

ABSTRACT OF CAPSTONE

Samantha J. Bryant

The Graduate School
Morehead State University

April 14, 2022

BEYOND ACCESS:
BEST PRACTICES TO INCREASE SUCCESS FOR LOW-INCOME, FIRST-
GENERATION COLLEGE STUDENTS

Abstract of Capstone

A capstone submitted in partial fulfillment of the
Requirements for the degree of Doctor of Education in the
Ernst and Sara Lane Volgenau College of Education
At Morehead State University

By

Samantha J. Bryant

Jackson, Kentucky

Committee Chair: Dr. Lee W. Nabb, Associate Professor

Morehead, Kentucky

April 14, 2022

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Low-income, first-generation (LIFG) student enrollment into postsecondary education programs has been steadily increasing over the last decade. These two groups of marginalized students are habitually overlooked regarding the need for additional supports as they often lack any visual indicators of their LIFG status. LIFG students arrive on-campus with unique goals, stories, and challenges but regularly lack college-going knowledge and social capital necessary to be successful at the collegiate level.

Colleges and other advocacy groups have been working across the globe to develop, implement, and examine specific programming and andragogy that hold the potential to increase LIFG collegiate student success when measured by cumulative grade point average (GPA), retention, and degree completion. LIFG students report multiple reasons for leaving a postsecondary program including intense feelings of isolation, financial need, and lack of campus engagement.

Several studies reflect similar approaches and strategies, but little has been done to examine why or how these specific approaches work and do so consistently. These programs and practices in place at individual institutions across the globe are benefiting small pockets of students and educators. However, understanding the

reasoning behind such successes, and sharing this set of knowledge, may be a first step in improving educational equity for LIFG students.

The goal of this study was to identify what practices increase LIFG rates of success, develop a theory as to why these approaches are effective, and prompt practitioners to experiment with this set of practices for further implications and research. Utilizing a mixed methods approach in gathering both quantitative measures and Strauss' Grounded Theory design support these goals as this approach allows for in-depth analysis to discover "the why" behind a specific phenomenon where little understanding exists - something many of the current studies fail to explore fully.

Using Strauss' Interpretive Grounded Theory and statistical data gathered during quantitative analysis this project examines the following research questions:

1. What strategies and approaches exist at the collegiate level that may increase success (overall GPA, retention, graduation) for LIFG students?
2. Why do these strategies work (theoretical development)?

KEYWORDS: Low-income students, first-generation students, interpretive Grounded Theory, culturally sensitive curriculum, success strategies, mixed methods

Candidate Signature

Date

BEYOND ACCESS:
BEST PRACTICES TO INCREASE SUCCESS FOR LOW-INCOME, FIRST-
GENERATION STUDENTS

By

Samantha J. Bryant

Approved by

Dr. John Monahan
Committee Member Date

Dr. Michael W. Kessinger
Committee Member Date

Dr. Lee W. Nabb
Committee Chair Date

Dr. Timothy Simpson
Department Chair Date

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DEDICATION

This work is dedicated to my mother, Carolyn, who has always pushed me to become more than I could ever dare dream. To my father, Fred, who has always offered unwavering support in all my decisions. To my grandmothers, Bertha and Evelyn, who've both always shown me how strong determined, Appalachian women can be.

I also dedicate this research to my TRIO family, especially those at Morehead State University, who offer help even when I am too stubborn to ask. None of this work would be possible without the TRIO programs, specifically Upward Bound, and the support these programs have given to promote both personal and professional growth. Experiences are truly life altering. #TRIOWORKS!

Lastly, to low-income, first-generation students everywhere: Take advantage of every opportunity presented to you, never stop dreaming, and push yourself Beyond Access.

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Chapter 1

Introduction

Low-income, first-generation (LIFG) students are enrolling into postsecondary degree programs at rates higher than ever before. Current statistics highlight the concerning fact that these students are less likely to persist from one school year to another as compared to their continuing-generation peers (Center for First-Generation Student Success, 2016). Continuing-generation students are from a household where at least one parent or guardian holds a bachelors level degree. LIFG students are also less likely to complete a bachelors level degree within six years (Swartz et al., 2018). In recent years this troubling trend has garnered much attention as the nation moves toward discussions on racial and social equity, primarily focusing on disparities within healthcare and educational systems that were exposed during the 2020 Coronavirus pandemic.

A large body of literature currently exists seeking to explore what are best practices and strategies for increasing collegiate success as defined by overall GPA, persistence from one year to the next, and degree obtainment for LIFG students (Hubbard, 1999; Seay, 2006). However, these studies are somewhat limited as they have been conducted in small pockets throughout the nation and at some institutions across the globe, or only test a singular strategy. This lack of collaboration has limited LIFG student exposure to these best practices as the information has been made available to only a small number of educators.

Despite this lack of collaboration many similarities seem to exist among the findings from these studies, including strategies, andragogical approaches, and relationship-building among students and staff. Based on the sporadic literature available, many of these strategies and approaches produce desirable outcomes for LIFG students (Harper & Quaye, 2009). This capstone project examined the current body of literature and data from a participant questionnaire to determine a set of best practices that increase LIFG student success and developed a theoretical model to explain why higher rates of success and degree completion occur when these strategies are implemented.

This research primarily utilized Anslem Strauss' Grounded Theory design – which is qualitative in nature (Strauss & Corbin, 1990). Using the data from the current literature, a basic student profile was developed, including an overview of the unique challenges students from this background may face and a rationalization for the need for institutional and classroom change.

Gathering statistical data to support the narrative data and the development of the Beyond Access Theory was also essential. To gather these data, a Likert scale participant survey was developed and was made up of 45 questions to gather demographic data and information on LIFG completers. This two-part approach eventually generated a mixed methods approach.

Data from the current body of literature were then cross-referenced with responses to the participant survey. This cross-examination served as a technique to increase applicability and confirm possible theoretical findings. The development and

utilization of this survey shifted the methodology of this project from solely qualitative to a mixed methods approach.

This specific research design is appropriate as it allows for the researcher to begin with an idea, ask structured questions, and arrange data to develop a Grounded Theory. The question at the very foundation of this project has consistently included examining and identifying strategies that exist to increase overall collegiate success for LIFG students and develop a theory to explain this phenomenon. Using this guiding idea, this design allowed the researcher to ask specific questions to discover relational connections within the data to develop a sound, Grounded Theory.

Using Strauss' Grounded Theory design (Strauss & Corbin, 1990) and coding recommendations as well as the quantitative data, this capstone explored potential relationships among factors deemed theoretically important to the collegiate success of LIFG students. These factors may include cost, relationships with faculty, and communication. This research also explored any potential systemic or societal barriers to collegiate success students from this marginalized background may face. Using these data the Beyond Access Theory was developed and is explored in this piece.

Purpose of the Research

One purpose of this study was to identify a set of best practices that increase success for postsecondary LIFG students. This purpose, while essential in moving the research forward, served as a place to begin theoretical development. While the identification and analysis of specific strategies is important, this research aimed to

go beyond basic level analysis common in literature reviews. A second, overarching and perhaps most important goal of this research included the development of a theoretical model to support and explain why the identified specific strategies and approaches used in postsecondary classrooms possesses the potential to increase success, as defined by overall GPA, persistence from one year to the next, and degree obtainment. This study used the current body of literature supplemented by survey data from seven students falling under the LIFG categories while pursuing undergraduate education. Out of this analysis the Beyond Access Theory was developed.

Research Questions

Strauss' Grounded Theory allows for the researcher to begin with a broad question (Creswell, 2006). This question may come from a variety of sources including a suggested or assigned area of research from a professor or colleague, the body of available literature, and personal or professional experiences (Strauss & Corbin, 1990). Drawing from these areas, it is recommended a broad research question be held in the beginning as the research and coding processes organically narrow the question down as work toward theory development progresses.

While it is important to begin with a broad question in mind, it is suggested that boundaries be placed on the research question early in the process (Strauss & Corbin, 1990). This may seem contradictory. However, it is essential for the qualitative researcher to acknowledge that all parts of the problem may not be addressed in a singular study. This idea lends itself to one of the overarching purposes

of Grounded Theory (GT) research – to promote further research on the same, or similar, questions.

An additional requirement for the Grounded Theory research question is to ensure it is asked in such a way that allows for flexibility and freedom to explore the phenomenon being investigated (Strauss & Corbin, 1990). Similar to other qualitative research methodologies, the Grounded Theory approach assumes all concepts pertaining to the research area are yet to be identified. Grounded Theory research questions should be action and process focused and state when phenomenon is being studied (Strauss & Corbin).

Research questions in Strauss' Grounded Theory may be interactional, organizational, or biographical in nature (Strauss & Corbin, 1990). An interactional research question focuses on observations and data primarily related to interactions typically between two different groups of people. Organizational research questions focus on exploring procedures and policies regarding how organizations react under certain conditions. Lastly, the biographical research question uses narrative data and oral histories to explore past experiences and prompt future research.

The primary research question for this study began as a broad, investigation of success strategies for LIFG students. As with GT, the research question was partnered with a focus on developing a theory that explains this phenomenon. This research is biographical in nature as the purpose of the capstone project included determining if a set of best practices that increases success rates for LIFG students does exist and why the approaches seem to work – development of the Beyond Access Theory.

This capstone project examined the current body of literature to search for similarities in strategies from these studies to answer (1) what postsecondary strategies exist that increase success and degree completion for LIFG students? The second, all encapsulating research question for this project asked (2) why do these best practices work? In other words, the second research questions provide the project with the flexibility to move forward in the development of the Beyond Access Theory that seeks to not only support the use of the identified strategies but explain the reasoning behind their successes when implemented within the collegiate classroom.

GT allows multiple sets of data to be used during constant comparison analysis. To increase validity, generalizability, and applicability a participant survey was also conducted to gather demographic data, degree completion statistics, and attitudes held by LIFG who have successfully completed a bachelor's level degree. Both sets of data underwent constant comparison analysis to develop a theoretical framework to explain why success strategies work.

Definition of Terms

As some terms related to this study may take on different meanings given the context. Clearly understanding terminology associated with this study benefits both the researcher and reader. Below is a list of key terms and definitions used throughout this study.

- *Compassionate Andragogy* – An adult learning model that considers marginalized student backgrounds and allows for the examination of

institutional policies and classroom practices that potentially hinder students from these backgrounds (Hao, 2011).

- *Continuing-Generation Student* – students who have at least one parent who had some postsecondary education experience (Redford et al., 2017).
- *Doubled-Up Homelessness* – A student involuntarily living in a residence with one or more families out of necessity (Low et al., 2017)
- *First-Generation College Student* – A student from a home where neither parent or guardian has completed a bachelor's level degree. Students may still be considered first-generation if a parent or guardian has: taken one or more collegiate level courses without degree conferment at the baccalaureate level, completed an associate's level degree, or completed a bachelor's level degree at an institution outside of the United States (Center for First Generation Student Success, 2016).
- *Imposter Syndrome* – The inability to believe individual success is deserved or has been achieved via personal effort and skill (Oxford Dictionary, 2020); the fear one cannot perform their role and will be exposed as a fraud (Gallagher, 2019).
- *Low-Income College Student* – A student from a home where the familial income is at or below predetermined levels as set by the U.S. Department of Health and Human Services. A family of four, in the contiguous United

States, is considered low-income if the household salary is \$27,752 or lower (see Table 1).

Table 1

U.S. Department of Health and Human Services Poverty Guidelines, 2022

Size of Family Unit	48 Contiguous States, D.C.	Alaska	Hawaii
1	\$13,590	\$16,990	\$15,630
2	\$18,310	\$22,890	\$21,060
3	\$23,030	\$28,790	\$26,490
4	\$27,752	\$34,690	\$31,920
5	\$32,470	\$40,590	\$37,350
6	\$37,190	\$46,490	\$42,780
7	\$41,910	\$52,390	\$48,210
8	\$46,630	\$58,290	\$53,640

(Office of the Assistant Secretary for Planning and Evaluation, 2022)

- *Marginalized Student* – A student whose identity may cause harassment, are underserved, or are unable to succeed on college campuses. These students are systematically denied equitable access to opportunities available to all students (Peck & DeSawal, 2021).
- *Student Success* – For the purposes of this study, student success considered overall GPA, persistence from one academic year to another, and bachelor's degree completion.

Chapter 2

Review of the Literature

The current body of literature to made up of a number on studies exploring LIFG students and strategies to increase both access to postsecondary education and success at the collegiate level and beyond. These studies (Hubbard, 1999; Seay, 2006), while beneficial to expanding understanding of LIFG students and their barriers, leave much to investigate when considering the theoretical model supporting the use of these success strategies. Using current studies to expand and support a knowledge base held by the researcher, data were used to develop a student profile highlighting barriers and issues commonly faced by LIFG students. Several andragogical approaches and specific classroom strategies are explored within this chapter.

The Literature

According to the Center for First-Generation Student Success (2016) and for the purposes of this study, a student is considered first-generation when they reside in a household where the parent or guardian has not obtained a bachelor's degree. Enrollment data as reported by the Center for First-Generation Student Success (2016) from the 2015-2016 academic year reflected that 56% of college freshmen fall under this first-generation definition. As compared to the 1995-1996 school year, this number has grown exponentially, when only 34% of the student body at four-year institutions could be identified as first-generation (Pascarella et al., 2004). When comparing six-year graduation rates of first-generation students with their continuing-

generation peers, these marginalized students are 29% less likely to complete a bachelor's level degree within this timeframe (RTI International, 2019).

