**ABSTRACT** 

Examining the Effect of a Scholarship and Living-Learning Program Intervention on First-Generation College Student Thriving

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First-generation students represent a unique and growing population in higher education. Much of the research on this student population has focused on the influence of pre-college characteristics on their experience in the classroom or more generally in college. The purpose of this study is to understand the extent to which incentivized engagement in a living-learning program affects first-generation students thriving in college. Thriving refers to "the experiences of college students who are fully engaged intellectually, socially and emotionally" (Schreiner, 2010). The study compared three groups of first-generations students who received both the scholarship and living-learning program intervention, only the living-learning program intervention, or neither. Through the *Thriving Quotient*, participants responded to items relating to academic, intrapersonal and interpersonal thriving. Findings found no significant difference in the level of thriving among the three groups. This suggests a need for further inquiry into the experiences of first-generation students in living-learning programs.

# Examining the Effect of a Scholarship and Living-Learning Program Intervention on First-Generation College Student Thriving

by

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#### CHAPTER ONE

#### Introduction

First-generation college students make up approximately 32 percent of the 17.3 million students enrolled in postsecondary education (NCES, 2016; Smith, 2012). This means that approximately 5.5 million first-generation students began their educational journeys at 2-year and 4-year institutions across the United States in 2014. These students were the first in their family to continue their education beyond the secondary level. As such, those who persist find themselves in unchartered territory from the start of the college application process to graduation. This unique and underrepresented student population is growing in higher education (Padgett et al., 2012). This growth can be attributed to increased access to higher education for minority and other previously underrepresented groups. Therefore, over the last few years, first-generation college students received increased attention from researchers and student affairs administrators.

#### Who are First-Generation Students?

According to current literature, first-generation students are defined as those with no parent or guardian who has earned a baccalaureate degree (Pike & Kuh, 2005). First-generation students tend to be female, older and nonnative English speakers (Lundberg et al., 2007). Students of color make up about 36 percent—approximately 1.98 million—of the first-generation student population (Lundberg et al., 2007). Approximately 4.5 million out of the overall 5.5 million—81 percent—first-generation students enrolled in postsecondary education are from low income families (Opidee, 2015). In high school,

these students spend less time engaging socially and have low standardized test scores (Padgett et al., 2012; Pike & Kuh, 2005). They tend to have less access to information about higher education, especially as it pertains to how they should shape their college experience (Lundberg et al., 2007). As such, first-generation students are more likely to feel like outsiders in college settings (Lundberg et al., 2007).

Once they do start at a 2-year or 4-year institution, first-generation students are more likely than their non-first-generation counterparts to enroll part-time, work longer hours off campus, engage less in on campus activities, and to live at home (Padgett et al., 2012; Pike & Kuh, 2005). For many of these students from low socio-economic backgrounds, living on campus is not possible (Lundberg et al., 2007). As a result of reduced engagement on the college campus, first-generation students are also less likely to engage with their peers in non-academic settings (Inkelas et al., 2007; Padgett et al., 2012). These students' status as first-generation has a significant influence on their career and academic aspirations. First-generation students are more likely to pursue majors focusing mainly on the career they will have after graduation. They tend to gravitate more to applied majors over theoretical majors, and cite helping their families after graduation as a principal motivation (Lundberg et al., 2007).

Concerns about First-Generation Students in Higher Education

This complex combination of characteristics can often make serving this student population more difficult on college campuses. The four main areas of concern that are emphasized throughout studies focused on first-generation students are persistence through college, on-campus involvement, peer and faculty engagement, and sense of belonging in higher education settings (Inkelas et al., 2007; Lundberg et al. 2007; Padgett

et al., 2012; Raque-Bogdan & Lucas, 2016). First-generation students are two times more likely to leave college before their second year at a 4-year institution (Choy, 2001; Inkelas et al., 2007). Approximately 45 percent—2.47 million of the 2014 cohort—of first-generation students are likely to leave college without earning their degree. This is significant, especially when compared to the 29 percent of non-first-generation students who are likely to not earn their degree (Inkelas et al., 2007). For these students who do not persist, the chances of reentry into higher education are significantly decreased (Inkelas et al., 2007).

Because first-generation students are less likely to be significantly involved on the college campus, there may be a reduced chance of successful transition and increased negative perceptions of the college environment (Inkelas et al., 2007; Lundberg et al. 2007). With limited opportunities for on-campus engagement, first-generation students often fail to build significant relationships with their peers and faculty—who often play key roles in offering support and affirmation (Inkelas et al., 2007). Extant research has found that building relationships with faculty especially has positive effect on first-generations student college experience. First-generation students, however, are more likely to have negative perspectives of faculty and sometimes cite relationships with faculty as a source of discouragement (Inkelas et al., 2007; Lundberg et al. 2007). This means that these students are less likely to seek out these potentially powerful relationships. First-generation students' limited interactions with these two groups can result in decreased positive perceptions of their college experience and a decreased sense of belonging in college environments.

