students, with specific focus on marginalized student populations, such as FGCS. Thus, teaching at the Master's level—specifically college student development theory courses—is another motivating factor for me to better understand FGCS.

Each of these experiences lends itself to my biases in some way. I am aware that as a continuing-generation student I have not experienced the same challenges as many first-generation students. In addition, I realize that I likely perceive the college context

differently than first-generation students. However, as a higher education professional I am deeply invested in the success of students, which requires better understanding students who have different experiences than my own. Therefore, I am highly interested in better understanding the experiences of first-generation students and how their participation in an intervention program may, or may not, lead to increased sense of belonging, and therefore increased student success.

Researcher Perspective

Since the researcher plays such an important role in qualitative research (Maxwell, 2013; Merriam & Tisdell, 2016), it was also necessary to understand my research perspective as a qualitative researcher. My perspective was guided by the interpretive, constructivist approach which “assumes that reality is socially constructed; that is, there is no single, observable reality. Rather, there are multiple realities, or interpretations, of a single event. Researchers do not ‘find’ knowledge; they construct it” (Merriam & Tisdell, 2016, p. 9). In addition to multiple realities, social context played an important role in the construction of knowledge and experiences. For example, the social constructionist perspective “holds that reality is a construction of the human mind, that this construction is tied to a particular time and social context, and that what is considered relative changes as the social context changes” (Jaccard & Jacoby, 2012, p. 7). Therefore, as a constructivist researcher it was important for me to recognize that the same context and experiences might result in different interpretations and realities for the individuals involved, and it was my role as the researcher to better understand the perceptions of the individuals.

Within constructivism, Creswell (2012) described philosophical assumptions that researchers make when pursuing qualitative research studies that will further influence this research study. Ontology refers to the “nature of reality” (p. 20). Qualitative researchers accept the premise of “multiple realities” (p. 20), meaning researchers, participants, and readers experienced different realities and constructed different interpretations. As such, the purpose of this qualitative research study was to explore the multiple realities of each participant; to do so, Creswell suggested using numerous forms of evidence to best understand the multiple realities.

Along with ontology, epistemology refers to the nature of knowledge. Qualitative researchers adhere to the notion that knowledge is constructed through understanding the subjective experiences of others (Creswell & Poth, 2019). Merriam and Tisdell (2016) further supported the notion of constructivism epistemology, stating that “[q]ualitative research is based on the belief that knowledge is constructed by people in an ongoing fashion as they engage in and make meaning of an activity, experience, or phenomenon” (p. 23).

As a qualitative, constructivist researcher, I adhered to the notion of multiple realities, and recognized that individuals are experiencing multiple realities, even within similar contexts. In addition, I recognized that knowledge, like reality, was constructed by each individual and was based on the experiences and context of the individual. Therefore, my role as a constructivist researcher was to better understand the experiences and realities of my participants. Moreover, it was necessary that I remained aware of my own, separate experiences, reality, and interpretations, making the act of reflection critical throughout the research process.

Theoretical Framework

Although the use of theory is debated in qualitative research, a theoretical framework underlies all research “because no study could be designed without some question being asked (explicitly or implicitly). How that question is phrased and how it is worked into a problem stated reflect a theoretical orientation” (Merriam & Tisdell, 2016, p. 85). This qualitative case study draws from the theoretical framework of Strayhorn’s (2012) sense of belonging. Strayhorn’s sense of belonging theory includes seven key postulates:

1. Sense of belonging is a basic human need.
2. Sense of belonging is a fundamental motive, sufficient to drive human behavior.
3. Sense of belonging takes on heightened importance (a) in certain contexts... (b) at certain times...as well as (c) among certain populations.
4. Sense of belonging is related to, and seemingly a consequence of, mattering.
5. Social identities intersect and affect college students’ sense of belonging.
6. Sense of belonging engenders other positive outcomes.
7. Sense of belonging must be satisfied on a continual basis and likely changes as circumstances, conditions, and contexts change. (pp. 18-23)

The postulates indicate that sense of belonging is important to the success of college students for many reasons. First, Strayhorn (2012) explained that “a college student’s need for belonging must be satisfied before any higher-order needs such as knowledge and self-actualization...can be achieved” (p. 18). Students must feel they belong and matter before they are able to achieve the goals of higher education such as academic

success. Additional research further supports the connection between sense of belonging and college success outcomes including retention, persistence, and academic achievement (Hausmann et al., 2007). Of particular importance to this case, Strayhorn asserted that “sense of belonging may also be particularly significant for students who are marginalized in college contexts such as...first-generation students” (p. 17). Strayhorn suggested that feeling connected and as though one matters is more important for students who are inclined to feel as though they are marginalized, such as first-generation students; therefore, sense of belonging is more important for the success of first-generation students than it is for continuing-generation college students (CGCS). Thus, it is evident that sense of belonging is critical to the success of first-generation students and must be better understood.

Research and Design

This study followed a qualitative case study methodology to explore how a first-generation focused student success program fostered sense of belonging among first-generation students, in order to better understand how institutional policies and practices may support first generation student success, if at all. Case study research involves “the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances” (Stake, 1995, xi). To do so, researchers study a “bounded system” that is often a single person or program, referred to as “an integrated system” (Stake, 1995, p. 2). Case study methodology is most valuable when the phenomenon—in this case, the sense of belonging of first-generation students—would be hard to separate from the context (Yin, 2018). This was further supported by Stake (1995) who explained that “the power of case study is its attention to the local situation” (p. 8).

By pursuing a qualitative case study, I was able to explore the phenomenon of sense of belonging within the context of a particular case in order to better understand the phenomenon of interest within the bounds of the case.

Since I endeavored to pay close particular attention to the phenomenon, not the case itself, I was conducting an instrumental case study (Stake, 1995, 2006). Stake (2006) described instrumental case study as necessary “[w]hen the purpose of the case study is to go beyond the case” (p. 8). As an instrumental case study, I focused on gaining a better understanding of the phenomenon—sense of belonging of first-generation students—as bounded by the intervention program—the IFG program at Liberal Arts College. Cases for instrumental case studies should be selected to best help the researcher understand the phenomenon of interest, with the first criterion being “to maximize what we can learn” (Stake, 1995, p. 4) with other considerations including access to the case and the context itself.

The case study methodology was also appropriate for this particular study as the case study methodology required me to collect data over time. Such prolonged experience (Creswell, 2012) allowed me to become extremely familiar with the phenomenon and case. In this case study, I was able to focus on the context of the first-generation student success program. Other research methodologies do not account for context or behavior in the same way the case study does. As recommended, this case study considered multiple data sources to better understand the phenomenon (Creswell, 2012; Stake 1995)—sense of belonging—within a particular case. In doing so, I gained a better understanding of the phenomenon as I was able to triangulate findings across types of data including documents, observations, and interviews. Case study methodology was

the ideal methodology for this research as I focused on the inseparable interaction between the phenomenon and the case through the collection of multiple data sources over a prolonged period of time.

The Case

This case study focused on the “I am First-Generation” (IFG, pseudonym) program, an intervention program for first-generation college students at a private, liberal arts institution—Liberal Arts College (LAC, pseudonym)—located in the Midwest. A case study focuses on a single, bounded unit (Merriam, 2001; Stake, 1995; Yin, 2018) in order to better understand the particular case. Attention to the context and situation is also necessary as “[q]ualitative case study was developed to study the experience of real cases operating in real situations” (Stake, 2006, p. 3). When selecting the case, Stake (1995) recommends considering how we can “maximize what we can learn” to “lead us to understandings, to assumptions, perhaps even to modifying of generalizations” (p. 4). After review of programs at local institutions, I selected the IFG program because it was a student success program specifically for first-generation college students. In addition, the IFG program aimed to increase the community (sense of belonging) of first-generation students within the program and on campus, as explained on the program website:

[The IFG program is] a community among our first-generation students, faculty and staff. We provide a structured approach to help you succeed in the classroom, get you involved with the campus, support your growth as a person and prepare you to apply what you’ve learned in the world around you. (IFG website, 2019)

The emphasis on belonging—feeling supported by the IFG community as well as around campus—is critical as Strayhorn (2012) emphasized that achieving sense of belonging influences student success. Strayhorn further specified that students with marginalized social identities—in this case, first-generation students—often feel lower levels of belonging. As such, it is important to better understand how first-generation students experience sense of belonging when participating in a first-generation focused student success program to ensure their success in college. To do so, the IFG program provided the bounded system for this case study as its purpose and initiatives endeavored to foster sense of belonging—the phenomenon of interest in this study—among first-generation students.

Embedded Cases

While the IFG program bound the case, I explored the embedded units within the context of the case to better understand the phenomenon. When considering individual case studies, Stake (2006) explained that “[a] few may become embedded cases (or mini-cases)—cases within the case” (p. 26). The embedded units should “share a common characteristic or condition” (Stake, 2006, p. 4); in this study, the commonality was that each embedded unit was a first-generation student participating in the IFG program at LAC. By including embedded cases I hoped to gain a better understanding of the phenomenon of sense of belonging of first-generation students participating in a first-generation focused student success program. When considering how individual cases work together in a traditional multiple case study, Stake (2006) suggested that:

The individual cases share a common characteristic or condition. The cases in the collection are somehow categorically bound together. They may be members of a group or examples of a phenomenon. (p. 5)

Although referencing a multiple case study, Stake's emphasis on common characteristics that collectively bind the cases together provided guidance as I selected embedded units from which to collect and analyze data. The sense of belonging of the first-generation students in this case are specifically influenced by their participation in the IFG program. They share a common characteristic (first-generation status), are members of the same first-generation student success program (the IFG program), and are examples of the phenomenon (sense of belonging), or lack thereof.

By drawing on multicas e methodology to include and analyze the embedded units, the embedded unit design allowed for a deeper understanding of how, if at all, a first-generation focused student success program influenced sense of belonging among the embedded units participating in the IFG program. By structuring the study in this way, I was able to explore the phenomenon from various levels: institutional, case, embedded unit, and phenomenon. At the institutional level I explored institutional support and resources to better understand how the institution endeavored to support first-generation students. To do so, I reviewed documents and interviewed the IFG program director. At the case level, I aimed to better understand the student success program: what are the main components of the IFG program, how do participants interact within it, etc. Similar to the institutional level, I reviewed documents and interviewed the program director to gain an understanding of the case.

When considering the embedded cases—the first-generation students participating in the IFG program—I endeavored to better understand the experiences of the participants and how their participation in the program fostered sense of belonging, if at all. To do so, Stake (2006) recommended working to fully understand each individual case—or in this study each embedded unit—before considering the cross-case analysis and findings. For the purpose of this study, the most inclusive definition of first-generation student—neither parent nor guardian having earned a degree from a four-year institution—was utilized. Not only was this the most inclusive definition of first-generation college students, this was the definition adhered to by the federal government (U.S. Department of Education, 2019b) and by leading higher education organizations such as TRiO and NASPA. Moreover, NASPA's Center for First-Generation Student Success—a leading organization on first-generation students, programs, services, research, and policy ("Center for First-Generation Student Success," 2018)—operated under the most inclusive definition of first-generation. Likewise, the IFG program operated under the same inclusive definition of neither parent nor guardian having earned a bachelor's degree, while also including students whose parents earned their degrees outside the United States within the definition of FGCS at LAC and within the IFG program.

Finally, I kept in mind the phenomenon of interest throughout the study, keeping sense of belonging of first-generation students participating in a first-generation focused student success program at the forefront of my mind as the study progressed. To better understand the phenomenon of interest I observed the embedded units as they participated in the IFG program and conducted two interviews with each embedded unit.

The ability to research all four levels—institutional, case, embedded unit, and phenomenon—provided the most complete understanding of the case, its context, and the phenomenon of sense of belonging.

Embedded Case Selection

With regard to this case study, the embedded units were already partially identified (Stake, 2006) as they were first-generation students participating in the IFG program at LAC. Although there were over 500 of participants within the IFG program (Carballo, 2020), I selected seven first-generation students as embedded cases. Stake (2006) emphasized the importance of a *few* cases being selected as “the cases selected will be many fewer than all cases that exist” (p. 1). When considering the number of first-generation students participating in the IFG program, it was not feasible—or necessary—to interview all participants. However, it was important to interview enough participants to achieve uniqueness and variety of context and situation. In addressing these possible limitations regarding embedded units, Stake (2006) suggested that “two or three cases do now show enough of the interactivity between programs and their situations, whereas 15 or 30 cases provide more uniqueness and interactivity than the research team and readers can come to understand” (p. 22). Therefore, I selected seven embedded units to interview and to pay close attention to during observation throughout the case study. Limiting the number of embedded units will ensure the case remains “*embraceable*” (Stake, 2006, p. 31, emphasis in original), meaning the size allowed me to understand the case and embedded units in their entirety. Anything too large or complex would be cause for considering a quantitative study as a single researcher (me) or a small research team would not be able to embrace the full case (Stake, 2006).

Since I did not intend to interview all of the 500+ IFG program participants, it was important to meaningfully select the embedded units to best help me understand the case, embedded units, and phenomenon. Stake (2006) recommended selecting cases—or embedded units in this study—that meet three criteria, including being relevant to the phenomenon or case being studied, diverse across contexts and situations, and likely to provide good opportunities to learn about the complexity of the case and embedded unit. I employed purposeful sampling to intentionally select who to interview to best contribute to my understanding of the phenomenon (Creswell & Poth, 2019; Merriam & Tisdell, 2016; Stake, 2006) of sense of belonging experienced by first-generation students participating in a student success program. More specifically, Creswell and Poth (2019) recommended the selection of "unusual cases in collective case studies and [to] employ maximum variation as a sampling strategy to represent diverse cases and to fully describe multiple perspectives about the cases" (p. 158). Although many of my participants shared similar social identities—the majority were: White (five), female (five), and traditional aged students (six)—when possible I selected the most distinct cases in order to learn from the unique cases of the phenomenon (Creswell & Poth, 2019). For example, of the students who agreed to participate I selected both students who identified as a marginalized race or ethnicity; likewise, I selected the only returning adult learner and the only two male students who completed the demographic survey. In doing so, I endeavored to learn from the most unique cases to which I had access.

While ideally I would be able to recruit diverse embedded units, I also had to consider the willingness of the participant to be interviewed and observed. To do so, Stake (2006) recommended researchers consider “cases from which we can learn about

their activity and situation. This may mean taking the ones that are more accessible, the ones we can spend the most time with” (p. 25). By selecting cases that were accessible, Stake (2006) suggested that the most important part of selecting embedded units was to select participants that would be most willing to share their experiences openly with the researcher. In following Stake’s suggestions, I considered which participants were most willing to be observed, interviewed, and available overall to participate in this study. By selecting the most accessible embedded units I hoped to gather more robust data; however, the tradeoff in prioritizing availability was potentially not gathering data that was as diverse or complex. I had to balance the desire to include diverse participants with the need to identify accessible participants to have the best “opportunity to learn” (Stake, 1995, p. 57) about the phenomenon.

To recruit embedded units, I started by collecting demographic information as well as consent to participate in the study via a survey. To provide the best access to participants who were willing to be interviewed—and were therefore more likely to provide rich data (Stake, 2006), the program director sent the participant/demographic survey to all second, third, and fourth-year first-generation students participating in the IFG program. This method of outreach allowed me to gain better access to the population by distributing the survey through a gatekeeper (Creswell & Poth, 2019). The demographic survey started by collecting the participants’ consent to participate (see Appendix A). At the beginning of the demographic survey I asked whether the IFG participant was open to being interviewed—accessible to the researcher—with the purpose of learning more about their experiences as first-generation students, thereby confirming the embedded units’ willingness to participate. If the student responded that

they were willing to participate, they were then prompted to read and sign a consent to participate form and to select a pseudonym for use in future writings and publications before completing the remainder of the demographic survey.

The survey included demographic questions derived from the theoretical framework that emphasized important aspects of the phenomenon of sense of belonging as it might pertain to the first-generation students participating in this study. For example, the survey asked whether students were commuting or living on campus, what other programs and groups with which the student was involved, how many hours they worked on- or off-campus, and whether they served as a student leader in the IFG program. The survey also asked about the students' approximate annual family income to determine the socioeconomic status of the students and allow me to select students of different socioeconomic statuses when possible. Having collected demographic data and received responses from participants willing to be included in the study, I began the process of selecting participants to interview. I purposefully selected participants with varying demographics when possible to gain a better understanding of the phenomenon by achieving maximum variation (Creswell & Poth, 2019) among IFG participants who agreed to be interviewed. This is in line with Stake (1995) who suggested that when considering the data sources to be used for the study, the selection of the best sources "means those that best help us understand the case, whether typical or not" (p. 56).

With regard to the selection of embedded units as it related to the phenomenon, I strongly considered the barriers most often experienced by FGCS as discussed in the literature review. For example, since FGCS were more likely to face barriers related to finances, they were more likely to work (Lohfink and Paulsen, 2005), which reduced the

number of hours they were available to be on campus, focused on their academics, or involved in campus organizations. Therefore, selecting students who worked varying hours on- and off-campus provided a diverse range of experiences related to balancing work and academics, as well as balancing work and involvement within the IFG program or in other campus organizations. In addition to working more hours, FGCS were more likely to commute, therefore reducing their opportunities to be connected to campus which was likely to reduce their belonging. By interviewing students with varied living situations—commuters as well as those who lived on campus—I was able to better understand how sense of belonging of IFG participants might be connected to their varying experiences with their on-campus communities and off-campus communities. Lastly, upper-class students were able to serve as ambassadors in the program, providing mentoring to first-year students in the IFG program. Students who chose to serve as an ambassador were inherently more involved in the program due to the commitments related to their ambassador role, and might also have had more positive associations with the program which led them to serve in the student leadership role. Therefore, I selected four student who were serving as an IFG program ambassador and three students who chose not to apply for the ambassador role in the 2020-2021 academic year.

Data Collection

As is typical with case studies, I intended to collect multiple types of data to create the most comprehensive understanding of the phenomenon (Merriam & Tisdell, 2016; Stake, 1995, 2006; Yin, 2018). By collecting multiple sources of data, I was able to examine the case from numerous perspectives with the purpose of gaining better insight into the phenomenon (Stake, 1995). Sources of data I collected for this study included

documents, observations, and interviews, as well as the data collected from the demographic survey. To best understand the complexity of the case under review, it was necessary for me to collect data at four levels: institutional (LAC), case (the IFG program), individual (embedded unit), and phenomenon (sense of belonging of embedded units).

Although the varying types of data provided a more complete understanding of the case, I did not intend to collect each type of data at each level. For example, I anticipated that document review (e.g., review of websites, IFG program handouts, social media posts made on the LAC and IFG accounts) would help me better understand the institution and the case, but not the embedded unit level as the documents do not reflect the experiences of the embedded units or their belonging—the phenomenon. Instead, I anticipated that observations of and interviews with the embedded units would best help me understand the embedded units and, therefore, the phenomenon. While document review helped to better understand the institutional and case level, observations allowed me to better understand three levels: the case, embedded unit, and phenomenon. Moreover, interviews provided valuable information regarding all four levels. Table 3.1 provides a visual depiction of types of data I collected; how each data type related to each level, if at all; and, how the data types and levels mapped to the research questions guiding this study. As Table 3.1 indicates I did not collect all types of data at each level (e.g., observations at the institutional level is blank in the table). Lastly, while some of the data informed all three research questions, other types of data collected were intended to only inform one of the research questions guiding this study. This table, however, confirms

that all data collected at each level helped provide a better understanding of the research questions and case.

Table 3.1: Types of Data to be Collected at each Case Level and Reflecting Research Question Applicability

	Document Review	Observation	Interviews
Institutional	RQ2, RQ3 <ul style="list-style-type: none"> • Websites • Marketing Materials • Strategic Plan 		RQ2, RQ3 <ul style="list-style-type: none"> • Program Administration
Case	RQ3 <ul style="list-style-type: none"> • Website • Program materials 	RQ3 <ul style="list-style-type: none"> • Program meetings • Interactions with program administrators 	RQ2, RQ3 <ul style="list-style-type: none"> • Program Administration • Embedded Units
Embedded Units		RQ1, RQ2, RQ3 <ul style="list-style-type: none"> • Program meetings • Embedded units 	RQ1, RQ2, RQ3 <ul style="list-style-type: none"> • Two 60-90 min. interviews per embedded unit
Phenomenon		RQ1, RQ2, RQ3 <ul style="list-style-type: none"> • Program meetings • Interactions with others 	RQ1, RQ2, RQ3 <ul style="list-style-type: none"> • Program administration • Embedded units

RQ1: How do first-generation students experience a student success program?

RQ2: How do program participants experience sense of belonging, if at all?

RQ3: How can institutional policies and practices support sense of belonging?

RQ3A: What program practices best support sense of sense of belonging?

RQ3B: How do administrators foster sense of belonging?

Given the complexity of this case and the four levels this study aimed to understand—institutional, case, embedded units, and phenomenon—it was necessary to collect data in a purposeful order. The primary phenomenon of interest pertained to the perceived sense of belonging (Strayhorn, 2012) of first-generation students participating in a first-generation focused student success program. To better understand this phenomenon, I reviewed documents (e.g., websites, fliers, social media posts) to gain an

understanding of the institution and the case, specifically considering how the IFG program was structured and supported to foster first-generation student belonging. Next, I interviewed the program director to corroborate the findings from the document review with regard to institutional and case understanding. I then interviewed first-generation students—the seven embedded units—to better understand their experiences as participants in the IFG program as well as how their participation has influenced their sense of belonging within the program and on campus, if at all. Following the interviews with IFG program director and first-generation students, I utilized the information gathered during the interviews to guide observations of IFG program meetings and workshops. I then interviewed the embedded units for a second time, inquiring about their participation in the program and sense of belonging as well as about information I gathered during observations. The following sections describe, in detail, the chronological steps I followed to collect data.

Document Review

Document review is a recommended method of data collection for case studies (Stake, 1995, 2006; Yin, 2018), often providing necessary information “on the context within which research participants operate” (Bowen, 2009, p. 29). I first used document review to better understand the institutional context in which the IFG program was situated. I located and reviewed documents related to the LAC to learn more about the institutional context, practices, and support for first-generation students at LAC as well as the IFG program. Documents related to the institution included websites, press releases, social media posts, and strategic plans. Reviewing these documents helped create an

overview of the institution at which the IFG program was housed, thus providing necessary insight into the context of the case.

After a thorough review of the institutional documents, I turned my attention to reviewing documents related to the IFG program, which included the IFG program website, social media posts, press releases, and program materials such as flyers, booklets, workshop handouts, and the “swag bag” (Carballo, 2020) which included IFG promotional gear such as pens, planners, hats, and a t-shirt. These items provided insight directly into the case—the IFG program—including its purpose, program attributes, and intended outcomes. Since data analysis with qualitative case studies is ongoing (Stake, 1995), I began analyzing document findings as I collected and reviewed the documents. In this way, my initial document review informed my ongoing document review as well as subsequent interviews and observations. I asked questions during interviews that were related to the information gathered via documents as well as sought to observe workshops and interactions that related to the phenomenon of interest. Document review also helped to corroborate my preliminary findings in subsequent data collection phases as I began to connect information from interviews and observations to my review of institutional and programmatic documents.

Demographic Survey

As I collected and reviewed documents, the IFG program director emailed out the demographic survey to all second-, third-, and fourth-year program participants. The demographic survey was made available via the online survey platform Qualtrics. The survey served multiple purposes. First, the survey included a consent to participate form (Appendix A) in which I provided an overview of the purpose of the study as well as

information required by the Institutional Review Board. Students who consented to participate in the study were then asked to select a pseudonym to be used in all future writings and reports.

Students who consented to participate were directed to the subsequent demographic information section of the survey which included information about the inputs (pre-college characteristics and experiences) and environments (college contexts) of the program participants. For example, the survey asked about demographic information including sex, race, ethnicity, date of birth, and year in school. Another input the survey requested was the participants' previous involvements and perceived sense of belonging in high school. The survey also asked about the participants about their socioeconomic status by asking their parents' annual income using the ranges that indicate, lower, middle, and upper class for a family of three (e.g., 0-\$42,000, \$42,000-\$126,000, and \$126,000 and above respectively) according to Pew Research Center's analysis of government data (Fry & Kochhar, 2018). I selected these demographic factors as they might affect participant sense of belonging in high school, college, and the IFG program.

The survey also asked about current environments, including transfer status, the major(s) and minor(s) the student was pursuing, whether the student commuted or lived on campus, on- and off-campus involvement, how many years they have participated in the IFG program, number of hours worked on- or off-campus job, and approximate GPA. Again, these questions were designed to better understand the experiences of participants before and during college for use in selecting embedded units with diverse experiences to interview and observe. I also used this information as a starting point during interviews to

probe deeper into the unique experiences, situations, and contexts of the seven embedded units.

Interview with IFG Program Director

After a thorough review of the institutional and programmatic documents, as well as distributing the demographic survey to begin identifying possible embedded units, I started collecting data through interviews with the IFG program director (Stake, 1995; Yin, 2018). Interviews allowed me to gain a deeper understanding of the phenomenon—first-generation student sense of belonging when participating in a student success program—from multiple perspectives. I started by interviewing the program director of the IFG program as understanding the context and case remained a priority early on to best understand the case as a whole.

I interviewed the program director to gain a better understanding of the case as well as potential experiences of the participants. The program director worked directly with the IFG program to create, plan, and execute events and initiatives with the purpose of supporting FGCS at LAC. In addition to providing valuable information about the case itself, interviewing the program director allowed me to learn “from the observation of others” (Stake, 2006, p. 4). Such observations provided me with an “indirect method [that] is necessary for activity at which the researcher is not present; the researcher needs to ask someone who was there, and to find records kept of what happened and artifacts that suggest it” (Stake, 2006, p. 4). In doing so, the “details of life that the researcher is unable to see for him- or herself [might be] found by interviewing people who did see it” (Stake, 2006, p. 29) such as the program director who interacted with the IFG program daily. This interview focused on the program director’s experience with the case and

perception of the phenomenon, and followed the interview protocol outlined in Appendix B. The program director observed both the IFG program as well as the participants, and, therefore, added a critical observational lens from which I was able to further understand the phenomenon of interest. Although the program director did not experience the phenomenon herself as she was not a student participating in the IFG program, my interview with the program director provided necessary insight into the institutional context, the history of the IFG program, and the program's main components. Each of these aspects was essential in increasing my understanding of the case and its context, which was critical as I endeavored to keep the case and context at the forefront of my mind when researching the phenomenon of interest. I also utilized the information I gathered from my interview with the program director to guide my first interview with the embedded units as well as my subsequent observations of the IFG program.

Interviews with Embedded Units

Interviews with the embedded units allowed me to better understand the participants' experiences within the IFG program, as well as how their time in the program has fostered sense of belonging, if at all. I initially sought to better understand the individual embedded units as well as their individual contexts, situations, and experiences (Stake, 2006) but also worked to keep my overarching focus on better understanding the phenomenon of interest. To do so, I asked questions about the student and their experiences within the IFG program and at LAC in general, as well as their sense of belonging as a result of participating in the IFG program. Moreover, I asked questions that arose as a result of my ongoing data collection including my review of

institutional and program related documents, interview with IFG program director, and observations.

I drew from the phenomenological interview approach described by Seidman (2006) in which the interviewer conducts 90-minute interviews with the purpose of “understanding the lived experience of other people and the meaning they make of that experience” (p. 9). However, the phenomenological approach calls for three interviews, while I only used two interviews in addition to the other aforementioned data types collected commonly included in case studies. Given the amount of data collected overall (i.e., documents, observations, interviews), as well as my limited resources and the COVID-19 pandemic, I was not able to interview all participants of the IFG program. Instead, I conducted two interviews lasting 60-90 minutes each with each of the seven participants. I conducted the first round of participant interview early in the fall 2020 semester prior to completing observations with the second round of participant after I completed observations. Since the goal of my research was to understand how participation in a first-generation focused student success program fostered sense of belonging among the first-generation participants, if at all, the phenomenological interview’s focus on understanding the lived experience was fitting.

I used semi-structured interviews to gather specific information from the seven participants while also responding to individual experiences and probing for additional information as needed (Merriam & Tisdell, 2016). Each interview included open-ended, semi-structured interview questions (Seidman, 2006; Yin, 2018) with the goal of helping me understand “how people interpret the world around them” (Merriam & Tisdell, 2016, p. 108). In this case, interviews helped me understand how the participants viewed their

experiences as first-generation students in general as well as with regard to their participation in the IFG program. The first round of interviews with program participants focused on building rapport with the participants as well as understanding the participants' pre-college and college experiences and involvements (see Appendix C). In addition, the first interview explored the student's participation in the IFG program, which allowed me to focus on getting to know the participant while exploring the first research question of how the participants experienced the IFG program. During the first interview I also explored initial feelings of belonging perceived by the participants both at LAC and within the IFG program.

Following each interview, I memoed immediately to note additional details, moods, and observations regarding the participants' responses and our interactions. In doing so I was able to note important points from the interviews that the transcription did not capture. My memos included notes on participant tone, disposition, and facial expressions in response to certain questions or statements. In doing so I was able to capture my initial thoughts and feelings, note important concepts, and highlight key participant experiences.

I completed the final transcript of each interview within a week of completing the interview so the data collection was fresh in my mind. I opted transcribe the interviews myself to allow me to become even more familiar with the participants and interview data. To transcribe the interviews, each interview—with the IFG program director and both interviews with the participants—was completed using a Zoom account which allowed the interview to be recorded to Zoom's cloud storage. Zoom produced an initial rough transcript that I edited for accuracy while listening to each interview. I then

generated final transcripts of the interviews (Merriam & Tisdell, 2016; Yin, 2018) using the rough interview transcripts produced by Zoom which I reviewed and edited to ensure accuracy. As I edited the transcripts, I removed all identifying information (e.g., names of participants, program director, institution) and replaced names with pseudonyms. Once I completed the final transcripts, I then exported the transcript from Zoom and formatted it in Microsoft Word so I could complete the coding process. Once the transcript was saved in Word, I permanently deleted the video from Zoom per the process described in my Institutional Review Board application. By removing identifying information and deleting the interview videos once the final transcript was complete, I was able to ensure privacy was maintained for participants and the program director as well as the IFG program and LAC.

The data collected at the first-round interviews subsequently guided my future observations and interviews. Together, the data collected during first-round interviews and observations provided direction for the second round of interviews with the seven participants. The second interview followed the completion of the first-round of interviews and all observations, and focused on the experiences of participants with regard to the degree to which the IFG program affected the participants' involvement and belonging, if at all (see Appendix D). The second participant interviews focused on addressing the second and third research questions related to the participants' sense of belonging as well as how institutional policies and practices can foster sense of belonging. In the second round of participant interviews I asked questions more directly derived from Strayhorn's (2012) sense of belonging theory to better understand how the IFG program fostered sense of belonging within the program and on campus, if at all.

Questions continued to be derived from the demographic survey as well as the first-round interview with participants and observations of the IFG program and participant participation.

Observations

Observations are an important data collection method for case studies (Stake, 1995; Yin, 2018) as “sometimes the most direct answers come from observing the activity” (Stake, 2006, p. 27). As such, observations constituted an important data collection method for this study. One benefit of observations is that it allows the researcher to come in direct contact with the phenomenon under review (Merriam & Tisdell, 2016). In addition, observations allowed me to pay close attention to the context and environment of the case in which the participants were interacting (Creswell, 2012). Further reinforcing the importance of observing the participants within the local situation and context of the case, Stake (2006) explained that the

qualitative understanding of cases requires experiencing the activity of the case as it occurs in its contexts and in its particular situation. The situation is expected to shape the activity, as well as the experiencing and the interpretation of the activity. (p. 2)

Therefore, observations provided important understanding of the context and influenced how I interpreted the activities and experiences of the students, “whether or not evidence of influence is found” (Stake, 2006, p. 27) from the context.