Studies have revealed that first-generation student status often coincides with students living at a low-income level, completely in poverty, or even in homelessness (Low, Hallett, & Mo, 2016; Mitchall & Jaeger, 2018; Rondini, 2016; Ting, 1998). This research applied The United States Office of the Assistant Secretary for Planning and Evaluation (2022) definition for low-income, which is determined by the sliding scale provided in Table 1.

Despite the barriers that LIFG students face, they continue to enroll at astounding rates. Unfortunately, many do not persist into their second or third year (Lohfink & Paulsen, 2005). In their study on persistence in first-generation and continuing-generation students, first-generation students are nearly 10% less likely to persist from their first year to their second year (Lohfink & Paulsen, 2005).

Mamiseishvili's (2011) longitudinal study found only 11% of LIFG students completed a bachelor's degree within six years. As comparison, 55% of continuing-generational students persisted through degree completion within five years or less. Factors impacting persistence include feelings of loneliness and isolation (Jehangir, 2008), inability to secure a support system (Yeh, 2010), and inability to adjust to the college student role (Collier & Morgan, 2007).

This inability to adjust and ultimately preventing LIFG students from degree completion contributes to the on-going cycle of poverty in the areas from which these students live. Without additional supports for degree completion these students

remain in stagnant routines that perpetuate the historical abuse of cheap labor in these impoverished areas. These communities are often utilized for the raw materials available to support the on-going industrialization of modern society (Crain & Newlin, 2021).

Additionally, negative stereotypes in the media of marginalized students reinforce the ideas that LIFG students are often ignorant and lazy. This impact of pop culture often influences policymakers to develop legislation to provide monetary relief, often temporary, to address poverty. However, these temporary adjustments do little to impact the long withstanding, cultural poverty that has been deeply embedded in these communities from which these students have grown up.

Degree completion for LIFG students is often viewed as a break, or at the very least a positive impact, in this generational cycle of poverty. A degree for the LIFG student is often viewed as a personal, familial, and community achievement (Rondini, 2016). When these students are provided opportunities for equal access and success and complete a bachelor's level degree they often return to their hometowns and close-knit communities with the hope to generate change and inspire other LIFG students. Ideally, this slow trickle-down effect will break historic and systemic poverty in place in the areas in which these students come from.

Supporting LIFG students is important for institutions as well. While performance-based funding (PBF) was put into place as a way to hold postsecondary institutions accountable and boost student outcomes, it has come with some unintended consequences (Ortagus et al., 2020). While 41 of the 50 United States

have adopted this funding model, specific PBF metrics have not yet been identified allowing institutions to pick and choose the data.

While specific metrics have not been identified, most PBF models consider degree completion, student retention and, community or technical college student transfers to a four-year institution (Ortagus et al., 2020). Additional metrics often include gender and race, with the majority of PBF institutions including at least one system of measurement to examine LIFG students.

States are also given the freedom to decide on the percentage of funding that will come from these data points within the PBF model. This percentage differs wildly with some states, like Ohio, receiving 100% of monetary allocations from this model whereas other states, Arkansas for example, only appropriates 3%. Kentucky sits on the higher end of this spectrum at 70% (Ortagus et al., 2020).

Given this common performance-based funding model postsecondary institutions, especially those with financial struggles, should work diligently to increase success for all students, especially those from marginalized backgrounds like LIFG students. This can be difficult as it is often postsecondary institutions geographically situated in or close to impoverished areas inhabited by LIFG students that struggle to remain in financial good standing. However, with exploration and implementation of strategies that increase success for LIFG students these institutions may be able to improve the budget and increase graduation rates.

Hao's Compassionate Andragogy

Several pedagogical approaches, classroom strategies, and interventions are currently in use, or have been used across the nation, and reflect an increase in GPA, retention, and graduation for all students, but primarily for those from LIFG backgrounds. Hao proposes that Compassionate Andragogy may be one solution (Hao, 2011).

Hao's approach allows for the examination of institutional policies and classroom practices that potentially hinder students from these backgrounds. Compassionate Andragogy involves a process in which faculty and staff teach students how to communicate effectively using "four components: observation, feeling, need, and request" (Hao, 2011, p. 92). Hao's approach is beneficial as it challenges and equips LIFG students to not only identify policies, procedures, and even entire systems designed to impede their success or upward mobility, but also provides a brief strategy to discuss these issues fully and effectively as a means to instigate change.

While ethnicity was not a characteristic of focus in this study, it is important to highlight this version of culturally responsive pedagogy has been shown to promote analysis of different cultures during the learning process. This approach to pedagogy and andragogy may also increase a sense of belonging and comfort on campus as well as in the classroom for LIFG students (Jehangir, 2008).

Targeted Strategies

In addition to Hao's Compassionate Andragogy discussed above, there are several targeted strategies that can be implemented that may help LIFG students succeed, both in and out of the classroom (McMurray & Sorrells, 2009; Miller, 2013). According to the literature, these strategies include pre-enrollment summer programming (Renbarger & Long, 2019), intrusive advising (McMurry & Sorrells, 2009), faculty making first contact outside the classroom (Collier & Morgan, 2007), and using illustrative examples (McMurray & Sorrells), and learning experiences outside the classroom including Service (Yeh, 2010) and Justice Learning (Conley & Hamlin, 2009).

Summer Programming

Since the Higher Education Act of 1965 became law, many colleges have developed several programs aimed at increasing enrollment of marginalized student groups, including students from LIFG backgrounds. Many of these programs, including Upward Bound, provide students with early exposure to college life and living on a campus (Renbarger & Long, 2019). Renbarger and Long suggest these early, on-campus experiences generate a sense of comfort and promote a sense of belonging.

These simulated college experiences equip LIFG students with knowledge, previously ungarner, partly due to lack of exposure to certain lived experiences similar to those shared by students coming from the dominant, White, middle-class

culture. These experiences may include, but are not limited to, enrolling in a degree program, navigating financial aid, college tours, and career exploration.

Additionally, this type of programming offers exposure to cultural experiences often unobtainable for LIFG students and families such as annual vacations, attending an etiquette luncheon, and understanding the importance of social networking.

Summer programs, like that offered by many TRIO programs including Upward Bound and Educational Talent Search, present LIFG students with opportunities to gather life experience and build social capital by providing LIFG students with a sense of college life and early connections to faculty and staff (Watt & Huerta, 2011). This understanding is likely to benefit the LIFG student and increase rates of success as he/she transitions from high school into the collegiate student role.

Intrusive Advising

Another targeted strategy that has shown the ability to increase success in LIFG students is intrusive advising. Intrusive advising can require some additional work on the instructor's or professor's behalf but may benefit all students, especially those from LIFG backgrounds. The first step in intrusive advising is getting to know the students within a class, primarily things like hometown, job, parent, and familial information. Learning these things allows the educator to begin determining who may or may not be a LIFG student and tailor experiences for these students to increase their likelihood of success.

After some idea has been developed of individual student identities, the second step challenges the traditional idea of office hours. Intrusive advising upholds

the age-old “by appointment only” idea; however, it is the instructors rather than the students reaching out to make appointments during office hours (O’Bryant & Schaffzin, 2017; Wiggins, 2011). This approach benefits all students, especially those from LIFG backgrounds, because they do have the learned experience to know the exact purpose of office hours (Collier & Morgan, 2007). The educator will also benefit as this approach may decrease the amount of idle time spent during office hours.

Aside from a general increase in academic performance (Collier & Morgan, 2007), intrusive advising promotes relationship building. LIFG students’ most common reason for leaving campus was a lack of support. This intrusive advising approach puts LIFG students face-to-face with their professors. This breaks down barriers, addresses fear, and demystifies the professor (Wiggins, 2011) so that organic, meaningful conversations can take place and a support system can begin to form (Means & Pyne, 2017; McMurray & Sorrells, 2009; Wiggins).

Faculty Contact Outside the Classroom

Building a diverse support system is key for LIFG students to combat feelings of isolation and loneliness (Glass et al., 2017; Jehangir, 2008; Pascarella et al., 2004; e.g.). Educators, primarily faculty, are often the first point of contact for students. Faculty may be pivotal in LIFG student decisions to persist through to another school year or drop out completely (Pascarella et al.).

Consciously aware or not, faculty are often the gateway to campus engagement for LIFG students (Glass et al., 2017; Jehangir, 2008). Faculty serve as

informational hubs for students unfamiliar with navigating the waters of academia. LIFG students often arrive on campus with little knowledge of a college campus, where to go for help, or even something as seemingly simple as how to find like-minded people.

To begin assisting LIFG students with finding groups or clubs they may be interested in engaging with, the instructor or professor should use intrusive advising techniques. Using this information, faculty can promote classroom discussions among peers with similar interests prompting organic relationship building. These opportunities for networking, albeit based on personal interest rather than academia, are essential in increasing success for LIFG students and are not possible without a jumping-off point provided in the classroom by faculty or staff.

Illustrative Examples

Faculty and staff, both in and outside the classroom, have an opportunity to increase LIFG student success by using illustrative examples. This approach is made up of two parts. The first part of using illustrative examples is sharing stories of successful LIFG students (McMurray & Sorrells, 2009). Many LIFG students live in areas where degree attainment is low. Due to this, these students often lack a role model, and it is important especially as these students develop and grow into the new college student role (Pascarella et al., 2004; Ramos-Sánchez & Nicholas, 2007). Sharing these stories may increase student motivation and promote application of course material.

The second part of this approach includes providing explicit examples for terms or concepts unfamiliar to those whose lived experiences are not based in the dominant White, middle-class culture. These examples are instrumental in combatting culturally insensitive curriculum and may help in breaking down barriers in misunderstanding of quirks specific to White, middle-class culture in order to maintain focus on actual course content (Hébert, 2017). For example, in America a cul-de-sac is a common fixture throughout suburbia; however, these do not exist in very urban or rural areas.

A student from rural, eastern Kentucky may have very little knowledge of a cul-de-sac but providing a loose comparison to the head of a hollow or an alley would likely be enough for a LIFG student to understand this concept. Comparatively, discussing the similarities of the end of an alley way or something analogous would be beneficial to a student from a very urban area. Using examples such as these provide these intelligent, high-achieving LIFG students with a point of comparison from their lived experiences and eliminates some of the additional work necessary to understand the content.

Service Learning

Learning experiences outside of the classroom provide an opportunity to apply learned knowledge and skills for all collegiate students but are very beneficial to LIFG students. Service learning provides opportunities for LIFG students to develop hands-on skills related to the information learned inside the college classroom (Yeh, 2010). As an additional benefit, service learning promotes networking “in real-life”

which increases LIFG student social capital, something these students often lack. Additionally, service learning provides a model for networking, increases LIFG understanding regarding the importance of this skill both in and beyond college, and provides opportunities to build social capital.

In addition to the benefits described above, Yeh (2010) proposes that experiences outside the classroom, like service learning, can increase student self-efficacy. Self-efficacy, one's belief in their ability to complete necessary tasks, is one main indicator of student retention and overall success (Moschetti & Hudley, 2008; Schwartz et al., 2018; Tate et al., 2015; Vuong et al., 2010). An increase in self-efficacy can also impact LIFG confidence to seek out help (Schwartz et al.) and self-perception, especially regarding potential career options for the future (Pulliam et al., 2017). Developing self-efficacy is essential in increasing success for LIFG students. Educators can help facilitate this process by including learning opportunities, like service learning, into the curriculum.

Justice Learning

Conley and Hamlin (2009) explain that justice learning supports marginalized students by engaging them in processes that investigate concepts of privilege, power, and difference. This approach encourages students to think about their communities and the impact both positive and negative that current governmental policies have on the areas in which they live. Justice learning provides a "bridge" between academia and the LIFG student's hometown community (Conley & Hamlin). To promote

critical thinking and broken systems, justice learning activities should assist students in building relationships with those they are working with directly.

Justice learning can look very different depending upon where the experience is taking place. Common locations for these types of activities include homeless shelters, jails, domestic violence shelters, and drug rehabilitation centers. Regardless of the location or activity, the most important component of justice learning is challenging bias and shifting thinking. For example, a professor plans an experience at the local jail for a group of criminal justice students. During this activity students will participate in a supervised recreation hour with nonviolent inmates charged with petty theft or low-level drug crimes.

This experience alone would be appropriate for a service learning activity. To transition this toward a justice learning experience, the professor should encourage the students to discuss reasons behind these crimes, the reason why those charged carried them out, and why society deems this behavior criminal. These discussions allow students to see authoritative systems in a new light to promote critical thinking and problem solving to address issues, such as overincarceration, in America upon degree completion.

Student Profile

In 2007 nearly 3.5 million students enrolled in Kindergarten through 12th grade were identified as high-achieving and low-income. High achieving meaning these students score in the top academic quartile in the United States on standardized tests (Hébert, 2018). These data points demonstrate that LIFG students do not lack

intelligence or necessary cognitive abilities, yet despite these standardized test scores, these students arrive on campus under- or completely unprepared.

Reasons for this lack of preparation may stem from a lack of rigorous high school curriculum (Wilson, 2016). Students who do not complete college preparation courses in high school – higher level math and science courses, reported feeling unprepared for similar courses at the postsecondary level (Hand & Payne, 2008). Unfortunately, students from low-income communities, whether rural or urban, often suffer from a general lack of access to quality education even before considering it at the postsecondary level. Unfortunately, due to the popularity of the performance-based funding model in America, many schools have little to no expectations to increase funding based on performance. Without proper financial support school administrators do not have the means to offer robust professional development or even purchase modern, better suited curriculum.

A misunderstanding of the collegiate application and lack of knowledge regarding the college-going process are two more commonalities found among LIFG students. Many LIFG students are not allowed the opportunity to explore college options and fail to learn the different types of colleges, what each type can offer, and which may be best suited for their individual learning needs (Hoxby & Turner, 2015). This lack of knowledge can increase LIFG student dropouts as the students often find themselves at an institution that does not appropriately meet their needs or support them efficiently.