Although a lot is already known about first-generation students, this population must continue to receive attention from researcher and administrators in the future. As this population continues to grow, it will become increasingly important for academic and student affairs leaders to understand how these students interact with and are affected by unique college campuses and environments. Studies have consistently found that first-generation students experience significantly lower overall success when compared to the rest of the student populations in higher education (Pike & Kuh, 2005; Lohfink & Paulsen, 2005; Lundberg et al., 2007). First-generation students are seen as "inhabiting intersecting sites of oppression based on race, class, and gender" (Lohfink & Paulsen, 2005, p. 411). Each of the intersecting aspects of identity can present increased barriers to participation in higher education. It is therefore critical that those in higher education continue to learn about this population and continue to evaluate the effectiveness of oncampus offerings for these first-generation students.

## Finances and the First-Generation College Student Experience

The experiences of first-generation students in higher education are often most constricted by the availability of sufficient finances. Limited financial resources often force first-generation students to decide between being involved on campus and having a job that will allow them to support themselves (Lundberg et al., 2007). With a majority of first-generation students coming from low socioeconomic backgrounds, they often are not able to receive any financial support from their families (Pike & Kuh, 2005; Lundberg et al., 2007; Inkelas et al., 2007). Although most of these students would qualify for federal financial aid, the aid they are offered generally does not fully cover all of their costs (Lundberg et al., 2007). Federal aid is also more likely to be loan-based,

and first-generation students tend to be more reluctant to take on extra debt for educational purposes (Lundberg et al., 2007; Seidman, 2005). Even if they do opt to take on loans, first-generation students generally have little understanding of the financial aid process and have few resources to offer guidance (Lundberg et al., 2007; Seidman, 2005).

As the academic achievements of students is generally a large factor in determining the success of the institution, much of the recent attention that has been given to first-generation students has focused on how to better assist them in the classroom setting and in terms of career aspirations. Research analyzing the academic performance of first-generation students reveals that first-generation students tend to study fewer hours per week, are less involved in the classroom learning experience, interact less with their peers, and earn fewer credit hours (Padgett et al., 2012; Pike & Kuh, 2005). About 60 percent of first-generation students will not complete their degree in six years (Smith, 2012). As a result of these findings, researcher and administrators have given greater attention to the classroom experience of first-generation students and have sometimes concluded that enhanced experiences in the classroom setting is most beneficial to this population.

#### Existing Gaps in Current Research

Three concerning gaps emerge from a review of first-generation student literature. First, most of the existing research focuses on the first-generation student experience in the academic and career aspiration arenas. This is likely the result of the fact that first-generation students generally have large financial constraints when it comes to engagement in higher education. First-generation students also lack the accumulated capital that would come with having parents who went to college and have an

understanding of the higher education system. As a result of these two factors, first-generation students may not see the need to live on campus or understand fully what the college experience is or should be. There is little research that focuses on the experience of first-generation students living on campus or specifically in living-learning programs.

The second gap in current research comes from the lack of examination of the role of incentivizing and assisting first-generation students through scholarships. This may be a result of the fact that many organizations may not have programs set up that intentionally reach out to first-generation students in this arena. The third gap relates to the perspective from which first-generation students have been examined in previous research. Researchers often tend to focus on first-generation students' success, which researchers have defined as "satisfaction, persistence, and high levels of learning and personal development" (Kuh et al., 2005, p. xiv). This concept of success does not fully encompass students' college experience as it focuses mainly on their academic performance and persistence to graduation and less on personal development (Schreiner, 2010). It also tends to lead to a deficit remediation approach—focused on compensating for student characteristics that may not be advantageous—to student development (Schreiner, 2010).

## Thriving in College

Instead of the concept of success, the concept of thriving may be better suited to examining and understanding the student experience in college on a deeper level.

Thriving refers to "the experiences of college students who are fully engaged intellectually, socially and emotionally" (Schreiner, 2010). According to Schreiner, students who are thriving do well academically and experience a sense of community that

helps them to persist to graduation. This concept of thriving is made up of three main categories, academic, intrapersonal and interpersonal thriving. Academic thriving focuses on students being psychologically engaged in the learning process (Schreiner, 2010). The Intrapersonal thriving category examines the positive outlook of students who are thriving. The Interpersonal thriving category looks at how students engage in relationships and create meaningful connections with their peers (Schreiner, 2010). The concept of thriving allows for a more holistic approach to student development that considers a number of key areas that are often overlooked when working from a deficit remediation approach (Schreiner, 2010).

Although one cannot deny that focusing on the experience of first-generation students in academic settings is highly important, not examining how they experience college life in other arenas ignores a vast amount of their college experience. Exploring other arenas of the college experience can allow for the shift from the success approach to a thriving approach. In this process of refocusing, the question then becomes what does thriving look like for first-generation students? If focusing on academic engagement and success is not enough, what other arena should researchers and administrators seek to better understand.

One such arena is on-campus residency. Recent research has found that on-campus residency has a significant impact on students' level of persistence and feelings of social support into their second year of college, which are two major areas of concern for first-generation students (Schudde, 2011). Students who live on campus tend to have greater access to resources that help them to navigate and integrate their college experience (Schudde, 2011). The combination of increased feelings of support and

increased access to resources can inspire students to seek more meaningful involvement in the college atmosphere (Schudde, 2011). While it is more likely for first-generation students to live off campus, almost 55 percent express an intent to live on campus prior to coming to college (Balemian & Feng, 2013). If first-generation students have the opportunity to live on campus, they could experience a significant positive impact on some of the areas of disadvantage that many of these students bring to college.