With regard to this case, this data collection method allowed me to observe students as they experienced the IFG program. I took notes in a blank notebook to allow me to be present to observe the event without structure. I started by focusing my

observations on the IFG program as a whole, considering how the event was set up, what topics were discussed, and how the program flowed from start to finish to gain an understanding of the IFG program context. However, when considering context, it is important to recognize that if the case is “an instrumental case study, certain contexts may be important, but other contexts important to the case are of little interest to the study” (Stake, 1995, p. 64). Therefore, as an instrumental case study, it was likely that the IFG program was not of utmost importance to the study; instead, it was likely that the participants’ actions and activities within the bounds of the IFG program were what would best inform my understanding of their belonging as a result of participation in the program, if at all. As such, once I completed initial observations of the program as a whole to develop a basic understanding of the IFG program context, I turned my attention to observing the program participants.

I specifically observed interactions among the IFG program participants and others, including participant interactions with other first-generation students, the program staff, and campus partners including faculty and staff (IFG website, 2018) when applicable. This allowed me to observe social relationships as well as how participants potentially formed connections and developed community which are key components to successfully developing a sense of belonging. By observing both the program structure and the interactions between participants and others, I was able to note potential ways in which the IFG program supported sense of belonging as a whole, thereby better understanding how the institutional practices of a student success program possibly supported sense of belonging. Each of these observed experiences supported the possible

sense of belonging of the participants as students created connections and developed community (Strayhorn, 2012) as a result of participating in the IFG program.

When considering the observations, the purpose of the observation is to “provide a relatively incontestable description for further analysis and ultimate reporting” (Stake, 1995, p. 62). The observations focused on the immediate context, the participants, and the phenomenon of sense of belonging. Observations included me observing the physical setting, participants, activities, interactions, conversation, subtle factors, and my own behavior (Merriam & Tisdell, 2016). I attended IFG program events to observe the first-generation students’ experiences and interactions, as well as the actions of the program administrators and the overall program features. Due to limited resources as well as the COVID-19 pandemic, I was not able to attend all of the IFG program workshops. Given my limited time and resources, I purposefully chose to attend workshops that took place in the month between my first and second round interviews. In addition, since workshops were being offered both virtually and in-person I chose to attend one virtual and one in-person workshop for juniors and one virtual and one in person workshops for seniors to observe the differences in program execution when in different formats. Although the virtual and in-person workshops were designed for the same populations (e.g., juniors who were first-generation or seniors who were first-generation), the structure of the virtual workshops varied greatly from the in-person workshops, providing another critical reason for me to attend both types of IFG program events for observations.

In these environments, I acted as an “observer as participant” (Merriam & Tisdell, 2016, p. 145) as the research activities came first but the participants were aware of my

activities. I took detailed field notes by hand and memoed immediately after each observation. Merriam and Tisdell (2016) reiterated the importance of drawing diagrams and shifting my perspective from wide angle (observing the full room/context) to narrow angle (observing specific people and interactions). I drew diagrams of the physical space while also taking detailed notes about the interactions between participants, program administrators, and guests (faculty and staff). When observing virtual workshops, I was not able to draw a physical diagram of the space, but instead took detailed notes about the structure of the program and video call. I was also able to observe the chat box and take notes on how the program administrators engaged students through the chat, and any subsequent conversations the students had through that unique feature.

Given the details that could be collected from observations, I kept in mind that there are also limitations of observations as a method of data collection. Observations are inherently subjective, which is why they are used as one of a few methods to “triangulate emerging findings; that is, they are used in conjunction with interviewing and document analysis to substantiate the findings” (Merriam & Tisdell, 2016, p. 139). Observations are also time consuming, so are often used in tandem with other forms of data when time and resources are limited as they were in this study.

Data Analysis

Throughout this study I analyzed data in an ongoing manner. Saldaña (2016) explained that most “qualitative researchers will code their data both during and after collection as an analytic tactic, for coding *is* analysis” (p. 9, emphasis in original). This was consistent with other experts in the field who have recommended analyzing data throughout the process with memos and basic coding (Miles et al., 2014; Stake, 1995;

Yin, 2018). In addition to analyzing in an ongoing manner, I analyzed data according to the different levels of this case. I collected data starting with the broadest level and concluded with the most specific in the order of institutional, case, embedded unit, and phenomenon level. Since I was interested in better understanding the phenomenon of first-generation student sense of belonging when participating in a first-generation focused student success program, I endeavored to find what Yin (2018) described as “elements of explanations” (p. 179). Yin (2019) stated, “to ‘explain’ a phenomenon is to stipulate a presumed set of causal sequences about it, or ‘how’ and ‘why’ some outcome has occurred” (p. 179). In this case, the phenomenon I was anticipating was sense of belonging of first-generation students.

To better understand the “how” and “why,” I started with the institutional level data to gain a better understanding of the institution at which the IFG program is housed. This was important for me to better understand the context of the institution as well as the case, as I needed to be familiar with the context surrounding the case (Stake, 2006; Yin, 2018) to better understand the embedded units. As previously discussed, institutional level data included collecting and analyzing documents pertaining to LAC as well as LAC’s support of first-generation students, if any, and LAC’s support of the IFG program which in turn supports FGCS. Following the analysis of documents at the institutional level, I turned my attention to better understanding the case-level data. Case-level data included gathering additional documents related specifically to the IFG program, observations, and the interview with the IFG program director. I continued to analyze data from the institution and case levels in an ongoing fashion while turning my attention to collecting data at the embedded unit level. The embedded unit level included

data from interviews and observations of seven first-generation students participating in the IFG program in Fall 2020. I analyzed embedded unit level data by reading and re-reading memos and interview transcripts, as well as observation notes and memos. I also coded the transcripts and observation notes, when applicable, looking for themes across interviews with and observations of embedded units. Specifically, I first analyzed data within each embedded unit to better understand the individual units, before moving to cross-unit analysis (Stake, 2006; Yin, 2018). To better understand the phenomenon of sense of belonging of first-generation students participating in a first-generation focused student success program, my last step of data analysis was to analyze across levels of data—institution, case, embedded unit, and phenomenon—to search “for patterns, insights, or concepts that seem promising” (Yin, 2018, p. 167).

Institutional Data Analysis

Since the case and phenomenon were expected to be “influenced by context” (Stake, 2006, p. 27), it was necessary for me to first understand the context surrounding the case. To do so, I collected and reviewed documents pertaining to the institution and its support of first-generation students and promotion of sense of belonging, or lack thereof. I reviewed documents related to the institution’s support of the IFG program, and also discussed the institutional context with the IFG program director during our interview which further contributed to the data I collected at the institutional level. In doing so, I hoped to gain a better understanding of the context in which the IFG program—the case under review in this study—operated. The institutional level data also provided important context surrounding the IFG program participants’ experiences both on campus and within the IFG program. This information helped me determine whether

there were “some questions that need to be asked and situations that need to be observed as part of the research” (Bowen, 2009, p. 30). In this way, the data gathered at the institution level helped inform my subsequent data collection at the case and embedded unit level.

To start, I reviewed the documents collected that pertain to the institution, drawing upon Bowen’s (2009) recommendations for analyzing documents. I reviewed institutional websites, strategic plans, press releases, admissions materials, and social media posts made on the main LAC accounts (primarily Facebook and Instagram as those were found to have the largest following and most interaction with views) to determine how the institution described its support for first-generation students and sense of belonging, if at all. As I collected and reviewed documents, I actively memoed about the content of the documents and how they related to the key variables of this study: the IFG program, first-generation students, and sense of belonging.

Document review took place in three phases based on Bowen’s (2009) recommendations. First, I collected and organized data from documents I reviewed by saving documents in Microsoft word. While collecting documents I skimmed the document to determine if the document pertained to this case. The document was included in the data collection and analysis process if it pertained to the IFG program, first-generation students, or sense of belonging. In order to better understand the context (Stake, 2006), documents were included if they provided information about the how the institution supports first-generation students and/or sense of belonging, if at all, or if the document contained information about the institution’s support of the IFG program. Second, Bowen recommended the researcher draw upon content analysis to conduct “a

first-pass document review, in which meaningful and relevant passages of text or other data are identified” (p. 32). During this step I identified portions of the documents that were pertinent to the case utilizing similar categories as described in step one. Lastly, Bowen recommended the researcher engage in “thematic analysis” of the documents which “is a form of pattern recognition within the data, with emerging themes becoming categories for analysis” (p. 32). To do so, I copied and pasted portions of the documents from Microsoft Word to a Microsoft Excel document with a short phrase or word serving as the code to describe what the passage was referencing. I then sorted the Excel document, moving similar codes together. In doing so, I closely followed Stake’s (2006) recommendation to cut documents into strips and rearrange the strips to “merge Findings into clusters” (p. 60). I took care to include the document number on each strip (Stake, 2006) so I knew which document the data came from once I had organized them in clusters by theme. I included contradictory findings in the same cluster as they relate to the same theme (Stake, 2006).

Throughout the document review process, I endeavored to remain mindful of from where the document originated and the primary purpose of the document (Charmaz, 2006). As I reviewed and analyzed documents, it was important to recognize that “the available (selected) documents are likely to be aligned with corporate policies and procedures and with the agenda of the organisation’s principals” (Bowen, 2009, p. 32). I kept in mind that the documents I reviewed likely reflected the perspective of the institution and its leadership, and therefore might have offered a biased view of the institutional context. However, whether the documents might be biased or unbiased, the

views of the institution and its leadership who crafted the documents were critical to my understanding of the context of the case.

Case Level Data Analysis

After gaining a better understanding of the institutional context of the case, I turned my attention to better understanding the IFG program. As with the institutional level, I started with document review. Case level documents provided additional context for my subsequent interview with the program director. Following document review, I interviewed the program director of the IFG program which provided the primary source of case-level data. The program director developed the IFG program and continues to work directly with the program and its participants, and therefore was most familiar with the program elements that foster sense of belonging, if at all. My interview with the program director provided valuable insight into the experiences of the program participants on campus and within the IFG program that might have been related to the phenomenon of interest.

With regard to document review, I sought documents to review that focused specifically on the IFG program. Document review at the case level included the IFG program website, social media posts on the IFG Facebook page and Instagram, documents handed out during program meetings, and a review of the “swag bag” (Carballo, 2020) provided by the IFG program to all participants. Through these documents I gained a better understanding of the IFG program and its elements that supported or hindered sense of belonging of the first-generation students participating in the program. I reviewed documents in the same manner as described above in the document analysis at the institutional level, this time paying specific attention to the case-

level information describing the IFG program. I organized the documents and my notes about the artifacts such as those about the “swag bag” in Microsoft Word, and copied and pasted key findings with codes into Microsoft Excel. I then sorted the codes in Excel to develop themes.

After reviewing documents, I turned my attention to the interview with the IFG program director. I interviewed the program director one time near the beginning of the data collection and analysis process. While I noted that I had the opportunity for a second interview with the program director should additional case-related questions arise during my observations and interviews with embedded units, I felt I had a thorough understanding of the institution and the case from my document collection and interview with the program director. After completing observations and interviews with the participants, I did not have additional questions for the program director so chose not to interview the IFG program director a second time. I recorded the single interview with the program director on Zoom. Zoom created a rough first transcript which I then reviewed and edited for accuracy. I also removed all identifying information (e.g., names) and replaced them with pseudonyms to ensure privacy.

As with document analysis, I drew upon Stake (2006) and Bowen (2009) to analyze the interview with the program director. I took notes during the interview and memoed (Merriam & Tisdell, 2016; Stake, 1995, 2006; Yin, 2018) immediately following the interview about information pertaining to the case and its context. During this phase I looked for relevant statements (Bowen, 2009) that pertained to the context of the case using the same key words as during the document analysis step: IFG program, first-generation, and sense of belonging. I then began the process of looking for patterns

and themes by scanning the interview transcript to look for statements applicable to the case. I focused primarily on information related to the IFG program, the first-generation student participants, and sense of belonging.

With the document analysis and program director interview analysis complete, I began the process of combining findings across the various documents and one interview with the program director to create a summary of the case-level data. I then used the combination of documents and the interview with the program director to write a summary of the case—the IFG program. To do so, I reviewed the clusters from document and interview analysis to determine if similar or different themes were present within the different data types. Themes that appeared more often or in more important documents (e.g., LAC’s strategic plan) and the interview with the program director were emphasized in the summary of the institutional context while less prominent themes provided additional context as needed.

Embedded Unit Data Analysis

Data analysis at the embedded unit level was ongoing and followed what Creswell (2012) described as a data analysis spiral. The spiral of data analysis references the fact that case study data analysis is not a linear process. In this case, my data analysis plan for the embedded units took place in phases that moved back and forth across the various data types I collected, including two rounds of interviews as well as observations. Initially, I started analyzing the embedded unit data by completing jottings during interviews and observations. Additionally, I memoed after each interview and observation. I also jotted while editing the transcripts and memoed after completing transcripts to further analyze the data early on. By memoing and jotting (Saldaña, 2016),

I was able to begin highlighting important points within the data, develop questions for subsequent interviews and observations, and start noting tentative connections across cases.

Once I finished all interviews and observations at the embedded unit level, I turned my attention to a more thorough analysis of the embedded unit data. As is typical with case study methodology, I analyzed my data in two steps: within-case followed by cross-case analysis (Stake, 2006). I first conducted within-case data analysis which included organizing data for each embedded unit within an individual Microsoft Excel table followed by the completion of a two-cycle coding process to develop themes within each individual case. I then analyzed data across the seven cases which focused on identifying the similarities and differences related to the phenomenon of interest across the collection of embedded units to construct themes from the participant data. Lastly, I considered how the institution and case level data and subsequent themes related to the themes I constructed at the embedded unit level, which served as the phenomenon-level data analysis as it considered sense of belonging of first-generation students across all levels of data.

The spiral of data analysis for this case study began with the institutional and case level data in the form of document analysis and my interview with the IFG program director, which together informed my subsequent data collection at the embedded unit level. The spiral of analysis then continued to include the embedded units as I began to gather data from the seven participants. With regard to the embedded units, data collection and analysis began with first round interviews with each of the seven participants. In addition to the interviews, I jotted during interviews, making notes when

case related information appeared including that of the student experience, IFG program structure, and belonging and community. My jottings were important as Saldaña (2016) explained that “virtually all methodologists recommend initial and thorough readings of your data while writing analytic memos or jottings in the margins, tentative ideas for codes, topics, and noticeable patterns or themes” (p. 22). Moreover, as I worked on the transcriptions, edited, and formatted the final transcripts, I continued to jot down case and embedded unit related information. I also memoed after each interview and observation, which allowed me to start to develop possible ways to organize the data for each embedded unit in the subsequent within-case coding, while also starting to note possible similarities or differences across the embedded units which was useful for the cross-case coding portion of data analysis.

In addition to my jottings during initial data collection and reviews, I memoed at the conclusion of interviews, interview transcription, and observations to solidify and secure any important points or concepts. Analytic memos provide “a place to ‘dump your brain’ about the participants, phenomenon, or process under investigation by thinking and thus writing and thus thinking even more about them” (Saldaña, 2016, p. 44). The analytic memos included my reactions to interviews and initial reviews of the data, potential patterns and connections or differences among participants, potential connections to theoretical framework of sense of belonging (Strayhorn, 2012), and the data collection and analysis process as a whole. Memoing also helped me remain mindful of potential personal bias and reflect on my perspective as a researcher, both of which are important in qualitative research as the researcher is a primary component in the data analysis process.

Saldaña (2016) recommended analytic memoing “whenever *anything* related to and significant about the coding or analysis of data comes to mind” (p. 45) with the goal of reflecting and expounding on the data. Prompts for analytic memoing recommended by Saldaña (2016) included: What are the administrators or participants doing? What did I learn from my interview or observation notes? and “How is what is going on here similar to, or different from, other incidents or events recorded elsewhere” (p. 22)? In addition, I used analytic memos to inform the next step of data collection. After completing analytic memos after the first round of interviews I paid closer attention to certain experiences or interactions of program participants during observations, and added additional questions to second round interviews and subsequent observations that required follow up or clarification. When I found something during observation that confirmed or contradicted information from the first round of interviews—or something that had not been discussed yet—I included those initial findings in my questioning during interview two with the participants. In doing so I was able to adjust my subsequent data collection to pay closer attention to particular experiences and events, or inquire directly about lingering questions and concerns.

Within-Case Analysis

Having completed my initial spiral of data collection, I moved on to the many spirals of within-case data analysis. Stake (2006) described that the “main emphasis at this stage is on reading the individual case reports” to “understand the individual Cases in depth before analyzing the Case Findings and preparing the cross-case report” (p. 44). Consistent with Stake’s (2006) recommendation regarding multiple case studies, my within-case analysis focused on getting to know each individual embedded unit first

before moving to cross-case analysis. To get to know each participant within-case, I started the within-case process by first skimming over the interviews and observation notes, focusing on one embedded unit at a time. I progressed in chronological order, starting my review with the transcripts and memos for the first round interview, followed by observation notes, and then reviewing transcripts from interview two. As I reviewed the interview and observation transcripts for each embedded unit, I continued to make preliminary jottings in the margins of the transcripts to make sure my “code jottings are distinct in some way from the body of the data” (Saldaña, 2016, p. 21). My jottings focused primarily on important experiences, statements, or possible initial findings mentioned by the embedded unit; however, particular embedded units described unique situations, experiences, or background characteristics that also merited additional jottings and follow up such as two participants who contracted COVID-19 during the Fall 2020 semester and a third who completed her second interview with me while in quarantine as she had been in contact with someone who tested positive for COVID-19. Thus, jottings reflected the peculiarity of each embedded unit, allowing me to get to know the embedded units better as suggested by Stake (2006). In addition, my jottings referenced possible connections with other data collected at the institution and case level, as well as connection with literature previously reviewed on first-generation students, belonging, and student success.

With my initial review and jottings complete, I then prepared the participant level data for first- and second-cycle coding of the interview transcripts and observation notes for each embedded unit. I continued to focus on one embedded unit at a time to get to know each participant. To start, I organized the data chronologically from interview

transcripts and observation notes into one Microsoft Word document per participant. I changed the color of the text for each type of data collected for embedded units, making transcripts for interview one green, observation notes blue, and transcripts from interview two purple. By creating a Microsoft Word document with color coded data for each participant, I was able to keep track of which transcript or set of interview notes the data came from in case I needed return to the original source of data.

I then created one Microsoft Excel document for each participant for use in the coding process. I carefully organized the concepts table in Excel to be ensure the tables were useful for within-case and cross-case coding. The first few columns of each table included information necessary for keeping track of the data and its original source. I made columns for the data file (e.g., transcript 1, transcript 2, observation notes) as well as the line number(s) as recommended by Stake (2006) to best track the original location of the data. I also made a column for the participant pseudonym, and included the pseudonym in each row of the Excel document. By having the participant pseudonym and line numbers I was also able to easily combine the data across-case during the subsequent cross-case coding phase while knowing which participant said each statement. Next was a column for the sentence or passage of data I had selected to move to the Excel table due to its relevance to the study, followed by a column for the initial code I assigned to the passage during the first-cycle of within-case coding. I then added one more column during the second-cycle of within-case coding that included the overarching pattern the initial code as applicable. In doing so I was able to keep track of the initial and pattern codes and participants who said them in one document that I was then able to organize and analyze in various ways using the sorting functions in Excel.

With the seven concept tables created in Excel, I started moving each passage I deemed relevant to this study from the transcript in Microsoft Word to a row in a Microsoft Excel workbook, or concept table, noting which transcript the passage was from in a column. I continued to work on data analysis for one participant at a time, moving all passages from one participant that pertained to the case to their Excel concept table before beginning the process with the next participant. I focused on moving concepts to the Excel table related to the study including experiences related to being a FGCS (e.g., college search process, financial barriers), the student experience at LAC and within the IFG program, sense of belonging, community, and relationships. I did not move information to the Excel document that was irrelevant to this case study; for example, one participant discussed at length her partner's experience with COVID-19. While I moved the first few passages to her concept table to note how her fall semester had been affected initially when her partner was diagnosed with COVID-19, the majority of that passage was her expressing her concerns and care for her partner. Since the majority of the passage did not focused on LAC, the IFG program, or the student's experience on campus or with belonging I did not move to the participant's full passage to the Excel document. At the end of this process, each participant had one final concept table in Microsoft Excel from which I worked on the first- and second-cycle within-case coding.

First-Cycle Coding. With the embedded unit data that was relevant to the case ready for coding in each participants' concept table, I began my two-step coding process for within-case analysis. I used a first- and second-cycle coding process to organize the data for each embedded unit. During first-cycle coding I utilized initial coding. Initial (or

open) coding applies to a wide variety of qualitative studies (Saldaña, 2016), and refers to the process that breaks down “qualitative data into discrete paths, closely examines them, and compares them for similarities and differences” (Strauss & Corbin, as cited in Saldaña, 2016, p. 115). Although Charmaz, as discussed in Saldaña (2016), recommended the use of initial coding for transcripts but not necessarily for field notes, I used initial coding for both interview and observation data. Since I coded the concept tables—which included data from the interview transcripts and observation notes—I was able to successfully utilize initial coding on all participant level data as I was not directly coding my field notes.

To complete the initial coding phase, I read each concept table line by line, coding sentences or passages by the main point, including, but not limited to, experiences related to being a FGCS, experiences at LAC, experiences with the IFG program, belonging, development, and background information. Each row received one initial code in the “initial code” column. While in my initial coding phase, if multiple concepts existed in a particular sentence or passage, I applied multiple initial codes to the same passage to account for the various concepts included in that passage. To do so I copied that row two or three times as needed and assigned each row a different initial code to represent the portion of the passage that fit the code. Consistent with Saldaña’s (2016) recommendation, I kept in mind that codes in this process had to remain “tentative and provisional” and may be “reworded as analysis progresses” (p. 115). Allowing for rewording was helpful as I searched for similarities and differences throughout each participants’ concept table as I was able to adjust codes as needed to best represent the experiences of the embedded units.

Once I had completed first-cycle coding for each participant I reviewed the complete list of tentative codes and reworded (Saldaña, 2016) any that were synonyms to reduce the number of initial codes. For example, I had codes for “felt community in the IFG program” and “recognized community in the IFG program.” After reviewing the passages associated with the two codes it was evident that the codes identifying the same concept although used different phrases. To adjust, I chose one phrase that best represented all of the passages included in the initial codes I identified as indistinguishable. I repeated this process for any duplicative codes to better reflect the similarities and differences in the data and streamline the initial codes before moving on to second-cycle coding.

Second-Cycle Coding. Having completed first-round coding for each embedded unit to develop initial codes, I proceeded to the second-cycle of coding: pattern coding. Pattern coding provides “a way of grouping those summaries into a smaller number of categories, themes, or concepts... explanatory of inferential codes, ones that identify an emergent theme, configuration, or explanation” (Saldaña, 2016, p. 236). Pattern coding is recommended for “condensing large amounts of data into a smaller number of analytic units” and/or “laying the groundwork for cross-case analysis by generating common themes and directional processes” (Saldaña, 2016, p. 236). With various data forms, including observation and transcript data, combined into the concept tables, the large amount of data I had to read, review, and code lent itself to pattern coding. In addition, pattern coding is strongly recommended as the step prior to the subsequent data analysis phase of cross-case analysis.

I began the process of pattern coding by reviewing all initial codes and associated participant statements in the aforementioned concept tables used for first-round coding. As I completed this review, I continued my jottings and analytic memoing (Saldaña, 2016), focusing on patterns across participants as well as similarities and differences. Before beginning the code sorting process, I made a copy of each participants' concept table (Excel Workbook) as a backup. I also copied and pasted the first-cycle coding worksheet onto a separate tab in Excel to ensure I had a master copy of the data on the first tab to review if needed, while naming the second tab "patterns" which I used for second-cycle coding.

With the initial coding portion complete and a new tab for pattern coding made in each participant's concept table, I began organizing the data in each concept table by theme. Similar to how Stake (2006) recommended researchers "sort paper strips" (p. 52) to organize findings, I organized sentences and paragraphs that had similar topics within the concept table by referring to the initial code column. I used Microsoft Excel's sorting feature to sort the rows by the "initial code" column, which effectively reorganized the concept table alphabetically by code. I then manually moved passages together by cutting and pasting to ensure that all related codes were located near one another. For example, codes such as "academic success" and "first-year success" were not initially sorted together but instead were sorted alphabetically. As such, it was necessary for me to manually move a few rows together so similar "initial codes" were located together. Likewise, I included all contradictory data related to the same concept in the section as well. For example, most participants described the IFG program as helping them be successful in their first year, while two participants disliked how "basic" the first-year

success skills portion of the program felt. I coded these all as “first-year success” as they were related in concept although some were positive reflections on the IFG program while others were negative. If a sentence or paragraph fit into multiple rows, I copied and pasted the same data into all applicable rows. I reviewed the codes in an ongoing manner, moving initial codes around until all codes were included in one of the clusters. I assigned each cluster a name that summarized the pattern, thus developing a “statement that describes the major theme, a pattern of action, a network of interrelationships, or a theoretical construct from the data” (Saldaña, 2016, p. 238). In this way I combined similar data from all three data collection phases—two interviews as well as observations—into one succinct document per embedded unit, with rows based on similar concepts. I then used the codes developed from the pattern coding phase in the subsequent cross-case analysis phase.

Cross-case (Phenomenon Level) Analysis

Embedded unit data analysis concluded with cross-case analysis. The purpose of cross-case analysis was to identify the themes that existed across the participants with the purpose of better understanding the phenomenon (Stake, 2006). While within-case analysis allowed me to better understand each participant, during the cross-case analysis phase I endeavored to combine the experiences and development of participants to better understand how the students’ participation in the IFG student success program fostered sense of belonging, if at all. Thus, cross-case analysis also served as the phenomenon level analysis as the focus of this phase was on the phenomenon of sense of belonging of IFG program participants as a result of their participation in a first-generation focused student success program.

To analyze data across the embedded units, I started by ensuring that each Excel document created through initial and pattern coding had a column with the pseudonym of the associated embedded units, line numbers, original initial codes from the first-cycle coding phase, and a column for the pattern code developed during second-cycle coding. I saved a copy of each embedded units' Excel workbook to ensure I had a back-up of the first- and second-cycle coding document. I then created one new Excel workbook to be used for cross-case coding and created multiple tabs onto which I would sort the pattern codes from the seven embedded unit workbooks. After reviewing the pattern codes among the embedded unit concept tables, I developed overarching themes across the participants and named each tab in the cross-case coding workbook as such. For example, each participant discussed "sense of community" when participating in the IFG program so I named one tab in the cross-case workbook "community." I then physically sorted the codes (Stake, 2006) by manually moving each group of pattern codes from the embedded unit concept tables to the related tab in the cross-case Excel workbook. As I did with initial and pattern coding, I kept similar and opposite concepts together provided they referenced the same theme. I continued reviewing and rearranging the strips until all pattern codes were included in a theme. Lastly, I reviewed the initial codes within each theme in the cross-case Excel workbook to ensure that both the initial codes and pattern codes suggested similarities in relation to the theme. The result was multiple tabs in the cross-case Excel document that represented themes I constructed after analyzing the data collected from the embedded units by following the previously described steps for within-case and cross-case.

Trustworthiness

The majority of my study involved one primary investigator (me) which could be a weakness with regard to my study's triangulation (Creswell & Poth, 2019). Regardless of being the only researcher, I endeavored to achieve the three (or more) points of confirmation suggested by Stake (2006) with regard to triangulation of the data.

Triangulation is critical as it

is an effort to assure that the right information and interpretations have been obtained. Triangulation is expected to lead to either confirmation that the observation means what we think it means or to ideas about how the observation would be interpreted differently by different people. (Stake, 2006, pp. 35-36)

To ensure confirmation of the data, I incorporated multiple strategies for triangulation into my study, including using a combination of methods of data collection—documents, interviews, and observations—and analysis (Bowen, 2009; Yin, 2018), seeking multiple perspectives, prolonged engagement in the field, member checking, and using rich, thick descriptions (Creswell, 2012).

I regularly relied on ongoing peer debriefing throughout the process, both formally and informally. To do so, I consulted with the program director on multiple occasions as well as a colleague who was also a first-generation student during her undergraduate experience to benefit from multiple perspectives (Stake, 2006). This included me asking the IFG program director about the data I planned to collect—documents, interviews, and observations—and if she had any recommendations for additional documents, interview questions, etc. One recommendation she provided early on was that I make sure to review the “swag bag” (Carballo, 2020) that the program was

handing out during first-generation celebration week and included IFG program branded items focused on celebrating being a first-generation student and promoting student success. I also asked the director about her thoughts and observations related to the phenomenon and embedded units, as well as how I was perceiving the participants' experiences and sense of belonging, or lack thereof.

I also solicited participant feedback through the use of member checking. Member checking allowed me to confirm the accuracy of my notes, interpretations, and findings with the participants (Stake, 2006). To do so, I sent each participant their typed participant profile prior to when I began coding. The participant profiles incorporated primarily demographic information from the participants' demographic survey, as well as key information gathered from interviews and observations that was important to better understand that particular participant. For example, one student immigrated to the United States as a child which affected her pre-college experiences and college search process. This was included in her profile to better understand her family situation as it was unique compared to the other participants in this study. By sharing the profiles with the participants, I allowed the participants to review and provide feedback on my observations and interpretations to verify that I was correctly understanding and interpreting what I heard and observed. After receiving feedback on the member checks, I moved forward with my first- and second-cycle coding process as described above. After finalizing my coding and drafting my findings, I sent each participant a draft of my findings section to allow them to provide feedback on how I was interpreting and analyzing the data I collected from documents, observations, and interviews.

Throughout the process I also reflected on my own positionality and bias as it related to the study. Stake (2006) stated that “it is an ethical responsibility for us as case researchers to identify affiliations and ideological commitments that might influence our interpretations—not only for the contracting parties but for the readers of reports, and, of course, for ourselves” (p. 87). Likewise, Creswell and Poth (2019) asserted that it is important to consider the lens of the researcher. I made a conscious effort to practice reflexivity throughout the process. For example, I am not a first-generation college student, and therefore needed to be mindful of the possibility of different experiences and perceptions between me and my participants. However, as an experienced higher education practitioner, I have interacted with this population frequently and have become familiar with some of their most common challenges, experiences, and ways of belonging or feeling isolated. I reflected on these components, as well as the data collected, throughout the process in my memos.

Chapter Summary

This chapter focused on the purpose of this study, the research questions that guided this study, and the methodology I followed to collect and analyze the data for this case study. Prior to starting data collection and analysis, I first reviewed my positionality as a researcher as well as my perspective as a researcher. I explained the conceptual framework—sense of belonging (Strayhorn, 2012)—that guided this case study. I then provided justification for why a qualitative case study methodology was most appropriate for this study. Next, I described the research design, including the case and use of embedded units as well as how they will be selected. I then described the data collection and data analysis process, including a detailed description of the steps I followed for

within-case analysis, which included first-cycle (initial coding) and second-cycle (pattern coding), followed by cross-case analysis. Finally, I concluded with a discussion of how I worked to ensure trustworthiness throughout the research process.

Chapter 4: Findings

The purpose of this study was to explore if and how a first-generation focused student success program fostered sense of belonging in order to understand how institutional practices and policies support the success of first-generation college students (FGCS). Through this study I intended to understand how first-generation students experienced a first-generation focused student success program, and—using Strayhorn’s (2012) sense of belonging as the theoretical framework—how the success program promoted sense of belonging, if at all. The following research questions guided this study:

1. How do first-generation students experience an intervention program?
2. How do first-generation students experience sense of belonging when participating in an intervention program, if at all?
3. How can institutional policies and practices, in the form of a first-generation intervention program, support the sense of belonging of first-generation students, if at all?
 - A. What program practices (e.g., events, workshops) best support sense of sense of belonging of first-generation students?
 - B. How do administrators of the intervention program foster sense of belonging, if at all?