Familial codependency is another commonality within the LIFG student community (Hand & Payne, 2008). Regularly, LIFG students help bear the burden of a low-income household. This frequently means taking care of younger siblings, cleaning the home, cooking meals for the family, and sometimes even working a part-time job to assist with bills. It can be difficult for many students to break away from this type of living situations as feelings of guilt and worry sometimes detract a student from moving away to attend college. This familial dependency may limit the LIFG student's perceptions of their future (Pulliam et al., 2017) and how this relates to their college-going goals.

Another common factor found across the LIFG student experience is financial strain (Lohfink & Paulsen, 2005; Mamiseishvili, 2010). Fortunately, many LIFG students often receive substantial financial aid packages (Azmitia et al., 2018); however, the on-going rise in the cost of postsecondary education often creates a gap between financial need and expected familial contribution.

In 2018, 38% of undergraduate students received Pell Grants (Mead, 2018). However, many students from low-income or first-generation backgrounds still work, often multiple jobs (Pike & Kuh, 2005; Ortagus, 2016; Hinz, 2016), simply out of necessity. Money from these jobs may go toward covering the gap between cost of attendance and financial aid or to cover basic living expenses, especially when residing off-campus.

Balancing school and work can have a negative impact on students by limiting the time available to focus on schoolwork and participate in extra- or cocurricular

activities (Katreovich & Aruguete, 2017). However, LIFG students that work 10-20 hours a week are more likely to persist through to another year (Lohfink & Pauslen, 2005; Mamiseishvili, 2010). While there are some benefits to employment, lack of usable time may negatively impact the LIFG student's ability to participate in co-curricular and extra-curricular activities (Glass et al., 2017; Schademan & Thompson, 2015).

The lack of free time may also decrease the number of opportunities LIFG students have to engage in meaningful social relationships with peers or faculty. When LIFG students do not have the ability to build supportive relationships with peers or faculty, overwhelming feelings of loneliness are often the result. This lack of a support system and decreased campus engagement are both often a major factor in LIFG student dropout (Jehangir, 2008; Martin, 2015).

Lacking self-efficacy, one's belief in one's ability to succeed in specific situations, is also common in LIFG students and directly impacts performance at the postsecondary level (Ramos-Sánchez & Nichols, 2007). This single characteristic alone has proven to be a predictor of collegiate GPA, persistence (Green, 2006; Pike & Kuh, 2005), and motivation (Katreovich & Aruguete, 2017) for LIFG students. A lack of self-efficacy may impact collegiate choice (Hand & Payne, 2008; Hébert, 2018; Green, 2006), major (Pulliam, et al., 2017), and even the type of courses the LIFG student may choose to take (Ortagus, 2017).

With these shortcomings, there is much opportunity for colleges and universities to implement policies and programming to assist these students in

reaching their dreams of a college degree and reach their full potential. Through academic and social support, additional guidance (Renbarger & Long, 2019), and institutional interventions (Watt et al., 2011) LIFG students can perform at the highest possible level.

Parental Influences

Data show several commonalities across LIFG experiences with parents and families. Higher levels of parental or familial support play a positive and important role in the development of student self-efficacy and motivation. Most LIFG students experience a strong sense of community and connection unique to their social class (Rondini, 2016). This connection is often challenged as these students develop a new identity as a college student. The disconnect between academic goals and cultural identity can sometimes exacerbate the imposter syndrome LIFG students face on a daily basis. Imposter syndrome is complex and may have several definitions. The two most common definitions applicable to LIFG students are

- The inability to believe individual success is deserved or has been achieved via personal effort and skill (Oxford Dictionary, 2020).
- The fear one cannot perform their role and will be exposed as a fraud (Gallagher, 2019).

Imposter syndrome often comes from a general lack of exposure and unfamiliarity with the college-going process and atmosphere rather than a lack of understanding in content. This commonality may also be due to familial dependence

or other cultural factors. The relationships these students have to family and community serve as a comfort when feelings of isolation and loneliness occur which may increase the likelihood of dropout. Additionally, imposter syndrome can generate feelings of guilt and loneliness because of familial dependance and may negatively impact college-choice (Mitchall & Jaeger, 2018).

Impact of Social Class

Social class is impacted by a variety of factors. Martin (2015) found work and family responsibilities were found to be more commonly occurring barriers for students with LIFG backgrounds as compared to their continuing-generation peers. It is important to understand “socioeconomic background influence[s] every aspect of the college experience” (Martin, p. 277). For many, escaping a potentially unsupportive or otherwise stifling home environment should be seen as a testament to the level of commitment LIFG students have in attending and persisting through college to degree completion.

According to Rondini (2016) most LIFG students hail from lower-working class families. Working class families are traditionally considered low-income with little-to-no educational attainment beyond high school. Family makeup for lower-working class often include a set of parents, or a single parent or guardian, working full-time with compensation at or marginally above the minimum wage. Lower-working class families are often dependent upon social support programs such as Medicaid or the Supplemental Nutrition Assistance Program (SNAP) – commonly known as food stamps.

The lower-working class family environment often lacks opportunity for upward mobility socially or economically and often severely lack knowledge of the college-going process (Mitchall & Jaegar, 2018). Due to this lack of knowledge in terms of educational attainment, individuals from lower-working class families often fail to understand the cultural, institutional, and societal barriers in place that have historically and systemically had a negative impact on their own academic successes, or lack thereof (Rondini, 2016).

This juxtaposition between familial background and the college or career goals held by the LIFG student often result in the student's subconscious attempt at class transition. During this process the LIFG student may begin to adapt their language and behaviors to mirror that of the upper and middle class (Hinz, 2016). According to Hinz, this occurs because "working-class students must eventually decide whether they want to identify with the working class or the middle class, because the two are fundamentally opposed" (p. 287). This juxtaposition of class identity can oftentimes cause tension between individual identity and perceived social expectations from both family and academia (Means & Pyne, 2017).

Students also perceive the need for multiplicity in these identities (Pizzolato et al., 2008) in order to maintain their cultural background and succeed in the middle class. Despite on-going interpersonal identity struggle and familial lack of educational attainment, these families and students hold postsecondary education in the highest regard. Parents, family members, and other individuals who are in direct support of the student's educational aspirations often have a positive impact on

educational persistence and general outcomes – including degree completion (Mitchall & Jaegar, 2018). Unfortunately, despite supportive families and parents, many LIFG students report feeling their individual experiences and identities are not always recognized, accepted, or valued at their institutions (Means & Pyne, 2017).

Homelessness

At some point in their lives, most LIFG students will experience “doubled-up homelessness” (Low et al., 2016, p. 796). Doubled-up homelessness refers to involuntarily living in a residence with one or more families out of necessity (Low et al.). Students in these living situations may also be referred to as highly mobile youth. At any given time, these students account for 75% of the homeless students attending public school (Low et al.). Highly mobile students often go unnoticed or unsupported because they do not meet the typical ideal of homelessness (Low et al.). These students often have poor academic goals, struggle with truancy, demonstrate poor or negative behavior, and have consistently lower GPAs as compared to their non-homeless peers (Low et al.).

Support and Motivation

Levels of student motivation are often impacted by familial support. Even though most LIFG students hail from families with minute knowledge regarding the college-going process, parental or guardian support plays a key role (Mitchall & Jaeger, 2018). Mitchall and Jaeger determined most LIFG students may come from one of two different homelife environments: informational or permissive. An informational environment “provides a feedback structure that enables the child to

have a sense of competency to master the environment” (Mitchall & Jaeger, 2018, p. 585). This type of environment is made up of rules, consequences, and stability – the student learns and becomes proficient in his or her situation.

The permissive environment “does not provide adequate rules or boundaries...critical for understanding...competency and autonomy” (Mitchall & Jaeger, 2018, p 585). A permissive environment is often inconsistent, unstable, and provides the student with little, if any, hands-on guidance.

Perhaps the most important component of familial support is the gift of choice. Students whose parents demonstrate support for educational pursuits and offer guidance, but ultimately leave the final choice to the student (Mitchall & Jaeger, 2018), produce more resilient students that are more comfortable with the college choice process. According to Mitchall and Jaeger, parents who are active participants in the application and financial aid process, even with little knowledge, make a positive impact on motivation. Additionally, high academic expectations, positive feedback, validation, and encouragement were all positive familial contributors to student motivation and self-determination (Mitchall & Jaeger).

The literature predicts an on-going rise in LIFG college student enrollment. Should institutions embrace the possibility of implementing these additional supports for LIFG students, both are likely to benefit. Given the popular performance-based funding model, an increase in retention and graduation rates will promote an increase in subsidies. Additionally, when these approaches are applied, they foster a seemingly more welcoming environment for marginalized students. However, little has been

done to explore why these strategies work. The objective of this research was to answer this question.

Summary

The current body of literature explores many strategies and andragogical approaches to support LIFG students. While these studies hold merit and highlight impactful strategies such as intrusive advising and illustrative examples, there has been little work done to develop a theoretical model supporting or explaining why these strategies work.

Using the literature, a student profile was developed to increase understanding of LIFG students. Common factors shared by most LIFG students that often impede postsecondary completion include lack of college-going knowledge, familial codependency, financial strain, and lack of self-efficacy. While this is not a complete list, these identified commonalities negatively impact most LIFG students and their ability to enroll in or complete a bachelor's level degree.

In addition to this student profile, the barriers LIFG students are faced with most often were also identified. Common barriers reported by LIFG from the literature included lack of familial support, cost of attendance, inability to work while attending college, and imposter syndrome. This literature review also served as a supplement to the researcher's background knowledge to explore specific classroom strategies and andragogical approaches, build a data set for constant comparison analysis, and contribute data to the development of a theoretical model – the main goal of this research project

Chapter 3

Methodology

This chapter describes methodology and overall design for this research project. The purpose of this research was to develop an overarching theory to support the use of a set of identified best practices that increase the overall success for LIFG students at the collegiate level. Most practitioners recommended choosing a methodology the research is comfortable with and is best suited for the type of research taking place. This study required a qualitative approach supported by quantitative questionnaire to develop a robust theoretical model resulting in a mixed method approach. Provided in this chapter is a rationale for mixed method design including reasoning for a Grounded Theory approach, instrumentation development, data collection procedures, data analysis, theoretical development, and sensitivity will be explored and discussed.

Rationale for a Mixed Methods Design

A mixed methods research methodology was chosen as it provides the researcher with the ability to utilize a variety in types of data and promotes the constant comparison analysis of research or observations from individual or group lived experiences, behaviors, and interactional relationships. Utilizing the researcher's personal knowledge, information regarding lived experiences of LIFG students around the globe as gathered from the literature review, and eventually the narrative data gathered in the participant survey mixed methods approach was determined to be best suited for this capstone project. This capstone project primarily

follows an Interpretive Grounded Theory approach but partnered this qualitative methodology with a Likert scale participant questionnaire to generate a data set utilized during the constant comparison analysis, creating a mixed methods approach in nature.

When comparing a general qualitative approach to the quantitative counter, many similarities can be observed. Both methodologies seek to answer research questions with general applicability and reliability. However, the quantitative approach puts a much larger emphasis on statistical evidence and tends to favor beginning with a clearly defined research question (Creswell & Creswell, 2018).

A qualitative methodology favors narrative and personal stories over patterns in hard numerical data. While the coding process for Grounded Theory generates a data set that can be examined numerically, emphasis is placed on language and perception of experiences, rather than identified patterns. However, the comparison of both qualitative and quantitative data for this research allowed the researcher to explore any potential outliers in these data and either confirm or deny the theoretical model.

Additionally, Grounded Theory specifically provides the researcher with a certain amount of flexibility and adaptability with many components of the research process including the formation, and reformation of the guiding research questions. Lastly, Strauss and Corbin (1990) urge one not to ignore researcher's preference in choice of methodology. In this case, while the questionnaire was essential and important to analysis, preference was given to a qualitative methodology based on the

reasoning described above and a researcher's natural inclination toward this style of methodology.

Qualitative Methodologies

There are five basic qualitative approaches: narrative research, phenomenological research, ethnographic research, case study research, and Grounded Theory research, which can be broken down into three specific approaches; Classical Grounded Theory (GT), Interpretive Grounded Theory (IGT) which is also referred to as Strauss' approach, and Constructivist Grounded Theory (CGT).

Grounded Theory methodology, more specifically IGT or Strauss' approach, was utilized to better understand the best practices that increase success for LIFG students at the collegiate level and develop a theory to explain this phenomenon. A brief overview of each approach is provided below as well as justification for utilization of Strauss' Grounded Theory.

The first qualitative approach, narrative research, is best suited for studies focusing on a singular research question or phenomenon, with two being the maximum. Using the narrative research approach requires the inquirer to gather data from personal stories – either written or oral. These stories are then studied for meaning and organized into a chronological order (Creswell, 2006). Data for this study comes from both individuals and secondary sources like studies in peer reviewed journals and often include data from at least 10 participants. Due to these characteristics of this project narrative research approach was deemed not appropriate.

The phenomenological approach primarily seeks to reduce the individual experiences of several subjects to basic, universal description (Creswell, 2006). This approach is best suited for studies seeking to understand shared experiences of a small group as related to a single phenomenon. While this approach could have been used for this study, it was not selected as it does not provide for the in-depth extension into theory work, nor does it promote future research – a goal of this research.

Ethnographic research examines entire culture groups – specifically the shared values, behaviors, beliefs, and languages of a group. While this research focuses on a specific group – LIFG students, students from this group come from a variety of backgrounds and are not considered part of the same culture. Poverty knows no race, religion, or creed and because of this, the ethnographic approach does not align with the research questions or objectives.