Although on-campus residency in and of itself could have a major positive impact on the first-generation student experience in higher education, it may not fully address the abundance of concerns that exist. An even more sophisticated intervention is the living-learning program. Living-learning programs (LLPs) are communities that were "developed to strengthen undergraduate students' learning by helping them to connect to potentially disparate knowledge gained from the academic, co-curricular, and residential arenas" (Inkelas et al., 2007). These programs are characterized by students living together in the same residence hall, engaging in some shared academic endeavor, having access to resources—faculty and professional staff—within the residence hall, and being involved in other targeted residence hall activities (Inkelas et al., 2007).

Because LLPs are focused on creating an integrative college experience for students, they are able to provide first-generation students with more avenues for engagement in beneficial social activities that allow for interaction with both peers and faculty. In providing these opportunities, LLPs aid first-generation students in finding and building their new social support system. Engagement in an LLP has also been found to positively affect academic transition during the first year of college (Inkelas et al., 2007). In spite of the benefits of on-campus residency, and especially of residence in an

LLP, first-generation students are often limited by financial concerns and lack of knowledge. How then, would an intervention that combines on-campus residency, participation in an LLP, and receiving additional financial assistance help first generation students to thrive? This is a question that a private, research university in the South is seeking to tackle for its increasing first-generation student population.

Starting in the 2015-2016 academic year, the study institution began offering living-learning program (LLP) scholarships to first-generation students, which in essence incentivized living on campus and in a living learning program. Through this initiative, the study institution has provided scholarships for 65 first-generation students—20 in 2015 and 45 in 2016. After living in an LLP in their first year, first-generations students have a number of options for maintaining their scholarships, including: remaining in the LLP, getting involved on campus in a leadership capacity, or engaging in research with a faculty member. Each of the options that these first-generation students have for maintaining their scholarships seek to provide support in areas that existing research has shown to be of significance to their thriving in college.

## Purpose of the Current Study

The proposed study seeks to understand to what extent engagement in living-learning programs and receiving a scholarship influences first-generation students' thriving in college. This is a topic that higher education professionals should care about because it adds to the understanding of the growing first-generation student population on college campuses and it could offer insight into an intervention in the residential setting that could positively impact first-generation students.

#### CHAPTER TWO

#### Literature Review

## First-Generation College Students

First-generation students are defined as college students from families where no parent has gone to college or earned a baccalaureate degree (Pike & Kuh, 2005). First-generation students represent a unique and growing population on 2-year and 4-year college campuses across the U.S. These students tend to come from low socioeconomic backgrounds and a variety of ethnic minority groups. They are generally female, non-traditional-aged students who are academically underprepared for college and tend to have lower aspirations for college (Padgett et al., 2012; Engle et al., 2006). These varying aspects of first-generation students' identities can influence how they experience college and the types of obstacles they face as they pursue an education. The complex intersecting positions of disadvantage that first-generation students operate from has attracted, and continues to attract, the attention of researchers and leaders in higher education.

## Pre-college Characteristics

First-generation students overwhelmingly identify themselves as part of some of the most disadvantaged and underrepresented groups in society and in higher education (Lohfink & Paulsen, 2005). Approximately 20 percent and 23 percent of first-generation students in college are African American and Hispanic respectively (Smith, 2012). First-

generation students are more likely to delay entry into college, to require more remedial courses, to take classes part-time while working full-time and to start their education at a 2-year institution (Engle et al., 2006; Choy, 2001). First-generation students are more likely to be from low-socioeconomic (SES) backgrounds, to have more financial dependents, and have less family support for their engagement in higher education (Raque-Bogdan & Lucas, 2016).

Being low SES has implications not only for students' involvement in college, but also the aspirations and educational attainment after graduation. Beyond the financial challenges, first-generation students with low SES also tend to have an added disadvantage of their limited habitus (Walpole, 2003). Walpole defines habitus as "a web of perceptions about opportunities and the possible and appropriate responses in any situation" (2003, p. 49). These students, because of their limited cultural capital, may fail to recognize the resources and chances for engagement and development available to them in the college environment.

Even if they so recognize these opportunities, they may not take advantage of them to the live that their high SES peers may (Walpole, 2003). Walpole (2003) does point out, however, that students can experience a change in habitus through interactions with faculty and other high SES peers, and through engagement in extracurricular activities. It is through these interactions that low SES students can learn to make new decisions and can gain cultural capital.

These and other pre-college characteristics influence how first-generations students choose to shape their college experience, including how much they invest in oncampus activities, how many hours they work off campus, and how many hours they

study (Lundberg et al., 2007). The scope of first-generation student literature also highlights the significant role parents play in the experience of first-generation students, even if they are not aware of it.

## Parental Involvement and Support

Parents who have earned a baccalaureate degree are able to transmit cultural capital—the intergenerational transfer of resources, experiences and knowledge about education—with their children and impart to them the value of the educational experience (Padgett et al., 2012). Parents of first-generation students, who have not pursued higher education and may not understand its value lack this knowledge, as Pike and Kuh explained can have a significant impact on how engaged first-generation students are.

Even if parents do understand the value of higher education and encourage their students' pursuit of it, they still lack concrete, first-hand knowledge about how colleges work. As a result, parents may fail to offer sufficient guidance, which leaves first-generation students to navigate the processes of higher education with little to no support or information.