For this qualitative study, I collected a substantial amount of data through document collection, observations, and interviews with the program director and seven participants. After extensive data collection and analysis as described in Chapter 3, I present the results of my data analysis in this chapter in order of level: institution, case,

and participant which includes within-participant and cross-participant data analysis. This chapter begins by summarizing the findings related to the institution, Liberal Arts College (LAC, pseudonym), which provides an important foundation on which to better understand the case and the experiences of the embedded units—seven IFG program participants. Next, I provide the findings related to the case, the I Am First-Gen program (IFG program, pseudonym). I then focus on the main findings of the study: the experiences of the participants within the IFG program. I first provide a short profile of each participant to allow the reader to become familiar with each participant in the study, followed by the main findings which highlights the seven participants' experiences at LAC and within the IFG program. Furthermore, the findings section discusses the participants' sense of belonging both within the program and on campus as a result of their participation in the IFG program.

Institutional Context

To better understand the results of this study, it is necessary to first understand the institution at which the case—the I am First-Gen program (IFG program)—is facilitated. The case is facilitated at Liberal Arts College (LAC), a small, private, four-year institution in the Midwest. The College was founded in 1861 and is affiliated with the Methodist church but welcomes students of all faiths. According to LAC's "At a Glance" website, the undergraduate population is made up of 54% women and 46% male students. Of the college's almost 3,000 students, over 90% are local from within the state. Out-of-state students, who make up just under 10% of the overall student population, come from 27 different states while the international student population represents 32 different countries.

LAC is located in a suburb of a large Midwest city. While the metropolitan area is diverse, the city LAC is located within is an affluent, predominately White area. The college is also a predominately White institution with only 24% of the student population identifying as minority students. As a predominately White institution located in a predominately White area, the college has been challenged recently by issues of diversity. Over the last year the college has endeavored to change the campus culture to better support and value its diverse members through an explicit diversity, equity, and inclusion plan. Campus communications—predominately from the President—available on the main website identify past and present diversity issues as well as current initiatives to improve the campus climate.

LAC costs approximately \$50,000 for tuition and room and board. However, the College's webpage indicates that over 95% of students receive financial aid—both need-based and merit-based—to help make the cost more affordable, with the average financial aid package covering almost \$25,000 of the total expenses ("Regional Midwest Universities," 2020). Approximately 60% of the student population resides on campus with the remaining 40% or so commuting from nearby cities. Almost 70% of students at LAC are first-time students who start in their first-year at LAC, while just over 30% of the students transfer to LAC from another institution. Academically, the college boasts over 65 undergraduate and master's level academic programs taught by approximately 150 full-time faculty and more than 30 part-time faculty. LAC has a reputation for producing students with a strong foundation in the liberal arts paired with majors focusing on business; education and health; arts and letters; and, science, technology, engineering and mathematics (STEM). The College has recently introduced and seen

tremendous growth in the engineering and health science fields as well (“The College,” 2020). LAC’s academic calendar consisted of trimesters through spring of 2019 when the College switched to 16-week semesters starting in fall of 2019. Currently, juniors and seniors who started at LAC as first-year students would have attended one or two years on trimesters before switching to semesters. Of further importance, in response to the COVID-19 pandemic, the College again adjusted its academic calendar, shifting to 14-week semesters for the 2020-2021 academic year.

Students are encouraged to be involved and engaged on campus, with the LAC website promoting student involvement through faculty interaction, research, athletics, student organizations, and international engagement on- and off-campus. The college offers 26 intercollegiate athletic teams that compete at the Division III level, the largest athletic department in the school’s conference. LAC’s athletic rosters include over 500 student-athletes, or approximately 20% of the total undergraduate student population. Other types of involvement promoted by LAC include 75+ student organizations, on-campus employment opportunities including work study options, recreational activities, service, and national and international travel opportunities.

First-generation students make up approximately 40% of LAC’s student population. The institution, according to the IFG Program website, defines FGCS as “neither parent has completed a four-year degree.” Throughout the LAC website, admissions materials, and official social media accounts, current FGCS are highlighted and promoted along with their successes at LAC and as alumni of the college. IFG related materials also encourage prospective FGCS to connect with the college and the IFG program. For example, the Office of Admission Visit-Day webpage includes the option to

attend a first-generation student specific visit day, during which FGCS are encouraged to visit campus with other first-generation students with the hopes of helping students connect to one another as well as faculty and staff, and ultimately recruiting first-generation students to join the “more than 40%” of students who are FGCS” (First-Generation Visit Days, 2020). Admissions materials also emphasize to the support for first-generation students available at LAC. Admissions and marketing materials promote the IFG program as well as the large first-generation student population on campus; moreover, they highlight the numerous faculty and staff members who were first-generation during their undergraduate experience as additional resources for first-generation students as well.

Case Context

This section provides an overview of the I Am First-Generation program (IFG program), which provides support to first-generation college students (FGCS) at Liberal Arts College (LAC). While highlighting that 40 percent—or approximately 1,000 undergraduate students—of the college’s undergraduate population is first-generation, the IFG program director explained that the IFG program is a comprehensive program that aims to help first-generation students “have a really good experience while they’re in college. To have it be a fun but productive experience with the students’ eyes on what they want to do after graduation.” The IFG program website encourages students to “embrace being a first-generation college student!” from the first day they arrive on campus through graduation day. To do so, the IFG program website as well as other college materials encourages each first-generation student to consider participating in the IFG program. Over 500 first-generation students participate in the IFG program, which

accounts for about half of the overall first-generation population on campus. This section provides an overview of the program history, the intended outcomes of the IFG program, and a review of the program curriculum which is intentionally designed to meet the program outcomes.

Program History

The program director provided a detailed overview of the IFG program history at LAC as she explained that first-generation success programming at LAC started a decade ago. The program director launched the college's initial first-generation focused success program in the 2010-2011 academic year for first-generation students in her academic department. During this time, first-generation students met with the program director regularly for mentoring and attended workshops to help them better understand and navigate the expectations of the department. In the fall of 2012, LAC started collecting information on first-generation college students through the admission application with approximately 40% of students indicating first-generation status since the question was added. With information on the large percentage of first-generation students, the division of student affairs began exploring ways to expand the initial first-generation program to include all first-generation students.

As the 2014-2015 academic year approached, LAC's vice president for student affairs asked the program director if she would develop a campus-wide first-generation student success program for students of all majors. At this time, the program director stepped down from her faculty role and accepted a position within the Dean of Students Office as full-time administrator. In this position, she coordinated the pilot year of the IFG program in the 2014-2015 academic year, during which the program primarily

focused on offering workshops on Fridays for all first-generation students on campus. In the following years, additional components and programmatic structure were added that more closely mirror the current program. Starting in Fall of 2015, the program structure developed to include specific programming for each year in school, as well as for first-year transfer students. This curriculum is described in more detail at a subsequent point in this section. In addition, the program started offering a renewable “delayed scholarship” for participation to be awarded to participants the year after they met program expectations. First-time, first-year students participating in the IFG program are eligible to receive the scholarship in their second, third, and fourth year provided they attend the required number of workshops each year. Transfer students are eligible to receive the scholarship in the year following their initial enrollment at LAC, and for any subsequent years in which they attend LAC. In addition to the programming specific to each year, the program director developed a student ambassador program within the IFG program. The student ambassador portion of the IFG program encouraged additional peer-to-peer interaction as continuing IFG participants applied, interviewed, and were selected to serve as mentors for first-year IFG participants.

Most recently, the IFG program has once again expanded its program offerings to incorporate major-specific sub-programs. Through the IFG program, academic departments on campus can apply to receive grant funding to develop major or department-specific IFG sub-programs. The IFG program piloted this model with a few majors on campus, including LAC’s business majors. Two faculty members from the college of business met with first-generation students who were pursuing business majors to discuss academic and career development topics. The program director expressed great

excitement about the major-specific groups as they help first-generation students connect directly with faculty in their academic department. Oftentimes the faculty members were also first-generation students themselves, which allowed them to connect with the participants on an additional level as they were more likely to have shared common experiences during their undergraduate years. The IFG program received grant money to provide food and some additional funding for the major-specific workshops, further supporting the success of the academically-oriented sub-groups.

Purpose and Outcomes

The institution's main purpose in developing the program was to increase student success, as determined by increased graduation and persistence rates. However, according to documents collected for this study as well as my interview with the IFG program director, in order to achieve student success, the IFG program endeavors to achieve two main outcomes: building community among first-generation students and reducing barriers to success often experienced by FGCS. Community building initiatives take place at each workshop and event and occur among different members of campus: peers, faculty, staff, IFG program administrators, and student ambassadors. Likewise, IFG program workshops include information or interactive sessions on skill development, career development, and financial understanding which help to foster success among FGCS.

Community Building

The IFG program promotes itself as a way for first-generation students to build relationships. A review of numerous websites, admissions materials, handouts, and social media posts directly supported the IFG program's goal of building community among

first-generation students at LAC. For example, the IFG program website explains that the program “creates a community among our first-generation students, faculty, and staff.” Moreover, the LAC and IFG program social media accounts share student profiles throughout the academic year highlighting the “sense of community” felt by first-generation students participating in the IFG program. One Instagram post quoted an IFG program participant, stating “As a transfer student, the IFG program community was so welcoming and helped me feel like I belonged.” When asked about the main purpose of the IFG program at LAC, the program director immediately responded that the students “benefited on many levels from the community” and “students cannot feel alone on the journey when you walk into these workshops and there’s 50 other first-gen students... who are the same as you.”

To build such community, the program is purposefully designed to help participants create connections with various members of the campus community. The program introduces first-generation students to other first-generation peers, as well as to the IFG program staff. In addition, participants meet faculty and staff—often who were first-generation themselves—from various campus departments who are invited to attend IFG program events. Participants also benefit from being paired with upper class IFG participants who serve as student ambassadors, acting as mentors for the first-year, first-generation students. According to the program director, each of these components “provides a community—a network” for first-generation students.

Besides the programming and structured interactions with peers, faculty, and staff through the IFG program, all IFG program participants as well as first-generation faculty and staff receive a first-generation student t-shirt or sweatshirt to wear throughout the

year. Program participants also receive a variety of other “swag” items including a program-branded planner, hat, pen, stickers, and—this year in response to the pandemic—a program-branded face mask and hand sanitizer. In doing so, first-generation students can easily identify other members of the first-generation community around campus. The following section reviews the relationships—peer, IFG program staff, faculty, staff, and student ambassadors—supported by the IFG program in an effort to build community among first-generation students.

Peers. The IFG program endeavors to create a community among first-generation students. To foster engagement among participants, each workshop includes assigned seating to reduce the stress students may feel if they do not know other participants. The program director explained: “we do assigned seating at every event so nobody feels like—Oh, everybody else is sitting with their friends and I don’t know anybody here. So at every event we do adhesive name tags with assigned seating.” Such assigned seating also ensures students will sit with different peer groups at each workshop, thereby meeting new peers and building their network. Once students are seated with their assigned group, the IFG program administrators provide time for conversation. The IFG program staff also offers conversation prompts to use if needed, such as “if you could eat dinner with one celebrity who would it be?” or “what’s your favorite class, and why?” By providing conversation starters the program encourages peers and ambassadors to engage with one another. Participants are also required to keep their cell phones away for the duration of the program which further encourages participants to interact with the peers and ambassadors assigned to their table. The IFG website and social media accounts further support the importance of peer-to-peer interactions, with student testimonials

describing the IFG program leading to friends, fellowship, and community. Testimonials on the program website from program participants state that they “feel as though there is a community between all the students that are first generation” while others have “met people who have become great friends.”

IFG Program Staff. The program director provided helpful information about the IFG program staff during our interview, explaining that the IFG program staff includes the program director, assistant director, and two graduate assistants. The program director and assistant director are full time administrators within the division of student affairs. In addition to the IFG program, they also help coordinate initiatives related to Veteran and Reserve Officer Training Corps (ROTC) students as well as transfer students. While the program director has been with the institution for 23 years and in her current role for six years, the assistant director has been in her role for approximately two years, and prior served as the graduate assistant for the program before moving to full-time. The two graduate assistants work with the IFG program in a part-time capacity while earning their master’s degrees. While the director and assistant director attend the majority of the IFG program workshops, the graduate assistants only attend certain workshops based on their availability and assigned responsibilities.

Regardless of which staff members are attending, at all workshops the IFG program staff aim to interact with each IFG participant who attends by greeting each student by name and asking how the student is doing. Additionally, after each workshop, the IFG program staff members continue to interact with students and are available for questions, advice, or general conversation.

All four staff members have offices in the main administrative building; therefore, IFG program staff members have offices which are located centrally on LAC's campus and are purposefully located within or near the office of student affairs. In addition, the program director and assistant director have offices located adjacent to the first-generation resource center. The program staff spends time staffing the first-generation resource center. During their time in the resource center the IFG staff members answer questions and connect with first-generation students who stop by. In response to the pandemic, the IFG program staff purchased an outdoor tent with program branding to account for the first-generation resource center being closed due to social distancing requirements. The IFG program staff set up "the tent" as participants referred to is on the lawn outside the college's main administrative building to engage with students in an outdoor and socially distant manner throughout the year to ensure safety and remain in compliance with the College's COVID-19 protocols.

Faculty and Staff. The IFG program incorporates faculty and staff at workshops and events. The IFG program prioritizes inviting faculty and staff members who were themselves first-generation students during their undergraduate time as they share the common connection of first-generation student experiences. The program director explained that when attending a workshop, the faculty and staff members are asked to share their experiences as a first-generation students, as well as a time something did not go right and how they navigated the challenge. The faculty and staff members also have the opportunity to promote their department and opportunities for involvement. For example, the director of career development and the faculty coordinator for undergraduate research are regular contributors to the program. Having been first-

generation students themselves, both have personal experiences to share with the group as well as information about ways they can be supportive in their current roles at LAC. Beyond the faculty and staff who attend and interact with participants, the IFG program also maintains a list of all faculty and staff members who were first-generation students themselves. This list is shared with program participants at workshops and on the program website. Faculty and staff who were first-generation are also given an IFG program t-shirt and sweatshirt, and receive a placard indicating they are first-generation to place by their name plate at their office door to further build the community among first-generation students and to highlight the successes of former first-generation students as well.

IFG Student Ambassadors. The IFG student ambassadors are upper class first-generation students who have completed one or more years in the IFG program. Returning IFG participants can apply and interview for volunteer positions as program ambassadors; those selected serve as leaders and mentors to first-year students in the IFG program. The program director explained that the program connects the first-year participants “to upper class first-generation student leaders and so it’s like a peer mentoring program of sorts.” The IFG program website and materials indicate the ambassadors serve as table hosts during first-year workshops to help guide conversation, support first-year participants in between workshops, and answer any questions the participants may have. Over 60 students serve as IFG program ambassadors each year. In addition to their peer mentor role, the student ambassadors also receive leadership development and training from the IFG program staff members to help them develop

personally and provide strong mentorship to the first-year, first-generation program participants they are assigned to work with.

Providing Support

Along with building community, the IFG program aims to provide support to FGCS with the goal of improving student success. Although the IFG staff try to avoid a deficit-based approach to working with FGCS, the IFG staff along with the institution recognize that first-generation students often face additional barriers—such as those discussed in Chapter 2 of this study—to being successful. My interview with the program director, observations, and review of documents established that the IFG program provides support for FGCS as they navigate such challenges in two key ways. First, workshops are designed to provide resources for students to develop success skills and connect students with campus resources designed to foster student success such as tutoring and the Writing Center. Second, the program offers a scholarship for participation to assist with financial need; also related to financial management, the program provides access to important financial aid and scholarship information, as well as offering programming on financial literacy and planning to further address the financial challenges often experienced by first-generation students.

Student Success Resources. According to the IFG program website, IFG program workshops include topics pertaining to college success such as time management, preparing for finals, managing stress, utilizing campus resources, and working with your academic advisor. The program director reiterated the importance of student success components of the IFG program throughout our interview. Repeatedly, the program director described the IFG program as “a guide on the side,” explaining that

the participants benefit from the “insider knowledge” the program offers and having a “point of contact for students to go with questions.” The program director also explained that the first year of programming is designed to be more “intrusive” and structured to help first-year students successfully transition to the institution and develop academic success skills. Throughout the first year the IFG program administrators promote help seeking and encourage the first-generation participants to ask questions to the IFG staff as well as to faculty and staff on campus. Subsequent years are less structured, have fewer workshops, and focus more on involvement, career development, and financial literacy. As students near graduation, the IFG program offers workshops to prepare for success after graduation including résumé and internship workshops, financial literacy, and sessions on how to apply to graduate school.

To further promote student academic success the IFG program promotes Alpha Alpha Alpha (Tri Alpha), the national honors society for first-generation students. All first-generation students who have completed three semesters of college and have a cumulative grade point average of 3.2 or above are eligible for Tri Alpha and are inducted in April on the college’s Honor’s Day. While observing IFG program workshops, interactions between IFG staff members and participants at “the tent,” and the first-generation celebration week, I observed the program administrators discuss Tri Alpha with participants on numerous occasions. The IFG staff reminded students of the honors society and reiterated the grade point average requirements, explaining that a 3.2 is between a B and B+ average to students as needed. In addition, numerous students stopped by with Tri Alpha apparel on including t-shirts and sweatshirts and a few of the

seven participants discussed feeling accomplished to have been inducted into Tri Alpha and proud to wear their Tri Alpha apparel around campus.

Financial Resources. Along with the development of social and academic success skills, the IFG program provides additional support to participants by providing financial resources. The IFG program offers a scholarship incentive for participating, which serves two purposes: encouraging participation and providing financial support. The program offers a renewable \$1,000 scholarship beginning in students' sophomore year provided they meet program attendance requirements and earn a 2.0 GPA. To earn the scholarship, FGCS must attend and participate in three of four workshops each semester for a total of six workshops per academic year. The IFG program staff remind students of the attendance requirements regularly by following up with participants who missed a workshop to encourage attendance at the remaining sessions that semester. The program director as well as most of the participants noted the importance of the scholarship in encouraging FGCS participation in the program, with the program director stating that while "we don't think [the \$1,000] is the value of the program, but it gets some people in the door for the first time, because of the scholarship." Multiple students also described the scholarship as a motivating factor in deciding to join the program. One participant in this study explained that "the program had mentioned the scholarship, and finances were a really big thing when picking LAC and so just seeing that, even the small amount of money as an incentive was enough to apply for the IFG program" (Jacob). In this way, the scholarship encourages FGCS to participate in the program while also offering financial assistance, which is a common barrier to success for FGCS.

Along with the scholarship, the program provides important financial aid and scholarship information throughout the year. In the October sessions, the director of financial aid attended each IFG program workshop to discuss the importance of filling out the Free Application for Federal Student Aid (FAFSA) as well as the deadline. He also discussed that his office—the Office of Financial Aid—was available to help students fill out their FAFSA if needed. He noted that he was also a first-generation student so understood the financial concerns of the students, and provided his contact information so students could contact him directly if they needed additional support. Throughout the year the program also offers information on scholarships, campus employment, and other opportunities for funding to further support the financial needs of the FGCS participating in the program. The program director encourages the participants to explore on-campus employment opportunities as campus offices and departments tend to be more understanding of the scheduling needs of college students and often have work study opportunities to support students from low-income families.

Program Curriculum

The IFG program offers one to two interactive workshops per month, most often including a free meal. First-generation students are encouraged to attend all workshops although they only need to attend 75 percent of the workshops each semester to meet the attendance requirements of the first-generation scholarship. The program is designed to be more structured and time intensive during the first-year at LAC and in the IFG program, with fewer workshops and commitments during subsequent years in the program. The program director explained “we’re here as much as [the students] need us. So sometimes by junior and senior year students are less involved and we’re—as long as

they're doing well—that's totally fine with us.” The IFG program website echoes these sentiments, explaining that the first-year programs are structured and focused on student success skills while the upper-class workshops are focused on “checking in each year and providing more and more tools for success as you go.” The following section provides a brief overview of the five cohorts of IFG participants in a given year, including first-time, first-year students, transfer students, sophomores, juniors, and seniors.

First-Time, First-Year Students

The main entry point into the IFG program is through the workshops geared toward first-time, first-year FGCS. Students who identified as FGCS on the admissions application are informed of the IFG program and the available workshops via email over the summer and in early fall. Such emails encourage FGCS to join the IFG program and attend the first workshop in fall semester. Workshops for first-year students are held twice a month on the first and third Friday of each month, which means the first-year student cohort meets twice as often as the other cohorts. On the first and third Fridays of each month, multiple workshops are available throughout the day to allow participants to select a workshop that fits around their academic and co-curricular schedules. Each first-year workshop emphasizes peer and faculty connections, with an upper-class student ambassador or two assigned to each table to guide conversation and answer questions. Faculty members who were first-generation students themselves also attend these workshops to share their experiences as first-generation undergraduate students. Each workshop includes an interactive presentation related to a student success skill; topics are scheduled chronologically throughout the academic year and include time management,

campus opportunities, preparing for finals, stress management, classroom etiquette, registering for classes, and goal setting/preparing to go home.

Transfer Students

First-generation students who transfer to LAC are invited to transfer-specific IFG program workshops during their first semester at the college. The series of four workshops focuses on the transition process for transfer students, emphasizing the importance of the program in introducing new first-generation transfer students to one another to build community and develop relationships with peers. Similar to the first-time, first-year programming, the transfer-specific IFG program includes student ambassadors who also transferred to LAC and are FGCS. These student leaders work to help facilitate conversation, connect with participants, and aid in the transition of the new first-generation transfer student. Faculty who were first-generation are also invited to interact with the participants, often including faculty who were also transfer students and FGCS themselves when available.

Sophomore Year

Sophomore workshops differ from the first-year and transfer-student workshops. In place of focusing emphasizing the development of student success skills, the sophomore year programming focuses on building relationships with faculty, staff, and peers. The program director explained that “there’s less content sophomore year, but there’s always a few little things like the study abroad fair is now, or you need to talk to your advisor about courses, or you should be getting an email from academic affairs.” In this way, the sophomore year programming reinforces information available on campus

while providing more space for participants to develop relationships and strengthen their community within the IFG program and on campus.

The sophomore IFG workshops are one-hour dinners during which faculty or staff member who were first-generation students themselves acts as a “table host” for eight or nine sophomores. The table host is asked to share their experiences from sophomore year of college as a first-generation student, including a time they failed at something and how they navigated those challenges to help demonstrate to participants that everyone struggles and that you can overcome challenges. A short interactive workshop follows the meal and focuses on helping the participants become more involved on campus in order to make the most of their college experience. At the end of the sophomore year, the IFG program celebrates being half-way to graduation. According to the program website and handouts, the program offers “a ‘Halfway to Graduation Celebration’ with half-sandwiches, half cookies and Arnold Palmers, and each attendee receives a ‘Halfway There’ half-mug.”

Junior Year

Similar to the sophomore year program, the IFG program offers juniors one workshop per month. These workshops are held during the day at various times to work around course and co-curricular schedules. Junior year workshops focus primarily on career development topics including planning for the summer between junior and senior year, setting oneself apart from other job candidates, and managing imposter syndrome. At each of the junior year workshops I observed, the IFG staff members reiterated the importance of taking advantage of the summer after junior year to build participants’ résumés through internships, undergraduate research, or service opportunities. To do so,

the IFG staff encourages juniors to attend the internship fair and the job fair in the fall; the program director strongly encourages juniors to begin planning for the summer internship or research opportunity early in fall semester. The program director emphasized this in our September interview, saying:

I'm working with the juniors now on you need to go to all the career fairs this fall for your summer internship because it's typically when you're going to look for a part time summer job even if you might think you would do it in April or May.

The program director recognized that the first-generation students were often unaware they needed to start planning for summer work experiences so many months in advance, so the IFG junior year programming promotes planning for the following summer starting in September. Additionally, workshops focus on preparing for interviews, updating participants' résumés, and "making yourself distinctive and interesting by building your skills and experiences" (IFG Website). For example, during my observation of the junior year program, the participants were asked to brainstorm what they would say in an interview when asked "to tell me about yourself" or "is there anything else you would like us to know?" The workshops culminated in a discussion of the career readiness competencies employers are looking for such as teamwork, critical thinking, and intercultural understanding.

Senior Year

In their final year in the IFG program, participants attend one workshop per month focusing on career development or graduate school planning, life after college, and financial literacy. The program director explained that the senior year workshops are intended to help first-generation students prepare for life and success after graduation.

One additional way the program fosters career readiness is through the alumni academy, a one-day conference-like event during which alumni of the IFG program are invited to present on their current career and discuss their path to success with the program participants. This newer initiative helps the senior IFG participants build their network and better understand different career opportunities. At the end of senior year, the IFG program culminates with the pinning ceremony. According to the IFG website, the ceremony is held the day before commencement with “each first-generation graduate ask[ing] a faculty or staff member who was an important part of his or her college journey to present the graduate with an IFG Program pin that will be worn at graduation.” The families of the IFG program participants are invited to attend and help celebrate this accomplishment.

Coronavirus Context

At the time of the proposal of this research project, the coronavirus pandemic (COVID-19) was in its first month in the United States. It was unclear at that time the extent to which COVID-19 would affect the case under review and, subsequently, the data collection process. As we now know, the COVID-19 pandemic tremendously affected the 2019-2020 academic year with institutions shifting to remote learning in a matter of hours; the pandemic continued to affect the 2020-2021 academic year as colleges continuously adjusted and responded to the pandemic worldwide, within their community, and on their campuses. LAC was no exception to these challenging circumstances. To better understand the context of both the institution and the case, this section provides a brief overview of how COVID-19 directly affected LAC as well as how the pandemic affected the IFG program.

COVID-19 and LAC

As the COVID-19 pandemic grew, LAC initiated a pandemic response committee to develop recommendations and coordinate responses based on new developments. In mid-March 2020, LAC shifted to fully remote learning for the remainder of the spring semester in response to the rise in COVID-19 cases. Subsequently, the institution canceled all remaining in-person events such as the College's annual "Springfest" celebration for students and all athletic practices and competitions. Events that could be conducted virtually shifted to an online format such as honors day and commencement. With courses moving to remote instruction, in-person events canceled, and the pandemic continuing to intensify, LAC also required all faculty and staff to work remotely until further notice and closed the residence halls to almost all students. Exceptions for on-campus housing were made for students who were unable to travel home, did not have a home to which they could return, or would not have the necessary technology to complete remote learning otherwise.

Throughout summer of 2020, institutional leadership developed numerous plans for fall 2020 related to how students might return to class, residents might return to the residence halls, and athletes might practice or compete. Summer 2020 orientation and course registration were facilitated online. Study abroad for fall 2020 was canceled midway through summer, with spring 2021 study abroad canceled later in the fall semester.

LAC typically emphasizes in-person course instruction, with few-to-no online courses during a "normal" year. However, in response to the pandemic, the 2020-2021 academic year at LAC included a variety of course modalities to accommodate students'

desire to reduce contact with others and meet the needs of students with health concerns. Course modes included in-person (the main method of instruction), blended (one or two days of instruction in person as a full class, one or two days of instruction facilitated online), split (part of the class attends in-person one day while the other part attends remotely to achieve required social distancing), online synchronous, and online asynchronous. In addition, the institution announced a policy that allowed students to request to complete their entire academic schedule remotely, regardless of the modality in which their courses were scheduled to be taught. The “Remote Learner” policy was available to students in both fall 2020 and spring 2021 to accommodate students who were not comfortable attending courses in-person.

In addition to the changes to course modalities, LAC adjusted all social gathering policies to require face masks to be worn at all times while indoors. Following state requirements, LAC also required everyone to wear facemasks when outside but unable to maintain six feet of distance. The College adjusted shared spaces to require social distancing within classrooms and common areas by limiting seating options and rearranging desks and tables to maintain a six-foot distance when possible. When it was not possible to achieve a six-foot distance, seats were marked as “do not sit” to ensure a six-foot distance was maintained. The College’s dining services shifted to provide all meals “to-go.” Athletic competitions were postponed for the fall semester; however, athletic teams were still able to practice but did so in small cohorts to reduce contacts and limit the possible spread of COVID-19 among teammates and coaches. A limited athletic competition schedule was announced for spring 2021 with contests to occur primarily within the conference.

To ensure a successful fall semester, LAC's COVID response team met regularly as a full committee, and sub-committees met throughout the week to review COVID testing procedures and results, numbers of cases, containment plans, contingency plans, and more. Random testing of the campus population—including students, faculty, and staff—was conducted on Tuesdays and Fridays and totaled 5% of the college's population each week throughout fall semester. In addition, athletes were tested multiple times per week following NCAA guidelines. As results were received, if someone tested positive for COVID-19, institutionally employed contact tracers would reach out to the person to discuss the need to isolate for 10-14 per Center for Disease Control recommendation. The contract tracers also worked with the contagious person to identify who they had been in contact with over the last few days, subsequently calling all recent contacts and informing them that they would need to quarantine. Residence life worked with all residents who tested positive for COVID-19 or who had been in contact with someone who tested positive to help coordinate their temporary move home or to a specific residence hall reserved for quarantine and isolation. Health permitting, students in quarantine or isolation were expected to continue attending class and complete coursework remotely.

COVID-19 and the IFG Program

As COVID-19 had affected all aspects of campus life, it was not surprising that the IFG program was also affected by the pandemic. The IFG program previously met indoors in a common gathering space, with 6-10 students seated at a table for food and fellowship. Such format would not have met the required COVID-19 social distancing and dining restrictions per campus and state policy. Instead, weather permitting, the

program administrators facilitated numerous IFG program sessions outside. First-year programs—for freshmen and transfer students—were held outside when weather permitted, with online options available for students who were not comfortable with the in-person format. For the in-person workshops held outdoors, students were assigned to small groups, with chairs spaced at least six feet apart and face masks required when not eating. The adjustment to meeting outdoors was important as it allowed for social interaction between peers, faculty, and staff that was not readily available in the online setting. Moreover, with most campus organizations and events held remotely in Fall 2020, the IFG program was one of the only campus activities that offered an in-person meeting option which was praised by numerous participants in this study. One participant noted that while their fall activities were primarily remote, they enjoyed attending the in-person IFG workshop where they “met in small groups outside of our [main administrative building] and we had lunch together like we normally do and had time to just like talk with one another, which was good” (Jacob). Another mentioned that while they had limited contact with others around campus, the in-person IFG option “was nice. It was good being out and I think they did it very well. The way they had it all set up. Yeah, it was done nicely. It was really good to see other people.” (Kia)

While the participants were grateful for the in-person meeting options, there were a few logistical challenges to the outdoor setting for program workshops. The program administrators were no longer able to utilize a projector and PowerPoint for talking points, workshops, and important announcements. Instead, program administrators rotated among the groups of students to make short announcements while students ate boxed lunches. While not a perfect set up as announcements were more difficult to hear

in the outdoor setting, the outdoor workshops allowed for in-person interaction the program director knew students “craved and needed.” Based on timing of events as well as weather, programming for juniors and seniors included a combination of in-person and online sessions during the day while sophomore programs were held remotely during the evenings.

Another adjustment for the IFG program came near the end of the fall 2020 semester during First-Gen Celebration Week. Throughout this week-long celebration, the IFG program staff members typically set up cocoa and coffee around campus for first-generation students and pass out IFG program apparel and promotional items to program participants including t-shirts, academic planners, pens, hats, and more. To adhere to the campus’s desire to reduce points of contact among students, faculty, and staff, the IFG program staff put together “swag bags” so students could pick up all branded items and apparel quickly. Since cookies and cocoa could not be handed out due to the pandemic protocol for dining services established by the state and College, the IFG program administrators included a packet of cocoa and a pack of cookies in each swag bag to continue the tradition.