The main objective of the case study approach is to gain a deeper understanding of a specific case (Creswell, 2006). Data collection occurs over-time and comes from multiple sources. Multiple cases may be used, should the researcher choose this approach. However, Creswell (2006) cautions researchers to refrain from overgeneralization. While both primary and secondary sources were utilized in this research, in the case study methodology data collection occurs over a long period of time thus making this approach unfitting for this study. This methodology was decided against as it does not provide for or promote the development of theory – a main goal of this study was to promote further experimentation.

The final qualitative approach is Grounded Theory. Within Grounded Theory there are three different contemporary schools of thought, each with a slightly different approach. These three different approaches are Classical Grounded Theory (GT), Constructivist Grounded Theory (CGT), and Interpretive Grounded Theory (IGT) which is also referred to as Strauss' approach. These different schools of thought began to develop in the 1980s when Glaser and Strauss identified key differences in their philosophical ideals.

Classical Grounded Theory

Classical Grounded Theory was originally developed by Barney Glaser and Anselm Strauss in the 1960s. Glaser, a positivist, someone who studies society through the single lens of scientific fact, worked to ensure his methodology remain adaptable in forming theory or conclusions based on specific observations. The objective of this new methodology was to serve as an approach that could seamlessly interconnect data and theory as a means to develop new theories to intricate problems.

Glaser believed the researcher should ignore all previous knowledge or experiences related to the research problem in order to avoid any possible bias (Creswell, 2006). Using this form of GT eliminates the use or need for the literature review as a starting point for the research. Rather, this approach requires concepts be identified beforehand the literature review may begin. Another trait unique to this classic form is that it does not allow for a specific research question, with Glaser claiming these should emerge during the analysis process.

Classical GT, unlike other grounded theory approaches, prohibits the researcher from utilizing any prior knowledge claiming this could impact research quality and skew data. Glaser upheld the idea that researchers should remain distant from their study or subjects as a means to address validity. Due to this, the literature review must take place upon completion of data analysis. While all forms of Grounded Theory use a constant comparison analysis, the coding process looks much different for each. The coding approach under GT has two steps: substantive coding and theoretic coding.

During substantive coding all data is examined and put into categories that appear consistently throughout. This method of GT stresses what Glaser referred to as saturation – using as much data as possible to form categories. As core categories are identified, GT then identifies a main phenomenon connecting them. From here, a theory connecting the core category, phenomenon, and all other categories can be developed. Verification of this form of research can only occur upon the completion of the project using a quantitative analysis.

Constructivist Grounded Theory

Constructivist Grounded Theory (CGT), developed by a former student of Glaser and Strauss, Kathy Charmaz, is different in that it acknowledges the relationship between the researcher and the subject. CGT claims prior knowledge cannot be ignored yet must be acknowledged and addressed by the researcher to examine possible bias.

Perhaps one of the most notable differences with CGT is the increased level of freedom provided to the research, even beyond that provided under the other two approaches (Creswell, 2006). Within this approach there is not true linear process to follow – literature review may occur when the research deems it necessary. CGT embraces the idea of research questions as they help guide data collection. However, it is important the researcher maintain flexibility and allow these questions to change if more substantial questions arise (Creswell).

The coding process for CGT is made up of two steps. The first step involves coding data using an approach preferred by the researcher, such as a line-by-line coding analysis. This often produces several codes which must then be examined to identify the most commonly occurring codes. The researcher then organizes the remaining research to fit into this set of codes. After this comparison analysis the researcher then determines which codes are most important and then can move into theoretical development.

Interpretive Grounded Theory

Interpretive Grounded Theory (IGT), or Strauss' approach, was refined in the 1990s by Anselm Strauss and Juliet Corbin. Arguably the basis for the split between Glaser and Strauss and the first notable difference within IGT is the acceptance of the researcher's prior knowledge (Strauss & Corbin, 1990). Taking a more realistic approach, Strauss believed the researcher should embrace prior knowledge and allow it to guide research, analysis, and develop of theory (Strauss & Corbin). Strauss and IGT support the use of prior knowledge, claiming it may be used not only to guide

data comparisons but also to interpret and explain results upon completion of the coding process.

This major difference this allows the use of a literature review both before and during the on-going analysis and data collection processes. This approach promotes a more active role for the researcher, allowing him or her the freedom to interpret data through the analysis process. IGT allows the researcher to begin with somewhat of a research question but encourages vagueness allowing data to provide clarity throughout the analysis process (Strauss & Corbin, 1990). Embracing the value of prior knowledge partnered with foundation of a research question promotes sensitivity when developing interview or survey instruments. Emphasis with Strauss' approach is places on verification of data through prior knowledge, experiences, and additional research (Strauss & Corbin).

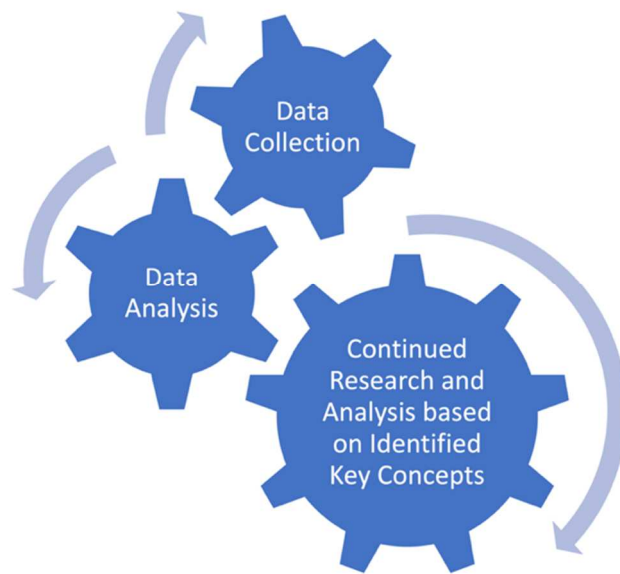
This freedom is perhaps one of the reasons IGT has continued to be a popular choice for the qualitative researcher. Known for flexibility and room for creativity, this methodology has become the preferred method for those seeking to understand a specific problem or answer a research question in a very robust and in-depth manner.

The Coding Process. The coding process looks much different in IGT as compared to the other forms of Grounded Theory. The IGT coding process is made up of three steps: open coding, axial coding, and selective coding. While these three steps have been identified as separate, Strauss' approach emphasizes constant interplay between data collection and data analysis (Strauss & Corbin, 1990) This interplay is referred to as Constant Comparison Analysis. This constant comparison

analysis, visually represented in Figure 1, allows for the connection of prior knowledge, emerging themes, and new data to exist harmoniously as work toward theoretical development takes place.

Figure 1

Visual Representation of Constant Comparison Analysis



Open Coding. The first part of the coding process begins with open coding. This process includes examining specific events with the data as they are related to the research question. As analysis of the data continues and more concepts emerge these begin to form the foundation of theory. As the number of key concepts continue to increase these singular concepts are grouped into larger categories. These categories are formed based upon similarities. After a number of these larger categories have been identified and formed, the relationships and interconnectedness of these are examined to begin the axial coding step.

Axial Coding. The axial coding step includes reexamination of these categories to closely examine the interconnectedness of selected subcategories and their components. The goal of this seemingly unnecessary step is the development of robust and detailed categories and identifying relationships between them. This step exemplifies the idea of constant comparison analysis as categories previously considered irrelevant may prove to contribute to the research questions.

Selective Coding. Like most methodologies utilizing a constant comparison, IGT promotes fluidity between open and axial coding in order to develop significant codes and categories as well as improve overall thoroughness. In step three, selective coding, the comparison continues with the emergence of a singular category as the goal. This singular category emerges through constant comparison analysis and is a concept or category interwoven throughout both the primary and secondary sources of data.

Once this central category is identified the researcher may then move toward development of a theory. Unique to IGT, verification of the theory occurs through confirmation from multiple perspectives confirming the same data – testing the theory against new experiences related to the phenomenon.

Upon identification of this central category and finalization of the theoretical model, IGT recommends theoretical sampling (Creswell, 2006). Theoretical sampling is an approach used in most Grounded Theory schools of thought and involves interviewing or surveying participants suppositionally related to the research question. This technique allows the researcher to gather more information, especially

in codes that may be lacking to completely saturate both data sets and ensure the theoretical model is as robust and complex as possible (Creswell).

Procedures

Using the IGT framework, this research intended to gather data from multiple sources made up of 40 peer reviewed studies and responses from a participant questionnaire that was shared with professionals who identified as LIFG student while working on a bachelor's degree. These data were used throughout the constant comparison analysis within the IGT framework and underwent the three-step coding process. During this process several common codes were identified and grouped into larger categories to distinguish a central phenomenon and ultimately move toward theoretical development.

Instrumentation Development

To test the theoretical model, the researcher chose to conduct a survey of LIFG students to compare relationships between best practices and rates of success as well as degree completion. Rea and Parker (2005) provide a specific process for developing, conducting, and analyzing survey research. The first step of this process includes identifying research focus and methodology. Given the characteristics previously examined, the researcher's familiarity and background knowledge with the subject area along with the addition of a number of emergent themes from the original coding process, it would seem a survey or questionnaire to gather additional data fits well within the goals and scope of this study.

Determining a schedule and budget is the recommended second step. A web-based approach was selected for this capstone project as a means to be cost effective, convenient, and efficient (Rea & Parker, 2005). The software was completely free for both the researcher as well as participants. Choosing this approach was an easy decision as a quick turnaround in data collection was desirable and this would only be possible with online implementation.

In addition to be cost effective online instrumentation allows for quick distribution and communication with survey participants. Participants were provided a two-week window for survey completion. Upon the initial distribution, a single response was gathered. To generate a more robust, comparable set of data however, an additional two-week window was granted. Upon close of this additional two-week grace period a total of seven questionnaires responses were collected.

Step three recommends establishing an information base. This recommendation fits well within the scope of this project as the researcher brought personal experience, body of knowledge as provided by the literature review, and the theoretical model to be tested as developed from IGT coding to both the capstone project and the survey development process. An essential component of this step is to clearly define objectives of the research to make sure they align with the practicality of online survey administration. The objective for use of this questionnaire was to test the theoretical model developed from the IGT coding process, justifying the use and development of the participant questionnaire.

Determining a sampling frame makes up step four. To ensure validity, reliability, and applicability it is essential the population sample reflects the subjects of the research project. General population must first be identified and for this study, was identified as college students, regardless of geographic location or institutional attendance. This group can then be narrowed down to what's considered a working population. For this study the specific working population was identified as LIFG college students.

To test validity and reliability the questionnaire was field tested on a small group of five colleagues, two males and three females. Of this group, two identified as LIFG students while pursuing a bachelor's degree. The instrument appeared to pass the measures of validity and reliability as a sample data set was easily generated. This field testing also allowed the researcher to check on ease of usability for the participant.

As this study focuses on LIFG students, 30 participants were invited to make up the sample and complete the survey. These participants were selected based on the researcher's access to a professional list-serv made up of the members of KYTRIO, an organization of educational access professionals in possession of a bachelor's degree as well as the researcher's previous knowledge that many of these professionals on the listserv identify as low-income, first-generation, or both. The seven questionnaire participants that responded became the sample by default, developing a convenience sample. This narrowing down of the working population to the sample is referred as the sampling frame (Rea & Parker, 2005).

In step five the researcher must determine an appropriate sample size and the procedure for which the sample will be selected. The four most common quantitative sampling methods include simple random, systematic random, stratified random, and cluster (Rea & Parker, 2005). Each of these approaches has a set of pros and cons however, for the objectives, scope, and timeline of this research, convenience sampling was utilized. This procedure was selected as it allows the researcher to develop a data set based on the number of survey responses generated after distribution of the research instrument.

The convenience sampling approach helps ensure that all responses to the questionnaire will produce information for constant comparison for the testing and further development of the theoretical model, in a relevant and timely manner. While a much larger set of information was the goal, most researchers recommend a sample size of approximately 10 when a study may be considered a homogeneous. While the researcher was optimistic to garner a total of at least 30 responses, given the short timeline and the number of complete responses, it was decided a data set of seven would be sufficient.

The development of the questionnaire is the focus of step six. During this step the researcher must again consider the goals and objectives of the research project. It is important to first identify what platform will be utilized to illicit survey responses. Will this survey be administered via telephone, in-person, online? Each of these approaches comes with advantages however, given the timeline and ease with

collecting responses online (Rea & Parker, 2005), it was determined a web-based approach would be best suited for this research.

This decision greatly impacts the formation of the questionnaire. Due to this online nature, interaction with the interviewer was limited (Rea & Parker, 2005). This slight disadvantage creates a condition where it is imperative the questionnaire be simple, straight-forward, organized, and easy to complete alone by both the universal population and identified strata groups. With these circumstances in mind a questionnaire of 45 questions was developed (Appendix A).

Each question on the survey was designed to be fixed answer. While fixed-answer questions do not necessarily generate qualitative data, IGT allows data to be gathered continuously and from multiple types of resources to ensure robust theoretical development (Strauss & Corbin, 1990). Fixed-answer questions limit participants to answering with one to two-word responses or select from a list of answers, like multiple choice.

Eight of these questions were used to gather basic demographic data including LIFG status, hometown, and degree status. The remaining 37 questions were presented in Likert scale style, another form of fixed answer where participants read a statement and select an answer on a one to five scale based on their feelings.

These questions focused on areas of student perceptions of campus atmosphere for LIFG students, LIFG student experiences with professors, and the lasting impact postsecondary education has on LIFG students. These domains were selected as these were consistent with the researcher's background knowledge as well

as on-going emergent themes identified during the coding process of the narrative data. Designing the survey in such a way provides for a check on both validity and reliability and assist in theoretical model development to identify and explain the use of best practices to increase LIFG student success. Figure 2 is an example of the Likert scale responses participants were provided.