First-generations students, therefore, generally come to college without an understanding of the value of engagement both in the classroom and the campus community, and with limited knowledge about activities and behaviors that were associated with the college campus (Padgett et al., 2012; Pike & Kuh, 2005; Engle et al., 2006). Winkler and Sriram (2015) explain that underrepresented students, including first-generation students, "must build college knowledge as a means of overcoming reproduction of underrepresentation and achieving family uplift in higher education" (p. 569).

First-generation students are two times more likely than their non-first-generation counterparts to exit higher education without earning a degree. For those who do persist, approximately 60 percent will not complete their degree in six years (Smith 2012). Improvements in access have given more first-generation students the opportunity to pursue higher education. Colleges and universities, however, have an obligation to support these students so that they succeed in both the academic and social arena. If colleges fail to implement interventions that create opportunities for first-generation students to overcome their complex obstacles, these students will continue to flounder and have a significantly limited and incomplete college experience.

The Current Scope of Extant Research on First-Generation Students

Most of the research addressing the issues of first-generation students focuses on their academic success, and persistence in college. First-generation students who engaged in a more rigorous curriculum were more likely to pursue postsecondary education at a 4-year institution. They were less likely to take on these rigorous courses without encouragement and support from others, especially from their parent (Engle et al., 2006). If first-generation students are to experience success in college, researchers suggest that they need to become more actively engaged in academic activities, especially with faculty (Inkelas et al., 2007; Lundberg et al., 2007; Padgett et al. 2012; Lohfink & Paulsen, 2005; Pascarella et al., 2004; Terenzini et al., 1996). Lundberg et al. explained that although first-generation students may come to college with limited cultural capital, active participation in academic endeavors may provide a supplemental form of cultural capital.

First-Generation Students' Experience in the Classroom

Academic engagement in the classroom can be highly beneficial for first-generation students. First-generation students were more likely than their peers to experience gains from engagement in academic endeavors than in social activities (Lundberg et al., 2007; Lohfink & Paulsen, 2005). Research has also found that exposure to academically challenging experiences is beneficial for both the cognitive and psychosocial development of first-generation students. By engaging in the classroom, first-generation students are exposed to diverse perspectives from their peers.

Simultaneously, studies have also found that this depth of engagement is sorely lacking in first-generation students for a number of reasons. First-generation students tend to be overcommitted—many of them work long hours on and off campus, shoulder family expectations and other outside obligations—which affects how much they can commit to their schoolwork and classroom experience (Lundberg et al., 2007; Pike & Kuh, 2005; Lohfink & Paulsen; 2005; Padgett et al., 2012).

Pike and Kuh found that first-generation students reported making less progress in learning and intellectual development than their non-first-generation counterparts. First generation students are less likely to be academically and socially engaged and are generally pursuing a degree for career purposes (Lundberg et al., 2007; Pike & Kuh, 2005; Lohfink & Paulsen; 2005; Padgett et al., 2012). These students do not come to the college classroom fully equipped to engage in the challenging academic experiences that researcher have found contribute to cultural capital for first-generation students (Lundberg et al. 2007). The lack of preparation puts first-generation students in a

disadvantaged position as they do not fully understand how the college classroom functions or how to interact with their peers and with faculty.

## Role of Faculty Engagement

Faculty engagement with first-generation students has continued to be a point of contention within the literature. On the one hand, much of the literature on this population has stated that engagement with faculty is highly beneficial (Chickering & Gamson, 1987). Studies have found student-faculty interactions have the greatest influence on how students get involved in college (Chickering & Gamson, 1987; Sorcinelli, 1991). More recently these interactions have been found to have a positive impact on students' cognitive, personal and intellectual development (Astin, 1993; Terenzini, Pacsarella & Blimling, 1996; Pacsarella & Terenzini, 1991, 2005).

On the other hand, these findings do not seem to hold for first-generations students. Research has consistently found that first-generation students may have a negative perception of faculty, and may experience negative outcomes from engaging with faculty (Terenzini et al, 1996; Padgett et al., 2012). Padgett and colleagues explain that these negative outcomes related to faculty engagement may result from first-generation students being underprepared for such interactions. This lack of preparation and anxiety may stem from the limited meaningful engagement that first-generation students may have had with their high school faculty as they prepared to go to college (Padgett et al., 2012). First-generation students of color have also reported seeing faculty interactions as a source of discouragement and having a negative perception about faculty concern for them (Lundberg et al., 2007; Padgett et al., 2012; Pike & Kuh, 2005).

engaging with faculty, they still did not benefit as much from the encounters as White students. Lundberg and colleagues suggested that the way to remedy this issue was for faculty and staff to invite first-generation students to interact with them by affirming their experiences as students and their value to the institution. Lohfink and Paulsen (2005) also add that these validation and affirmation experiences with faculty need to take place both inside and outside the classroom.

## Faculty vs. First-Generation Student Expectations

Collier and Morgan (2007) sought to gain a better understand of how faculty and students' expectation aligned. The study also wanted to examine how cultural capital affected how well student participants master the role of "college student" and how that mastery in turn affected their understanding of faculty expectation. The study, conducted at Portland State University, consisted of two faculty focus groups, and eight student focus groups—six first-generation student groups and two traditional student groups. The researcher conducted group interviews to gain insight into what the faculty and student groups thought students should be able to accomplish in first-year and sophomore level classes.