Participants

The above sections provide an overview of the institution and case to gain a better understanding of the IFG program as well as LAC—the context in which the case exists. As described in Chapter 3, I interviewed the program director to gain a better understanding of the IFG program as well as the program director’s role within the case. With a better understanding of the case and context, this section provides an introduction to the embedded units—seven first-generation undergraduate students participating in the

IFG program at LAC during Fall 2020—including in this case study. I selected students to interview and observe who were participating in the IFG program for their second, third, or fourth year. In doing so, I aimed to better understand their experiences on campus and in the IFG program as well as their perceived sense of belonging, if at all. This section provides an introduction to each of the seven student participants in this study.

Participant Overview

As described in Chapter 3, I selected seven participants who were first-generation students participating in the IFG program. With the understanding that the 2020-2021 academic year would be different than any previous year due to the pandemic, I purposefully chose students who were participating in their second, third, or fourth year in the program, thereby ensuring students had experienced one or more years of IFG programming prior to the pandemic while also participating in the program during the 2020-2021 year. Using information from the demographic survey, I selected the participants to best represent the common barriers experienced by first-generation students described in the literature reviewed in Chapter 2. I selected students of varying socioeconomic statuses and levels of involvement on campus, as well as some participants who commuted to LAC and some who lived on campus. In addition, I also sought representation from participants in their second, third and fourth years, as well as students who had served as student ambassadors in the IFG program and others who had not. The racial and ethnic identities of the students who responded to the demographic survey, however, did not fully reflect the student population of LAC as no Black students participated in the study. Although the program director asked a few Black students if they were interested in participating in the study, those she identified indicated they were

too busy in Fall 2020 to add another responsibility to their already full plate. The participants for this study included five students who identified as White students, one who identified as Hispanic/Latinx, and one who identified as Asian/Pacific Islander. Apart from race and ethnicity, the majority of the demographic factors provided me the opportunity to select IFG participants with varying demographics including those who had varying numbers of years at LAC, levels of financial support, connection to the IFG program, and involvements on campus. Table 4.1 provides demographic information for the participants while the subsequent section provides a short introduction to each of the seven participants before presenting the main findings of this study.

Table 4.1

<i>Participant Demographics</i>							
Name	Sex	Race/ Ethnic.	Age	Family's Approx. Annual Income	Major(s)	Lives On Campus	Years in IFG Program
Jacob	M	White	21	42-126k	Business, Spanish	Yes	4
Jenna	F	White	21	0-42K	Actuarial Science	No	4
Katie	F	White	19	0-42K	Education, Chinese	Yes	2
Kia	F	White	24+	42-126k	Art	No	3
Lizbeth	F	Hispanic/ Latinx	19	0-42K	Psychology, Spanish	No	2
V	M	White	20	0-42K	Business	Yes	3
Zenni	F	Asian	20	0-42K	Biochemistry	Yes	3

Jacob

Jacob was a 22-year-old, White male in his fourth year at LAC. He grew up in a small town in a rural area of the state and was from a middle-class family. His sister attended one semester of college before deciding to no longer pursue a college degree; given her limited experience, Jacob's sister did not help much in his college search process. Jacob expressed that his parents were supportive of his college search but were also not able to offer much guidance during his college search and application process. Primarily, Jacob relied on his friends and their parents who did attend and graduate from college to help guide his college search. He chose LAC because he had friends attending the institution.

Although a strong student in high school, Jacob arrived on campus with significant imposter syndrome and general nervousness. Jacob recalled move in day of his first year, during which he thought to himself "well [my sister] only made it one semester, so I just have to make it one semester and then I can be done and I don't have to be here anymore." This led him to feel nervous, overwhelmed, and as though he did not belong at college. He also questioned whether he would be success in college given his sister's early departure from her institution. Subsequently, he struggled to get settled in his dorm room and organized for classes which resulted in:

feeling a lot of imposter syndrome in the first week, particularly. There was—I couldn't figure out how to order a textbook. And that was sending me through the roof that I couldn't figure it out and my parents were trying to help. In hindsight it's not a big deal but I was here at a new place. The little things would throw me

off and I'd think I just shouldn't be here. If I can't even figure out how to buy a textbook.

While Jacob initially felt uncomfortable with regard to college academics, his early involvements with student government and campus ministry altered his views of college as he felt more at ease and met peers and staff members who supported him. In addition to student government, and campus ministry, Jacob was involved in a handful of other campus activities and organizations in addition to working on campus both in admissions and residence life as a resident assistant.

Along with his campus involvements, Jacob joined the IFG program as a first-year, first-generation student primarily for the scholarship. After attending a few IFG program workshops during his first semester, he felt he already had many of the skills and resources offered to students in their first-year of the program. He continued to participate in the IFG program so he could receive the scholarship, and by the second year began to value the program for the connections to faculty and staff the program fostered. Moreover, he was accepted to serve as an IFG student ambassador and relished the opportunity to help guide first-year students through challenges similar to those he faced such as his rough academic adjustment.

Jenna

Jenna was a 21-year-old, White female in her fourth year at LAC. Jenna grew up in a town 20-30 minutes away from LAC and was generally familiar with the college, having attended high school competitions on the LAC campus. Her family was of lower socioeconomic status. Academically, in high school she was in many honors and AP courses. Although her high school and AP courses generally promoted college, Jenna felt

her high school did not provide much help with the search process as well as with the scholarship and financial aid process. Her older sister did attend college but did not help her during her college search. Her parents are from Eastern Europe and did not earn college degrees, so Jenna felt they were unable to help as they “didn’t really know anything about college, or how to apply.” Instead, Jenna was responsible for her own college search, explaining that “everything I did was my own kind of knowledge and searching for it.”

Jenna chose LAC for a few reasons. First, LAC was the most affordable of her options, offering a competitive scholarship and the ability to commute from home which allowed her avoid the cost of room and board. Second, she had attended a speech team competition at LAC while in high school and recalled liking the campus. Once on campus, she chose to get involved with the IFG program for the scholarship but ended up liking the program as a whole. During her sophomore and junior years, she served as a student ambassador in the program. Apart from the IFG program, Jenna is on the speech team and is involved in the student organization associated with her primary major of actuarial science.

Katie

Katie was a 20-year-old, White female in her second year at LAC. The middle of three children, Katie grew up in a town 45-minutes away from LAC in a lower socioeconomic family. Her parents were born and raised in an Eastern European country before moving to America. While still in Europe, her dad graduated from middle school and her mom attended a year or two of vocational school but did not earn a degree; neither of her parents were familiar with the American education system. Katie’s older

sister did not attend college after high school. Therefore, none of Katie's family members—parents or older sister—were able to offer much guidance as she searched for colleges; however, Katie stated that her parents were supportive of her search, driving her to college tours and celebrating her acceptances with her. In reflecting on her college search, Katie realized that although her parents were supportive overall, she still felt alone in the college search process, stating "I'm in high school, searching for college. I was kind of really lost."

Although Katie applied to a few colleges throughout the state, her parents wanted her to attend a college close to home and commute to lessen the financial burden of attending college so encouraged her to attend LAC. She was also interested in attending LAC because of the IFG program, explaining that she "went to LAC specifically for the first gen program and the education program because I looked the program up and it did not compare to any other college that I saw." Aside from the IFG program, Katie also participated in a summer bridge program for marginalized student populations including first-generation college students. She credits her participation in both the summer-bridge and IFG programs as introducing her to her current friend group and helping her be successful at LAC. Now in her second year, Katie is studying education and Chinese and plans to study abroad before she graduates in fulfillment of her Chinese major requirements. She works 15-20 hours a week at two campus jobs, and has an off-campus job on the weekends.

Kia

Kia was a returning adult student who identified as White and female. As a non-traditional student, Kia initially started completing courses at LAC while working full-

time at the College. Although her academic standing by credit hour was that of a junior, she had already been completing courses at LAC for a few years at the time of this study. Prior to LAC, Kia had completed a year or two of coursework at a community college immediately following high school decades ago; at the time her parents—neither of whom attended college—were not supportive of her college pursuit which resulted in her starting at her local community college and departing from the institution before she completed her associate's degree.

Now married with children, Kia was balancing her studies with numerous other responsibilities. In addition to caring for her children and family, during our first interview, Kia was searching for a full-time job as she had lost her previous position with LAC due to position reductions as a result of the pandemic. At the time of our second interview, she had recently started a full-time job with an inconsistent work schedule. Her new position with varying days and hours challenged her ability to balance attending class, completing schoolwork, working, caring for family, and attending the IFG program events needed to maintain the scholarship.

Kia chose to participate in the IFG program after hearing about it during her required transfer student orientation: "I thought, feeling like the lost pup on campus, that the program would be a great way to get guided and maybe help me through the process and get acclimated to the campus." Although she was not able to take advantage of the scholarship initially as her tuition was covered as a full-time employee, since losing her position with the college she has become even more appreciative of the scholarship as it—along with a grant she applied for—has helped allow her to continue pursuing her degree.

Lizbeth

Lizbeth was a 20-year-old, Hispanic/Latinx female in her second year at LAC. She commuted to LAC from home which was about 40 minutes away. Lizbeth's high school was predominately Hispanic/Latinx, which was very different from the predominately White campus of LAC. Although there was a difference in campus culture, Lizbeth knew what to expect as her sister attended LAC before her. Her sister's positive experience at LAC was one of the main reasons she chose the school, along with it being the most affordable of the schools to which she applied. Lizbeth's parents were from Mexico and had completed their education through middle school but stopped at that time to work. They were supportive of her college search process but could not share their own experiences. However, her two older sisters had both attended college and provided guidance on the application and financial aid process as well as encouragement to join the IFG program.

Lizbeth's sister participated in the IFG program at LAC throughout her four years at LAC, which was the main reason Lizbeth knew about the program. Lizbeth also recalled receiving emails from the IFG program over the summer encouraging her to join. She also chose to join for the incentives such as the scholarship and free food. Aside from the IFG program, Lizbeth was involved in college athletics and had a 20-hour-per-week campus job, in addition to being a part of a few student organizations. Academically, her first year was more challenging as she was in a challenging STEM major and not doing well. At the start of her second year, she changed her academic path to pursue majors in psychology and Spanish and was performing better in her classes. She also found herself

connecting to the faculty members in the both departments which further supported her academic success.

V

V was a 20-year-old, White male in his third year at LAC. An only child, V grew up in a small town located two hours from LAC. He indicated that his family earnings were under \$42,000, which classified his family as of lower socioeconomic status. V's parents did not earn their bachelor's degrees but were supportive during his college search and application process. Although his parents were not familiar with the college search process, one of V's high school teammates attended LAC before him and encouraged him to consider attending the College as well as participating on the athletic team; although V chose LAC in part because of his teammate's recommendation, V's high school teammate transferred to another institution prior to when V started at LAC. Despite knowing no one at LAC, V chose to attend LAC for a few reasons: financial affordability, the small size of the school, the opportunity to participate in college athletics, and the location being near his parents yet far enough away to afford "a little bit of freedom, but not too much freedom."

A business and accounting major, V was involved in athletics and the IFG program, both of which helped him transition to college. Although part of an athletic team, V shared that he did not initially connect with his teammates so felt alone initially. V also expressed that he felt lost entering college and as though he "didn't know what [he] was doing." He credited his experiences in the IFG program with helping him feel more confident that he could be successful at LAC. As an upper-class student V chose to

serve as a student ambassador in the IFG program to help mentor first-year students who might feel as lost as he did.

Zenni

Zenni was a 21-year-old, Asian female in her third year at LAC. She was born in the Philippines and moved to the United States with her family when she was three years old. Unlike the other participants, Zenni's parents both earned bachelor's degrees from institutions in the Philippines. Since their degrees were earned outside of the United States, LAC and the IFG program still considered her first-generation as neither parent earned a degree in the United States. Zenni explained the importance of this as she recognized she:

didn't really know how the American school systems worked. My parents both were able to get a bachelor's degree, but it was in the Philippines. The different curriculum was hard for me to grasp, especially going to college which is such a different world from high school and middle school.

Although Zenni's parents earned bachelor's degrees she still felt lost navigating the college search and application process, as well as navigating LAC during her first few weeks on campus.

Although she did not believe she was eligible to participate in the IFG program as her parent's graduated with their bachelor's degrees, the program director sought her out to explain that she qualified to participate and encouraged her to join the program. She was grateful for the support of the program as her brother attended some college but stopped before earning his associate's degree, so she felt she had limited support from her family regarding completing a college degree. As a second-year student, Zenni was

especially grateful for the support of the IFG program in her first year as it helped her develop a network of peers and faculty. Given her positive experience, she was eager for the “opportunity to get a leadership position with the IFG program. I just wanted to be involved in that so I can share my experiences with other first gen students, especially the first-years and transfers.”

Aside from the IFG program, Zenni was a member of the track and field team, which she considered her primary community on campus since she spent so many hours per week with her teammates and coaches. Her athletic participation was one of the reasons she was familiar with LAC to begin with, as she attended competitions on campus while in junior high and high school. She chose LAC for its location being close to home, as well as the opportunity to compete in collegiate athletics. Along with her athletics, Zenni was pursuing a biochemistry major. She worked 20-30 hours per week off campus at a memory care facility.

Sense of Belonging as a Result of Participating in the IFG Program: Four Themes

This section presents the findings across all of the levels of data I collected—institutional, case, and participant—with the purpose of better understanding the phenomenon of sense of belonging of first-generation students participating in the a first-generation focused student success program—the IFG program at LAC. After collecting and analyzing data from documents, observations, and interviews, I constructed four themes. Each of the themes related to the sense of belonging experienced by the first-generation students in this study and who participated in the IFG program. The four themes discussed in the following section include:

1. Helping students navigate unfamiliar structures of the institution, particularly during the initial transition to college
2. Helping students connect with other people on campus to promote a sense of community
3. Providing a sense of mattering for students
4. Promoting a positive self-identification as a "first-gen" student

Across the four themes it is evident that the IFG program fostered a sense of belonging for the first-generation students participating in the program.

Helping Students Navigate Unfamiliar Structures of the Institution, Particularly During the Initial Transition to College

Across all interviews, the participants described how the IFG program helped them navigate the unfamiliar structures of the college, especially during their first semester at LAC. Strayhorn (2012) found that “sense of belonging takes on heightened importance (a) in certain contexts, such as being a newcomer to an otherwise established group” (p. 20). As newcomers in the college environment the participants discussed feeling generally lost on campus. However, they noted that the IFG program helped to guide them through the transition to college as they worked to navigate and familiarize themselves with the unfamiliar structures of higher education. Specifically, participants described how the program helped them transition socially and academically, fostering relationships with peers and becoming more comfortable in the classroom and with speaking to faculty. A few of the participants also noted that some of their other campus involvements helped in their transition, but the participants continued to reinforce the

important role the IFG program played in their transition regardless of campus involvements.

Feeling Lost

Participants described feeling uncomfortable or lost during their first few weeks of college as they transitioned to LAC. Participants reported feelings of nervousness and anxiety as they attempted to adjust to the college environment and expectations of professors. Jacob who explained “I was probably overwhelmed for a while. Probably at least the first couple weeks” and Zenni stated that “definitely in the start I was a little nervous and hesitant.” Zenni continued on to explain that she struggled to adjust to the increased independence of college:

It's just going from high school to college is a way different experience. I gained a whole new sense of independence. I already had some independence the last two years of high school, but it wasn't the same. I was still living at home so I was still kind of dependent. But moving to college, I really just had to figure out things for myself, especially how to study effectively was a big thing, just because it's a whole different environment. I had to adapt.

Zenni recalled that her high school as well as her parents provided strong structure academically and athletically. However, as a first-year FGCS, Zenni felt overwhelmed during her transition to college as she experienced more independence and flexibility than she had while in high school with little guidance regarding how to navigate her responsibilities. Katie also recalled feeling overwhelmed by the less structured class schedule of college:

I was really stressed out for classes, though, because I wasn't used to the different schedules, because in high school everything is the same and in college everything's like oh you have some Monday, Wednesday, Friday classes and some Tuesdays and Thursdays. That was something to get used to.

While high school courses provided a consistent daily schedule and pattern to navigate, Katie struggled to adjust to the more flexible college course schedules. Katie found that attending courses only a few days of the week required more time management and organization than her high school schedule. The different structure of her college class schedule compared to her more rigid high school schedule resulted in feelings of stress and anxiety for Katie during her first semester of college. In this way, the participants described having a difficult time adjusting to the college environment.

In addition to their challenges transitioning to the college environment in general, the participants described feeling lost without their usual social networks and support systems such as family and high school friends. Along with recalling he was "very nervous" when he arrived at college, V explained that felt lost without a support system at LAC, stating, "I came in by myself. So I didn't know anybody. I didn't have a single, single person that was willing to talk to and help me through this process." Despite participating on an athletic team during his first weeks at LAC, V struggled to connect with peers, faculty, and staff in his first few weeks on campus. He continued on to explain that he did not know who he could talk to about the challenges he was experiencing during his first weeks on campus until he met the IFG program director, explain that:

Having [the IFG director], and then to make a connection with me and be like, hey, we're doing these workshops. This is perfect for you to like to guide you into the school system. Get to know everybody make some friends and make some like know your professors, a little bit because like they bring in some professors to. So that was, that was a great bridge to have. And I'm very grateful for it because I had I didn't know what I was doing. I didn't really have any friends, it was, it was so I'm, I'm very grateful that they came in and kind of like saved a little bit.

Without identifying a clear support system, V felt lost and overwhelmed during his first few months at LAC. Katie also realized she did not have a strong support system upon arriving at college. She explained that while her parents continued to support her in general, she felt that she was no longer able to rely on her parents for questions and concerns since they did not go to college. She stated that she struggled with the “missing puzzle pieces your parents can't really solve and help you with, because you're not entirely sure.” While Katie could rely on her parents to assist her in problem solving while in high school, she felt lost navigating the college environment on her own. Jacob echoed Katie’s sentiments, describing how he initially felt lost on campus without guidance from his parents or sister. This led to Jacob feeling as though he didn’t belong in college at all during his first semester at LAC:

I remember feeling a lot of imposter syndrome. The first week, particularly, I couldn't figure out how to order a textbook. And that was just sending me through the roof that I couldn't figure it out and my parents were trying to help. I had ordered one from somewhere and it didn't work out. But then I had bought it

twice. And so just the little things that in hindsight are not a big deal, but felt so much more since I was here at a new place and the first one [to attend college].

And also no one from my high school or anyone that I knew went to LAC. So I didn't have a support system yet. So just the little things were pretty easy to throw me off and be like, well, then maybe I just shouldn't be here. If I can't even figure out how to buy a textbook.

Jacob described how not having a support system to help him navigate even the “smallest of bumps” led to imposter syndrome and feelings of inadequacy during his first few months at LAC. Without clear support systems, the participants felt overwhelmed trying to navigate the unfamiliar structures of the institution which resulted in the participants questioning whether they would be able to succeed in college.

In addition to adjusting to college academics in general, several participants felt lost as they decided to change their major after arriving at LAC. Jenna did not feel a sense of belonging within her original major as she felt “disconnected” without specific major courses offered in the first year. After meeting with a professor in a different major she decided to switch and eventually became “close friends” with her classmates, many of whom she initially connected with through the IFG program. Lizbeth disclosed that she did not do as well academically as she had hoped in her first semester and “did not talk to the faculty” in her original major, which might have helped her prevent being on academic probation after her first fall semester at LAC. Although she felt supported by the STEM faculty in her major, her poor academic performance in the first semester led her to explore other options. After speaking with the IFG program administrators, who encouraged her to meet with her academic advisor to discuss options, she pivoted to a

different major. With encouragement from the IFG program director she worked to develop close relationships with the faculty members in her new major. Having changed her major and connected with faculty members in her new major, Lizbeth was excited to report she did much better academically in her second semester. Katie was not initially sure how to go about switching her major but after speaking with an IFG administrator she felt confident in making the switch and connected with her academic advisor to do so.

Overall, as newcomers to the institution the participants noted feeling lost. The students reported feeling overwhelmed and confused as they transitioned to college and attempted to navigate the unfamiliar college structure. The participants described feeling unaccustomed with the college environment in general. The majority were stressed as they searched for support systems to replace those they relied heavily on while in high school such as friends and family. A few of the participants also felt additionally challenged as they explored the possibility of changing their major. Each of these challenges resulted in the participants feeling inadequate and questioning whether they could be successful in college.

Program Structure Provided a Foundation to be Successful in Their First Year

Although the participants described feeling lost as “a newcomer to an otherwise established group” (Strayhorn, 2012, p. 20), they simultaneously recognized that the IFG program helped provide structure and support as they worked to transition to LAC and become part of the community. In addition to noting that the program provided valuable resources and college success skills during the first year, the participants described the social and academic support offered during their first year as they worked to adjust to the college environment. According to the IFG Program website, the program intentionally

offers workshops throughout the first year to assist students in navigating the unfamiliar structures of the college environment. Workshops during the first-year of college are designed to foster student interaction and include presentation topics such as time management, preparing for finals, and registering for classes. While a few participants described how other involvements also helped in their transition, all participants recognized the important role the IFG program played in helping them successfully acclimate to LAC.

How to Navigate College. Initially, the participants expressed their gratefulness at the numerous resources the program connected them with. Kia described being unfamiliar with the college environment, stating that “The IFG program has been extremely helpful too because I’ve never been on campus, you know, I didn’t have that kind of experience and I find the IFG program very supportive and informative.” Kia recognized that the IFG program played an important role in her transition to LAC as she was unfamiliar with the campus and college environment, and described herself as “a lost pup” before starting in the IFG program. Similarly, Zenni stated that her “first year was definitely transitioning and the focus of the IFG program was really on trying to get to know the college” while Lizbeth explained that the IFG program “really helped me figure out my first-year of college.” To do so, the participants recalled that the IFG program provided resources that they used to successfully navigate the college campus. When describing the first year in the IFG program, Jacob explained that the first year of the program:

in general is college 101 in a sense—time management, learning how to email professors, go to office hours—things that all college students benefit from...

things that college students in general should be able to do. They do good at kind of identifying them for first gen students in a way and highlight the major things that are contributors to college success and then doing a workshop on each of them.

Jacob recognized that the program provided helpful resources and tools for navigating the college environment successfully. Likewise, Zenni echoed the focus on resources in the first year, indicating that the program “is going to provide you resources to be successful as a student.” Overall, the participants acknowledged the important role the IFG program played in providing tips and tricks for successfully navigating the college campus throughout their first year.

Beyond navigating the college campus, a few participants also explained how the program helped connect them to campus resources including the study abroad advisor, career development, and various academic resource centers (e.g., the writing center, the math resource center). In doing so, the IFG program further helped the participants successfully navigate the structures of LAC and achieve academic success. For example, Lizbeth described various resources the IFG program connected her with throughout the first year on campus:

I felt like I always had like a resource or people that I can go to and ask them questions that I wasn't like comfortable asking like my professors and like asking them, “where can I go to get like education abroad?” How if I didn't want to go talk to my like advisors, I felt because I always saw them so often I just felt like [the program staff] were always there and willing, with their smiles, all the time. Now I can't see their smiles as much but having had them guide me through my

first year—and now I'm paying it forward guiding first years which is why I decided to become an ambassador, because I felt like they helped me and I want to pay it forward in a way.

The IFG program connected Lizbeth with study abroad information, advising and academic information, and more during her first year. Due to the support she received, Lizbeth decided to serve as a program ambassador. She was excited to assist the first-year, first-generation students in the program to help support students as they transitioned to LAC and “pay it forward.” Kia also understood the value of being connected to resources through the IFG program, stating that the first year of the program “was about getting you to know all these different resources. I don't think I've found that as much [in my second year in the program], but that could just be me, what I'm focused on.” Kia recognized that the first year of the program focused on campus resources to create the foundation for success, while in her second year she noticed fewer references to campus resources.

Navigating Social Structures. In addition to helping navigate the unfamiliar college environment in general, the IFG program specifically helped students navigate the unfamiliar social structures at LAC. For example, Zenni explained how the IFG program encouraged her to attend campus events and meet people who she otherwise might not have done, stating that the IFG program:

really helps to stay super involved on campus. Or especially being a first gen [student] you really need to attend events. You know, kind of like go out of your comfort zone and just like try to meet new people. Because I mean, your first year of college, everyone is always trying to meet new people, but like I feel like for

first gen students, it should be a bigger effort because it's such a new environment.

Zenni noted the importance of the program pushing her out of her comfort zone to become more involved on campus, which led her to meeting new people and developing a sense of community. Likewise, V described how the IFG program was integral in connecting with peers. Although competing on an athletic team at LAC, V did not initially connect with his teammates so felt lost socially as a first-year student. He described how the IFG program supported him through his transition to college, stating that:

pretty much all my friends I had in high school were from sports. So if I didn't make those connections through those sports that would have been a little bit difficult. So that's why I think the first gen program for sure is like a bridge into coming into [college].

While in high school, the majority of V's friends were from athletics. However, he did not initially have the same experience at LAC as he did not immediately connect with his college teammates. Instead, the IFG program played an important role in helping provide him with social connections during his first year at LAC.

Katie also mentioned the IFG program as crucial to her flourishing social life at LAC, stating that the program "made me a lot more confident" in talking to peers. While she recalled being timid and quiet in high school, she admitted that as a sophomore in college "people can't get me to stop talking. Yeah, I can go on for hours and am very extroverted now probably because of [IFG Program] because we were kind of forced to talk to new people." The participants each noted the importance of the IFG program in

helping them foster connections with other students by encouraging program participants—specifically those in their first year—to step out of their comfort zone to meet other students both at program workshops and around campus. In doing so, the IFG program helped the participants successfully navigate the social structures of the college and create a sense of community amongst the first-generation students in the IFG program as well as with their peers on campus.

Navigating Academic Structures. Along with navigating the social structures of the college, the IFG program helped students better understand the academic structures and expectations of the college as well. Lizbeth explained that the program made “sure that you have the tools and the tricks to successfully succeed at LAC,” offering an example of how the program “gives us little packet at the beginning....and talks about where to find the final exam schedule which is on the college's website.” Unfamiliar with college, Lizbeth was appreciative of the program’s intentional focus on final exams and providing information for the participants to use to be successful when taking finals. V expressed his gratitude toward the IFG program’s focus on academic success as well, specifically discussing that because of the IFG program he “had an academic planner. So I wouldn't miss assignments...That's, that's my big thing is they helped me out with this planner and if I didn't do that I would be a bad student.” The IFG program provided all program participants with an academic planner which V mentioned on multiple occasions. In doing so, V recognized that the IFG program was a “very big tool of being successful in college.” He also recognized that he might’ve been a successful student without, stating “I'm not saying I would be successful without them. But they’re very helpful.” Given his strong academic background, V understood that he was likely to have

been successful in college without the program, but also recognized that his participation in the IFG program allowed him to be a more successful student through the sharing resources like the academic planner.

Additionally, participants appreciated the program's focus on connecting them to academic resources on campus. Even though Kia—a returning adult student—initially stated that she felt the program was not as impactful for her given her age, she still described the role the program played in helping her transition academically to college. For example, when she was challenged with writing a research paper during her first semester at LAC, the program director encouraged her to take advantage of campus resources such as the Writing Center. Prior to joining the IFG program Kia had not heard for the Writing Center:

I didn't know anything about the Writing Center...trying to write a report, my first big huge research paper that I had to do. I didn't know where to start. Everything was so different from when I in school 38 years ago...So I had writer's block. And I think I was talking to the Program Director, and she goes, "You do know that we have a writing center? We have people in a writing lab that are there to help you with just that" and I went there. I was like, hearing someone's gonna help me was such a relief.

Kia described feeling unfamiliar and lost within the academic environment of LAC, and found great relief in being connected to campus resources—specifically the Writing Center—via the IFG program director. Similarly, Katie was also grateful the IFG program director connected her to the major-specific first-generation program which helped support her academically. When Katie told the director she was changing majors,

the IFG program director immediately told her to join the first-generation program associated with her new major. Katie recalled that the program director explained to her that the major-specific program was “like different branches of the IFG program, and this is one of them. It gives you a mentor that's graduated from LAC, and is working right now.” Katie joined the major-specific first-generation program. In reflecting on her experience throughout her first year in the major-orientated program, she described how she was:

talking to my mentor right now like we email each other a lot. She studied with the same professor I have, and she gave me a lot of tips and how to get better... So I'm really grateful for the IFG program [and the major-specific program] for that part like giving you that mentor.

Katie benefited greatly from both the IFG program as a whole and the major-specific program associated with the IFG program as well. Moreover, all of the participants described the importance of the IFG program helping them navigate the academic structures of the college during their first year. The participants noted how the program connected them to academic resources in general or with specific academic resources on campus and within their majors.

Helping Students Connect with Other People on Campus to Promote a Sense of Community

The most commonly discussed theme throughout interviews was how the IFG program helped connect participants with others to build a sense of community. Participants described the sense of community they felt as a result of their participation in the IFG program. Participants reiterated throughout both interviews the importance of

feeling a part of the first-generation community as a whole through the IFG program, as well as meeting other first-generation students and faculty members who were first-generation while completing their undergraduate degrees. In addition to the IFG community, participants noted how their participation in the IFG program helped them develop feelings of belonging and community throughout campus as well. Through their regular interactions with peers, faculty, and program staff at IFG workshops and events, the participants recognized receiving critical social support, and being “important to the group (e.g., campus community) or others on campus (e.g., faculty, peers)” (Strayhorn, 2012, p. 3).

IFG Community as a Whole

Most broadly, the participants discussed the importance of feeling as though they immediately belonged to the IFG community. Jenna explained that she simply always felt like she belonged when at IFG events, stating:

I always felt like I belonged in the IFG program. That was the easiest one just because it was like you're first generation, that's your only qualification like everyone else. You know, so many different backgrounds. So I always feel like I belong there.

Jenna recognized that the only “qualification” needed to belong to the IFG program was being first-generation, which allowed her to always feel a sense of belonging and community within the IFG program. Lizbeth recalled feeling similar to Jenna, in that she felt “you're not alone at LAC with having the IFG program there on the sidelines rooting for you.” The IFG program provided Lizbeth with the support and community she needed to be successful at LAC from the moment she started college. Similar to Jenna and

Lizabeth, Zenni recognized the important role the IFG program played in helping her establish a sense of community on campus. Zenni—whose parents graduated from college outside the United States—felt the IFG community as a whole was the most important part of the program, stating:

I'd probably say the biggest takeaway is probably knowing you have a support system because it's not easy being a first gen student because like you honestly don't know what to expect. Like my parents did go to college, but they went to college in a different country. So they don't know the American curriculum. And so everything was just super new to me but just knowing that I have a support system from my faculty, staff and other students to support me along the way eases my mind that I know that people are in the same boat as me, people are, you know, facing the same challenges and I know like I will get through it...So I think that's like the best part of being a first-generation student and being part of the part of the first gen programs, knowing that you have that support and then you could get through it.

Although Zenni's parents graduated from college, their degrees from institutions outside the United States meant they were not familiar with the U.S. system of higher education. As such, Zenni relied heavily on the community of the IFG program to provide support and a welcoming environment. Similar to Zenni, V recognized the IFG program helped him feel more comfortable at LAC. As a more reserved person, V explained that the program:

really made me feel a lot more comfortable. Like I if I wasn't in this [the IFG program] I felt like I would have been so much different of a person and a

different student. But also the connections I made. I 'm not necessarily [a] not-friendly person, but I'm not going to create relationships on my own if I didn't have to. So making relationships and networking and all this different stuff in a professional way is very helpful. I never would have done that on my own. I would have been in my room and alone. I would have done my thing. And [the IFG program] kind of made me branch out and make sure I'm comfortable with being uncomfortable.