Figure 2

Response Choice on the Participant Questionnaire

1 – Strongly Disagree	4 – Agree
2 – Disagree	5 – Strongly Agree
3 – Neutral	

Data Collection

Forty articles from scholarly, peer reviewed journals were used in the data collection process (see Appendix B). Seemingly somewhat arbitrary, this number was settled upon as the researcher felt a desirable amount of information would be produced from a set this size. Additionally, in an attempt to remain current, only articles published after the year 2000 were collected for use in the coding process.

These articles were gathered from databases such as EBSCOHost and SAGE Journals online. Search terms included: low-income, first-generation, and postsecondary, or collegiate success strategies. To provide a diverse sampling these articles included data from several geographical areas in the United States, many international studies, and included information from several racial, religious, cultural, gender, and political backgrounds. This selection was done intentionally to increase

applicability and validity. Utilizing print outs of the articles, the researcher read each entry and used highlighters to color-code similar information in each piece regarding strategies that may increase LIFG student success.

In addition to this vast source of literature data, a brief questionnaire (Appendix A) was used to collect primary source data and confirm findings from the literature (Rea & Parker, 2005). The final questionnaire was made up of 45 questions. Of these 45 questions, eight were made up of open-ended and multiple choice to gather demographic data including college or university of attendance and hometown.

The remaining 37 questions were in the Likert scale style and focused on campus atmosphere for LIFG students, LIFG student experiences with professors, and the lasting impact postsecondary education has had on the LIFG survey participant. These 37 questions were designed to collect data on emergent themes identified during the coding process of the narrative data.

Participant Selection

This questionnaire was conducted entirely online and emailed to 30 professionals. These professionals were selected based on the researcher's access to the KYTRIO listserv, made up of educational access professionals. Based on the researcher's personal knowledge, members of this organization have obtained at least a bachelor's degree and likely identified as either low-income, first-generation, or both while pursuing undergraduate education. Participation in this study was completely voluntary and garnered a total of seven responses, a 23.3% response rate.

Due to the small sample size and to increase validity, the entire data set was used during the constant comparison analysis and coding process to verify data and guide theoretical development. This approach provides for a negative case analysis which prompts further analysis to eliminate outliers and ensuring all data support the theoretical model and requiring the researcher to refine any working theory.

Data Analysis

IGT promotes a specific approach to coding: open coding, axial coding, and selective coding (Strauss & Corbin, 1990). Using these coding steps systematically and in a nonlinear fashion promotes narrative and theory development – both goals of this qualitative approach. As IGT allows, the researcher utilized background knowledge to locate a robust body of literature data using the search terms low-income, first-generation, and postsecondary, or collegiate success strategies. Using constant comparison analysis, the data gathered from this body of secondary data helped shape and guide the development of the questionnaire. Strauss recommends this method as it promotes higher quality research and allows for additional perspectives on the research question (Strauss & Corbin, 1990).

Narrative Data Source

Each data source was subject to coding. The set of peer reviewed articles underwent open coding first. During this process the data was examined for on-going consistent codes or concepts. These codes were identified and organized based on specific properties or characteristics. For this project, the open coding process

included identifying both barriers to LIFG student success and practices that increase achievement in LIFG students.

In the next step, axial coding, the data from the literature was rearranged to identify what Creswell (2006) refers to as the central phenomenon. In this case, the central phenomenon refers to the conceptual relationships between the set of codes from step one. However, before this central phenomenon can be identified the codes defined during the open coding step must be resynthesized and regrouped to form larger, overarching categories. The central phenomenon was then examined for causal conditions, context, and consequences (Creswell, 2006). Causal conditions are entities that may influence the phenomenon under investigation and assist in identifying how categories are interrelated. Context attempts to describe these conditions, consequences, and provide the outcomes of the phenomenon.

The final coding step, selective coding, allows the researcher to develop a description, or narrative, that connects and explains the relationships among these categories (Creswell, 2006). During selective coding, the researcher compared codes to clearly define the central phenomenon, how this phenomenon related to other subcategories or themes, and the conceptual relationships that existed between these. As these subcategories were continually examined through constant comparison analysis, they were validated through the final narrative building process included in selective coding.

Participant Questionnaire Data

The data gathered from the participant questionnaire was compared to the codes, categories, and central phenomenon identified from the literature. This cross-referencing allowed the researcher to affirm these codes, categories, and central phenomenon (Strauss & Corbin, 1990). During this step of constant comparison analysis of the two data sets, the participant data was used to affirm or deny identified best practices and assist in theoretical model development.

This examination also included comparing the primary source data of the questionnaire to theories held early-on in the research (Rea & Parker, 2005). This was done to deepen the researcher's understanding of both the data and the research question. These rich sources of data provided a solid foundation from which a theoretical model was developed to answer and address the guiding research questions: (1) what strategies exist that increase success in LIFG students? and (2) why do these best practices work?; or theoretical development.

Theoretical Framework

The initial purpose of this research included (1) the identification of the practices that increase success – as defined by GPA, retention, and graduation for LIFG students, (2) develop theory to explain the reason behind these success-enhancing practices, and (3) prompt implementation and further research with these best practices. These goals relate directly to the previously stated research questions, (1) what strategies exist that increase success in LIFG students? (2) why do these best

practices work? With these goals in mind IGT, or Strauss' Grounded Theory, was selected as the most appropriate methodology for this project.

IGT supports these goals as the development of a formal theory is the ultimate product of IGT design. IGT design allows for discovering "the why" behind a specific and specific phenomenon where little understanding exists (Glaser & Strauss, 1967), provides flexibility, embraces background knowledge, and allows creativity in interpreting the data to create a substantive theory (Strauss & Corbin, 1990).

IGT allows the researcher to begin with a general direction for research before the process starts and embraces the use of background knowledge - both characteristics unique to this project. These can be attributed to the researcher's general interests, personal and educational background, and extensive work experience with LIFG students. Other models of Grounded Theory ask the researcher to negate background knowledge, something this researcher simply could not do regarding this project. The background knowledge and previous experience of the researcher have both helped guide development of the research questions and objectives.

To develop this theoretical model, IGT goes beyond basic data analysis and description. First, this methodology promotes the interpretation of data to explore concepts, rather than basic themes as commonly associated with other methodologies. Data were analyzed, interpreted, grouped, and assigned a conceptual label by examining both similar and contrasting events. These conceptualized labels are then examined for relational interactions and reported out to build a theoretical model.

The guiding questions for this study placed emphasis on the discovery of a set best practices in postsecondary classrooms for LIFG students and a development of a theoretical model to support these best practices to guide further analysis and interpretation, characteristics unique to IGT methodology. Throughout this analysis of the data conceptual themes emerge and are compared to the guiding research questions aimed at the development of a Grounded Theory for application and experimentation in the future – the goal of this capstone.

Theoretical Sensitivity

IGT design allows the researcher to use data, personal, and professional experiences during the comparison process. However, the research must not assume a group's experience is a shared one (Strauss & Corbin, 1967). Due to this, it was imperative the researcher maintained a systemic comparison approach to reduce any possible bias. This systemic approach promotes self-reflection, especially regarding current patterns of thinking in the given area of study. Strauss equips the Grounded Theory researcher with two specific techniques the researcher used to reduce bias and increase theoretical sensitivity: the flip-flop technique and far-out comparison.

The flip-flop technique requires the researcher to examine one's guiding questions in an opposite context (Strauss & Corbin, 1967). For this study, the question was: What specific strategies or andragogical approaches are in existence that increase success for LIFG college students? And why? To examine this question using the flip-flop technique the researcher asked: What strategies and approaches exist that hinder success, or create barriers, for LIFG college students? And why?

This approach allowed for a comparison between these two conflicting ideas which framed the research questions differently and provided a slightly different perspective.

By identifying common barriers LIFG students the theorized best practices were examined to determine if any of these practices could potentially address these barriers. During this process it was determined that the best practices did address common barriers including feelings of isolation due to a lack of support system and engagement on campus.

The far-out comparison examines two seemingly different concepts to deepen an understanding of the area of study (Strauss & Corbin, 1967). For this study, the researcher looked at pedagogical approaches used in high schools, andragogical approaches used for adult learners, and some special education intervention strategies that are all loosely related but impact a much broader demographic of students. Comparisons of this sort are endless. However, the key in this comparison was to breakthrough any blocks that may have occurred during the data analysis and coding process. Using this method of comparison prompted thought into additional strategies that may exist to further research, testing, and data analysis.

Chapter 4

Results

The purpose of this IGT study was to identify postsecondary best practices that increase success for LIFG students and develop a theoretical model explaining this phenomenon. These goals are directly in-line with the overarching purpose of this research, the development of a theoretical model to support the use of the specific set of best practices and an explanation of the approaches' successes. Accessing background knowledge, a characteristic unique to IGT methodology, an initial literature search for scholarly reviewed articles and similar studies was conducted using the search terms including low-income, first-generation, and postsecondary, or college success strategies.

Analysis and coding of the 40 scholarly articles (Appendix B) began by identifying concepts and events related to the research question. During this process both common barriers to success as identified and reported by LIFG students and best practices strategies were identified and coded. The open coding process revealed several codes relating to the research question. These codes included both institutional and classroom practices.

Narrative Data

Open Coding

During this open coding process, the first step included identifying codes that hinder, negatively influence, or otherwise create barriers to overall success as defined by GPA, retention, and graduation as reported by LIFG students. Using narrative data

from the selected 40 articles, singular barriers were identified and color coded. The major codes that emerged were financial burden, family obligations, work obligations, confusion navigating campus, a general lack of college-going knowledge, lack of social capital, inability to identify and develop a support system, and failure to manage multiple identities.

These barriers, while seemingly impossible to address, have been successfully contested by faculty and staff at colleges and universities both in the United States and in small pockets across the globe. The open coding process regarding best practices revealed a specific set of strategies that addressed these barriers. Codes for best practices that consistently reduced the impact of the identified barriers emerged as illustrative examples, intrusive advising, required appointments during office hours, flexible deadlines, and redemptive opportunities on failed assignments. These best practices appear to be most influential as they connect LIFG students with faculty and staff, who may assist in or even eliminate some of the barriers detrimental to success and degree completion as identified by LIFG students.

The data set from the narrative data produced from the open coding process of student barriers, shown in Table 2, indicated the most common or perhaps detrimental barrier is the LIFG student's inability to identify a support system at the postsecondary level. Narrative data from 36 or 90% of the 40 articles included this code, the most frequent of the eight codes identified during open coding. The second most identified barrier was failure to manage multiple identities with 31 or 77.5% or

the articles including this code. Both lack of college-going knowledge and lack of social capital presented as barriers in 75%, or 30, of the articles.

Table 2

Emergent Codes Produced During Open Coding

Article:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	N	Percent
Financial Burden	X	X								X			X		X		X		X		X		X																		9	22.50%
Family Obligations	X	X		X	X			X		X					X		X					X	X		X			X				X				X		X		15	37.50%	
Work Obligations		X		X	X				X						X		X					X		X		X		X				X				X		X		12	30.00%	
Confusion Navigating Campus	X		X		X		X	X	X		X		X	X		X	X	X	X	X	X			X		X	X	X	X	X	X	X		X	X		X	X		27	67.50%	
Lack of College-Going Knowledge	X		X	X	X		X	X	X		X		X	X		X	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		30	75.00%
Lack of Social Capital	X	X	X	X	X	X	X	X	X	X	X		X	X	X		X	X		X		X		X	X	X	X	X	X	X	X	X		X		X	X	X		30	75.00%	
Lack of Support System	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X	X	X	X	X		X	X	X	X	X	X	X	X		X	X	X	36	90.00%
Failure to Manage Multiple Identities	X	X	X			X		X	X	X	X	X	X	X			X	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	31	77.50%

Axial Coding

The identification of these codes prompted the shift to axial coding. Though constant comparison analysis in the axial coding step, it became apparent that many barriers to success are influenced by both institutional and classroom practices. The codes identified during the open coding process was furthered examined to identify similarities and overarching relationships. Upon completion of this analysis, it became apparent that many of the codes identified during the open coding step could be grouped into three major categories during the axial coding processes.

The three major categories identified during based on similarities and relationships identified throughout the axial coding process were: (1) campus

atmosphere regarding LIFG students, (2) identification of a support system, and (3) interactions with faculty and staff.

Table 3

Emergent Categories Produced During Axial Coding

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	Count
Institutional	x	x	x	x	x	x			x								x	x	x	x	x				x				x	x		x	x		x	x		20
Faculty			x	x	x	x		x												x					x			x	x		x				x		x	12
Parental							x			x							x					x	x							x				x				7
Other							x				x	x	x	x	x	x		x	x				x	x	x	x	x	x	x				x			x		18

Following the formation of these major categories, the relationships between them were closely examined to identify the central phenomenon (Creswell, 2006).

The central phenomenon refers to the relationships amongst the emergent codes identified in both the open and axial coding steps. In this study, the central phenomenon was determined to be the positive impacts on LIFG student success when one, or more, of the best practices are implemented.

Examining this phenomenon through the lens of context, it was determined approaches including intrusive advising, required appointments during office hours, flexible deadlines, and redemptive opportunities on failed assignments promote relationship building and lead to the development of positive relationships with faculty or staff. These mentoring relationships then reduce feelings of loneliness and perceived isolation thus increasing LIFG student success directly addressing the two thirds of the categories related to this research and theoretical development.