Collier and Morgan compared the results between students and faculty and between first-generation students and traditional students. Their analysis resulted in the forming of three categories: 1) expectation about workload and priorities, 2) explicitness of expectations and assignments, and 3) expectations related to communication and problem solving. In the first category, faculty in the study expected students to understand the time required for assignments and to prioritize schoolwork over other commitments. Students, however, expressed that they had to fit schoolwork into the

remaining time they had after their other commitments. In the second category faculty expressed that they believed their expectations were clearly stated in the syllabus, and that they had assumed that their students already possessed the necessary basic skills for success in the class. On the other hand, students said that they wanted greater clarity from faculty, especially as it related to the syllabus and logistical and formatting concerns of writing assignments. In the third category, although both faculty and students said communication was highly important for success, faculty saw it mainly as a problem-solving tool for students as they encountered issues in the class. Students, by contrast, viewed communication as a tool for building relationships and rapport so that they would feel more comfortable approaching faculty when issues arose in the future.

The results from the first-generation groups specifically highlight their lack of preparation and understanding about the academic realm of the college experience. In the first category, first-generation students expressed increased issues with time management and prioritizing schoolwork. These students further explained that their external commitments further exacerbated the issue of time management and made it harder to resolve. In the second category, first-generation students desired more details than the traditional students. First-generation students wanted clarity as it related to effective note-taking in the class, descriptions of assignments, and specifics about tests. Collier and Morgan found that first-generation students relied almost entirely on the information they received from listening, observing, and interpreting the actions of professors—especially as it related to their explanation of the syllabus. Traditional students perceived the information in the syllabus and the information verbally shared by the professor as interchangeable. In the third category, first-generation students pointed out that how the

professor spoke in class—use of jargon associated with the discipline or a higher level vocabulary—influenced their willingness to initiate interaction with the professor if they needed help. The way the professor speaks may further intimidate students and reduce their likelihood of reaching out.

Collier and Morgan's study points to a number of major misalignments that potentially lead to the negative outcomes that result from interactions between first-generation students and faculty. College is often the first time that many first-generation students are taking rigorous class. Faculty expectations that students possess certain basic skills—and the way in which they express these expectations—may create an environment where first-generation students feel inferior and even threatened. Collier and Morgan note that faculty know that their first-generation students tend to have more problems related to time management and prioritization, yet they do not seem to validate the experiences and value of these students in the classroom environment, which can affect first-generation students' performance and how much they choose to engage in learning.

First-Generation Students' Persistence Through College

The process of transition and adaptation is generally more difficult for first-generation students because they are not able to fully engage in the diverse and integrative experiences that comprise the college experience (Engle et al., 2006). First-generation college students are more likely to live and work off campus, to have limited engagement with peers and faculty outside of the academic setting, to participate less in extracurricular activities on campus, and to be less involved in the learning environment

(Padgett et al., 2012; Inkelas et al., 2007). These factors tend to hinder effective transition.

If first-generation students fail to transition effectively, they will likely not persist from the first to the second year of college. First-generation students are twice as likely to leave college before the second year at 4-year institutions (Choy, 2001; Inkelas et al., 2007). Of the first-generation students who enroll in college, 45 percent will leave before earning their degree (Choy, 2001).

Determinants of First-Generation Student's Persistence to the Second Year

Lohfink and Paulsen (2005) examined the factors that determined the persistence of first-generation and continuing-generation students. They used data from the Beginning Postsecondary Students Longitudinal Survey-BPS, to examine the persistence behaviors of first-generation and continuing-generation students. The study, which defined persistence as institutional retention, found that "being a Hispanic first-generation student, a lower-income first-generation, or a female first-generation student, made first-to-second-year persistence more problematic" (Lohfink & Paulsen, 2005, p. 418). The study also found that attendance at a private 4-year institution had a negative relationship with first-generation students first-to-second year persistence, which they attributed to cost burden, size, and availability of resources at smaller colleges (Lohfink & Paulsen, 2005).

Lohfink and Paulsen explained that for first-generation students from Hispanic backgrounds, the concept of separation found in Tinto's (1993) model of retention may be problematic because it required that these students completely disconnect from their culture and immerse themselves in the culture of higher education (Hurtado & Carter,

1997; Stephens et al., 2012). Hurtado and Carter (1997), in their study of Latino students' college transition, similarly argued that Tinto's model did not capture the experience of students who had been marginalized in higher education.

The authors took issues especially with the concept of separation, which they saw as a pivotal point in Tinto's (1993) model. They noted that for academically talented Latino students remaining connected to prior communities was essential in their effective transition and adjustment to college (Hurtado & Carter, 1997). They highlighted that other research also suggested that students who maintained relationship with their families were better adjusted and were more likely to persist to graduation (Hurtado & Carter, 1997). These supportive communities, therefore, can significantly influence the college experience and thriving of first-generation students. This means that students thriving may be attributed to social support outside of the living-learning program and the university, a key consideration in this study.

For first-generation students from low income homes, Lohfink and Paulsen concluded that not only were these students disadvantaged by their parents' lack of knowledge about college, but also by financial constraints. In the case of the female first-generation student, their findings raised the question of how colleges and universities can help this subpopulation to navigate parts of the college experience that may still be affected by gender-based inequities.