V acknowledged that he was not an extroverted person. As an introvert, V realized that without the IFG program he would not have developed the peer and faculty connections he did. However, because he felt “comfortable with being uncomfortable” when attending IFG workshops he was able to meet others and expand his network of friends and faculty mentors.

The participants specifically described how the IFG program’s multi-year structure further supported their sense of belonging. For example, Zenni recognized how the second year of the IFG program focused on building community, stating that in “the sophomore year, they kind of focused on like networking and getting to know your professors and staff and getting to know the other first gen students.” Likewise, Jenna explained that the “sophomore year was really about meeting people and meeting professors.” For Jenna, the focus on connections and belonging in the second year of the IFG program was important. She described that the second year was her “best year of IFG program—the first year was important for building my skills—sophomore was really: let's get to know each other, you already know how to manage your time.” Both Jenna and Zenni appreciated how the second year of the IFG program emphasized

making connections with peers and faculty, two critical components of sense of belonging (Strayhorn, 2012).

While Zenni and Jenna described increased peer interactions in their second year of the IFG program, Jacob recalled strengthening his relationships with the IFG program administration in his second year in the program. Jacob recognized how he felt a stronger sense of belonging in his second year, explaining that his relationship with the IFG program director:

was stronger my sophomore year. Since I interacted with her more often and just got to see more often how hard she works for this one demographic of student and how she just gives it so much time and attention and care and just seeing how much she appreciates us. It's hard to not reciprocate that feeling.

Although Jacob started to build a relationship with the IFG program staff during his first-year at LAC, he recognized that it took well into his second year in the program to truly recognize and appreciate the extent to which the IFG program staff went to to support first-generation students; in doing so, he valued his relationships with the IFG staff members more in his second year of participation in the program. Jenna also came to understand the importance of the program to her sense of belonging in her sophomore year, stating that:

the sense of belonging really hit me my sophomore year because by that point, like every time I walked in the IFG staff would be like "hi Jenna" and all the [graduate assistants] would be like, "Hi, Jenna! How's it going?" And, like, they knew me, they knew my major. They knew what else I was doing. And so having them recognize me felt like I really belonged.

Like Jacob, Jenna started to realize the extent to which she felt a sense of belonging when participating in the IFG program during her sophomore year as she continued to develop relationships with peers, faculty, and IFG program staff. Across the participants, the students recognized that the second year in the program was critical to their belonging as the program focused on fostering relationships with peers, faculty, and staff which in turn increased their sense of belonging.

Connecting with Peers

In addition to the importance of the IFG community as whole, the participants noted the role the program played in helping connect them to peers, faculty, and staff. Such connections with members of campus helped the participants further feel a sense of community. For example, Jenna described how the program's structured workshops encouraged her to converse with different first-generation peers each week, explaining that:

the IFG program really became a way that I got to know some more people and talk to more people. And so that when I was on campus, you know, if someone's sitting somewhere I have someone to talk to, or in between classes. It could be like oh hey you're in the IFG program. And so that's something I really liked about it.

Jenna was able to connect with her peers both in the program and around campus because of her participation in the IFG program, strengthening her sense of community within the program and at LAC in general. Lizbeth and Katie also expressed how they met friends through the IFG program. Lizbeth explained that the program “helped me find some of my closer friends.” Likewise, when asked what she appreciated about the IFG program,

Katie responded that she was thankful for “the program giving me my friends, the connection it's given me.” Jenna, Lizbeth, and Katie recognized that they developed relationships with peers in the IFG program and around campus as a result of their participation in the IFG program. Such relationships contributed to their sense of community and belonging on campus and within the program.

While some participants quickly recognized how the program successfully fostered interactions for them, a few participants took longer to appreciate the structured interactions the IFG program required. V described how the IFG program “required” him to interact with peers, which he would not have done on his own as an introverted person. While uncomfortable to start, V recognized the IFG program was integral in him making connections with peers, stating that he “would have never, never branched out, I would have would have stuck to myself. But now I have friends [from the program] I have made.” V continued on to explain that he “I met a couple of buddies through the IFG Program and even some classmates, like, hey, are you in the IFG Program are you going to the thing tonight. So we've made some good relationships there.” In this way, V was able to build relationships with peers through their participation in the IFG program. Similar to V’s initial discomfort, Jacob recalled how the structure of the IFG program made him feel overwhelmed in his first year as he was “forced” to talk to strangers, which contributed to him not enjoying the program initially. As an introverted person, Jacob was uneasy with the assigned seating required during the IFG program workshops, explaining that the program participants:

got put at a table with strangers and like forced to talk to each other, which was freshman me's biggest fear and so I think that definitely contributed to me not

liking the program initially and then once I like got over it, then it was totally fine. And that makes sense ...the program helped you in some ways, learn to talk to other people or and I'm sure that [my other involvements], like all of those things helped also but IFG program gives you a safe space to practice that and force you into it.

While Jacob did not initially enjoy the program's structure which included seating assignments that split up friends and required talking points, he simultaneously recognized that that same structure helped him "learn to talk to other people" and gave him a "safe space" to connect with others. Overall, the participants recognized that the structure of the IFG program—specifically the assigned seating, conversation prompts, and regular meetings with their peers—helped them connect with peers and, in turn, feel a sense of community and belonging within the IFG program.

Faculty Relationships

Along with structured peer interactions, the participants also appreciated how the IFG program structure helped them develop relationships with faculty and staff members. For example, Zenni described how the IFG program staff "always encouraged us to talk to some of the faculty that have showed up at the workshops because they'll be our resources and our mentors." Zenni continued on to explain how she felt increasingly comfortable connecting with the faculty members at the IFG program, stating that the IFG program:

definitely strengthened some of those relationships, especially with the first generation faculty members. I feel like I've been able to reach out to them, more so than like some of my other professors, just because I know what struggles they

faced in the past, being a first-time student. So I felt like I could relate to them a little bit better.

Zenni recognized that she felt more comfortable interacting with the faculty members because the IFG program specifically invited faculty members who were first-generation students themselves during their undergraduate careers. As such, Zenni felt she could more easily relate to the faculty members as they shared the common experience of being a first-generation student. Jenna also observed that the IFG program helped her meet faculty members, explaining that because of her participation in the program meeting faculty:

wasn't as big of a deal. And it wasn't as intimidating. So when I got to like junior year and like you know [certain professors] would come and be like, Oh, here's [the professors] again or I'd hear like [the first-gen political science faculty member] come and talk and be like I know her because of the IFG program and so by the time I got to like junior and sophomore year, I was just like, okay, I know what to ask you, I know what your role is now. And so the conversations were a little bit more helpful and they were also more casual and not as much awkward silence.

Jenna noticed that she was more comfortable talking to faculty members and building relationships after participating in the IFG program. Jenna acknowledged that in her sophomore and junior years she was familiar with the IFG program structure, and therefore, was more easily able to connect with faculty members during workshops. Like Jenna, Jacob described feeling more confident interacting with faculty because of the IFG program, stating that he:

also felt more confident my sophomore year interacting with professors, they were like less scary. And so I didn't have that barrier. I would be afraid to make a comment or ask a question and that kind of went away for sophomore year. So I'm recognizing the people there more often. So it doesn't feel as strange—eating a meal with strangers and a professor. I got used to just kind of like the environment. I think that made me able to kind of reap the benefits more of the program.

Both Jenna and Jacob described feeling an increased sense of confidence when interacting with faculty as a result of their participation in the IFG program. Both students described that because the IFG program fostered interactions between students and faculty, they felt more comfortable over time in that setting and, therefore, more comfortable engaging with professors.

While some participants noted the importance of IFG program workshops in connecting with faculty members, a few participants recalled other ways the program helped connect them with faculty. Lizbeth noted that in addition to meeting professors during program workshops, the IFG program encouraged students to visit the offices of professors who were first-generation students themselves. She explained that the IFG program would hang a sign-up sheet outside the offices of faculty who were first generation and then IFG program participants:

would write your name and then it was like a tactic or whatever [the IFG program administrators] would draw name and you'll get it like a gift card, but at the same time they're making us go talk to the faculty and then make that connection to build our network.

Beyond the IFG program workshops, Lizbeth recognized that the program fostered relationships between students and professors by rewarding participants for stopping by professors' offices. Lizbeth also noted how being rewarded for stopping by professors' offices was important to her becoming more comfortable talking to professors. In a similar fashion, Katie appreciated that the IFG program helped her connect with professors outside of her major. Although not a business major, Katie connected with a business professor who presented at an IFG program workshop. Following the presentation Katie sought the professor out in his office in the Business Center. She recalled that the program connected her to faculty by:

showing me professors that aren't necessarily in my department that I can go and talk to if I need help. I've taken advantage of it. Like one of the professors from the Business Center, they showed me him because he had a really good story and I just like wanted to talk to him after it.

Katie was able to develop relationships with professors across campus through her participation in the IFG program. Moreover, a few participants chose classes specifically with faculty members they had met through the IFG program, indicating they felt more comfortable taking courses with faculty members they had previously interacted with.

For example, Jenna explained that:

when it came to picking classes, I would be like, Oh, [our psychology professor] I know him from the IFG program and I've heard so many great things about him that when I was trying to sign up for a psychology class. I was like, oh, let me try to find [the class section with the professor I met through the IFG program],

because he was super cool, and I liked it because I got to know some more professors.

Jenna greatly appreciated that the IFG program helped her build relationships with professors, and found those relationships helpful when picking her courses. Kia further stated that she took a course with a professor she met through the IFG program, further explaining how the professor went on to become “a mentor” to her.

Overall, the participants described how the IFG program helped them develop a sense of community and belonging within the program and on LAC’s campus. The students expressed how the IFG program helped them feel they had a place they belonged and could connect with others simply because they were a first-generation student. Moreover, the participants appreciated how the IFG program’s structure facilitated interactions between peers, faculty, and staff members. While most participants recognized the benefits of the IFG program fostering interactions early on, even those who initially felt less comfortable with the structured interactions—Jacob and V—eventually recognized and appreciated the community they developed from interacting with others at the IFG program workshops.

Providing a Sense of Mattering for Students

Participants also noted feelings of “mattering or feeling cared about” (Strayhorn, 2012, p. 3) as a result of their participation in the IFG program. When attending IFG workshops and events, the participants appreciated that the IFG program administrators and other students knew them by name. Additionally, the participants felt cared about when peers, faculty, and the IFG staff members asked how they were doing and took a genuine interest in their responses. Finally, the participants recognized that they mattered

within the IFG community as a result of the IFG staff members offering help and assistance. In each of these ways the participants felt as though they “mattered” within the context of the IFG program which also helped them feel as though they mattered within the overall LAC community as well.

People Recognize and Care About Me

A few of the participants described the importance of being recognized by others when attending IFG program events. Jenna, for example, recalled noticing that her peers knew her name, which resulted in her feeling a stronger sense of belonging within the IFG program community at LAC. She explained:

And then as I started sitting at like different tables and it was just other students would recognize me like, “Hi, Jenna. How's it going? I haven't seen you since freshman year at the first freshman IFG workshop. Like, how are you doing?” and so it was really my sophomore year where it was like, this is where like I belong, because it was like other people knew my name. They knew who I was and it was just—it was just nice.

Jenna valued being noticed by others, and was especially impressed that her peers remembered who she was and knew her name in the years following when they were first introduced through the IFG program. Having others recognize her by name made Jenna feel as though she was an important part of the IFG community. She also appreciated that the IFG staff members—including the director, assistant director, and graduate assistants—all knew her by name as well, stating “They knew me. They knew my major. They knew what else I was doing. And so having [the IFG program administrators] recognize me felt like I really belonged.” Jenna’s sense of belonging and mattering were

driven by the fact that IFG students and staff members recognized her and welcomed her when she attended events.

Katie had similar recollections, explaining that even the IFG program administrators quickly learned her name and showed genuine interest in checking in with her. She was further amazed that even with the COVID adjustments including having to wear a face mask while on campus near others, the IFG staff members who helped in the program's outdoor tent recognized her from far away with her face mostly covered. Katie explained that whenever she walked past the IFG program tent set up outside the campus's main administrative building, she would hear the IFG program assistant director and graduate assistants "yelling my name. I would wave at them and they're like, come over here, grab a bag of trail mix." Katie recalled the outdoor interactions were often short as she stopped by the tent briefly on her way to class or work. However, even the smallest interactions as described by Katie—a hello and a snack—helped her feel as though she mattered on campus and within the IFG program. Likewise, V also felt the IFG staff members went above and beyond to acknowledge him, regularly checking in and asking how he was doing:

It's real nice because if they see me on campus or something I'm like "hey, how's it going?" They'll be like—they'll make an effort to come say hi to me and stuff. So it makes me feel like they care.

Like Katie, the thoughtful outreach by the IFG program administrators helped V feel as though the IFG program staff members cared about him. He was further impressed that they would remember his involvements and recent activities, such as an upcoming athletic competition, and would follow up to see how his commitments were going as

well as how he was doing overall. In these ways, the participants identified how the IFG program, including the IFG staff and other program participants, helped them feel they mattered by recognizing them by name, taking an interest in their lives, and engaging in regular conversation.

Participants Felt Constantly Supported by IFG Staff

In addition to feeling as though they mattered to the IFG community, the participants described how the IFG program staff constantly made sure they felt supported within the program and on campus. Jacob explained that he felt supported by both the IFG community and the staff members, stating “No matter like where I was at, I always had like the support from [the program administrators] and then the community itself.” Jacob felt comforted knowing that at any point in his time at LAC the IFG staff “had his back.” Jenna also recognized how the IFG staff members constantly supported her, explaining “I think from the beginning it was like constant support. From all around. I always felt like someone cared about me.” Both Jenna and Jacob recognized that the IFG program was an important source of constant support. Furthermore, they both described how their interactions with the IFG staff members made them feel cared about and as though they mattered. Similarly, V described feeling like he was appreciated and cared about by the IFG staff members, stating:

I like that [the IFG program administrators] are just like a friendly face. Like I know that the director and I have a really good relationship. And the assistant director and I have really good relationship. They make me feel like I'm actually—Like they're happy I'm here on campus and happy to be at the college and they're glad that I'm helping out the first gen students [as an ambassador] and

stuff. So it makes me feel appreciated, which is—who doesn't want to like feel appreciated? That's, that's a big one.

V was excited to share that he had strong relationships with the director and assistant director. In addition, he noted the important role the IFG staff played in making him feel he mattered on campus through their interactions. Katie also noted the support she felt from the IFG staff members. She explained that when she was diagnosed with COVID-19 in fall 2020, she:

emailed [the IFG director] and she's like 'everything's gonna be good. You're fine, I hope, everything's good.' And when I got back to campus she was the first person that came up to me and asked, 'How are you doing, how how's everything' So it's like a great support system.

Katie was thankful that the IFG director reached out to her while she was sick and in isolation from having COVID-19; although worried about her illness and her semester of coursework Katie felt continuously supported by the IFG program. Although for varying purposes—health, emotional, or general support—the participants described how the support they received from the IFG staff made them feel as though they mattered to the IFG community and on campus.

The participants also greatly appreciated the extent to which the IFG staff went to continue to offer opportunities for in-person interactions during the COVID-19 pandemic. All of the participants described how the pandemic changed the nature of their fall 2020 semester, including course modes shifting to blended or online formats and the majority of their on-campus activities and social events being canceled or moved online. While the IFG program also adjusted to offer some workshops online for participants

who felt unsafe attending in-person, the participants described how the IFG staff found creative ways to continue engaging with the participants in-person by offering in-person outdoor workshops and setting up an outdoor tent during the week for quick outdoor conversations.

Many of the participants greatly appreciated that the IFG program found ways to continue offering of some workshops in an in-person format while most programs on campus moved online without exploring in-person options. To do so, the participants described that IFG program administrators held workshops outdoors to allow for participants to maintain the required six-foot social distance and “to go lunches” to be served and consumed safely. In doing so, the IFG staff kept the “food and fellowship” (Carballo, 2020) component of the program going through the pandemic. Jacob described his gratefulness to the IFG staff as they arranged for participants to meet in small groups outside on the college’s main lawn. Jacob recalled that the students “had lunch together like we normally do and had time to just like talk with one another, which was good.” Likewise, Kia described appreciating the opportunity to attend an in-person workshop outdoors on the main lawn of campus. Even with the required COVID adjustments she was able to enjoy lunch with peers followed by listening to the IFG staff members make short presentations on important upcoming events and career development tips. She mentioned that she felt the IFG staff “did it very well. The way they had it all set up. Yeah, it was done nicely” and that “it was really good to see other people.” Both Kia and Jacob recognized the effort of the IFG staff to host in-person events and valued the opportunity to be in-person during fall 2020 while they noted most other events moved to online. Jenna and Katie also commented on how they appreciated the time and effort the

IFG staff put in to make in-person sessions available to the IFG participants even though both had selected to attend only online workshops in fall 2020 due to schedule conflicts with the in-person times. Regardless of whether the participants were able to attend an in-person workshop, they all mentioned their appreciation of having the option to attend an in-person event with the IFG program during fall 2020.

Along with the in-person workshops, the participants described the importance of the IFG program tent available outdoors on the main campus lawn during fall 2020. The participants explained that when walking to and from class, work, or other activities they would be sure to stop by the tent to say a quick hello to the IFG staff members, ask questions, pick up a snack, and connect with others students. Lizbeth explained that even with social distancing regulations due to COVID the IFG program staff were able to make her feel that she mattered, noting that she would stop by the IFG outdoor tent to engage in quick “hellos,” conversations, and ask questions whenever she was able to. Lizbeth mentioned that she:

talked to a lot to the assistant director and the graduate assistants, I talked to them the same way that I used to do...It's still the same really good, friendly, and welcoming warm interaction. There's always somebody at the tent and then sometimes I'm kind of sad that the tent is not up, but I know it's a rainy day, or now because it's cold.

Lizbeth appreciated that the IFG staff set up an outdoor tent to engage with her and the other program participants, noting that she was able to continue to have good interactions with the staff members in the outdoor space which made her feel continuously supported by the program staff. Jenna shared similar sentiments regarding the benefits of the

outdoor tent to continue her interactions with the IFG staff. She specifically recalled how the tent allowed her to continue building her relationship with the IFG assistant director, describing how she thought the IFG program “transitioned pretty well. Just because I can see them in person still, I can still stop by the tent and see [the assistant director].” Jenna was grateful to have opportunities for in-person connections via the IFG program’s outdoor tent as she was unable to attend the in-person workshops due to time conflicts with class. She expressed that having both options—workshops and tent interactions—made available in-person by the IFG staff made her feel that they cared about her and the other participants.

The participants noted the various in-person meeting opportunities provided in the form of outdoor workshops and tent interactions, and were grateful that the IFG staff dedicated significant time and energy to ensuring the students had in-person meeting opportunities during fall 2020. They also recognized that the IFG staff had to make significant adjustments—which took time, effort, creativity, and energy—to ensure the in-person meeting opportunities met all campus and state safety regulations related to COVID. As such, the participants expressed deep gratitude and appreciation for the IFG staff as they worked to offer the best experience possible for the IFG participants in fall 2020 despite the continuous challenges of the pandemic. The participants also indicated the effort put forth by the IFG staff to create such opportunities made them feel cared about and as though they mattered to the IFG staff and LAC.

In various ways, the participants described feeling that the IFG program fostered a sense of mattering, including through interactions with other participants and the IFG staff. Jacob went a bit further to assert that he has been most affected by the IFG program

director during his time at LAC, explaining that the program director was irreplaceable at the institution:

She's the one person on campus I've consistently always felt like 100% supported and backed by and know if it came down to it, and I was really going through it, that her door is open and she genuinely cares about each person she interacts with. She's just like a piece of familiarity that's been like through all the through all the changes throughout college and [the first gen program] has been a very consistent constant thing.

While Jacob felt some of his other involvements—specifically student government—played more important roles in his successful transition to LAC during his first year, he made it clear that the IFG program director was the most supportive staff person on campus, stating “she's our biggest cheerleader, and our biggest supporter... she just cares about us.” Others shared similar sentiments about the IFG program director and staff, indicating they felt constantly supported by the IFG staff members.

Through their interactions with other participants and IFG staff members during workshops and around campus, the participants felt that they were cared about by others in the IFG program. The participants felt an even stronger sense of mattering after observing the program’s exceptional transition to provide outdoor gatherings for workshops and the interactions at the IFG program tent. The adjustment to outdoor workshops and meeting spaces allowed for continued in-person interaction through the IFG program during a semester when most activities and courses shifted online, further adding to the participants’ feelings of mattering and belonging within the IFG program and on campus.

Promoting a Positive Self-Identification as a “First-Gen” Student

Another common theme across the participants was how the IFG program and community promoted a positive self-identification with being a first-generation student. Strayhorn (2012) explained that sense of belonging is particularly important “among certain populations, especially those who are marginalized or inclined to feel that way in a said context” (p. 3) including first-generation students. The participants described that the IFG program increased their sense of belonging at LAC by helping them feel proud to be first-generation. As part of the positive self-identification, the participants noted the importance of the IFG program making them aware of the large total number of first-generation students at LAC—approximately 40% of the undergraduate student population according to the program director. As the participants realized how many students were first-generation college students like themselves, they felt comfort knowing they were “not alone” (V).

Proud to Be a First-Generation College Student

The participants explained how the IFG program helped them feel proud to be a first-generation student. Jacob explained that he thought “it's cool that the College frames first gen students in a way of so much pride and celebration.” Like Jacob, Jenna also realized that the IFG program made her feel proud to be a first-generation college student, stating:

I also like that [the IFG program director] has created a culture where almost—it's like you're first gen like that's really cool. And that's what I love about it too because like I would have never thought of it to be like a huge deal or anything. I just thought my parents don't know what they're doing and so I'm figuring it

out...It's almost like you're proud to be first generation. Which I think is really cool to take something that's something that some people are like, 'oh,' to, 'no, this is really cool.'

Jenna noted that the IFG program specifically helped foster a sense of pride around being a first-generation student. Although she previously had not thought being first-generation meant anything special, her participation in the IFG program helped her develop positive feelings toward being a first-generation student. Lizbeth further described that the program helped her see not only how she was proud to be a FGCS but how she was making her parents proud, too. Lizbeth explained that the IFG program showed her that “we're in this together. So at the end of our four years we're going to be wearing those sashes and we're doing our family proud. Both [my sister and I] completed the program, both of us got our degree.” Lizbeth was excited to receive her first-generation student sash to wear at graduation as her sister did and knew that once both her and her sister had graduated from LAC, their parents would be exceptionally proud of them. Jacob, Jenna, and Lizbeth all understood the role the IFG program played in their feelings of pride in being first-generation students.

Along with increased feelings of pride, the participants noted that the IFG program helped them view being a first-generation student as a point of strength instead of a disadvantage. While many institutions and research studies approach first-generation students from a point of deficit (Whitley et al., 2018), the participants recognized that the IFG program approached first-generations students from a strength perspective. Katie stated that the IFG program “really tried to make me not seeing a first gen as being a disadvantage.” Jacob further explained that continuing-generation students would react

with surprise or shock when he would disclose his first-generation status, describing how he would:

often feel like when I first tell people that I'm first gen their reaction is like, 'Oh my gosh, I would have never guessed. So like, Whoa, good for you' and it's obviously—it's not true, but I think there's like the assumption that your parents didn't go to college because they're not smart and you're just here because you happen to get in. And so I think the College does a really good job about defeating that stigma. And they make it more of a celebration as opposed to a setback.

Jacob often felt inadequate as a result of people's comments regarding his first-generation status; however, he noticed that the IFG program and LAC proactively worked to defeat the negative stigma that often surrounds first-generation students by celebrating first-generation students on campus. Like Jacob, Lizbeth also noticed that people perceived being continuing-generation as superior, explaining that:

people are like, 'oh yeah, my grandparents and like my great grandparents had a degree.' They try to front that they're better in a way some of the kids at school, like degrade the [first-generation students] saying 'oh wow you're really doing it,' but at the same time the IFG staff are like 'Oh, I'm very proud that you're going to college' and stuff like that.

Lizbeth pointed out that she occasionally felt degraded for being a FGCS, but that the IFG program and IFG staff members reminded her they were genuinely proud of her accomplishments as a first-generation student. Throughout their interviews, many of the participants described initially feeling inadequate or embarrassed with regard to their

first-generation status; however, they also expressed that their participation in the IFG program helped them develop feelings of pride toward being a FGCS. In addition, the participants appreciated that the IFG program framed being a first-generation college student as a point of strength, celebrating the many accomplishments of program participants and faculty who were first-generation students themselves.

Helped Participants Feel They Were Not Alone

In addition to instilling feelings of pride in the participants, the IFG program also helped the participants realize they were part of a large community of first-generation students at LAC. The participants overwhelmingly expressed that the IFG program helped them recognize they were not alone at LAC. V, for example, explained that the IFG program was integral in introducing him to other first-generation students when he first entered college. As V met other first-generation students, he noticed he felt less alone. He explained “going to [the IFG program] and making friends right off the bat, and knowing that there's people there that are going through the same thing...that you're not alone.” V appreciated the opportunity to connect with other first-generation students through the IFG program who were “going through the same” challenges and experiences he was. Likewise, Zenni felt comforted knowing that the IFG program included others who were “in the same boat” as her, explaining that:

being able to know that I have other students and other faculty who are in the same boat as me, or have you know in the past been in the same boat as me. Just knowing I have those resources. Makes me feel content that I can always, you know, go to them if I ever need help.

The IFG program helped Zenni recognize there were other first-generation students and faculty who were first-generation students themselves at LAC who she could rely on for help. She noted she was thankful she was able to connect with students and faculty who were more likely to understand her experiences as a first-generation student. Jenna also felt less alone within the IFG community, describing that:

It gave me a sense that, like, okay. I'm not the only one doing this. I'm not the only one who may have problems. And so it made me feel a little less alone.

Because it was like, I'm not the only one right now who may not know this information. I'm not the only one who is in this major or like it really helped me feel like I wasn't as alone.

In addition to feeling less alone, Jenna felt comforted knowing that other first-generation students likely experienced similar challenges to her. Like Jenna, V was also comforted in knowing that he was not the only first-generation student who likely had questions or concerns with regard to navigating and being successful in college, explaining that his participation in the IFG program:

made me definitely feel like, 'Hey, I'm not, you're not alone.' Like these are the people that are going through the exact same thing as you are. They're probably struggling a little bit too. So don't feel like you're going through any of this alone.

For the participants, the IFG program helped them realize they were not alone. Their participation in the program normalized their feelings of apprehension and fears of failure as they recognized other first-generation students were experiencing through the same concerns and challenges. Moreover, the participants appreciated that they were

navigating those concerns together and able to rely on members of the IFG community as resources.

The participants specifically noted a few ways in which the IFG program worked to make LAC aware of the large first-generation student population. First, the participants noted that the program discussed the number of first-generation students on campus, sharing on numerous occasions that approximately 40% of students at LAC are first-generation. V recalled during his “first year I didn't really understand that much like they would tell us hey 40% of students here are first-gen...” but he had a hard time conceptualizing what that meant. However, during his second year V was able to better understand how many first-generation students were in the IFG program when he attended evening workshops with all of the first-generation sophomores at once. During a regular sophomore meeting V recalled thinking “it gave the reality of hey, there's 105 other people that are going through the exact same thing that you're going through.” When V saw the entire sophomore class at one program, he was able to better comprehend the large size of the first-generation community at LAC as he realized there was at least 100 students participating in each of the cohorts of the program—first-year, sophomore, junior, and senior years as well as the transfer cohort. Like V, Lizbeth also described how seeing hundreds of students gathered during the sophomore year IFG workshops helped her:

realize that I'm not the only one, because I thought since I was going to school in [this affluent city], I felt like everybody's parents had gone to college, I was like all there's only gonna be like a few select ones, but there's hundreds of us [in the IFG program].

For V and Lizbeth, the larger IFG workshops allowed them to better recognize the number of first-generation students at LAC. In doing so, they felt less alone knowing they were part of a large community of fellow first-generation students.

Aside from the larger group meetings during sophomore year, many participants highlighted the IFG program gear they saw people wearing around campus, and the part the program gear played in helping them realize the extent of the first-generation community on campus. Katie recalled seeing the IFG program stickers on students' computers and personal belongings, explaining that when she notices "people with IFG Program stuff every single day. Like the program stickers—I look at people's laptops and they have the first gen stickers and I'm like, oh, there's so many of us. It's so cool." Likewise, Lizbeth appreciated seeing other first-generation students wearing IFG program t-shirts and clothing, explaining that when she sees students in IFG gear she doesn't "feel as like lonely. I'm like, Oh, you're also a first gen or, oh, I have that, too, because they also made a shop. So we can shop first-gen gear." Katie and Lizbeth both felt less alone on campus when they saw students displaying or wearing IFG program gear—clothing, stickers, pens, etc. In addition to giving each first-generation student a t-shirt to celebrate their first-generation status, the IFG program offered students the opportunity to order additional gear through an inexpensive online shop, which the participants enjoyed personally. The online first-generation apparel shop also increased the amount of IFG program apparel students wore around campus, further representing the IFG program community.

In addition to students wearing IFG clothing and displaying IFG stickers, Zenni and Jacob explained that they further appreciated when faculty members who were first

generation students themselves wore their IFG gear while teaching or around campus.

Zenni explained:

When people are wearing the first gen gear, it's pretty amazing to see how many people are actually first-gen, especially on the faculty side, I didn't think that some of those like faculty members were first-gen because some of them don't participate in the meetings and stuff like that. So it's just nice to see who I can go to if I ever need help, or whatever.

To Zenni, when faculty wore their first-generation gear it signaled they were part of the same community she was, and that they were willing to be a resource for her and the other first-generation students. Similarly, Jacob was grateful when the faculty members who were first-generation themselves wore their IFG gear because it indicated to him that first-generation students can go on to earn higher degrees and hold positions like those of his professors. He described:

With the first-gen gear, I think I like especially appreciate when faculty do it because, like, it's good to have like the peer support and everything, but it's also good to see people in our position now that are like doing things that we want to do in the future. So I definitely really appreciate when professors make an extra effort to do that.

Jacob was able to identify role models in faculty members who were first-generation by the IFG program gear they wore. Additionally, seeing first-generation gear on successful faculty and staff members who were first-generation students themselves inspired him to set higher goals such as applying to law school. In various ways, the students recognized how the IFG program publicized the size of the first-generation community at LAC,

making the participants feel less alone and more supported within the IFG program and across campus.

Conclusion

This study explored if and how a first-generation focused student success program fostered sense of belonging (Strayhorn, 2012) in order to understand how institutional practices and policies support the success of first-generation college students (FGCS). In this chapter, I provided the findings for this qualitative case study, which were based on data analysis of documents, observations, and interviews. At the institutional level, through analysis of documents and an interview with the IFG program director, I found that LAC—a small, comprehensive, liberal arts college located in the Midwest—intentionally supported first-generation students. From first-generation focused admissions events to the first-generation celebration ceremony on the day of commencement, LAC aimed to help first-generation students feel a sense of belonging and pride throughout the institution. The case level included document review and an interview with the IFG program director through which I found that the IFG program endeavored to support first-generation students and build community within the program and across campus, both of which helped first-generation students develop a sense of belonging. The majority of the data was collected at the embedded unit level through interviews and observations with the seven participants to better understand their experiences as well as their sense of belonging, if at all. At the embedded unit level, I found that the participants recognized that IFG program played a critical role in their sense of belonging within the program and on campus.