This central phenomenon, identified as the positive impacts on LIFG student success when one, or more, of the best practices are implemented as these best

practices reduce feelings of perceived isolation, was then examined for causal conditions, context, and consequences (Creswell, 2006). Causal conditions are entities that may influence the phenomenon under investigation and assist in identifying how categories are interrelated. Context attempts to describe these conditions, consequences, and provide the outcomes of the phenomenon.

For example, when discussing a cul-de-sac it is important to offer culturally similar examples such as the head of a hollow, appropriate for more rural LIFG students or the end of an alleyway, which may be helpful to more urban students hailing from a LIFG background. In this example, causal conditions associated with illustrative examples may be that they provide a “real life” idea of the content or simply makes the content easier to process due to increased applicability to the LIFG student’s life and theorizing this also makes the faculty or staff person seem more relatable is probable. Contextually, this application of a specific best practice likely increases overall understanding and creates a connection between instructor and student, thus positively influencing persistence and degree completion.

Selective Coding

The final coding step, selective coding, allows the researcher to develop a description, or narrative, that connects and explains the relationships among these categories (Creswell, 2006). While developing this narrative for the theoretical model it became apparent that the identified codes were related to two major issues identified by LIFG students: financial burden, and feelings of loneliness or perceived isolation.

Summary of Narrative Data

Financial burden is often a unique, varied, and complex. Financial aid issues are best handled on a student-by-student basis. With the rising cost of postsecondary attendance, it is important for institutions and other governing bodies to examine this issue to increase access and success for all students. However, due to the complex nature of this issue and likelihood to increase change on a smaller scale, it was decided this research would focus on those practices that address perceived isolation.

Several best practices have been discussed in this research and include intrusive advising, mandatory office appointments, compassionate andragogy, culturally sensitive curriculum, and redemptive opportunities on assignments. These strategies can be placed into two categories identified as most influential in combatting LIFG students' feelings of loneliness or perceived isolation; faculty making contact outside of the classroom and displays of empathy.

All these strategies appear to be the most beneficial in increasing LIFG student success likely because they connect LIFG students to faculty and staff in a less intimidating, more personal fashion. These best practices decrease the mystery surrounding postsecondary educational attainment, the college campus, and degree completion by providing LIFG students with a solid connection to the campus environment and begin with the identification of a support system.

Participant Questionnaire Data

Using a convenience sampling approach, a total of seven responses were collected. These data underwent a quantitative analysis to generate statistical data to

compare with data gathered during the coding process of the scholarly articles and was then compared against the identified codes, categories, and theoretical model. Due to the identification of emerging categories from the data, the analysis of survey responses was done very meticulously to identifying data points that both do and do not support the developing theoretical model.

Respondent's Demographics

Table 4

Demographic Data from Participant Questionnaire

Participant	Gender	LIFG Status	Location	Institution	Major	Graduation	Time to Complete
1	F	Low-Income and First-Generation	KY	Morehead State University	Business	2003	5
2	M	Low-Income and First-Generation	KY	Murray State University	Organizational Communication	2002	5
3	F	Low-Income and First-Generation	VT	Northern Vermont University - Johnson	BA in Psychology	2016	4
4	F	First-Generation	KY	Morehead State University	Paralegal Studies	1992	4
5	M	Low-Income and First-Generation	KY	Murray State University	Youth and Nonprofit Leadership	2014	6 or more
6	F	Low-Income and First-Generation	WV	Marshall University	Psychology	1996	5
7	F	First-Generation	KY	Alice Lloyd College	Business Administration	1988	4

Demographic data for the final set of seven survey participants making up the convenience sample are show above in Table 4. The final set of seven participants included four females and three males. Five of the participants reported being both first-generation and low-income upon undergraduate college enrollment with the

remaining two identifying as first-generation only. Colleges and universities included in the survey responses were in Kentucky, West Virginia, and Vermont. As this study did not place emphasis on race, no questions regarding this data point were asked.

The participant questionnaire design consisted of 45 questions. Of these 45 questions, eight were open-ended and multiple choice to gather demographic data including college or university of attendance and hometown. The remaining 37 questions were in the Likert scale style and focused on campus atmosphere for LIFG students, LIFG student experiences with professors, and the lasting impact postsecondary education has had on the LIFG survey participant. These 37 questions were designed to collect data on emergent themes identified during the coding process of the narrative data. Using a mixed methods approach, the participant questionnaire was examined to generate statistical measures and percentages rates of responses to compare with the narrative data set.

These data from the questionnaire supports the identification of the three main barriers to LIFG; poor campus atmosphere toward LIFG students, inability to identify a support system, and interactions with faculty and staff. These overarching categories identified in both the narrative and questionnaire data support the idea that best practices, primarily relationship building between faculty and the LIFG student do positively impact barriers most faced by marginalized students and greatly reduce feeling of loneliness or perceived isolation.

Based on this developing theoretical idea of perceived loneliness as the most impactful barrier to LIFG student success with two identified best practices to address

this, the participant survey was developed to collect data in three major areas potentially related to this barrier of perceived loneliness. The participant questionnaire included questions related to cost perceived ideas of the atmosphere on the institution of attendance regarding LIFG students, interactions with faculty, and the lasting impact bachelor-level degree completion has had. This questionnaire explored multiple domains to decrease impending bias, identify any possible outliers, and potentially confirm or reject the developing theory.

According to Strauss and Corbin (1990), this is essential in keeping IGT studies and mixed method studies both reliable and valid. The following sections provide a summary of the participants' responses to questions as broken down into the categories identified after coding and constant comparison analysis of the narrative data. To decrease the likelihood of any potential bias, analysis of the participant responses began by identifying and possible outliers not included in the secondary source data.

Survey Response Summary

During the analysis of these data there were some moments of promise however, many responses indicated there is much work to be done within the postsecondary classroom to implement the best practices identified in this research to increase success for LIFG students. Analysis of the responses are presented below as broken down into the three identified categories and explored in order of importance as indicated by the survey participant responses.

Category 1: Campus Atmosphere. Items 9 through 24 of the survey examined LIFG student perceptions of their campus of attendance toward this group of marginalized students. These questions asked participants to reflect and consider campus acknowledgment and celebration of LIFG students. Some survey items produced some rather interesting results which are presented in Table 5. Highlights from the data within this category are explored in detail in this section.

Upon analysis of survey items addressing category 1, identified during the coding process of the narrative data LIFG as codes and ideas relating to student perceptions of campus atmosphere toward LIFG students. The first interesting data point observed from this data set came from item number 11. This survey item asked LIFG students about their decision regarding college of attendance and whether this choice was impacted by the number of family members in attendance at that college. While this study focuses on LIFG students, it is important to highlight, as mentioned earlier in the student profile, that while low-income and first-generation status often go together, these characteristics are not always mutually exclusive.

Table 5

Category 1: LIFG Student Perception of Campus Atmosphere

	SD	D	N	A	SA	Mean	SD
Q9: The out-of-pocket cost of attendance was affordable	1	1	0	1	4	3.86	1.68
Q10: A number of friends attended the same college/university	2	0	3	1	1	2.86	1.46
Q11: A number of family members attended the same college/university.	4	1	2	0	0	1.71	0.95
Q12: A significant other (at the time) attended the same college/university.	6	1	0	0	0	1.14	0.38
Q13: The college/university is geographically close to my family or hometown.	0	0	1	2	4	4.43	0.79
Q14: I had the ability to live at home while attending the college/university.	3	0	1	0	3	3.00	2.00
Q15: The college/university had my desired program or major of study interest.	0	0	1	2	4	4.43	0.79
Q16: The financial aid package offered by the college/university was large enough to cover most cost of attendance.	2	1	0	2	2	3.14	1.77
Q17: My college/university acknowledges low-income, first-generation status.	0	1	4	0	2	3.43	1.13
Q18: My college/university creates welcoming spaces for low-income, first-generation students.	1	1	2	1	2	3.29	1.50
Q19: My college/university offers several scholarship and other financial aid options that appropriately serves low-income, first-generation students.	1	1	0	2	3	3.71	1.60
Q20: My college/university considers the student as whole when making admission decisions.	0	1	4	1	1	3.29	0.95
Q21: My college/university hires and maintains a faculty (professors) equipped to serve low-income, first-generation students.	1	0	3	0	2	2.86	1.46
Q22: My college/university hires and maintains a staff equipped to serve low-income, first-generation students.	1	1	2	1	2	3.29	1.5
Q23: My college/university considers price and other fees that may be burdensome to low-income, first-generation students.	1	1	2	2	1	3.14	1.35
Q24: My college/university values my background as a low-income, first-generation student.	1	2	1	2	1	3.00	1.41

However, this survey reflected the similar ideas discovered during the literature review in developing the student profile and from the coding of the

narrative data. While these characteristics are often presented together, they do not always indicate an impact of college-going decisions. Data from survey item 11 indicated an average, or mean, response of 1.71 indicating family attendance, or lack thereof, at the college or university of choice had very little bearing on the student's decision to attend and enroll.

These data point is reflected throughout the narrative data (Hinz, 2016; Katrevich & Arugnette, 2017) which examined success indicators in LIFG students. Both Hinz and the Katrevich and Arugnette piece state LIFG students often arrive to academia lacking general knowledge and support, due to familial background reflecting the idea presented in the quantitative data that familial attendance at a college or university has very little, if any, impact on college choice likely because the LIFG student in question did not have any family members attend postsecondary education.

Questionnaire item number 17 asked participants to indicate if their institution of postsecondary study acknowledged LIFG students. Five out of seven, or 71.4% of survey participants, as seen in Table 5, either disagreed or were neutral when it came to this item. This data point is essential to understand as this lack of acknowledgement likely reduces the LIFG student's ability to seek out fellow students they may share similarities with thus negatively impacting the development of a support system. When LIFG students are not, at the very least, acknowledge, it creates an unwelcoming or exclusive college atmosphere. This lack of inclusivity often increases overall feelings of isolation, can increase imposter syndrome, and

negatively impact the LIFG student's postsecondary experience (Gallagher, 2019; Glass et al., 2017; Lohfink & Paulsen, 2005).

Survey item 21 addressed the experience and training level of faculty regarding LIFG students. Participant responses to this item reflected somewhat of a mixed response with an average answer of 2.86. This breakdown includes one participant who strongly disagreed, two that strongly agreed, and three remained neutral. This data point indicates that college professors and LIFG students may not be equipped to communicate effectively or understand one another well enough to work together to ensure, or at least increase, LIFG student success.

Hao (2011) explored this concept in-depth in his piece on Compassionate Andragogy in which he provides a specific approach to communication that provides both faculty and student with equal footing regarding communication. Collier and Morgan (2007) also explored this idea and provide several examples of failure in communication and expectations between faculty and the LIFG student by detailing language often outside marginalized students' scope of knowledge.

The concept of LIFG stop-outs and drop-outs was indicated in several studies examined during the qualitative coding process including Glass et al., (2017), Jehangir (2008), and Pascarella et al., (2004). This phenomenon and theory were confirmed via the participant survey with 57.1% of the responses to item 28, quoting a positive relationship with a faculty or staff member was enough encouragement and support to persist onto the next academic year. Five out of seven LIFG survey participants indicated in item 25 a professor's effort to build a relationship with them

significantly reduced feelings of isolation, granted new on-campus opportunities, and prompted resiliency onto the next semester.

Similar to item 17, Item number 21 from the questionnaire asked participants to reflect on their faculty and staff, specifically how equipped these individuals were in working with LIFG students and addressing the barriers specific to them. Like the lack of acknowledgment at most colleges and universities, 71.4% of survey participants indicated they did not feel their professors, instructors, or collegiate staff properly understand or know how to work with LIFG students. Unfortunately, this data point can be observed in several pieces from the narrative data (Pascarella et al., 2004; Wiggins, 2011) which indicate many faculty and staff are underequipped to fully meet the needs of LIFG students and highlight the need for additional discussion and training regarding marginalized student groups.

An interesting outlier discovered in the participant data, not strongly indicated within the narrative data was the idea of geographic location. Survey item 13 asked participants to indicate the impact the physical location of a college or university had their decision to attend the institution in question. One small study by Hand and Payne (2008) briefly explores this idea as it relates to LIFG Appalachian students specifically. In this study, geographic location was explored as being significant to the LIFG Appalachian student. Nearly 86%, or six out of seven survey participants, seen in Table 5, indicated that geographic location was important as they either agreed or strongly agreed on questionnaire item number 13, supporting the idea LIFG students often hang onto familiarity and desire a consistent support system.

This idea is directly reflected in the survey data responses as the average response rate was 4.43, indicating all questionnaire participants, apart from one, either agreed or strongly agreed that geographic location was important when deciding on a college or university. This data point may be a marker of a unique cultural quirk to the Appalachian region however, more data on this specific topic is required before full consideration can be made.

While this specific data point regarding geographic location of a postsecondary institution is somewhat unique to the survey responses, through the examination of relationships indicated by the survey responses, it became apparent that while geographic location may have been indicated as important by the survey participants, this idea was related to fears of isolation or perceived loneliness. Participants indicating that geographical location was important when making a college choice indicated this was often due to fear associated with the unknown of being away from home and separated from one's hometown – often small, either very rural or very urban, and tight-knit.

Despite all the barriers, perhaps one point of promise lies within the responses to item 15 on the participant survey. This question asked participants to consider the impact the program options offered by the college or university of their choosing had on their final institutional choice. Responses to this item highlighted that, despite the odds and number of barriers LIFG students face attending a postsecondary institution with their desired program of study was one of the most important indicators when selecting a college or university. With an average response of 4.43, tied only with

responses to item 13 which examined geographic location, six out of seven or 85.7% of participants either agreeing or strongly agreeing that program or choice of major was important when choosing a college or university.