Although Lohfink and Paulsen (2005) chose to operationalize persistence as first-to-second year at the same institution, other contradictory definitions of persistence exist in the literature. Reason (2009) defined persistence as an individual phenomenon. He further explained that because persistence was individual in nature—focused on how

students defined their goals—"a student may successfully persist without being retained to graduation" (Reason, 2009, p. 660). Reason's main point is that college student success should mean more than persistence from one year to another. Much of the attention given to first-generation students has focused on their academic success. The academic experience and issues of persistence are both significant parts of first-generation students' experience in higher education. However, they do not fully capture the college experiences that institutions of higher education should strive to provide for first-generation students. In light of this gap, Schreiner (2010) offers the concept of thriving as a new way of approaching and understanding the concept of college student success.

## Schreiner's Thriving Quotient

Schreiner states that thriving students are those who are fully and deeply engaged in their college experience in three arenas—intellectual, social and emotional. This concept of thriving has its roots in the field of positive psychology, and more specifically in the term flourishing. Flourishing has been defined, in prior research, as "a life lived with high levels of emotional, psychological, and social well-being" (Schreiner, 2010, p. 4). A person who is flourishing is enthusiastic about life, is engaged in meaningful ways with others and the community, and is resilient when handling personal challenge (Schreiner, 2010). Although the concept of flourishing offers a foundational new approach to understanding the human experience, studies around it mainly focus on young children. Therefore, academic factors that are fundamental for the college experience are missing. Schreiner sought to integrate this academic component and created the *Thriving Quotient* as a new means of understanding and assessing the college

student experience. The *Thriving Quotient* is made up of three main categories of thriving—academic, intrapersonal, and interpersonal—and five latent variables—engaged learning, academic determination, positive perspective, diverse citizenship, and social connectedness—which spread across the three categories.

## Academic Thriving

Students who are academically thriving are those who are actively engaged, both mentally and physically, in the learning process. Engaged learning and academic determination are representative variables of academic thriving. Engaged learning looks at how well students process course material and make connections between new knowledge and old knowledge. These students seek out opportunities to learn more, and participate more in conversations with their peers about what they have learned (Schreiner, 2010). Based on previous findings, this is likely the category of thriving in which first-generation students may encounter the most challenges. Because they are often working full-time off campus and do not actively participate in academic environments, first-generation students are less likely to make those important connections between what they already know and what they are learning (Lohfink & Paulsen, 2005; Padgett et al., 2012; Pike & Kuh, 2005). First-generation students are also less likely to seek out opportunities for continued learning, which could be the result of how busy they are and of the negative perceptions they often have of faculty.

The second variable that characterizes academic thriving—academic determination—refers the level of effort invested into academic pursuits, the capacity for effective time management, and the motivation to do well and pursue one's personal goals (Schreiner, 2010). This variable seems to be most in line with Reason's (2009)

definition of persistence. Schreiner explains that students thriving in this factor understand that they must consistently invest effort in tasks they do in order to succeed, and that even when things become difficult they must persist. First-generation students may find themselves at a disadvantage under this category as well because they generally come to college underprepared and likely have not received the affirmation from their parents that they can be successful in more difficult courses of study (Engle et al., 2006; Padgett et al., 2012). Because college may be the first time that they are engaging in rigorous classes, first-generation students may struggle to persist as they have not developed the necessary habits to help them to effectively accomplish their academic goals (Engle et al., 2006).

## Intrapersonal Thriving

Intrapersonal thriving focuses on having a positive and optimistic point of view on life. Students who thrive in this category approach the world and life from a positive perspective—the variable associated with this category. Schreiner (2010) explains that positive perspective is not about being excessively optimistic, but "a way of viewing reality and proactively coping with it" (p.5). As a result of their approach, these students tend to better manage stress when faced with difficult situations.

## Interpersonal Thriving

Interpersonal thriving focuses on how well students make meaningful connections to others and to the larger community. The two factors associated with interpersonal thriving are social connectedness and diverse citizenship. Social connectedness looks at the actual relationships that students have with others and the sense of community that

they experience through those relationships. Diverse citizenship is based on a mix of openness and valuing of difference, a desire to interact and be exposed to others from diverse backgrounds, a desire to contribute in some way to the world, and a confidence in one's own ability to do so (Schreiner, 2010).

## Predictors of Thriving in Students of Color

The concept of thriving offers a new lens through which researchers and higher education leaders can examine the student experience. As this approach has gained primacy, researchers have also discovered that the basic model of thriving that offers a good fit for Caucasian students does not fit well with African American, Asian, and Latino students (Schreiner et al., 2011). In response to these findings, Schreiner, Kammer, Primrose, and Quick (2012) sought to discover and understand the varying approaches to thriving used by these ethnic groups. Two research questions guided this study: 1) What are the unique structural models predictive of thriving for each group? 2) In what ways are the structural pathways optimized for different ethnic groups? The study consisted of a final sample of 5,117 undergraduate students from 51 four-year colleges and universities around the U.S. These students were between 18 and 24 years of age and came from all year classifications—first-years, sophomores, juniors, and seniors. Of the students who completed the survey, 85 percent were Caucasian, 5 percent were African American, 5.6 percent were Asian, and 3.6 percent were Latino. First-generation students made up 21 percent of the sample, 69 percent of the sample was female, and sophomore students were overrepresented in survey responses.