The majority of the findings section discussed the final data analysis step during which I analyzed data across the levels—institutional, organizational, and participant—from which I constructed four themes. Through the data I collected and analyzed, I found that the IFG program:

1. Helped students navigate unfamiliar structures of the institution, particularly during the initial transition to college,
2. Helped students connect with other people on campus to promote a sense of community,
3. Provided a sense of mattering for students, and
4. Promoted a positive self-identification as a "first-gen" student.

Initially, participants expressed how the IFG program helped them navigate the academic and social structures of the college. As newcomers to LAC, the participants were seeking ways to successfully navigate the college context, which directly relates to Strayhorn's (2012) sense of belonging theory as he asserted that "sense of belonging takes on heightened importance (a) in certain contexts... (b) at certain times..." (p. 17) such as when students are transitioning to a new and unfamiliar environment.

The participants consistently described that the IFG program structure helped them connect with others on campus, thereby building their sense of community and resulting in "perceived social support" or sense of belonging (Strayhorn, 2012, p. 3). More specifically, participants also explained how the program helped them build relationships with peers and with faculty members, resulting in the participants feeling as though they were "important to...others on campus (e.g., faculty, peers)" (Strayhorn,

2012, p. 3). With increased connections and relationships, the participants then felt a stronger sense of community and belonging within the program and on campus.

The participants described how the IFG program helped them feel they mattered on campus and within the IFG program, which further confirmed their sense of belonging as “sense of belonging is related to, and seemingly a consequence of, mattering” (Strayhorn, 2012, p. 17). Such “perceived social support” (Strayhorn, 2012, p. 3) is necessary for sense of belonging to occur and took place as the participants felt recognized and cared about while participating in the IFG program, as well as supported by the IFG program staff. In this way, the sense of mattering identified by the participants further supported that they felt a sense of belonging as a result of participating in the IFG program.

Lastly, the participants described how participating in the IFG program helped to develop a positive association with their first-generation student status, which ties directly to their development of sense of belonging as the IFG program helped the participants feel as though they mattered to the program and college. In doing so, the program developed “feelings of connectedness” (Strayhorn, 2012, p. 3) among the first-generation student participants. Moreover, as Strayhorn (2012) asserted, sense of belonging “takes on heightened importance...(c) among certain populations, especially those who are marginalized or inclined to feel that way in a said context” (p. 3, emphasis in original), continuing on to include first-generation students in this group. The IFG program’s emphasis on being proud to be first-generation allowed the participants—who initially described feelings of marginality when arriving at college—to instead feel celebrated and as though they were an important part of campus.

Across the four themes it is evident that the IFG program fostered sense of belonging among the participants. The participants described how the program met their continued need for sense of belonging, whether during their transition in their first semester, while helping to build connections with peers and faculty in their sophomore year, or in reinforcing that first-generation students matter on campus and should be proud of their accomplishments.

Chapter 5: Discussion

The purpose of this study was to explore if and how a first-generation focused student success program fostered sense of belonging. In doing so, I strived to better understand how institutional practices support the success of first-generation college students (FGCS). In this chapter I discuss the results of this study as well as how the results connect to or differ from the existing literature on first-generation college students (FGCS), sense of belonging, and student success programs. In doing so, I aim to demonstrate how this study verifies current research as well as adds to the literature. Moreover, I discuss sense of belonging theory (Strayhorn, 2012) and consider how this study furthers our understanding of sense of belonging. I then provide implications for practice as well as recommendations for future research. Lastly, I provide strengths and limitations of this study as well as an overall conclusion to this chapter and the study as whole.

Discussion

Through this study I endeavored to better understand how first-generation students experienced sense of belonging when participating in a first-generation focused intervention program, if at all. As my literature review demonstrated, few studies explore first-generation student success programs or sense of belonging or a combination thereof, with limited to no studies exploring sense of belonging among first-generation students participating in a first-generation specific student success program. Likewise, Strayhorn (2012) stated that few studies explore how institutional practices foster sense of belonging. However, with institutions starting to dedicate resources to first-generation

student success programs (Whitley et al., 2018) it is important to determine if and how these program works.

This section discusses how the aforementioned findings support or expand upon the existing literature, as well as areas where the findings of this study contradict or further contribute to the extant literature. In following with my findings, this section starts with a discussion of how first-generation students experienced a student success program during their transition to college. Next, I discuss how the first-generation focused student success program in this study fostered sense of belonging among the first-generation participants. I then discuss how the success program helped first-generation students feel as though they mattered and being first-generation was not a deficit as they transitioned to, and navigated, the college environment. Finally, I discuss how the IFG program fostered a positive self-identification among the participants with regard to their first-generation student status.

Helping First-Generation Students Successfully Navigate College

In Chapter 2: Literature Review, I provided a review of the literature describing structural barriers first-generation students might face as they transition to college. For example, Gibbons and Borders (2010) found FGCS were less confident in their ability to succeed in college while additional research indicated that FGCS felt less academically prepared than CGCS (Martinez & Klopott, 2005; Reid & Moore, 2008). Similarly, research conducted by Collier and Morgan (2007) found that FGCS struggled to adjust to expectations of college such as understanding faculty expectations or recognizing the amount of time needed to study to be successful in classes. Many of these barriers were discussed during interviews with the IFG program director as well as with the

participants. All of the participants described feeling overwhelmed and lost during their first few weeks of college. Jacob stated he felt “overwhelmed for a while” while Zenni described her struggles to adjust to the expectations of college academically and athletically. Participants also described feeling confused by institution and faculty expectations and the more flexible academic schedules of college. Katie explained that she was “really stressed out for classes” because she “wasn't used to the different schedules” compared to the consistent high school schedule she followed for years. Across participant interviews, the FGCS described feeling less confident in their academic abilities, overwhelmed by college expectations and generally lost—socially and academically—during their first few weeks on campus. Such findings support current research as the first-generation students felt under prepared for college and described having difficulty adjusting to the many expectations and requirements of college.

To counter these barriers, Soria and Stebleton (2012) suggested that colleges implement additional support structures for FGCS to help them navigate their transition to the institution while Rubio et al (2017) suggested colleges better connect students to resources and interventions to support student success. The IFG program does just that as demonstrated by my findings, including in my interviews with the program director and participants, as well as my review and analysis of the IFG program website. The IFG program works to counter these concerns by dedicating the first year to developing student success skills in order to help support the first-generation participants through their initial transition to college. For example, Lizbeth explained that the IFG program “really helped me figure out my first-year of college” while Kia described herself as a “lost pup” prior to joining the IFG program and receiving information throughout her

first year on campus. Jacob summarized the IFG program overall, explaining that it was like “college 101 in a sense—time management, learning how to email professors, go to office hours—things that all college students benefit from... things that college students in general should be able to do.” The majority of the participants described the IFG program as helping them during their transition to college. They explained that the program did this by providing workshops to help the participants better understand college expectations and to learn the skills needed to be successful in college. These findings advance our understanding of the important role first-generation focused student success programs can play in supporting first-generation students as they transition and adjust to college. In addition, these findings advance our understanding of the field by demonstrating that a first-generation focused intervention program can help first-generation students overcome possible barriers such as difficult adjusting to college and understanding the different expectations.

Fostering Sense of Belonging and Community Among First-Generation Students

Throughout the literature review, the research suggested that first-generation students tend to feel more disconnected than CGCS (Covarrubias & Fryberg, 2015; Rubio et al., 2017). Moreover, sense of belonging theory further asserted that marginalized students, including first-generation students, tend to feel lower levels of belonging (Strayhorn, 2012). To counter this, Strayhorn (2012) stated that it is important that marginalized students feel they are a part of a group and have a community on campus. This findings of this study support the research and theory as the participants described feeling lost during their first few weeks of college. For example, V explained he had not made any social connections through athletics or classes in his first few weeks,

but the IFG program helped him connect with other students, faculty, and staff; in this way, V described the program as an important “bridge into coming into [college].”

Lizbeth also felt supported within the IFG community, explaining that she never felt “alone at LAC with having the IFG program.”

Beyond the initial transition to college, research suggests that to establish sense of belonging it is necessary that students feel supported and connected to their campus community (Schlossberg, 1984; Strayhorn, 2012; Tinto, 1993). Current research reiterated the importance of relationships, both peer and faculty, in fostering sense of belonging (García & Garza, 2016; Glass et al., 2015; Newman et al., 2015). Throughout the interviews, the participants described how the IFG program helped support and connect them to their peers and faculty within the program as well as across the campus community. Jenna stated that she “always felt like [she] belonged in the IFG program” and appreciated knowing that she was surrounded by all first-generation college students. Other participants mentioned how the IFG program helped them feel constantly supported through regular email communication and ongoing workshops. Zenni specifically described how the IFG program was an important “support system” for her, and all of the participants described the importance of meeting faculty members through the program, often explaining they felt less intimidated by faculty members after making connections through the IFG program. The first-generation participants’ intimidation with regard to faculty interactions is echoed in the literature as Longwell-Grice and Longwell-Grice (2007) found that first-generation students were more likely to be intimidated by professors, potentially leading to lower levels of retention per Tinto’s theory of departure. Longwell-Grice and Longwell-Grice suggested that institutions find ways to create

structured student-faculty interactions to support student success, such as the structured workshops of the IFG program that the participants referred to time and time again as helping them navigate academic structures and connect with faculty members.

The IFG program also played a critical role in helping the FGCS make connections with peers, faculty, and staff, which further increased their sense of belonging. For example, Jenna described that through the IFG program she “got to know some more people,” including peers, faculty, and staff. V also recognized that the IFG program helped him build relationships and network, both of which were important as he explained he was “not going to create relationships on [his] own” due to his more reserved personality. Similarly, Jacob explained that the IFG program provided a “safe space to practice” interacting with others. All of the participants described how their participation in the IFG program helped them feel they belonged on campus by creating a sense of community within the program and connecting them with peers, faculty, and staff. In this way, the findings of this study support the extant research as the participants described the importance of the IFG program helping them to feel supported and connected to both the program and the campus. Furthermore, while a handful of studies explored low-income, first-generation students’ sense of belonging (Smith & Lucena, 2015; Means & Pyne, 2017), few to no studies look at first-generation students’ sense of belonging when participating in a first-generation focused student success program. In this way, this study advances the knowledge within the field by contributing unique findings related to how a first-generation focused success program can foster sense of belonging through structured workshops and intentional interactions between peers, faculty, and staff.

Uniquely contributing to the literature on sense of belonging and first-generation students, this study explored a comprehensive, four-year first-generation focused student success program. In doing so, this study provides an understanding of how a unique, long-term student success program can successfully foster sense of belonging among first-generation students across multiple years. For example, while the participants described meeting peers and faculty in their first-year, the participants described how the second year of the program focused heavily on developing stronger connections with peers, faculty, and staff. Moreover, while the first year focused on transitioning to the institution and achieving academic success, the second year emphasized making connections and building community within the program and on campus—or in other words, increasing sense of belonging. To highlight this, Jenna described how the second year in the program was the “best year of IFG program” in her opinion. While she appreciated that the first year “was important for building my skills, sophomore was really: let’s get to know each other.” Other participants echoed these sentiments, with Jacob describing stronger connections with the program staff—specifically the IFG program director—while Zenni appreciated the overall focus on relationships and connections with peers, faculty, and staff.

Providing a Sense of Mattering for First-Generation Students

Research suggested that students must have a sense of “mattering or feeling cared about” (Strayhorn, 2012, p. 3) in order to achieve a sense of belonging. Moreover, prior research by Schlossberg (1989) further explained that it is important that students feel as though they matter to the institution or a community. Schlossberg (1989) and Strayhorn (2012) both asserted that it is more important for marginalized individuals to feel they

matter and belong than it is for students who do not feel marginalized. Therefore, existing literature suggested that mattering is important for the success of marginalized students such as first-generation students. The findings of this study confirm the extant literature on mattering and marginalized students, specifically focusing on first-generation student experiences. First, the participants noted that because of their participation in the IFG program they felt that someone recognized them and cared about them. Katie recalled numerous instances when the IFG staff members would welcome her to an event or the IFG tent by name, asking her how her day was or following up on a previous conversation they had. Likewise, Jenna explained that when she arrived at the program workshops, students and IFG staff recognized her and welcomed her by name, which made her feel as though she matters to the IFG community. The personalized interactions Katie and Jenna had with IFG peers and staff were echoed by other participants as well, and provided a much needed sense of mattering to the participants. Thus, the findings of this study confirm the importance of mattering to marginalized student populations such as first-generation students.

Promoting Positive Self-Identification with First-Generation Status

The majority of research on first-generation students explored student success (Cataldi et al., 2018; Pratt et al., 2017; Soria & Stebleton, 2012) as well as common challenges faced by first-generation students (Whitley et al., 2018) including financial challenges (Covarrubias et al., 2019; Stephens et al., 2014) or difficulties adjusting to college (Covarrubias et al., 2019; Stephens et al., 2012b). However, little to no research explores how FGCS positively associate with being first-generation, often focusing on more negative deficits (Whitley et al., 2018) that first-generation students might be

challenged by upon arriving at college. This study contributes to the literature in a unique manner as many of the participants articulated how their participation in the IFG program helped them to view being a first-generation college student as a positive attribute.

Most notably, multiple participants described how the IFG program instilled a sense of pride in the first-generation participants. For example, Jacob mentioned that the IFG program described first-generation with “so much pride and celebration.” While Jacob had previously felt self-conscious about being a FGCS, the IFG program positively changed the way he thought about his FGCS identity. Jenna similarly described that “it’s almost like you’re proud to be first-generation” which, for her, was a different way of thinking about being first-generation as well. Moreover, multiple participants recalled times when people had made negative comments about them being first-generation during high school or while at LAC. The participants noted how the IFG program helped to counter the negative narrative often associated with FGCS by framing being a FGCS as a matter of pride and strength. The participants described how the program discussed strengths first-generation students bring to campus such as resilience and commitment, thereby countering the negative narrative associated with FGCS. In doing so, the IFG program provided a positive narrative for first-generation students which, for many of the participants, was the first time they considered their FGCS status as an asset.

Participants also pointed out the many ways in which the IFG program—and therefore the institution—celebrated first-generation students. The participants recognized the importance of first-generation focused events throughout the year including First-Generation Celebration Week, the “halfway there” lunch celebration for sophomores, the tri alpha honors society induction on Honors day, and the pinning

ceremony for graduating seniors. The participants noted how each of these events—and more—purposefully emphasized the strengths and successes of first-generation students on campus. In doing so, the events strengthened the participants’ pride toward their first-generation identity. Another way the program fosters pride among FGCS is by providing first-generation branded gear to the program participants as well as faculty. The participants described feeling proud to be a FGCS and a sense of community when they saw other students in IFG apparel or face masks, and that they would often see program participants around campus with “program stickers—I look at people's laptops and they have the first gen stickers and I'm like, oh, there's so many of us. It's so cool” (Jenna). Through purposeful programming and first-generation specific apparel and giveaways, the IFG program fostered a sense of community and pride among the program participants.

Overall, the students felt empowered by the IFG program’s positive rhetoric. While many participants had previously viewed their FGCS identity as a negative, the IFG program helped them realize their strengths as a FGCS. Additionally, the participants recognized the importance of the program’s regular promotion and celebration of first-generation student accomplishments. The program successfully helped participants develop a sense of pride specific to being first-generation. This finding is relatively unique as the literature primarily emphasized the challenges first-generation students face, often approaching first-generation students from a deficit perspective. The IFG program, however, purposefully approaches the first-generation students from a position of strength and pride, which the participants not only recognized but appreciated tremendously.

Importance of the IFG Program Director and Staff

The participants also repeatedly discussed the importance of the IFG program director as well as the other IFG program staff members—the assistant director and graduate assistants—with regard to their sense of belonging as well as the IFG program’s success and functioning. The participants expressed their appreciation of the constant support they received from the program director throughout the duration of their time in the program. As Jacob and Jenna—the two seniors participating in this study—reflected on their four years in the program they appeared increasingly appreciative of the program director as they realized the continuous support and encouragement she provided throughout their four years at LAC. For example, Jacob stated that he knew he “always had the support from the [program administrators]” while Jenna recognized that their “constant support” let her know she was always cared about on campus. V—a third year student—also appreciated the friendly faces of the program administrators, describing how the program administrators regularly made him feel they were happy he chose the institution and to be a part of the program.

In addition to the personal support they received from the IFG program staff, the participants all voiced their appreciation of the IFG program administrators and how hard they worked to facilitate in person workshops and events despite the challenges of the COVID-19 pandemic. For example, when the COVID-19 pandemic threatened to prevent in-person workshops and activities, the participants explained that the IFG staff members purchased a tent so they could continue to have in-person interactions with participants outdoors in a socially distanced manner. While other programs on campus had moved fully online in response to the pandemic, the participants were grateful that the IFG

program endeavored to keep some in-person workshops (held outdoors) and interactions via the program tent. Even when the participants were unable to attend the in-person workshops as they were completing their courses in a primarily remote fashion, they expressed gratitude toward the IFG staff for finding a way to safely offer in-person options to connect with peers, faculty, and staff.

Along with their praise for the full IFG staff, the participants expressed significant gratefulness for the IFG program director herself. Each of the participants recognized the energy of the program director as being important to the success of the program as well as her importance to their experience with the program. For example, Kia recognized that the IFG program director took her under her wing while she was a “lost pup” transitioning to campus. As a returning adult student Kia was grateful for the kindness and direction provided by the program director. Likewise, Katie was surprised that the IFG program director was the first person on campus to reach out when she fell ill with COVID-19 early in fall semester. She was thankful the program director took the time to email her personally to ask if she needed anything, and also followed-up with an email checking in when Katie returned to classes. Similar to Katie and Kia, each of the other participants described ways in which the IFG program director went above and beyond to assist them.

In this way, this study further contributes to our understanding of mattering as the participants described the importance of the IFG staff support they received. While existing research indicated that many institutions do not have specific administrators or offices dedicated to providing first-generation services (Whitley et al., 2018), the findings of this study suggest that having dedicated first-generation staff members played an

important role in helping the participants feel they mattered within the program and campus community. With limited to no research on first-generation focused student success programs and belonging, and therefore almost no research on first-generation program administration, this study adds a new perspective to the literature by confirming the importance of having a dedicated first-generation staff member (or members) to support first-generation students on campus.

Implications for Practice

The purpose of this study was to better understand the role that a first-generation focused student success program played in fostering sense of belonging among first-generation college students. I endeavored to understand how first-generation students experienced a comprehensive, four-year student success program for first-generation students, how the program fostered belonging, if at all, and the role the program and the program administrators played in the development of sense of belonging, if at all. The findings presented in the previous chapter as well as the discussion in this chapter indicate that the first-generation success program supported sense of belonging among participants.

This section focuses on the implications of the findings as well as the discussion presented in this study. The findings and discussion are applicable to college leadership, student affairs and academic affairs professionals, faculty members, and staff members who work with first-generation students. In each of these capacities, the findings of this study are helpful as college practitioners should work to offer more resources and support to first-generation college students with the purpose of increasing student success for FGCS.

First-Generation Focused Success Program

The findings of this study indicate that the IFG program fostered a sense of belonging and community among first-generation students, faculty, and staff at LAC. The extant literature asserts that “sense of belonging may also be particularly significant for students who are marginalized in college contexts such as...first-generation students” (Strayhorn, 2012, p. 17). The findings of this study reveal that the IFG program successfully helped develop sense of belonging among the first-generation participants by offering regular workshops and programming that allowed first-generation students to connect with peers, faculty, and staff and receive important student success resources. Therefore, institutions should consider developing a first-generation specific student success program similar to the IFG program, and should consider implementing as many of the attributes of the IFG program as possible. The following section describes such attributes with a specific focus on those that participants recognized as helping foster first-generation student success and belonging.

One important aspect of the program that fostered of sense of belonging was that all participants in the IFG program identified as first-generation students. Participants explained that they felt particularly comfortable within the IFG program community because the other participants were also first-generation students. Further, the majority of faculty and staff guest speakers were also first-generation students during their undergraduate experience, and shared stories of challenges they experienced and how they overcame those challenges. As colleges consider developing student success initiatives for underrepresented students such as first-generation students, they might

consider a group limiting participation to first-generation students to help foster community as the IFG program does.

The participants also recognized the importance of the structured first-year workshops in helping them successfully transition to college. The IFG program offers additional social and academic resources as students transition to college, not only helping the students be academically successful but further promoting sense of belonging, which takes on heightened importance during periods of transition (Strayhorn, 2012). To do so, the program's structured curriculum focuses on helping students successfully transition to the institution through regular workshops focused on student success skills. Woven within those workshops, the program also focuses on helping students connect with one another as well as faculty and staff, further supporting the development of sense of community and belonging. In addition, the program emphasizes the many strengths the first-generation participants and their parents have, asking questions such as "what is one thing you learned from your parents that has helped you be successful?" and "what strengths do you bring to LAC?" (Carballo, 2020).

Extended Length of Program

One important factor to the design of the IFG program is the extended length of time the program covers. While many student success programs are offered as summer bridge programs (Ashley et al., 2017; Cabrera et al., 2013) or first-year experience programs (Swanson et al., 2017; Tobolowsky et al, 2008) that conclude after the first semester of first year of college, the IFG program spans all four years of a traditional undergraduate path through college. The participants noted the importance of having support from the IFG program throughout their college experience, with the majority of

participants noting an increase in sense of belonging in their sophomore year specifically as the program focused on creating connections and getting involved on campus. While many student success programs are shorter in time-span (Hatch et al., 2018), the IFG program is one of few first-generation programs in the country to offer such a comprehensive format (Carballo, 2020) which the participants described as important to their sense of belonging.

Staff Dedicated to First-Generation Students

Another important aspect of the IFG program was the number of staff members who were dedicated solely to facilitating the IFG program workshops and events. Participants described the importance of knowing they could always contact the IFG program staff—the director, assistant director, or graduate assistants—with questions or concerns. Multiple participants described how they felt continuously supported by the IFG program staff, including Katie who recalled the IFG program director being the first person to contact her after she became sick with COVID. In addition, with two full-time administrators and two graduate assistants, the IFG program was able to execute a high volume of programs including workshops specifically for first-years students, transfers, sophomores, juniors, and seniors, as well as First-Gen Celebration Week and a number of other events, all of which the program participants highlighted as important to their success or the success of their first-generation peers. Therefore, the findings of this study suggest that it is important to have a dedicated staff member, or staff members, who focus on first-generation students. This finding is supported by the existing research which highlights the lack of full-time first-generation administrators and calls for campuses to develop positions dedicated solely to the success of first-generation students

(Whitley et al., 2018). Moreover, the findings of this study suggest having an energetic and creative leader in the role of program director was important to the success of the program and the sense of belonging of the participants. Institutions might consider naming a strong, high energy leader as the person in charge of their first-generation success initiatives if possible.

Financial Support for First-Generation Students for Participating in Program

The participants confirmed the importance of the IFG program providing a scholarship for their participation. With research indicating that tuition is a top concern for FGCS (Azmitia et al., 2018; Rubio et al., 2017), the IFG scholarship provided both an incentive to participate as well as a financial resource for the FGCS participants. Given the financial incentive, the participants stated that the scholarship was a main reason they decided to join the IFG program. For some, including Jacob, the scholarship was the main reason he decided to return for sophomore year after not particularly enjoying the first year of workshops. Ironically, his sophomore year in the program was by far his favorite as he reflected on his experience with the IFG program as during his second year in the IFG program Jacob met numerous faculty who were first-generation students themselves and expanded his network on campus. Jacob recognized without the scholarship incentive it is possible he would have not returned and therefore missed out on such an impactful second year in the program.

With the participants candidly reporting that the scholarship was a driving factor in their initial participation, institutions should consider offering a first-generation specific scholarship associated with participation in a first-generation success program. While current research suggests a variety of ways to support FGCS such as increasing

work study opportunities (Lohfink & Paulsen, 2005) or increasing financial aid in general for FGCS (Katreovich & Aruguete, 2017), attaching a FGCS scholarship to program participation would work to provide multiple benefits to first-generation students including financial, academic, and social support.

Supporting First-Generation Students When a Program is Unavailable

While offering a robust first-generation success initiative similar to the IFG program might be ideal, it is possible that not all institutions have the resources—personnel, financial, time, etc—to do delete. In situations where resources are tight but the institution endeavors to further support FGCS, institutions might consider ways to better support FGCS with more limited resources. In these cases, it might not be possible to have as many or any dedicated staff members, to offer a scholarship, or to provide so many workshops, food, and/or first-generation specific apparel and gear. The following section provides the key components described by participants in this study that fostered sense of belonging as they participated in the IFG program. Institutions might consider weaving one or more of the following components into existing programs on their campus, or beginning a few low-cost, first-generation specific initiatives to support sense of belonging.

One option institutions might consider would be to offer a program similar to the IFG program but smaller in scale. This recommendation for practice is similar to the program included in the research study of Araujo et al., (2014) who found that a low-cost series of student transition and support initiatives helped to foster sense of belonging among students in their first year of college. Such initiatives can help first-generation students meet one another as well as faculty who were first-generation as participants in

my study described the importance of connecting with other FGCS at workshops in their first and second years. Institutions could host one or more low-cost social gatherings for first-generation students during their first few semesters on campus to facilitate the creation of connections among first-generation students. This recommendation is founded on the findings of this study, as well as current research such as one study conducted by Dika and D'Amico (2016) which found that perceived social fit was an important indicator of persistence for first-generation students pursuing a variety of majors. If possible, the institution should encourage faculty who were also first-generation during their undergraduate years to attend and connect with first-generation students, as the participants in this study emphasized the importance of developing relationships with faculty who were first-generation. While students in this study indicated that food was an incentive for participating, if budgets are tight, the program might not include food or might include limited snacks (e.g., cookies and hot cocoa), but not offer a full meal as the IFG program often provides.

Along with a more limited offering of workshops geared toward social belonging, institutions should consider regular email and social media communication with first-generation students. The participants in this study indicated the importance of receiving weekly emails from the IFG staff members with important campus resources and events such as the study abroad fair, etc. While those resources are often communicated from separate offices, the IFG program reiterates the importance of attending certain events for career development, academic success, skill development, and networking. Therefore, an institution could recreate a similar email sequence at no cost—other than the staff

member's time—to engage with first-generation students regularly throughout the year and help highlight key campus events and resources.

If a dedicated program director is not available, institutions should consider other ways to embed first-generation success into job responsibilities of staff and faculty. Since the participants described the importance of feeling supported and encouraged by the program director, institutions should consider which office or division would be best suited on their campus to foster similar support and encouragement, with likely options being within academic or student affairs.

If a dedicated full-time staff member—or two—is not an option, an institution might consider hiring a graduate assistant dedicated to first-generation student success initiatives. The graduate assistant could report to academic or student affairs depending on where student success initiatives are housed at the institution. As the IFG program has grown over the last five years, the program director has sought two graduate assistant positions to assist with workload. The graduate assistant could then develop and execute workshops, create email communications, and help connect first-generation students with pre-existing student success resources across campus such as career development, financial aid, academic advising, and study abroad.

In addition to staff members—full-time, part-time or graduate assistant—institutions might consider how to purposefully facilitate interaction among first-generation students and faculty members. The participants in this study highlighted on numerous occasions the importance of their interactions with faculty members on their overall sense of belonging, especially with regard to levels of belonging within the classroom. Additional research further supports the importance of faculty interactions,

especially among marginalized populations. For example, research by DeFreitas and Bravo (2012) points to the importance of faculty interactions to the academic achievement of Black and Latinx college students. Therefore, institutions should consider fostering relationships between faculty and first-generation students as a way to increase sense of belonging and student success, even when a first-generation specific success program is not an option.

Implications for Research

This study furthers our understanding of sense of belonging theory, specifically focusing on better understanding how first-generation students experience sense of belonging when participating in a first-generation focused student success program, if at all. This study also advances our understanding of the role a first-generation focused student success program can play in assisting first-generation students during their transition to college, as well as in developing a positive identification with their first-generation identity. However, additional research is needed to further our understanding of sense of belonging and first-generation students, as well as first-generation focused student success programs.

Although ample research has been conducted on sense of belonging theory and student success (Strayhorn, 2012; Zumbrunn et al., 2014) as well as on marginalized groups including Black students (Newman et al., 2015; Strayhorn et al., 2015; Wood & Harris, 2015) and Latino students (Dueñas & Gloria, 2020; Garcia, 2019b; Garcia & Garza, 2016), few studies explore sense of belonging and first-generation students (Means & Pyne, 2017). While this study contributes to the limited research on first-generation student sense of belonging, it focuses on the experiences of FGCS in a

specific student success program; additional research on first-generation student sense of belonging is necessary. Future research might focus on first-generation students' sense of belonging when participating in other campus programs such as orientation, first-year experience courses, or athletics. In doing so, future research can explore whether additional campus programming influences the sense of belonging of first-generation students, if at all. Moreover, research might consider first-generation student sense of belonging on campus in general, thereby expanding the research beyond a particular student program or experience.

As mentioned above, current research focuses on sense of belonging and marginalized student populations such as Black students (Newman et al., 2015; Strayhorn & Tillman-Kelly, 2013; Strayhorn et al., 2015; Wood & Harris, 2015); Latino students (Abrica et al., 2020; Dueñas & Gloria, 2020; 2019b; Garcia & Garza, 2016), Native American students (Tachine et al., 2017), international students (Glass et al., 2015; Lau et al., 2018; Yao, 2015, Yao, 2016), students with disabilities (Vaccaro et al., 2015; Vaccaro & Newman, 2016) and veteran students (Durdella & Kim, 2012). However, limited to no research explores how first-generation students who identify as two or more marginalized social identities experience a first-generation student success program and sense of belonging. Therefore, future research should explore the intersectionality of first-generation student status with a variety of other marginalized identities to better understand how various social identities—including first-generation status—affect the student experience when participating in a student success program, as well as sense of belonging, if at all. Moreover, future research should explore the intersectionality of

social identities among first-generation students participating in a first-generation specific student success program.

Current research on student success programs focuses primarily on first-year experience programs, summer bridge programs, and learning communities, with limited research focusing on first-generation student success programs (De La Rosa, 2012; Wibrowski et al, 2016). Again, this study contributes to the limited research on first-generation student success programs by exploring a comprehensive, four-year first-generation focused success program, yet additional research is needed as research in this area is insufficient. With regard to sense of belonging and first-generation students, future research could replicate this same study at various institutions to better understand first-generation sense of belonging in different contexts. While this study was designed to first and foremost understand the IFG program at LAC, future research should consider exploring first-generation student sense of belonging when participating in student success programs at different institutions.

Future studies on first-generation student success programs should consider different methodologies as well. The case study nature of this study allowed me to thoroughly understand the case—the IFG program—and the participants' experiences within the specific case during the fall 2020 semester. Future studies might incorporate a longitudinal design to consider first-generation student sense of belonging over a time frame longer than one semester. Additionally, research might consider a quantitative and/or multi-institutional design to produce findings that are generalizable. Quantitative research could also allow for comparisons to be made between first-generation students participating in similar, different, or no student success programs, or between first-

generation and continuing-generation student sense of belonging. While this study provided an in-depth understanding of the IFG program, the results of case study research are not generalizable, therefore requiring future research to better understand first-generation student sense of belonging when participating in student success programs in different contexts.

Additional research should further explore the concept of promoting positive associations with first-generation status. While most research focuses on the deficits experienced by first-generation college students such as limited financial support (Covarrubias et al, 2019), lower levels of involvement (Mehta et al., 2011), this study found that the first-generation focused student success program can help foster positive feelings among first-generation students. In this way this study uniquely contributes to the literature as few, if any, articles focus on students feeling proud to be first-generation college students. Therefore, additional research should further explore this topic. Future research might consider what aspects of an institution foster first-generation student pride in general, or perhaps could focus on specific programs or initiatives designed to promote FGCS pride. Research might also compare and contrast initiatives, or lack thereof, across many campuses to determine the ways institutions foster or hinder first-generation student pride.