This data point relates to Green's (2006) piece on historically underserved college students, which details the similarities between continuing-generation students and those from otherwise marginalized backgrounds. This piece provides that despite their LIFG status, most students from these backgrounds share more similarities with their peers than perhaps previously assumed meaning these strategies and best practices explored in this research will benefit all students but especially those from LIFG backgrounds.

Category 2: Experiences with Professors. Survey items 25 through 39 focused on category 2, LIFG student experiences with professors, as identified during the coding process. Full results are provided in Table 6 with several items being examined in this section.

Table 6

Category 2: LIFG Student Experiences with Professors

	SD	D	N	A	SA	Mean	SD
Q25: My instructors/professors make an effort to get to know me.	0	1	1	4	1	3.71	0.95
Q26: My instructors/professors celebrate low-income, first-generation students.	2	1	3	0	1	2.57	1.40
Q27: My instructors/professors understand low-income, first-generation students.	2	0	4	0	1	2.71	1.38
Q28: My instructors/professors make me feel supported.	1	1	1	3	1	3.29	1.38
Q29: My instructors/professors make me feel unsupported.	2	1	2	1	1	2.71	1.5
Q30: My instructors/professors provide in-class opportunities for students, including those from low-income, first-generation backgrounds, to share their opinions and experiences.	0	0	3	2	2	3.86	0.9
Q31: My instructors/professors understand the barriers low-income, first-generation students face in college.	0	2	3	1	1	3.14	1.07
Q32: My instructors/professors provide opportunities to make up missed work when appropriate (i.e: work, illness, family responsibilities).	0	0	2	5	0	3.71	0.49
Q33: My instructors/professors provide deadline extensions when appropriate (i.e: work, illness, family responsibilities).	0	1	2	4	0	3.43	0.79
Q34: My instructors/professors provide learning opportunities outside the classroom (service project, hands-on learning, etc.).	0	1	2	3	1	3.57	0.98
Q35: My instructors/professors use culturally appropriate or easy to understand examples for course content.	0	1	1	3	2	3.86	1.07
Q36: I feel out of place at my college/university.	4	2	0	1	0	1.71	1.11
Q37: It is easy to identify and develop a support system at my college/university.	0	2	1	2	2	3.57	1.27
Q38: My professors/instructors are a part of my campus support system.	0	2	0	3	2	3.71	1.25
Q39: College/University staff persons are a part of my campus support system.	1	1	1	2	2	3.43	1.51

Item 26 focused on celebrating LIFG students. Six out of seven, or 85.7% of participants indicated their institution did not do this. Additionally, the same statistic was generated when questionnaire participants were asked whether they believed the faculty or staff at their institutions even understood LIFG students at all. Perhaps the last, most troubling statistic identified from the analysis of the questionnaire data was the LIFG student's inability to identify a faculty, instructor, or staff person within the postsecondary support system. Only 28.5% (2 of 7) of the participants indicated they could agree that faculty or staff person was part of their support system.

Participants indicating their college, or professors didn't understand or properly celebrate LIFG students self-reported a longer window of time in obtaining a bachelor's degree. Approximately 86% of questionnaire participants, as seen in Table 6, reported on item 27 that faculty and staff at their institution did not understand LIFG students. Three out of seven of these participants self-reported stopping their postsecondary education after receiving this bachelor's degree. Comparatively, participant 3 indicated feeling unsupported by faculty or staff. This participant also reported struggling to create a support system at the postsecondary level, similar to 42.8% of the questionnaire participant responses to item 17 in category one.

Survey items 30, 31, and 35 examined specific classroom approaches experienced by LIFG students. Item 31 asked participants to consider opportunities for open classroom discussion to present ideas, perhaps differing from the dominant college-going culture. Impressive and surprisingly, this item had a mean response of

3.86 with four participants either in agreement or strong agreement that this opportunity was present to them within the postsecondary classroom.

Jehangir (2008) explores this concept in the piece examining LIFG students discovering their voice as a postsecondary education student, claiming this is often quite the struggle due to differing backgrounds. However, with 57.1% of survey participants indicating they were presented with opportunities to share about their backgrounds in class, it seems as though some movement is being made toward full acknowledgement and inclusivity of LIFG college students.

Item 31 asked participants to consider any redemptive opportunities to make up missing or poor assignments. Understanding most LIFG students have many additional outside factors like children and spouses (Bers & Schuetz, 2014), multiple jobs (Mamiseishvili, 2010), and often negative familial influences (Mitchall & Jaegar, 2018), opportunities to makeup or re-do assignment is essential both for overall GPA but is also important in promoting relationships with faculty. These opportunities, as indicated in both the narrative and survey data, are extremely beneficial to LIFG students attempt to grow into their new role of college student while still maintaining their other priorities and identities and combatting feelings of isolation and loneliness.

In item 35, the importance and impact of Hao's (2011) work on culturally sensitive curriculum can once again be observed. With an average score of 3.86, over half of the participants indicated faculty used culturally sensitive examples, making curriculum more palatable. Much like offering redemptive opportunities on assignments, using culturally sensitive curriculum and language increases overall

academic performance for LIFG students and encourages the development of positive relationships with faculty.

The most promising data point from category 2 comes from item 36. This question asked participants explicitly if they felt out of place at their college or university of attendance. With a rather small mean score of 1.71, only one survey participant agreed with this statement. This singular data point is refreshing as most statistical data gathered from this survey indicates negative impacts on LIFG students. Item 37 highlights the persistence of LIFG students as explored by McMurray and Sorrells (2009) as well as Ramos-Sánchez and Nichols (2007) which provide that LIFG students often learn self-efficacy during their time in postsecondary education and increase their overall persistence, especially when an environment feels welcoming, accessible, and easy to navigate.

Further examination of the participant survey data addressing category 2 confirmed the findings from the coding process undergone by the literature. Both sets of data specifically identified strategies in place to decrease these negative feelings, improve overall college experience, and increase collegiate success for LIFG students. These strategies include intrusive advising, mandatory office appointments, compassionate andragogy, culturally sensitive curriculum, and redemptive opportunities on assignments. When these strategies and approaches are implemented LIFG students maintain similar GPA, persist, and graduate at increased rates.

Category 3: Lasting Impact of Education. After analysis of Category Three, LIFG students' ideas on the lasting impact of their education, seen in Table 7, it is

apparent obtaining a bachelor's degree creates positive ideals toward higher education and generates improved outcomes for overall quality of life. This is explicitly indicated by participant responses to item 45, with 86%, or six out of seven, participants either in agreement or specifying strong agreement. Using Strauss' Grounded Theory coding approach on the literature and supported by the quantitative examination of the responses to the participant questionnaire, it was discovered that most LIFG students become postsecondary stop-outs or drop-outs for one singular reason: loneliness. A post-secondary stop-out is defined as a student who has discontinued work on a degree with plans of returning. Unfortunately, many of these students fail to return to their studies (Mamiseishvili, 2010).

Table 7

Category 3: Lasting Impact of Education on the LIFG Student

	SD	D	N	A	SA	Mean	SD
Q40: I decided to pursue a bachelor's degree because it was a personal goal.	0	0	0	2	5	4.71	0.49
Q41: I decided to pursue a bachelor's degree because my family encourage me to.	2	1	1	2	1	2.86	1.57
Q42: I decided to pursue a bachelor's degree to improve my career options.	0	0	0	2	5	4.71	0.49
Q43: I decided to pursue a bachelor's degree to increase my overall income earned during my lifetime.	0	0	0	3	4	4.57	0.53
Q44: I decided to pursue a bachelor's degree to improve my overall quality of life.	0	0	1	3	3	4.29	0.76
Q45: Completing a bachelor's degree has improved my overall quality of life.	0	0	1	2	4	4.43	0.79

Theoretical Development

With this final comparison of the qualitative and quantitative data sets, theoretical development began. This theoretical development is a major characteristic of IGT. The goal of the original research questions was to identify a set of best practices and discover why these practices work. However, the major phenomenon identified in this study was a simple one: genuine relationships among faculty and the LIFG student increase overall success by combatting perceived isolation, the main barrier to LIFG student success. This concept was examined through multiple pieces of data from the literature, specifically Means and Pyne's (2017) piece on perceptions of institutional support which states that when LIFG students feel supported on a college campus, they are more likely to graduate.

This is in direct relation to survey item 25 in which 71.4% of participants indicated their professors made an effort in getting to know them. Survey item 37 also supports this idea as four out of seven participants responding having little to no trouble in identifying and developing a support system. When examining these data, it is important to remember survey participants have completed at least a bachelors-level degree suggesting their shared experiences, along with the secondary source data, support this theoretical development.

It was determined that the use of these best practices, intrusive advising, mandatory office appointments, compassionate andragogy, culturally sensitive curriculum, and redemptive opportunities on assignments, generate positive outcomes

for LIFG students by decreasing any feelings of isolation or alienation via the development of positive, mentoring relationships with faculty and staff.

When LIFG students can identify a genuine relationship with at least one faculty or staff member as indicated throughout the narrative data but specifically in Hoxby and Turner's (2015) examination on LIFG student's perceptions of postsecondary education as well as survey items 25, 27, 37, and 38 all of which provide a general consensus that the main barrier to success, perceived isolation, can be and often is addressed and eliminated when the suggested best practices are put into place. However, LIFG students often lack the college-going knowledge and social capital to develop these relationships easily thus the faculty or staff must be intentional in developing connections with these students (Collier & Morgan, 2007; Glass et al., 2017; Means & Pyne, 2017; McMurray & Sorrells, 2009). These genuine relationships challenge the feelings of perceived solitude by LIFG students by creating a support system and providing a gatekeeper to academia, the specific institution in which the LIFG student is attending, and potential career endeavors.

Through the non-linear, constant comparison of both the literature data source and the primary questionnaire data it was determined that best practices for LIFG students do exist, and the use of these approaches generate positive outcomes for LIFG students. These positive outcomes include an increasing understanding of postsecondary course content and decreasing any feelings of isolation or alienation via the development of positive, mentoring relationships with faculty and staff. This confirmation provided additional evidence to support the theory of best practices and

the positive impact of relationships with faculty for LIFG students; with over 71% of survey participants, who have obtained a bachelor's level degree, answering item 38 as being able to identify a faculty member as part of the postsecondary support system.

Chapter 5

Discussion

This project began with two basic research questions: (1) what strategies exist that increase success in LIFG students? (2) why do these best practices work.

Research question number two lends itself to theoretical development, the goal of IGT and this project, despite utilizing a mixed methods approach. These research questions were selected based on the researcher's personal background and previous knowledge, both allowable features within IGT. The goal of theoretical development served as a guide during both the qualitative coding process of the narrative data as well as the quantitative analysis of the participant survey data to develop comparable data sets.

These research questions were selected due to statistics reflecting astonishing differences in degree attainment of LIFG students when compared to their continuing-generation peers, with LIFG students two-thirds less likely to complete a bachelor's degree as compared to their continuing-generation peers (Center for First-Generation Student Success, 2016). Implications for understanding these approaches that increase success for LIFG students is of relevant interest to those in academia based on the increasing number of students from these backgrounds and the continuing use of performance-based funding. In order to increase funding, support for marginalized student groups, especially those from LIFG backgrounds, must be increased first.

Data surrounding LIFG student academic ability, persistence, and degree attainment have indicated these students can perform at, or beyond the same level of their peers. However, LIFG students often arrive to academia underprepared, lacking college-going knowledge and the social capital necessary to be successful. All the practices discussed throughout this research have demonstrated the potential to support LIFG students and increase their overall rates of degree completion.

Summary of Findings

After the analysis of the narrative data and on-going comparison during the coding process, three emergent themes emerged to identify the main barriers faced by LIFG students. These themes (Table 2) were campus atmosphere, identification of a support system, and interactions with faculty. Synthesis of both data sources determined that while LIFG students face several barriers to success these categories can be connected to the central phenomenon of perceived isolation, the main determinant of persistence. Several strategies were identified to address these feelings and included intrusive advising, mandatory office appointments, compassionate andragogy, culturally sensitive curriculum, and redemptive opportunities on assignments.

The Beyond Access Theory

Despite the specific strategy used, both sources supported the Beyond Access Theory. The Beyond Access Theory states that when faculty and staff show a genuine interest in relationship building, the LIFG student is more likely to be successful, addressing the overarching goal of theoretical development of this project. Data from

both the literature and participant survey indicated that these positive, mentoring relationships address negative feelings of perceived isolation and loneliness thus increasing overall success for LIFG students as measured by retention, GPA, and degree completion.

The Beyond Access Theory, which identifies the main barrier to LIFG success as loneliness or perceived isolation states the most influential way to combat these negative feelings is the development of genuine relationships between the LIFG student and faculty or staff. Best classroom practices to address these negative feelings and prompt relationship development include intrusive advising, mandatory office hour appointments, and redemptive opportunities on failed assignments.

Often due to lack of social capital, LIFG students often are not successful in building these relationships in failing to realize they must shoulder part of the responsibility. Thus, it is essential faculty and staff extend explicit opportunities to LIFG students for networking and relationship building, both with the faculty or staff person and with peers. This can be done using the variety of strategies presented in this research however, the most important component is intentionality and genuineness. This proactiveness from the faculty or staff often demystifies components in academia, creating a more welcome and comfortable space for LIFG students.

The intentional relationship building allows the LIFG college student to begin developing a support system which may help in learning this foreign role of college student. Additionally, building these relationships provides the LIFG student with a

sense of belonging and provides him or her with a point of contact for general guidance when faced with barriers. LIFG students possess the ability to be successful at the highest levels and have the potential to address systemic cycles of poverty in their communities if only given the opportunity to complete at least a bachelors level degree. Based on the research presented in this project, LIFG students are more likely to be successful when their feelings of perceived loneliness are contested by a singular positive relationship with faculty.