Schreiner and colleagues discovered that for each of the ethnic groups—or models, as the study called them—different pathways to thriving existed. In the

Caucasian model, they found that demographic variables including gender, high school grades, and degree goal among others directly or indirectly influenced these students' experience of thriving. They also highlighted a number of college environmental factors that influence thriving, such as campus involvement, hours worked, and engagement in religious and ethnic organizations. For Caucasian students, interactions with faculty contributed to their psychological sense of community and thriving.

They found that what contributes to thriving for African American, Asian, and Latino groups was different from Caucasian students. These differences are important because literature has tended to focus on the challenges and disadvantages of these underrepresented students. The African American model revealed that the only key demographic variables that had an impact on thriving were first choice at enrollment, high school grades, and level of certainty of major. Engagement on campus, in ethnic organization or religious activities were indirectly related to thriving. Spirituality, student-faculty interactions, level of certainty about major, and psychological sense of community were direct pathways that significantly influenced thriving for African American students.

In the Asian Model, Schreiner and colleagues found that demographic variables such as gender, level of certainty about major, degree goals, and first choice at enrollment directly and indirectly influenced thriving. They also found that the percentage of female students on campus directly affected thriving for this population of students. The Asian model also identified living on campus as a contributor to thriving. This is significant because it is the only non-Caucasian model that did. The Latino model identifies major certainly as the only demographic variable that directly influenced thriving (Schreiner et

al., 2012). Involvement on campus, the percentage of female students on campus, and psychological sense of community were direct pathways to thriving for Latino students. This study offered a new way of understanding the positive psychological, relational, and intellectual pathways that helped students to get the most from their college experiences.

Schreiner and colleagues found that psychological sense of community had the highest impact on thriving in all of the models. They explain that "students who experience a strong sense of community on campus not only feel a sense of belonging, but also feel that they matter to the institution and can contribute to the campus ethos. They have positive relationships with others on campus and perceive that being a student on that particular campus fills an important need in their lives" (Schreiner et al., 2012, p. 18). This was especially important for Latino students, for whom sense of belonging is important to their success.

As a result of this study, Schreiner et al. (2012) highlighted the major implications for institutions. First, they state that creating policies and practices tailored to the specific needs of students was more helpful than using a one-size fits all approach. Second, there are various pathways to thriving for students that can be emphasized through institutional messaging at orientation, around holidays, or about "safe spaces." Third, Schreiner et al. (2012) recommend that in order for institutions to improve thriving in its students—especially its students of color—they must create "a campus environment that is conducive to a psychological sense of community" (p. 25).

First-generation students were a significant part of the sample in the study.

However, the study does not specifically focus on how their experience may be different within each of the models. Across all the models, psychological sense of community

(PSC) consistently had an impact on thriving. The questions for first-generation students—who tend to be less engaged on campus—are what does PSC look like and how can institutions promote involvement on campus in various activities that directly influence PSC. Although the study does not allow for the determination of causality between the different pathways and thriving, it presents important information about how the experiences of thriving may differ across ethnic groups. This insight is especially important in the current study as first-generation students tend to come from the Black/African American and Hispanic/Latino ethnic groups.

As this study has highlighted, thriving occurs in large part in community.

Colleges and universities have mainly focused on success in the classroom for firstgeneration students. Moving forward, how can institutions of higher education implement
interventions that focus on first generation students' success in the on-campus
community, particularly outside of the classroom?

Effects of On-campus Residency on Students: Examining the Living-Learning Program

Blimling (2015) that living in residence halls has been found to students' learning experience and retention to graduation. The learning that occurs within the residence hall is often through the active student-student and student-faculty interactions. He explains that "Most forms of learning in [residence halls] occur through the intermediate peer environment of conversation, social encounters, intentional and unintentional experiences, and opportunities to explore interests" (Blimling, 2015, p. 65). He offers that engagement in the residence hall setting is especially useful in developing interpersonal, intrapersonal, and existential intelligence within students. On the interpersonal level, students learn how to understand the perspectives and feelings of others, and how to

communicate (Blimling, 2015). In this setting students are actively engaging each other and can gain social knowledge and skills needed, as well as positive and negative feedback from their interactions.

On the intrapersonal level, the residence hall offers a space where students can begin to think about themselves in relation to others and to situations they may encounter in college. This introspection would result in a higher level of self-awareness and self-knowledge in students. In regard to existential intelligence, Blimling makes the point that students can engage and challenge each other on moral and religious issues related to the purpose of life while living together in the residence hall. The residence hall creates a space for continued learning beyond the classroom.

First-generation student literature has often concluded that a need exists for some kind of intervention in on-campus housing for this student population (Pike & Kuh, 2005; Padgett et al., 2012; Lundberg et al., 2007). Pike and Kuh explain that living on campus has a direct impact on student learning outcomes and educational aspirations. Students living on campus are more likely to interact with each other and to have more experiences with diverse students than those who do not. Pike and Kuh state: "If an institution is serious about improving first-generation student success rates, then it should require them to live on campus at least for the first year of college" (2005, p. 291). Similarly, Padgett et al. (2012) suggest that institutions should pair them with non-first-generation roommates in on-campus housing in the first year of college. They explain that this could help make up for the cultural, social, and academic deficits that first-generation students often come to college with. These and other studies have highlighted the benefits of on-campus residency for first-generation students, especially in the first-

year of college. Little research, however, has been conducted to further understand the experience of first-generation students in the residential setting. Because limited research exists around first-generation students living on campus, little consideration has been given to how the living-learning program could influence these students' success and thriving.