Lastly, future research should further explore how comprehensive first-generation focused success programs like the IFG program foster student success. With up to four-years of programming, research might follow students throughout the four years to determine how their experiences vary from year to year, if at all. Future research should explore how comprehensive student success programs such as the IFG program foster

other desired outcomes beyond sense of belonging, if desired. For example, future studies might consider how participating in a multi-year student success program fosters involvement and/or student engagement on campus, academic success, persistence, career readiness, or more.

Strengths and Limitations

As with any study, this study had strengths and weaknesses that must be considered and are discussed in this section. While there are likely additional strengths and weakness than discussed in this section, this section highlights what I believe are the most pertinent strengths and limitations related to this study.

Strengths

This study followed a qualitative approach, which offered certain strengths for this particular research study. Qualitative studies are best suited when “we might be interested in uncovering the meaning of a phenomenon for those involved...and what meaning they attribute to their experiences” (Merriam & Tisdell, 2016, pp. 5-6). Since very little is known about first-generation student success programs and sense of belonging, the qualitative nature of this study allowed me to explore the phenomenon—sense of belonging—among the participants while gaining a better understanding of their experiences within the program. Moreover, the qualitative design allowed me to collect richly descriptive data to “better understand the phenomenon of interest from the participants’ perspectives, not the researcher’s” (Merriam & Tisdell, 2016, p. 16). Therefore, the qualitative design of this study was a strength as I was able to focus on understanding the phenomenon from the participants’ viewpoints through rich description including quotes, documents, and field notes from observations.

A second strength, which was also related to the design of the study, was the case study methodology. By pursuing a case study, I was able to gain a deep understanding of one particular case (Creswell, 2012; Stake, 1995)—the IFG program at LAC. The purpose of this study was to better understand the experiences of first-generation students participating in a specific first-generation focused student success program, with a particular focus on the students' sense of belonging. Through the case study methodology I was able to concentrate solely on the IFG program, as with case study research the primary "obligation is to understand this one case" (Stake, 1995, p. 4). By focusing on this one case—the IFG program—I was able to collect a substantial amount of data through documents, observations, and interviews to analyze and present as findings and implications for practice and research. In doing so, this study demonstrated that a first-generation focused student success program promotes sense of belonging and student success among FGCS participants.

Along with the case study methodology, another strength of this study was the multiple types of data collected. As is typical with a case study, I collected numerous forms of data including documents, observations, and interviews (Creswell, 2012; Stake, 1995; Yin, 2018) with the program director and participants. Collecting and analyzing multiple types of data allowed me to gain better insight into the phenomenon and develop a more comprehensive understanding of the case and phenomenon (Stake, 1995) of first-generation student sense of belonging.

In addition to the types of data collected, the ongoing data analysis associated with case study design was also a strength. As is typical with case studies, I collected and analyzed data in an ongoing "spiral" (Creswell, 2012), which allowed each portion of

data collection and analysis to influence the next phase. For example, after collecting documents and starting the document analysis, I used information gathered from the document collection and analysis to guide interview questions with the program director. Following my interview with the program director, I gathered more documents based on some of her responses, and utilized both the program director interview and the documents to then guide my first round interviews with participants. I continued with my ongoing data analysis of the documents and interviews, using this information to inform my first round of observations of the IFG program, which, in turn, guided some of my interview questions for my second round of interviews with the participants. In this way, each ongoing cycle of data collection and analysis further informed the next phases of the study, allowing me to respond to new information in order to collect the most pertinent data available.

Limitations

As mentioned above, all research includes limitations that must be considered. This study has a few limitations which were briefly described in Chapter 1. For example, this study was short-term in nature. While participation in the IFG program typically lasts 1-4 years, this study took place over one 14-week semester. To better understand how students experience sense of belonging when participating in a student success program, it could be beneficial to collect data at various points during their participation, which often lasts four full years for students who enter the program as a first-term, first-year student. However, it was beyond the scope of this study to collect longitudinal data as the purpose was to gain a better understanding of student sense of belonging in the IFG

program in general, but this does limit the data collection and analysis to a one-semester window of time.

Along this same line, another potential methodological limitation was the heavy reliance on interview data. While I collected data in the form of documents and observations, the primary source of data for this case study was interviews with program participants. I used the documents and observations to guide interviews and corroborate information gathered during the interviews. As such, I relied relying primarily on interview data for the majority of the findings, as the focus of the study was on sense of belonging of participants participating in the student success program. As interviews rely on self-reported information from students in response to semi-structured questions, it is possible that at times the participants misunderstood the question asked, thereby leading to unrelated or inaccurate responses. When possible, I asked a follow-up question using different wording to clarify or allow for a different response, but it is possible I did not identify all of these situations and therefore included some imprecise responses. Moreover, since I asked the participants to describe their experiences within the IFG program as well as their perceived sense of belonging, it is possible each participant might have perceived belonging differently.

Beyond the limitations related to methodology, another limitation of this study is the participant demographics. Although I solicited all continuing students participating in the IFG program for their second, third, or fourth year, only a handful replied to participate in the study. As such, the participants selected did not fully represent the student body at the College. While LAC's "At-A-Glance" website indicated that the student population includes 46% male students, 24% minority students as well as 9% out-

of-state students, the participants in this study were primarily female (5 of the 7 participants) and five of the seven participants identified as White with one student identifying as Latinx and one student identifying as Asian, while no participants identified as Black. Both male participants identified as White. None of the participants were from out-of-state. Therefore, the participants did not fully represent the LAC student population. Moreover, the program director indicated that the percentage of minority students was higher in the IFG program than the overall population, meaning the participants of this study were even less representative of the IFG student population. Despite these limitations, the participants were representative of the different years in school and in the program, with two seniors, three juniors, and two sophomores representing the various cohorts. Moreover, the participants were representative in that first-generation students often come from families with lower incomes (Mehta et al., 2011; Engle & Tinto, 2008) with the majority of program participants coming from families with lower incomes.

It was beyond the scope of this study to explore the intersectionality of the various social identities of the participants. Participants in this study included varying genders, races, ethnicities, and ages. However, this study's purpose was to focus on the first-generation student experience when participating in a first-generation focus success program and their sense of belonging, if at all. Similarly, some participants were commuters while others lived on campus, some were college athletes, and some were working full time. It is possible the various social identities of the participants affected their experiences at LAC and within the IFG program.

Lastly, and perhaps most dynamic, were the limitations created by the COVID-19 pandemic. The pandemic, which started in March of 2020 for the United States, affected not only data collection but the nature of the case and the participants' experiences with the case, LAC, and in life in general. Although I intended to collect observation and interview data in-person, the pandemic required an adjustment to the data collection procedures. All interviews, including the program director and participants, were conducted virtually. In reflecting on this data collection process, I do believe I was able to collect the same quality data from interviews virtually, as the participants and I established a good rapport and I engaged with the participants well via video conferencing call. In addition, with interviews for this study collected in September and November of 2020, the participants were accustomed to virtual appointments and meetings having already completed months of coursework and meetings virtually due to the pandemic.

Apart from interviews, my observations were also affected as the program shifted to outdoor and online options. I was able to observe two outdoor sessions as well as two online sessions, both of which had limitations. In the outdoor format students sat in small groups spaced around a lawn on campus. The format, along with pandemic regulations of six or more feet of space between people along with the wearing of a mask unless eating or drinking, made it more difficult for me to observe facial expressions and conversations among students, and between students and IFG program staff. In addition, social distancing in the outdoor format made it difficult for me to observe the full group at one time as I had to focus on observing one small group at a time, meaning I might have missed noteworthy observations in the outdoor setup. However, the online programs

provided their own challenges as the majority of participants chose to keep their cameras off. While observing the online program, I was able to observe the IFG program director who facilitated the online sessions as well as the chat feature where participants engaged in conversation by text so I was able to read and observe their comments. However, when observing the virtual workshops I was unable to see the faces of the participants who chose to keep their cameras off during the workshop.

As is evident from the paragraph above, the structure of the IFG program changed in response to the pandemic, which provided another limitation. The IFG program workshops were adjusted to outdoor (with social distancing) or virtual (most often with student cameras off), which changed the nature of the program and therefore affected the data, as the student experience was directly affected by the pandemic. Several participants described how the program was different this year from their prior experiences, noting how the small, socially distanced groups and the virtual meetings were less desirable than prior years where students gathered in a tight space, sitting 8-10 students per table with a meal provided at each workshop. However, since I anticipated the altered program format affecting students' experiences, I made the decision to only include continuing students in the study to ensure the participants had experienced the IFG program in person in prior years. In this way, participants were able to reflect on prior years and compare to this year which has been driven by the pandemic, providing more robust data and a better representation of the IFG program in both its pre-pandemic and pandemic formats.

While these limitations influenced the study with regard to research design and pandemic response, the data collected still represents the experiences of the participants

within the IFG program. Although data collection methods had to change due to the pandemic, I was able to collect a robust set of data in the form of documents, interviews, and observations that took place in-person and virtually to represent the structure of the IFG program in fall 2020. While the limitations, including the influence of the COVID-19 pandemic on the program and the participants' experiences, must be recognized, this study still contributes uniquely to the research by providing a better understanding of the sense of belonging of FGCS participating in a first-generation student focused student success program.

Conclusion

Throughout this chapter I highlighted the results of this study, with specific emphasis on describing how the findings confirm or contradict existing research. In addition, this chapter also presented how this study uniquely advances sense of belonging theory as it relates to first-generation students, as well as our understanding of first-generation focused student success program. The chapter also presented implications for practice and research based on the findings of this study. Lastly, the chapter concluded with a discussion of the strengths and limitations of this study.

To summarize the study as a whole, it is important to first recognize that prior to this study there was limited research on sense of belonging and first-generation students. This study contributed to the small body of research as it helps better understand first-generation student sense of belonging. In addition, this study uniquely advances the field by exploring the sense of belonging of first-generation students participating in a first-generation focused student success program. With limited research on first-generation focused student success programs, and little to no research on first-generation student

success programs and sense of belonging, this study provides a new understanding of the experiences of first-generation students participating in a first-generation specific program as well as their sense of belonging.

In summary, the results of this study indicate that participants experienced sense of belonging when participating in a first-generation focused student success program. The participants described how the first-generation focused success program fostered student success as well, which further influenced their sense of belonging within the program and at the institution.

References

- Abrica, E. J., Lane, T. B., Zobac, S. R., & Collins, E. (2020). Sense of belonging and community building within a STEM intervention program: A focus on Latino male undergraduate experiences. *Journal of Hispanic Higher Education*, 1-15.
- Adelman, C. (2006). *Toolbox revisited: Paths to degree completion from high school through college*. U.S. Department of Education.
- Araujo, N., Carlin, D., Clarke, B., Morieson, L., Lukas, K., & Wilson, R. (2014). Belonging in the first year: A creative discipline cohort case study. *The International Journal of the First Year in Higher Education*, 5(2), 21-31. doi: 10.5204/intjfyhe.v5i2.240
- Arbona, C., & Nora, A. (2007). The influence of academic and environmental factors on Hispanic college degree attainment. *Review of Higher Education*. 30(3), 247-269.
- Armstrong, E., & L. Hamilton (2013). *Paying for the party: How college maintains inequality*. Harvard University Press.
- Ashley, M., Cooper, K. M., Cala, J. M., & Brownell, S. E. (2017). Building better bridges into STEM: A synthesis of 25 years of literature on STEM summer bridge programs. *CBE—Life Sciences Education*, 16(es3), 1-18. doi:10.1187/cbe.17-05-0085
- Atherton, M. C. (2014). Academic preparedness of first-generation college students: Different perspectives. *Journal of College Student Development*, 55(8), 824–829.
- Azmitia, M., Sumabat-Estrada, G., Cheong, Y., & Covarrubias, R. (2018). “Dropping out is not an option”: How educationally resilient first-generation students see the future. In C. R. Cooper & R. Seginer (Eds.), *Navigating pathways in multicultural nations: Identities, future orientation, schooling, and careers. New directions for child and adolescent development* (pp. 89–100). Wiley.

- Bainbridge, W. L., & Lasley, T. J., II. (2002). Demographics, diversity, and K–12 accountability: The challenge of closing the achievement gap. *Education and Urban Society*, 34, 422–437.
- Baker, C. N., & Robnett, B. (2012). Race, social support and college student retention: A case study. *Journal of College Student Development*, 53, 325-335.
- Balemian, K., & Feng, J. (2013, July). First generation students: College aspirations, preparedness and challenges. Paper presented at the College Board AP Annual Conference.
- Barr, M.J., & McClellan, G.S. (2011). *Budgets and financial management in higher education* (3rd Ed.). San Francisco, CA: John Wiley & Sons.
- Barry, L. M., Hudley, C., Cho, S., & Kelly, M. (2008). College students' perceptions of parental support: Differences and similarities by first-generation status. *Southeastern Teacher Education Journal*, 7(1), 101-108.
- Barton, A., & Donahue, C. (2009). Multiple assessments of a first-year seminar pilot. *The Journal of General Education*, 58(4), 259-278.
- Ben-Avie, M., Kennedy, M., Unson, C., Li, J., Riccardi, R. L., & Mugno, R. (2012). First-year experience: A comparison study. *The Journal of Assessment and Institutional Effectiveness*, 2(2), 143-170. doi:10.5325/jasseinsteffe.2.2.0143
- Bidwell, A. (2018). Report highlights top financial literacy barriers for low-income, first-gen students. *National Association of Student Financial Aid Administrators*. Retrieved from https://www.nasfaa.org/news-item/16315/Report_Highlights_Top_Financial_Literacy_Barriers_for_Low-Income_First-Gen_Students

- Billson, J. P., & Terry, M. (1982). In search of the silken purse: Factors in attrition among first-generation students. *College & University*, 58(1), 57-75.
- Bir, B., & Myrick, M. (2015). Summer bridge's effects on college student success. *Journal of Developmental Education*, 39(1), 22-30.
- Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. *Child Development*, 78(1), 246–263. doi:10.1111/j.1467-8624.2007.00995.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27-40.
- Bradbury, B. L., Mather, R C. (2009). The integration of first-year, first generation college students from Ohio Appalachia. *NASPA Journal*, 46(2), 258-281.
- Braxton, J. M., & Hirschy, A. S. (2005). Theoretical developments in the study of college student departure. In A. Seidman (Ed.), *College student retention: Formula for student success* (pp. 61–87). Praeger.
- Brower, A. M., & Inkelas, K. K. (2010). Living-learning programs: One high impact educational practice we now know a lot about. *Liberal Education*, 96(2), 36-43.
- Bryan, E., & Simmons, L. (2009). Family involvement: Impacts on postsecondary educational success for first-generation Appalachian college students. *Journal of College Student Development*, 50(4), 391-406
- Bui, K. V. T. (2002), First-generation college students at a four-year university: Background characteristics, reasons for pursuing higher education, and first-year experiences. *College Student Journal*, 36, 3-11.

- Byrd, K. L., & MacDonald, G. (2005). Defining college readiness from the inside out: First-generation college student perspectives. *Community College Review*, 33, 22–37.
Retrieved from <http://dx.doi.org/10.1177/009155210503300102>
- Cabrera, N. L., Miner, D. D., & Milem, J. F. (2013). Can a summer bridge program impact first-year persistence and performance?: A case study of the New Start Summer Program. *Research in Higher Education*, 54, 481-498.
- “Cardinal First.” (2016). Cardinal First: Office of First-Generation Programs. Retrieved from <https://www.northcentralcollege.edu/cardinalfirst>.
- Cataldi, E. F., Bennett, C. T., & Chen, X. (2018). First-generation students: College access, persistence, and post bachelor's outcomes. U.S. Department of Education. Retrieved from <https://nces.ed.gov/pubs2018/2018421.pdf>.
- Carballo, J. (2020). Personal communication.
- Castillo-Montoya, M. (2017). Deepening understanding of prior knowledge: What diverse first-generation college students in the U.S. can teach us. *Teaching in Higher Education*, 22(5), 587–603.
- “The Center.” (Dec. 1, 2017). First-generation students: Approaching enrollment, intersectional identities, and asset-based success. *Center for First-Generation Student Success*.
Retrieved from: <https://firstgen.naspa.org/blog/first-generation-students-approaching-enrollment-intersectional-identities-and-asset-based-success>
- "Center for First-Generation Student Success" (2019). Student Affairs Practitioners in Higher Education (NASPA). Retrieved from <https://firstgen.naspa.org/>.

- Cerezo, A. & McWhirter, B.T. (2012). A brief intervention designed to improve social awareness and skills to improve Latino college retention. *College Student Journal* 46(4), 867–879.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Thousand Oaks, CA: SAGE Publications Inc.
- Chen, X. (2005). *First-generation students in postsecondary education: A look at their college transcripts* (NCES No.2005-171). U.S. Department of Education, National Center for Education Statistics. U.S. Government Printing Office.
- Choy, S. (2001). *Students whose parents did not go to college: Postsecondary access, persistence, and attainment* (NCES No.2001-126). U.S. Department of Education, National Center for Education Statistics.
- Clark, M., & Cundiff, N. (2011). Assessing the effectiveness of a college freshman seminar using propensity score adjustments. *Research in Higher Education*, 52(6), 616–639. doi:10.1007/s11162-010-9208-x
- Clauss-Ehlers, C., & Wibrowski, C. R. (2007). Building educational resilience and social support: The effects of the educational opportunity fund program among first- and second-generation college students. *Journal of College Student Development*, 48, 574–584. <http://dx.doi.org/10.1353/csd.2007.0051>
- Cleveland, M. J., Lanza, S. T., Ray, A. E., Turrissi, R., & Mallett, K. A. (2012). Transitions in first-year college student drinking behaviors: Does pre-college drinking moderate the effects of parent- and peer-based intervention components? Psychology of Addictive Behaviors: *Journal of the Society of Psychologists in Addictive Behaviors*, 26, 440–450.

- Collier, P.J., & Morgan, D. L. (2008). “Is that paper really due today?”: Differences in first-generation and traditional college students’ understandings of faculty expectations. *Higher Education*, 55, 425-446.
- Conley, C. S., Travers, L. V., & Bryant, F. B. (2013). Promoting psychosocial adjustment and stress management in first-year college students: The benefits of engagement in a psychosocial wellness seminar. *Journal of American College Health*, 61, 75-86.
- Covarrubias, R., & Fryberg, S. A. (2015). Movin’ on up (to college): First generation college students’ experiences with family achievement guilt. *Cultural Diversity and Ethnic Minority Psychology*, 21(3), 420–429.
- Covarrubias, R., Valle, I., Laiduc, G., & Azmitia, M. (2019). “You never become fully independent”: Family roles and independence of first-generation college students. *Journal of Adolescent Research*, 34(4), 381-410.
<https://doi.org/10.1177/0743558418788402>.
- Cramer, M. (2017). Understanding Sense of Belonging among Undergraduate Latino Men at Indiana University Bloomington. *Journal of the Student Personnel Association at Indiana University*, 98–111.
- Creswell, W., J. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative approaches to research. (4th ed.)*. Pearson Education.
- Creswell, J. W., & Poth, C. N. (2019). *Qualitative inquiry & research design: choosing among five approaches (6th ed.)*. Thousand Oaks, CA: SAGE Publications, Inc.
- Curtin, N., Stewart, A. J., & Ostrove, J. M. (2013). Fostering academic self-concept: Advisor support and sense of belonging among international and domestic graduate students. *American Educational Research Journal*, 50, 108-137. doi:10.3102/000283121244

- Cuseo, J. (2010). The empirical case for the first-year seminar: Promoting positive student outcomes and campus-wide benefits. In *The first-year seminar: Research based recommendations for course design, delivery, and assessment*. Kendall/Hunt.
- Cushman, K. (2007). Facing the culture: First-generation college students talk about identity, class, and what helps them succeed. *Educational Leadership*, 64(7), 44-47.
- Davis, J. (2012). *The first generation student experience: Implications for campus practice, and strategies for improving persistence and success*. Stylus Publishing.
- DeAngelo, L. (2013). Programs and practices that retain students from the first to the second year: Results from a national study. In R. D. Padgett (Ed.), *The first-year experience. New Directions for Institutional Research*. Jossey-Bass.
- De La Rosa, M. L. (2012) Borrowing and working of low-income students: The impact of a summer transition program. *Journal of Student Financial Aid*, 42(1), 5-15.
- Dennis, J. M., Phinney, J. S., & Chuateco, L. I. (2005). The role of motivation, parental support and peer support in the academic success of ethnic minority first-generation college students. *Journal of College Student Development*, 46, 223-236.
- DeFreitas, S. C., & Bravo, A. (2012). The influence of involvement with faculty and mentoring on the self-efficacy and academic achievement of African American and Latino college students. *Journal of the Scholarship of Teaching and Learning*, 12, 1-11.
- Dika, S. L., & D'Amico, M. M. (2016). Early experiences and integration in the persistence of first-generation college students in STEM and non-STEM majors. *Journal of Research in Science Teaching*, 53(3), 368–383.

- Dueñas, M., & Gloria, A. M. (2020). ¡Perteneceemos y tenemos importancia aquí! Exploring Sense of Belonging and Mattering for First-Generation and Continuing-Generation Latinx Undergraduates. *Hispanic Journal of Behavioral Sciences*, 42(1), 95-116.
- Duncan, G. J., Dowsett, C. J., Claessens, A. Magnuson, K., Huston, A. C., Klebanov, P., Pagani, L. Feinstein, L., Engel, M., Brooks-Gunn, J., Sexton, H., Duckworth, K. & Japel, C. (2007) School Readiness and Later Achievement. *Developmental Psychology*, 43(6), 1428–1446.
- Eitel, S. J., & Martin, J. (2009). First-generation female college students’ financial literacy: Real and perceived barriers to degree completion. *College Student Journal*, 43, 616–630.
- Engle, J. (2007). Postsecondary access and success for first-generation college students. *American Academic*, 3, 25-48.
- Engle, J., & Tinto, V. (2008). Moving beyond access: College success for low-income, first generation students: Retrieved from Pell Institute for the Study of Opportunity in Higher Education website: http://www.pellinstitute.org/publications-Moving_Beyond_Access_2008.shtml
- Falcon, L. (2015). Breaking down barriers: First-generation college students and college success. *Innovation Showcase*, 10(6).
- Fink, J. E. (2014). Flourishing: Exploring predictors of mental health within the college environment. *Journal of American College Health*, 62(6), 380–388.
doi:10.1080/07448481.2014.917647
- “First-Generation Visit Days” (2020). <https://www.northcentralcollege.edu/visit/first-generation-visit-days>

- Feeney, M., & Heroff, J. (2013). Barriers to need-based financial aid: Predictors of timely FAFSA completion among low-income students. *Journal of Student Financial Aid*, 43(2), 65–85.
- Folger, W. A., Carter, J. A., & Chase, P. B. (2004). Supporting first-generation college freshmen with small group intervention. *College Student Journal*, 38, 472-476.
- Fry, R., & Kochhar, R. (Sept. 6, 2018). Are you in the American middle class? Pew Research Center. Retrieved from <https://www.pewresearch.org/fact-tank/2018/09/06/are-you-in-the-american-middle-class/>
- Garcia, C. E. (2017). Latinx college student sense of belonging: The role of campus subcultures (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (ProQuest No. 10271563).
- Garcia, C. E. (2019a) Belonging in a predominantly White institution: The role of membership in Latina/o sororities and fraternities. *Journal of Diversity in Higher Education*.
- Garcia, C. E. (2019b). "They Don't Even Know that We Exist": Exploring Sense of Belonging Within Sorority and Fraternity Communities for Latina/o Members. *Journal of College Student Development*, 60(3), 319-336. <https://doi.org/10.1353/csd.2019.0029>
- García, H. A., & Garza, T. (2016). Retaining Latino males in community colleges: A structural model explaining sense of belonging through socio-academic integration. *Journal of Applied Research in the Community College*, 23(2), 41–58.
- Garcia, L. D & Paz, C. C. (2009). Evaluation of summer bridge programs. *About Campus*, 14(4), 30.

- Garrison, N. J., & Gardner, D. S. (2012). Assets first generation college students bring to the higher education setting. Paper presented at the Association for the Student of Higher Education, Las Vegas, NV.
- Giachalone, M. D. (2018). A review of sense of belonging for LGB fraternity and sorority members: Recommendations for research and practice. *Journal of Student Affairs*, 27, 93-97.
- Gibbons, M. M., & Borders, L. D. (2010). Prospective first-generation college students: A social-cognitive perspective. *The Career Development Quarterly*, 58, 194–208.
- Glass, C.R., Kociolek, E., Wongtrirat, R., Lynch, R.J., & Cong, S. (2015). Uneven experiences: The impact of student-faculty interactions on international students' sense of belonging. *Journal of International Students*, 5(4), 353-367.
- Gofen, A. 2009. Family capital: How first-generation higher education students break the intergenerational cycle. *Family Relations*, 58, 104-120.
- Gopalan, M., & Brady, S. T. (2019). College students' sense of belonging: A national perspective. *Educational Researcher*, 1-4.
- Grisier, C. (2018). Identifying a relationship between grit and both sense of belonging and student GPA. ProQuest 10789355.
- Gummadam, P., Pittman, L. D., & Ioffe, M. (2016). School belonging, ethnic identity, and psychological adjustment among ethnic minority college students. *Journal of Experimental Education*, 84, 289 –306.
- <http://dx.doi.org/10.1080/00220973.2015.1048844>

- Guzman Oliver, A. I., & King, C. A. (2018). Reaching Individual Success and Empowerment (RISE): A First-generation co-curricular, academic, and social engagement model. *Journal of Business Diversity, 18*(3), 43-47.
- Hatch, D. K., Mardock-Uman, N., Garcia, C. E., & Johnson, M. (2018). Best laid plans: How community college student success courses work. *Community College Review, 46*(2), 115–144.
- Hausmann, L. R. M., Schofield, J. W., & Woods, R. L. (2007). Sense of belonging as a predictor of intentions to persist among African American and White first-year college students. *Research in Higher Education, 48*(7), 803-839.
- Hébert, T. P. (2018). An examination of high-achieving first-generation college students from low-income backgrounds. *Gifted Child Quarterly, 62*, 1-15.
doi:10.1177/0016986217738051
- Hillman, N. W. (2016). Geography of college opportunity: The case of education deserts. *American Educational Research Journal, 53*(4), 987–1021.
<https://doi.org/10.3102/0002831216653204>.
- Hoffman, M. B., Richmond, J. R., Morrow, J. A., & Salomone, K. (2002). Investigating “sense of belonging” in first-year college students. *Journal of College Student Retention: Research, Theory and Practice, 4*, 227–256.
- Hudley, C., Moschetti, R., Gonzalez, A., Cho, S., Barry, L., & Kelly, M. (2009). College freshmen’s perceptions of their high school experiences. *Journal of Advanced Academics, 20*, 438–471. doi:10.1177/1932202x0902000304
- Huerta, J. C., & Bray, J. J. (2013). How do learning communities affect first-year Latino students? *Learning Communities Research and Practice, 1*(1), Article 5.

- Hurtado, S., & Carter, D. F. (1997). Effects of college transition and perceptions of the campus racial climate on Latino students' sense of belonging. *Sociology of Education*, 70, 324-345.
- IFG Website (2019). First-generation programs.
- Inkelas, K. K., Daver, Z. E., Vogt, K. E., & Leonard, J. B. (2007). Living–learning programs and first-generation college students' academic and social transition to college. *Research in Higher Education*, 48, 403–434.
- Inkelas, K. K., Vogt, K. W., Longerbeam, S. D., Owen, J., & Johnson, D. (2006). Measuring outcomes of living–learning programs: Examining college environments and student learning and development. *The Journal of General Education*, 55(1), 40-76.
- Inkelas, K. K., & Weisman, J. (2003). Different by design: An examination of outcomes associated with three types of living-learning programs. *Journal of College Student Development*, 44, 335-368.
- Irlbeck, E., Adams, S., Akers, Ci., Burris, S., & Jones, S. (2014). First generation college students: Motivations and support systems. *Journal of Agricultural Education*, 55(2), 154-167.
- Ishitani, T. T. (2003). A longitudinal approach to assessing attrition behavior among first-generation students: Time-varying effects of pre-college characteristics. *Research in Higher Education*, 44(4), 433-449.
- Ishitani, T. T. (2006). Studying attrition and degree completion behavior among first-generation college students in the United States. *Journal of Higher Education*, 77(5), 861 – 885.

- Ishitani, T., 2008. How do transfers survive after “Transfer Shock”? A longitudinal study of transfer student departure at a four-year institution. *Research in Higher Education*, 49, 403–419.
- Jaccard, J. & Jacoby, J. (2012). *The nature of understanding. In Theory Construction and Model Building Skills: A Practical Guide for Social Scientists*. Guildford Press.
- Jehangir, R., Williams, R., & Jeske, J. (2012). The influence of multicultural learning communities on the intrapersonal development of first-generation college students. *Journal of College Student Development*, 53, 267–284.
- Jenkins, A.L., Miyazaki, Y., & Janosik, S.M. (2009). Predictors that distinguish first-generation college students from non-first generation college students. *Journal of Multicultural, Gender and Minority Studies*, 3(1), 1-9.
- Jessup-Anger, J. E. (2011). What’s the point? An exploration of students’ motivation to learn in a first-year seminar. *The Journal of General Education*, 60, 101-116. doi:10.1353/jge.2011.0011
- Johnson, D. R., Soldner, M., Leonard, J. B., Alvarez, P., Inkelas, K. K., Rowan-Kenyon, H. T., & Longerbeam S. D. (2007). Examining sense of belonging among first-year undergraduates from different racial/ethnic groups. *Journal of College Student Development*, 48, 525-542.
- Katrevich, A. V. & Aruguete, M. S. (2017). Recognizing challenges and predicting success in first-generation university students. *Journal of STEM Education: Innovations & Research*, 18(2), 40-44.
- King, J. E. (2004). Missed opportunities: Students who do not apply for financial aid. Washington, DC: American Council on Education. Retrieved from <http://>

www.cherrycommission.org/docs/Resources/Participation/Student_FinancialAidArticle.pdf

- Kodama, C., Han, C., Moss, T., Myers, B., & Farruggia, S. (2016). Getting college students back on track: A summer bridge writing program. *Journal of College Student Retention: Research, Theory & Practice*, 20(3), 350-368. doi: 10.1177/1521025116670208
- Kowski, L. E. (2013). Does high school performance predict college math placement? *Community College Journal of Research and Practice*, 37(7), 514-527. doi: 10.1080/10668926.2012.754730
- Keup, J. R., & Barefoot, B. O. (2005). Learning how to be a successful student: Exploring the impact of first-year seminars on student outcomes. *Journal of The First-Year Experience and Students in Transition*, 17(1).
- Klatt, J., & Ray, R. (2014). Student academic outcomes after completing a first-year seminar. *North American Colleges and Teachers of Agriculture Journal*, 58(4), 288.
- Kutty, F. M. (2014). Mapping their road to university: First-generation students' choice and decision of university. *International Education Studies*, 7(13), 49.
- LaBrie, J. W., Hummer, J. F., Grant, S., & Lac, A. (2010). Immediate reductions in misperceived social norms among high-risk college student groups. *Addictive Behaviors*, 35, 1094-1101.
- Lafferty, K. (2015). The impact of participation in a first-year seminar on increased usage of campus resources, academic and social integration and first-to-second semester persistence at a two-year community and technical college (Doctoral dissertation). Retrieved March 8, 2020 from <https://doi.org/10.18297/etd/2085>.