Limitations

Strauss and Corbin (1990) encourage all theoretical models be implemented, tested, and retested to confirm or deny the framework and develop a formal, overarching theory. This can be viewed as part of the constant comparison analysis that is essential to the IGT methodology. In addition to this built-in guide for future research, this project could also benefit from several adjustments in future studies including a larger sample size – including examination of participants outside TRIO programming, collecting additional narrative data to refocus or breakdown of the project to examine specific groups.

Generalizability

While qualitative studies often include a smaller sample size by design, this research could benefit from a larger-scale study to increase overall generalizability. To increase this sample size, a redistribution of the participant survey is recommended. Ideally, gathering more responses to this survey will only add to the current body of knowledge and promote further application of the theoretical model.

As a follow-up to the questionnaire and to increase the amount of narrative data pertaining to the specific research questions surrounding LIFG student best practices, future research may include time for either individual or focus group interviews. While sometimes arduous, this process will benefit this specific study by providing potential data relating to several concepts introduced in this study but would be primarily beneficial in examining the interpreted relationships between barriers and the proposed best practices.

Examination of Specific Subgroups

It is understood that LIFG students exist across the globe. This researcher purposefully utilized secondary source data from studies spanning the globe to explore as many barriers and best practices as possible. While race, religion, gender, ethnicity and other identifying variables were not part of this study, additional data from studies with this design in mind may prove to be beneficial in future research. Several more specific studies focusing on specific regions, institutions, ethnic groups, or even by gender could potentially assist with exploring the differences in experiences for LIFG students in individual geographic locations across the nation and globe and help to pinpoint any possible regional, or otherwise group-specific, quirks as related to this research.

Future Research

Developing a working theory to prompt further study is beneficial for the academic environment and these underserved populations as this research may go beyond examining access and increase success for LIFG students. Increasing

retention and graduation rates for LIFG students also benefit postsecondary institutions. The commonly used performance-based funding model often results in many colleges and universities operating ‘in the red’ creating budgetary issues.

Those institutions serving a large LIFG student population often feel the brunt of the negative impacts a performance-based funding model creates. With this cycle of underfunding these institutions pour numerous resources in creating and maintaining a functioning budget. However, classroom approaches and general andragogy is rarely examined to increase the overall budget.

LIFG students are often victims of systemic, long-standing cultural poverty and seek education to improve overall quality of life. These students often have deep rooted ties to their local communities and hometowns and carry with them to goal of returning to these areas. LIFG students who are awarded a degree or credential feel a sense of pride and often work to motivate those from the same communities by serving as a role model.

As the impact of increased success for LIFG snowballs, these educated individuals may begin work to address this cultural poverty eventually freeing up state and federal dollars provided by welfare programs. However, this long-term ideal cannot be achieved without the examination of classroom practices at the collegiate level, only one reason why this research and theoretical development is so important. With the development of The Beyond Access Theory through IGT’s design, the confirmation of the proposed theory may be supported or denounced as other practioners implement these practices within their classrooms.

Implications

While a set of specific best practices was identified, this component of the research question was eventually absolved. Through the constant comparison analysis process, a number of best practices and classroom strategies were discovered to produce desirable academic results for LIFG students. However, upon examination of both sets of data it became apparent that despite the strategy or combination of strategies implemented in the classroom, any of these practices decrease any feelings of isolation or alienation. Even techniques seemingly unrelated to specific relationship development, like the use of culturally sensitive curriculum or illustrative examples, seemed to break down walls between LIFG students and faculty. Thus, any approach in which faculty shows interest in getting to know or otherwise demonstrates genuine interest in the LIFG student, the development of positive, mentoring relationships with faculty is more likely to occur.

Due to the lack of a specific set of strategies, one may question the relevancy or even necessity for sharing this research. However, it is recommended these data and theory be shared with all educators working, or potentially working with LIFG students including Student Success Centers, Advising Centers, and any student-focused organizations or departments assisting with retention and degree conferment.

The Beyond Access Theory highlights the importance of faculty and staff as gatekeepers to postsecondary life by being proactive in relationship building. Should this be shared with institutions throughout the world, particularly those serving high levels of LIFG populations, it is likely to be well received. Due to the nature of this

research, it would be simple to share this information and could be done so via email, in an in-person training, or in informal settings like a work lunch.

A major characteristic of IGT is the development of a theoretical model. Ideally, this theoretical model is developed based on data from several sources. The goal of the original research questions was to identify a set of best practices and support these with the development of a theory. As describe throughout this writing, this project used both primary and secondary sets of data to develop this theory. Using the recommended guidelines of IGT to remain both flexible and interpretive, an approach unique only to this specific methodology, and constant comparison analysis the theoretical model was developed to address the guiding research questions.

While the initial goal was the develop a theory in support of specific set of best practices, the major phenomenon identified in this study and used to develop The Beyond Access Theory was a simple one: genuine relationships among faculty and the LIFG student increase overall success by combatting perceived isolation, which was identified as the main barrier to success, and ultimately degree completion, for LIFG students. Thus, leading to the development of the final form of the Beyond Access Theory which identifies the main barrier to LIFG success as loneliness or perceived isolation and to combat these negative feelings, the development of genuine relationships with faculty and staff are imperative. Best classroom practices to address these negative feelings and prompt relationship development include

intrusive advising, mandatory office hour appointments, and redemptive opportunities on failed assignments.

Reflection

LIFG students often come to college underprepared due to no fault of their own. Despite the reasoning for this lack of preparedness, these students continue to enroll and succeed at the postsecondary level. However, when compared to their continuing-generation peers these students perform less consistently in regard to GPA, retention, and degree completion. Throughout this research many surprising statistics and familiar strategies were uncovered.

Based on the researcher's background as a LIFG student, many of the barriers and strategies identified in this project were experienced first-hand. It is both fulfilling and promising that positive experiences shared by LIFG students across the globe can be specifically identified, implemented, supported by data, and now this theoretical model, The Beyond Access Theory.

At the time of this study, the researcher has been fortunate to present early findings at a few professional conferences. Upon completion and publication, it is the goal of the researcher to offer this information to institutions examining institutional and classroom practices that both deter and support LIFG students.

Conclusion

LIFG students are enrolling into postsecondary degree programs at rates higher than ever before. Current statistics highlight the concerning fact that these students are less likely to persist from one school year to another as compared to their

continuing-generation peers – students hailing from a household where at least one parent or guardian holds a bachelors level degree. LIFG students are also less likely to complete a bachelors level degree within six years (Lohfink & Paulsen, 2005).

However, in several programs throughout the world LIFG students are demonstrating the ability to perform at the same level, if not beyond, their continuing-generation peers. Using Strauss' Interpretive Grounded Theory, a qualitative methodology, partnered with quantitative statistical analysis the research questions for this study asked: (1) what strategies exist that increase success in LIFG students? (2) why do these best practices work?

Through the coding process and constant comparison analysis the first research question was absolved, a characteristic unique to and supported by IGT methodology. This was decided as codes from the data emerged indicating that while there are best practices in place for LIFG students that may increase success, faculty and staff that show genuine interest in relationship building are often the sole indicator of LIFG student persistence. The Beyond Access Theory was developed based on the data examined and codes identified during this project.

The Beyond Access Theory identified the main barrier of LIFG student success as feelings of isolation, or perceived loneliness. To address this barrier, the Beyond Access Theory encourages the use of any best practices discussed in this research, which includes intrusive advising and faculty making first point of contact outside the classroom. However, despite the specific strategy the Beyond Access

Theory places emphasis on the development of positive, mentoring relationships with faculty and staff.

This relationship building may occur via the use of the identified strategies throughout this writing however, the most important component is genuineness. These relationships are essential to LIFG student success as faculty and staff are often viewed as gatekeepers to postsecondary society and are pivotal in LIFG student adjustment to college life, overall success, and ultimately degree completion.

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Appendix A

Participant Questionnaire

Beyond Access: Best Practices to Increase Success for Low-Income, First-Generation Students

Participant Questionnaire

Consent

The purpose of this research is to gain a deeper understanding of Low-Income, First-Generation (LIFG) college student experiences and what approaches increase success for this student group. Data will be collected via a brief survey which takes 15-45 minutes to complete.

Completion of this Survey implies consent and confirms the participant understands the following:

- The researcher is available to answer any questions prior to participation in the project.
- Participation is voluntary – you may withdraw at any time or choose to leave questions unanswered.
- Information collected will remain confidential and no information that could possibly identify the participant will be made publicly available.
- Unidentifiable Data will be used in research, publications, sharing, and archiving.

1. Name

Please review the definitions and select the status closest related to you.

First-Generation College Student – While you were in college neither parent/guardian had a bachelor's level degree.

Low-Income College Student – You grew up at/below the poverty line and/or your family may have received government assistance such as SNAP or Medicaid.

2. What is your LIFG status? (multiple choice)

Low-Income

First-Generation

Low-Income and First-Generation

Unsure

3. Hometown (City, State)

4. What college/university did/are you attending (please provide the entire name, no abbreviations)?

5. What was your program of study or major?

6. Year of Graduation

7. Please provide the number of years it took to complete your bachelor's degree

3 or Less

5

4

6 or more

8. Have you earned a degree beyond a Bachelors?

Yes, Masters

Yes, Other

Yes, Doctorate

No

On the following scale from One to Five, please rate how the following impacted your choice of college/university.

1 – Strongly Disagree

4 – Agree

2 – Disagree

5 – Strongly Agree

3 – Neutral

9. The out-of-pocket cost of attendance was affordable.

10. A number of friends attended the same college/university.

11. A number of family members attended the same college/university.

12. A significant other (at the time) attended the same college/university.

13. The college/university is geographically close to my family or hometown.

14. I had the ability to live at home while attending the college/university.

15. The college/university had my desired program or major of study interest.

16. The financial aid package offered by the college/university was large enough to cover most cost of attendance.

On the following scale, from One to Five, please rate the following statements in relation to your bachelor's level college/university.

1 – Strongly Disagree

4 – Agree

2 – Disagree

5 – Strongly Agree

3 – Neutral

17. My college/university acknowledges low-income, first-generation status.
18. My college/university creates welcoming spaces for low-income, first-generation students.
19. My college/university offers several scholarship and other financial aid options that appropriately serves low-income, first-generation students.
20. My college/university considers the student as whole when making admission decisions.
21. My college/university hires and maintains a faculty (professors) equipped to serve low-income, first-generation students.
22. My college/university hires and maintains a staff equipped to serve low-income, first-generation students.
23. My college/university considers price and other fees that may be burdensome to low-income, first-generation students.
24. My college/university values my background as a low-income, first-generation student.

On the following scale, from One to Five, please rate how the following based on your experience with bachelor's level instructors/professors.

- | | |
|-----------------------|--------------------|
| 1 – Strongly Disagree | 4 – Agree |
| 2 – Disagree | 5 – Strongly Agree |
| 3 – Neutral | |

25. My instructors/professors make an effort to get to know me.
26. My instructors/professors celebrate low-income, first-generation students.
27. My instructors/professors understand low-income, first-generation students.
28. My instructors/professors make me feel supported.
29. My instructors/professors make me feel unsupported.
30. My instructors/professors provide in-class opportunities for students, including those from low-income, first-generation backgrounds, to share their opinions and experiences.
31. My instructors/professors understand the barriers low-income, first-generation students face in college.
32. My instructors/professors provide opportunities to make up missed work when appropriate (i.e: work, illness, family responsibilities).
33. My instructors/professors provide deadline extensions when appropriate (i.e: work, illness, family responsibilities).
34. My instructors/professors provide learning opportunities outside the classroom (service project, hands-on learning, etc.).
35. My instructors/professors use culturally appropriate or easy to understand examples for course content.

On a scale from One to Five, please rate the following statements.

- | | |
|-----------------------|--------------------|
| 1 – Strongly Disagree | 4 – Agree |
| 2 – Disagree | 5 – Strongly Agree |
| 3 – Neutral | |

36. I feel out of place at my college/university.

37. It is easy to identify and develop a support system at my college/university.

38. My professors/instructors are a part of my campus support system.

39. College/University staff persons are a part of my campus support system.

On the following scale, from One to Five, please rate the following statements on how they relate to you.

- | | |
|-----------------------|--------------------|
| 1 – Strongly Disagree | 4 – Agree |
| 2 – Disagree | 5 – Strongly Agree |
| 3 – Neutral | |

40. I decided to pursue a bachelor's degree because it was a personal goal.

41. I pursued a bachelor's degree because my family encouraged me to.

42. I decided to pursue a bachelor's degree to improve my career options.

43. I decided to pursue a bachelor's degree to increase my overall income earned during my lifetime.

44. I decided to pursue a bachelor's degree to improve my overall quality of life.

45. Completing a bachelor's degree has improved my overall quality of life.

Appendix B

Complete List of References Used for Data Analysis

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VITA

SAMANTHA J. BRYANT

EDUCATION

May 2011	Bachelor of Arts Morehead State University Morehead, Kentucky
December 2016	Masters of Arts Morehead State University Morehead, Kentucky
Pending	Doctor of Education Morehead State University Morehead, Kentucky

PROFESSIONAL EXPERIENCES

March 2017 to Present	Associate Director Upward Bound Math Science Morehead State University Morehead, Kentucky
January 2016 to November 2016	Student Affairs Officer Robinson Scholars University of Kentucky Lexington, Kentucky
July 2015 to January 2016	Intermediate Teacher, Self-Contained Third/Fourth Grade Breathitt County School District Jackson, Kentucky
May 2014 to May 2015	Assistant Director Woodland Early Learning Center KinderCare Lexington, Kentucky

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