- Lane, T. B. (2016). Beyond academic and social integration: Understanding the impact of a STEM enrichment program on the retention and degree attainment of underrepresented students. *CBE Life Sciences Education*, 15(3), 1–13. Retrieved from <https://doi.org/10.1187/cbe.16-01-0070>
- Lau, J., Garza, T., & Garcia, H. (2018). International students in community colleges: On-campus services used and its effect on sense of belonging. *Community College Journal of Research and Practice*. doi: 10.1080/10668926.2017. 1419891
- Lee, J. J., Sax, L. J., Kim, A. K., & Hagedorn, L. S. (2004). Understanding students' parental education beyond first-generation status. *Community College Review*, 32, 1-20.
- Lohfink, M.M. & Paulsen, M.B. (2005). Comparing the determinants of persistence for first-generation and continuing-generation students. *Journal of College Student Development*, 46(4), 409-428.
- Longwell-Grice, R., Adsitt, N.Z., Mullins, K., & Serrata, W. (2016). The first ones: Three studies on first-generation college students. *NACADA Journal*, 36(2), 34-46.
- Longwell-Grice, R., & Longwell-Grice, H. (2007). Testing Tinto: How do retention theories work for first-generation, working-class students? *Journal of College Student Retention: Research, Theory and Practice*, 9(4), 407-420. <http://dx.doi.org/10.2190/CS.9.4.a>
- Maestas, R., Vaquera, G. S., & Zehr, L. M. (2007). Factors impacting sense of belonging at a Hispanic-serving institution. *Journal of Hispanic Higher Education*, 6(3), 237–256.
- Mallett, K. A., Varvil-Weld, L., Borsari, B., Read, J. P., Neighbors, C., & White, H. R. (2013). An update of research examining college student alcohol-related consequences: New perspectives and implications for interventions. *Alcoholism: Clinical & Experimental Research*, 37, 709-716.

- Martinez, M., & Klopott, S. (2005). The link between high school reform and college access and success for low-income and minority youth. Washington, DC: American Youth Policy Forum and Pathways to College Network. Retrieved July 3, 2006, from <http://www.aypf.org/publications/HSReformCollegeAccessandSuccess>
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50, 370-396.
- Maslow, A.H. (1954). *Motivation and personality*. Harper.
- Mattanah, J. F., Ayers, J. F., Brand, B. L., Brooks, L. J., Quimby, J. L., & McNary, S. W. (2010). A social support intervention to ease the college transition: Exploring main effects and moderators. *Journal of College Students Development*, 51, 93-108.
- Maxwell, J. A. (2013). *Qualitative research design*. (3rd Ed.) Sage.
- McKeown-Moak, M. P. (2013). The “new” performance funding in higher education. *Educational Considerations*, 40(2), 3–12.
- Means, D. R., & Pyne, K. B. (2017). Finding my way: Perceptions of institutional support and belonging in low-income, first-generation, first-year college students. *Journal of College Student Development*, 58(6), 907–924. <https://doi.org/10.1353/csd.2017.0071>
- Mehta, S. S., Newbold, J. J., & O’Rourke, M. A. (2011). Why do first-generation students fail? *College Student Journal*, 45, 20–35.
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th Ed.). Jossey-Bass.
- Meeuwisse, M., Severiens, S. E., & Born, M. P. (2010). Learning environment, interaction, sense of belonging and study success in ethnically diverse student groups. *Research in Higher Education*, 51, 528-545.

- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook (3rd Ed.)*. SAGE.
- Morrow, J. A., & Ackermann, M. E. (2012). Intention to persist and retention of first-year students: The importance of motivation and sense of belonging. *College Student Journal*, 46, 483-491.
- Murphy, T. E., Gaughan, M., Hume, R., & Moore, S. G. (2010). College graduation rates for minority students in a selective technical university: Will participation in a summer bridge program contribute to success? *Educational Evaluation and Policy Analysis*, 32(1), 70–83. doi:10.3102/0162373709360064
- Museus, S. D., & Maramba, D. C. (2011). The impact of culture on Filipino American students' sense of belonging. *The Review of Higher Education*, 34(2), 231–258.
<https://doi.org/10.1353/rhe.2010.0022>
- NASPA (2019). Are you a first-generation student? Retrieved from:
<https://firstgen.naspa.org/why-first-gen/students/are-you-a-first-generation-student>
- Newman, C. B., Wood, J. L., & Harris III, F. (2015). Black men's perceptions of sense of belonging with faculty members in community colleges. *Journal of Negro Education*, 84(4), 564-577. doi:10.7709/jnegroeducation.84.4.0564
- Nguyen, T., & Nguyen, B. (2018). Is the “first-generation student” term useful for understanding inequality? The role of intersectionality in illuminating the implications of an accepted—yet unchallenged—term. *Review of Research in Education*, 42, 146-176.
- O’Keefe, P. (2013). A sense of belonging: Improving student retention. *College Student Journal*, 47, 605-613.

- O'Shea, S. (2016). Avoiding the manufacture of 'sameness': first-in-family students, cultural capital and the higher education environment. *Higher Education*, 72, 59–78.
- Pak, C. (2018). Linking service-learning with sense of belonging: A culturally relevant pedagogy for heritage students of Spanish. *Journal of Hispanic Higher Education*, 17(1), 76-95.
<https://doi.org/10.1177/1538192716630028>
- Pascarella, E. T., Pierson, C. T., Wolniak, G. C., and Terenzini, P. T. (2004). First Generation College Students: Additional Evidence on College Experiences and Outcomes. *The Journal of Higher Education*, 75(3): 249-284.
- Patterson Silver Wolf, D. A., Perkins, J., Butler-Barnes, S. T., & Walker, T. A., Jr. (2017). Social belonging and college retention: Results from a quasi-experimental pilot study. *Journal of College Student Development*, 58(5), 777-782.
- Perna, L. W. (2015). Improving college access and completion for low-income and first-generation students: The role of college access and success programs. Invited testimony presented to the Subcommittee on Higher Education and Workforce Training, Committee on Education and the Workforce, United States House of Representatives, Washington, DC.
- Petty, T. (2014). Motivating first-generation students to academic success and college completion. *College Student Journal*, 48, 257–264.
- Permzadian, V., & Crede, M. (2015). Do first-year seminars improve college grades and retention? A quantitative review of their overall effectiveness and an examination of moderators of effectiveness. *Review of Educational Research*, 86(1), 277-316. doi: 10.3102/0034654315584955
<http://dx.doi.org/10.3102/0034654315584955>

- Pike, G. R., Kuh, G. D., & Gonyea, R. M. (2003). The Relationship Between Institutional Mission and Students' Involvement and Educational Outcomes. *Research in Higher Education, 44*(2): 243-263.
- Pike, G.R., Kuh, G.D., & McCormick, A.C. (2011). An investigation of the contingent relationships between learning community participation and student engagement. *Research in Higher Education, 52*, 300–322.
- Pittendrigh, A., Borkowski, J., Swinford, S., & Plumb, C. (2016). Knowledge and community: The effect of a first-year seminar on student persistence. *Journal of General Education, 65*(1), 48-65. doi:10.5325/jgeneeduc.65.1.0048
- Potts, G., & Schultz, B. (2008). The freshman seminar and academic success of at-risk students. *College Student Journal, 42*(2), 647–658.
- Pratt, I. S., Harwood, H. B., Cavazos, J. T., & Ditzfeld, C. P. (2017). Should I stay or should I go? Retention in first-generation college students. *Journal of College Student Retention: Research, Theory & Practice, 1*-14. doi:10.1177/1521025117690868
- Pritchard, T. J., Perazzo, J. D., Holt, J. A., Fishback, B. P., McLaughlin, M., Bankston, K. D., & Glazer, G. (2016). Evaluation of a summer bridge: Critical component of the Leadership 2.0 Program. *Journal of Nursing Education, 55*(4), 196–202.
<http://dx.doi.org/10.3928/01484834-20160316-03>.
- Prospero, M., & Vohra-Gupta, S. (2007). First-generation college students: Motivation, integration, and academic achievement. *Community College Journal of Research and Practice, 31*, 963-975. doi: 10.1080/10668920600902051
- Rainey, K., Dancy, M., Mickelson, R., Stearns, E., & Moller, S. (2018). Race and gender differences in how sense of belonging influences decisions to major in STEM.

- International Journal of STEM Education*, 5(1). <https://doi.org/10.1186/s40594-018-0115-6>
- Redford, J., & Hoyer, K.M. (2017). First-generation and continuing-generation college students: A comparison of high school and postsecondary experiences. (NCES 2018009). Washington, DC: National Center for Educational Statistics.
- Reid, M. J., & Moore, J. L., III. (2008). College readiness and academic preparation for postsecondary education: Oral histories of first-generation urban college students. *Urban Education*, 43, 240-261.
- Rhee, B. (2008). Institutional climate and student departure: A multinomial multilevel modeling approach. *The Review of Higher Education*, 31, 161–183.
- Ribera, A. K., Miller, A. L., & Dumford, A. D. (2017). Sense of peer belonging and institutional acceptance in the first year: The role of high-impact practices. *Journal of College Student Development*, 58, 545–563. doi:10.1353/csd.2017.0042
- RTI International. (2019a). First-generation College Students: Demographic Characteristics and Postsecondary Enrollment. NASPA. Retrieved from <https://firstgen.naspa.org/files/dmfile/FactSheet-01.pdf>
- RTI International. (2019b). First-generation College Students' Employment. NASPA. Retrieved from <https://firstgen.naspa.org/files/dmfile/FactSheet-04.pdf>
- Rubio, L., Mireles, C., Jones, Q., & Mayse, M. (2017). Identifying issues surrounding first generation students. *American Journal of Undergraduate Research*, 14(1), 5-10.
- Saldaña, J. (2016). *The coding manual for qualitative researchers (3rd Ed.)*. Los Angeles, CA: SAGE.

- Salzman, N., Delaney, A., Bates, C. R., & Llewellyn, D. C... (2019). Easing students' transitions to university via a summer bridge and our door experience program. 2019 ASEE Annual Conference & Exposition, 26522-1 - 26522-19.
- Samura, M. (2016a). How can residence hall spaces facilitate student belonging? Examining student experiences to inform campus planning and programs. *Planning for Higher Education* 44(4):90–101.
- Schlossberg, N. K. (1984). *Counseling adults in transition*. Springer.
- Schlossberg, N. K. (1989). Marginality and mattering: Key issues in building community. In D. C. Roberts (Ed.), *Designing campus activities to foster a sense of community* (New Directions for Student Services, No. 48, pp. 1-15). Jossey-Bass.
- Schlossberg, N. K., Lynch, A. Q., & Chickering, A. W. (1989). *Improving higher education environments for adults: Responsive programs and services from entry to departure*. San Francisco, CA: Jossey-Bass.
- Schoch, K. (2019). Case study research. In Burkholder, G., Cox, K., Crawford, L., Hitchcock, J. (Eds.), *Research design and methods: An applied guide for the scholar-practitioner* (pp. 245-258). Thousand Oaks, CA: Sage Publications.
- Scott-Sheldon, L.A.J., Carey, K.B., Elliot, J.C., Garey, L., & Carey, M.P. (2014). Efficacy of alcohol interventions for first-year college students: A meta-analytic review of randomized controlled trials. *Journal of Consulting and Clinical Psychology*, 82, 177-188. doi: 10.1037/a0035192
- Seidman, I. (2006). *Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences (3rd Ed.)*. New York, NY: Teachers College Press.

- Senyshyn, R. M. (in press). A first-year seminar course that supports the transition of international students to higher education and fosters the development of intercultural communication competence. *Journal of Intercultural Communication Research*, 48(2), 150-170.
- Sharpe, R. (Nov. 3, 2017). Are you first gen? Depends on who's asking. *The New York Times*. Retrieved 2/1/2020 from <https://www.nytimes.com/2017/11/03/education/edlife/first-generation-college-admissions.html>.
- Shook, N., & Clay, R. (2012). Interracial roommate relationships: A mechanism for promoting a sense of belonging at university and academic performance. *Journal of Experimental Social Psychology*, 48, 1168–1172. doi:10.1016/j.jesp.2012.05.005
- Slade, J., Eatmon, D., Staley, K., & Dixon, K. G. (2015). Getting into the pipeline: Summer bridge as a pathway to college success. *Journal of Negro Education*, 84(2), 125–138
- Smith, J. M., & Lucena, J. C. (2015). Invisible innovators: How low-income, first-generation students use their funds of knowledge to belong in engineering. *Journal of Engineering Studies*, 8, 1-26. doi:10.1080/19378629.2016.1155593
- Soria, K. M. & Stebleton, M. J. (2012). First-generation students' academic engagement and retention. *Teaching in Higher Education*, 17(6), 673-685. doi: 10.1080/13562517.2012.666735.
- Soria, K. M., & Stebleton, M. J. (2013). Social capital, academic engagement, and sense of belonging among working-class college students. *College Student Affairs Journal*, 31(2), 139–153.

- Soria, K. M., & Stubblefield, R. (2015). First-year college students' strengths awareness: Building a foundation for student engagement and academic excellence. *Journal of the First-Year Experience and Students in Transition*, 26(2), 69–88.
- Spanierman, L. B., Soble, J. R., Mayfield, J. B., Neville, H. A., Aber, M., Khuri, L., & De La Rosa, B. (2013). Living learning communities and students' sense of community and belonging. *Journal of Student Affairs Research and Practice*, 50, 308-325.
doi:10.1515/jsarp-2013-0022
- Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: SAGE Publications Inc.
- Stake, R. E. (2006). *Multiple case study analysis*. Guilford Press.
- Stebbleton, M. J., & Aleixo, M. B. (2016). Black African immigrant college students' perceptions of belonging at a predominately white institution. *Journal of the First-Year Experience & Students in Transition*, 28, 89–107.
- Stephens, N. M., Fryberg, S. A., Markus, H. R., Johnson, C. S., & Covarrubias, R. (2012). Unseen disadvantage: How American universities' focus on independence undermines the academic performance of first-generation college students. *Journal of Personality and Social Psychology*, 102, 1178–1197. Retrieved from <http://dx.doi.org/10.1037/a0027143>
- Stephens, N. M., Hamedani, M. H., & Destin, M. (2014). Closing the social-class achievement gap: A difference-education intervention improves first-generation students' academic performance and all students' college transition. *Psychological Science*, 25, 943–953.
- Stephens, N. M., Townsend, S. S. M., Markus, H. R., & Phillips, T. (2012). A cultural mismatch: Independent cultural norms produce greater increases in cortisol and more negative emotions among first-generation college students. *Journal of Experimental Social Psychology*, 48, 1389–1393.

- Strayhorn, T. L. (2006). Factors influencing the academic achievement of first-generation college students. *NASPA Journal*, 43(4), 82-111.
- Strayhorn, T. (2011). Bridging the pipeline: Increasing underrepresented students' preparation for college through a summer bridge program. *American Behavioral Scientist*, 55(2), 142-159. doi:10.1177/0002764210381871
- Strayhorn, T. L. (2012, 2019). *College students' sense of belonging: A key to educational success for all students*. New York, NY: Routledge.
- Strayhorn, T. L. (2013). What role does grit play in the academic success of black male collegians at predominantly white institutions? *Journal of African American Studies*, 1–10. <http://dx.doi.org/10.1007/s12111-012-9243-0>.
- Strayhorn, T. L. (2015a). Factors Influencing Black males' preparation for college and success in STEM majors: A mixed methods study. *Western Journal of Black Studies*, 39, 45-63.
- Strayhorn, T. L. (2015b). Reframing academic advising for student success: From advisor to cultural navigator. *NACADA Journal*, 35(1), 56–63.
- Strayhorn, T. L., Bie, F., Dorime-Williams, M. L., & Williams, M. S. (2016). Measuring the influence of Native American college students' interactions with diverse others on sense of belonging. *Journal of American Indian Education*, 55(1), 49–73.
- Strayhorn, T. L., Lo, M. T., Travers, C. S., & Tillman-Kelly, D. L. (2015). Assessing the relationship between well-being, sense of belonging, and confidence in the transition to college for Black male collegians. *Spectrum: A Journal on Black Men*, 4, 127-138. doi:10.2979/spectrum.4.1.07
- Strayhorn, T. L., & Tillman-Kelly, D. L. (2013). Queering masculinity: Manhood and Black gay men in college. *Spectrum: A Journal on Black Men*, 1(2), 83-110.

- Stake, R. E. (1995). *The art of case study research*. Sage.
- Stake, R. E. (2006). *Multiple Case Study Analysis*. The Guildford Press.
- Suzuki, A., Amrein-Beardsley, A., & Perry, N. J. (2012). A summer bridge program for underprepared first-year students: Confidence, community, and re-enrollment. *Journal of the First-Year Experience & Students in Transition*, 24, 85–106.
- Svanum, S., & Bigatti, S. M. (2009). Academic course engagement during one semester forecasts college success: Engaged students are more likely to earn a degree, do it faster, and do it better. *Journal of College Student Development*, 50, 120-132.
doi:10.1353/csd.0.0055
- Swanson, N. M., Vaughan, A. L., & Wilkinson, B. D. (2017). First-year seminars: Supporting male college students' long-term academic success. *Journal of College Student Retention: Research, Theory & Practice*, 18, 386-400.
- Tachine, A. R., Cabrera, N. L., & Yellow Bird, E. (2016). Home away from home: Native American students' sense of belonging during their first year in college. *The Journal of Higher Education*, 88(5), 785–807.
- Tampke, D. R., & Durodoye, R. (2013). Improving academic success for undecided students: A first-year seminar/learning community approach. *Learning Communities: Research & Practice*, 1(2), Article 3. Retrieved from <https://eric.ed.gov/?id=EJ1112851>
- Tate, K. A., Caperton, W., Kaiser, D., Pruitt, N. T., White, H., & Hall, E. (2015). An exploration of first-generation college students' career development beliefs and experiences. *Journal of Career Development*, 42, 294-310.

- Tate, K. A., Williams, C. W., & Harden, D. (2013). Finding purpose in pain: Using logotherapy as a method for addressing survivor guilt in first-generation college students. *Journal of College Counseling, 16*, 79–92. doi:10.1002/j.2161-1882.2013.00028.
- “The College” (2020). <https://www.northcentralcollege.edu/about>
- Thomas, L. (2012, March). Building student engagement and belonging in higher education at a time of change: A summary of findings and recommendations from the What Works? *Student Retention & Success programme*. London, England: Paul Hamlyn Foundation.
- Retrieved from https://www.heacademy.ac.uk/system/files/what_works_summary_report_0.pdf
- Ting, S. M. (2003). A longitudinal study of non-cognitive variables in predicting academic success of first-generation college students. *College & University, 78*(4), 27-31.
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research, 45*(1), 89–125.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*. University of Chicago Press.
- Tobolowsky, B. F., & Allen, T. O. (2016). On the fast track: Understanding the opportunities and challenges of dual credit. *ASHE Higher Education Report 42*(3): 1–105.
- Tobolowsky, B. E, Cox, B. W., & Wagner, M. T. (Eds.). (2005). Exploring the evidence, Vol. 3: Reporting research on first-year seminars (Monograph #42). National Resource Center for the First-Year Experience and Students in Transition.
- Tomasko, D. L., Ridgway, J. S., Olesik, S. V., Waller, R. J., McGee, M. M., Barclay, L. A., ... Upton, J. (2013). Impact of summer bridge programs on STEM retention at the Ohio

- State University. In *Proceedings of the 2013 ASEE North-Central Section Conference, held April 5–6, 2013, in Columbus, OH* (pp. 1–13).
- Tomasko, D. L., Ridgway, J. S., Waller, R. J., & Olesik, S. V. (2016). Association of summer bridge program outcomes with STEM retention of targeted demographic groups. *Journal of College Science Teaching, 45*(4), 90–99.
- Toutkoushian, R. K., May-Trifiletti, J. A., & Clayton, A. B. (2019). From “first in family” to “first to finish”: Does college graduation vary by how first-generation college status is defined? *Educational Policy*. DOI: 0895904818823753.
- Turrisi, R., & Ray, A. E. (2010). Sustained parenting and college drinking in first-year students. *Developmental Psychobiology, 52*, 286–294.
- U.S. Department of Education, National Center for Education Statistics. (2019a). The Condition of Education 2019 (NCES 2019-144), Annual Earnings of Young Adults.
- U.S. Department of Education, National Center for Education Statistics (2019b). Digest of Education Statistics, 2017 (NCES 2018-070), Table 330.10.
- U.S. Department of Education (2019c). “Federal TRIO Programs- Home Page.”
<https://www2.ed.gov/about/offices/list/ope/trio/index.html>
- Vaccaro, A., Daly-Cano, M., & Newman, B. (2015). A Sense of belonging among college students with disabilities: An emergent theoretical model. *Journal of College Student Development, 56*, 670-686. doi:10.1353/csd.20150072.
- Vaccaro, A., & Newman, B. M. (2016). Development of sense of belonging for privileged and minoritized students: An emergent model. *Journal of College Student Development, 57*, 925-942.

- Vaccaro, A., & Newman, B. (2017). A sense of belonging through the eyes of first-year LGBPQ students. *Journal of Student Affairs Research and Practice*, 54(2), 137-149.
- Van Herpen, S. G., Meeuwisse, M., Hofman, W. A., & Severiens, S. E. (2019). A head start in higher education: The effect of a transition intervention on interaction, sense of belonging, and academic performance. *Studies in Higher Education*, 1-16.
- Vasquez-Salgado, Y., Burgos-Cienfuegos, R., & Greenfield, P. M. (2014). Exploring home-school value conflicts: Implications for academic achievement and well-being among Latino first-generation college students. *Journal of Adolescent Research*. Advance online publication. doi:10.1177/ 0743558414561297.
- Vega, D. (2016). “Why not me?”: College enrollment and persistence of high-achieving, first-generation Latino college students. *School Psychology Forum*, 10, 307–320.
- Verdin, D., Godwin, A., Kirn, A., Benson, L., & Potvin, G. (2018). Understanding how engineering identity and belongingness predict grit for first-generation college students. Paper presented at the Collaboration Network for Engineering and Computing Diversity Conference, USA, April 29–May 2.
- Vetter, M. K., Schreiner, L. A., McIntosh, E. J., & Learning, C. (2019). Leveraging the quantity and quality of co-curricular involvement experiences to promote student thriving. *The Journal of Campus Activities Practice & Scholarship*, 1(1), 39-51.
- Vuong, M., Brown-Welty, S., & Tracz, S. (2010). The effects of self-efficacy on academic success of first-generation college sophomore students. *Journal of College Student Development*, 51(1), 50–64.

- Wachen, J., Pretlow, J., & Dixon, K. G. (2018). Building college readiness: Exploring the effectiveness of the UNC academic summer bridge program. *Journal of College Student Retention: Research, Theory & Practice*, 20(1), 116-138.
- Walton, G. M., & Cohen, G. L. (2011). A brief social-belonging intervention improves academic and health outcomes of minority students. *Science*, 331(6023), 1447-1451.
doi:10.1126/science.1198364
- Wathington, H., Pretlow, J., & Barnett, E. (2016). A good start? The impact of Texas' developmental summer bridge program on student success. *The Journal of Higher Education*, 87(2), 150–177.
- Wachen, J., Pretlow, J., & Dixon, K. G. (2018). Building college readiness: Exploring the effectiveness of the UNC academic summer bridge program. *Journal of College Student Retention: Research, Theory & Practice*, 20(1), 116–138.
doi:10.1177/1521025116649739.
- Werch, C.E., Pappas, D.M., Carlson, J.M., DiClemente, C.C., Chally, P.M., & Sinder, J.S. (2000). Results of a social norm intervention to prevent binge drinking among first-year residential college students. *Journal of American College Health*, 49, 85–92.
- Whitley, S.E., Benson, G., & Wesaw, A. (2018). First-generation Student Success: A Landscape Analysis of Programs and Services at Four-year Institutions. Center for First-generation Student Success, NASPA–Student Affairs Administrators in Higher Education, and Entangled Solutions.
- Wibrowski, C. R., Matthews, W. K., & Kitsantas, A. (2016). The role of a skills learning support program on first-generation college students' self-regulation, motivation, and academic

- achievement: A longitudinal study. *Journal of College Student Retention*.
doi:10.1177/1521025116629152
- Wilbur, T., & Roscigno, V. (2016). First-generation disadvantage and college enrollment/completion. *Socius*, 2, 1–11.
- Williams, C. J. (2017). First-generation community college students and their sense of place: An opportunity to succeed; an opportunity to belong. Graduate Theses and Dissertations(16241). Retrieved from Iowa State University Digital Repository: <https://lib.dr.iastate.edu/etd/16241>
- Wilson, D., Jones, D., Bocell, F., Crawford, J., Kim, M. J., Veilleux, N., . . . Plett, M. (2015). Belonging and academic engagement among undergraduate STEM students: A multi-institutional study. *Research in Higher Education*, 56, 750-776.
- Wood, J. L., & Harris III, F. (2015). The effect of academic engagement on sense of belonging: A hierarchical, multilevel analysis of Black men in community colleges. *Spectrum: A Journal on Black Men* 4(1), pp. 21-47.doi:10.1353/csd.2016.0091
- Wolf, D. A., Perkins, J., Butler-Barnes, S. T., & Walker, T. A. (2017). Social belonging and college retention: Results from a quasi-experimental pilot study. *Journal of College Student Development* 58(5), 777-782.
- Wolf-Wendel, L., Ward, K., & Kinzie, J. (2009). A tangled web of terms: The overlap and unique contribution of involvement, engagement, and integration to understanding college student success. *Journal of College Student Development*, 50, 407-428.
- Yao, C. W. (2015). Sense of belonging in international students: Making the case against integration to US institutions of higher education. *Comparative & International Higher Education*, 7, 6–10.

- Yao, C. W. (2016). Unfulfilled expectations: Influence of Chinese international students' roommate relationships on sense of belonging. *Journal of International Students*, 6(3), 762-778.
- Yeh, T. L. (2010). Service-learning and persistence of low-income, first-generation college students: An exploratory study. *Michigan Journal of Community Service Learning*, 16(2), 50-65.
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Thousand Oaks, CA: SAGE Publications Inc.
- Zobac, S., Smith, K., Spears, J. & Rode, S. (2016). Need a little TLC? Incorporating first-year seminars in themed learning communities. In Schmidt, L., & Graziano, J. (Eds.) *Building synergy for high-impact educational initiatives: First-year seminars and learning communities*. Columbia, SC: University of South Carolina, National Resource Center for the First-Year Experience & Students in Transition
- Zobac, S., Spears, J., & Barker, G. (2014). Identical profiles, different paths: Addressing self-selection bias in learning community cohorts. *Learning Communities Research and Practice*, 2(1), 1-13.
- Zumbrunn, S., McKim, C., Buhs, E., & Hawley, L. R. (2014). Support, belonging, motivation, and engagement in the college classroom: A mixed method study. *Instructional Science*, 42, 661-684. doi:10.1007/s11251-014- 9310-0

Appendix

Appendix A: Demographic Information Survey & Consent to Participate

Consent to participate:

Are you willing to participate in a research study exploring the experiences of first-generation students? Specifically, the study aims to understand how participating in a first-generation student success program (The Cardinal First Program) effects your experiences in college.

If you respond yes, you will be prompted to complete a short survey following this question, and might be selected to participate in the study. If you are selected to participate you will be sent a follow up email with additional information about the study as well as a consent form.

Yes/No

Demographic Survey

1. First Name
2. Last Name
3. Email (only will be used to contact you about your participation in this study)
4. Phone number (only will be used to contact you about your participation in this study)
5. Please select a pseudonym (first name only) NOTE: Your pseudonym will be used in place of your own name in all documents, reports, and publications.
6. Date of birth (Must be 18 years of age or older to participate in this study)
7. Sex (Male, Female, Prefer to Self Describe)
8. Are you Hispanic or Latino?

9. Select one or more race/ethnicity with which you identify:
- a. American Indian or Alaskan Native
 - b. Asian
 - c. Black or African American
 - d. Native Hawaiian or Other Pacific Islander
 - e. Caucasian
 - f. Prefer not to answer
10. Please select your family's approximate annual income (0-\$42,000, \$42,000-\$126,000, and \$126,000+)
11. What activities were you involved in in High school, if any? (athletics, leadership, service, social, other)
12. Overall, did you feel as though you belonged (were cared about, appreciated, important) at your high school? (Always, sometimes, never)

COLLEGE

13. Is this the only post-secondary institution you have attended?
14. If no, what institution(s) did you attend prior to this one: _____
15. Approximately how many credit hours did you start with at this institution?
16. Please list your current major(s)
17. Approximately how many credit hours have you earned
18. What is your current approximate GPA
19. Where do you live:
- a. On campus
 - b. Off campus but not at home

c. Commute from Home

20. How many years have you been involved with the IFG program?
21. Are you serving as a Cardinal Ambassador this year?
22. Besides the IFG Program, what other organizations are you involved with on campus?
23. What organizations are you involved with off campus (including work)?
24. How many hours a week do you work on campus?
25. How many hours a week do you work off campus?

B: Program Administrator Interview Protocol

1. What is your primary role at this institution?
2. What is your role in relation to the IFG program?
3. From your perspective, please describe the IFG program:
 - a. How many students are involved?
 - b. What role do you believe the IFG program plays on campus?
4. In your opinion, how does the IFG program foster involvement, if at all?
5. How does the program support sense of belonging on campus, if at all?
6. What role do the mandatory meetings play in student involvement and sense of belonging?
7. Are there other units on campus that support first-generation students in this way?
8. Are there other programs similar to the IFG program at other institutions? Please elaborate.
9. What do you believe students value most about the IFG program?
10. Is there anything else about the IFG program or institution you believe I should know?

Appendix C: Embedded Unit Protocol 1

This first interview is about getting to know you and your experiences at the institution and with the IFG program.

1. Tell me about yourself
2. How has your experience been since starting at the institution?
3. Why did you decide to become involved with the IFG program?

Involvement Focus

4. What types of organizations or programs are you involved with on campus? Off campus?
5. How has the IFG program influenced your involvement on campus, if at all?
6. How has the IFG program helped you become more involved academically, if at all? (connect with faculty, speak in class, etc)
7. How has the IFG program helped you become more involved socially, if at all? (make friends, join clubs/organizations, etc)

Sense of belonging focus: sense of belonging is feeling that you matter or are cared about and valued.

8. Since starting at this institution, have you felt you belonged on campus?
 - a. Can you think of an experience/example? What made you feel this way?
9. Can you think of a time when you felt you did not belong on campus?
 - a. Can you think of an experience/example? What made you feel this way?
10. Since starting in the IFG program, can you think of a time/example of when you felt you belonged within the context of the program? What made you feel this way?

11. Since starting in the IFG program, can you think of a time/example of when you felt you did not belong within the context of the program? What made you feel this way?

Appendix D: Embedded Unit Protocol 2

During our first interview, we got to know each other a bit as well as your experiences at this institution and with the IFG program. Today, I'd like to discuss what it is about the IFG program that has caused you to increase your involvement or feelings of sense of belonging, if at all.

1. Since our last interview, have you had any new experiences with regard to your on or off campus involvements?
2. Likewise, any new experiences where you felt your belonged on campus or within the IFG program? Any experiences where you felt you did not belong?
3. Since our last interview, I had the change to observe the IFG program meetings. What is it about these regular meetings that you believe supports your involvement on campus?
4. What is it about these regular meetings that you believe supports your sense of belonging on campus or within the IFG program?
5. Insert specific questions here brought up by my observations or in the first round interview that need following up

Appendix E: Observation Worksheet

Date of observation:	
Event Observed	
Location	
Description of event	
Purpose of event	
Who I am observing	
Uniqueness of this event	
Prominence of	
Academic Integration	
Social Integration	
Interactions with others	
Sense of Belonging	
Findings/Possible Excerpts	
Researcher's notes:	