### Living-Learning Programs as a Beneficial Intervention

Living-learning programs (LLPs) refer to programs or communities within residence halls that focus on a specific academic field or interest-based themes (Brower & Inkelas, 2010). This approach to community gained efficacy in the 1950s and 1960s as higher education was expanding in the United States (Brower & Inkelas, 2010). Since the late 1980s and 1990s, living-learning programs have been considered a highly effective and impactful educational experience that affected both the academic and social development of students (Pike et al., 2008). LLPs are designed to serve as a bridge that connects the academic and social lives of students in meaningful ways (Spanierman et al., 2013). Students in living-learning programs live together in the same residential community, engage in classes and academic activities together, and have increased access to on-campus resources including faculty, professional staff, and other academic assistance services.

LLPs differ from traditional residence halls in that they intentionally incorporate academic endeavors into the process of shaping community (Spanierman et al., 2013; Brower & Inkelas, 2010; Pike et al. 2008). In traditional residence halls, sense of community is developed mainly through social engagement with peers. Living-learning programs encourage greater interaction between students and faculty in both the

academic and social arena (Inkelas et al., 2007; Spanierman et al., 2013). Although living-learning programs may differ structurally, they offer a number of lasting benefits to students engaged in them.

Spanierman et al. (2013) found that students in living-learning programs reported higher levels of sense of belonging in their residence halls and on their college campus. They also found that living-learning programs provided social support and a welcoming community for students who were in them. Living-learning programs also offered academic support, especially for female respondents, in that they created an environment that was conducive to academic pursuits. It was easier for students to form study groups, and students had easier access to academic resources. Students in living learning programs also stated that they had opportunities to gain and improve their leadership skills. Students reported that they felt that their living-learning program promoted personal growth through multicultural experiences and interactions with their peers and with faculty.

Students who lived in a living-learning program in their first year of college tended to have higher levels of academic self-confidence (Brower & Inkelas, 2010). They were more likely to mentor their peers, and "remained more committed to civic engagement three years later" (Brower & Inkelas, 2010, p. 42). Brower and Inkelas found that students who engaged in high-impact educational practices, like student-faculty interactions within the living-learning program, were likely to engage in other high-impact practices outside the living-learning program. These students often pursued research opportunities with faculty, study abroad opportunities, or worked on senior theses. These findings speak generally to the benefits of involvement in a living-learning

program. Inkelas and colleagues (2007) sought to illuminate the experiences of first-generation students, specifically, in living-learning programs.

### The First-Generation Student Experience in LLPS

An abundance of research exists on the impact of living-learning program on students, but little is known about the experiences of first-generation students in these programs. Inkelas, Daver, Vogt, and Leonard (2007) conducted the only study, to date, that seeks to understand how living-learning program engagement affects first-generation students' perceptions of their academic and social transition to college. The study used data from the National Study on Living-Learning Programs that was collected from 34 institutions across 24 states and the District of Columbia. From NSLLP data, they drew a random sample of 651 first-generation students who participated in living-learning programs, and a sample of 684 first-generation students who were living in residence halls on campus that were not part of a living-learning program. These students were mainly first-years (61 percent) and sophomores (21 percent), and they were generally between ages 17-22.

Inkelas and colleagues found that engagement in LLPs positively influences first-generation students. They found higher levels of both academic and social transition in first-generation students in LLPs than those living in traditional residence halls. They state that LLPs may serve as a space where the innate abilities of first-generation students can be valued and developed, which in turn leads to a more successful transition. Inkelas and colleagues were also surprised to discover that—even within the LLP environment—faculty-student interaction had a negative effect on first-generation students' social

transition. They suggest that LLPs should more intentionally reach out to this population, and that LLPs should be open to first-generation students who do not live on campus.

This study provides the first real insight into the experiences of first-generation students outside of the classroom. Like extant research that focused primarily on the academic experiences of first-generation students, Inkelas and colleagues' study focused narrowly on the concept of transition. Transition periods can vary in length depending on the student. As such, focusing solely on how students transition does not offer sufficient insight into first-generation students' complete college experience. Further research is necessary to understand the impact of living-learning programs on first-generation students beyond their transition periods.

Impact of Scholarships on First-Generation Students' Involvement

First-generation students' college experience is often restricted by the financial constraints they have when they come to college (Lohfink & Paulsen, 2005). Because they tend to work many hours off campus, they are less likely to get involved on campus. First-generation students' financial constraints also mean that they are less likely to be able to live on campus. If they are able to live on campus, their lack of cultural capital may lead them to engage in or see the value of living-learning programs. The question becomes how can institutions attract students to engage in these programs. Merit-based scholarships have been found to influence students' choice of where to attend college (Baksh & Hoyt, 2001). Recipients of these scholarships are generally selected based on their achievements in high school. Although many first-generation students who decide to go to college may have done well comparatively within their own high school, they may not meet the requirements of these scholarships.

As most first-generation students come from low-income families, they generally are all qualified to receive federal financial aid (Lundberg et al. 2007). Brock and Richburg-Hayes (2006) explains, however, that even if they do receive financial aid, a substantial amount of their needs remain unmet. First-generation students also tend to not fully understand the financial aid process and often lack the resources necessary to assist them (Seidman, 2005). Seidman explains that for African American students, who are often first-generation, sufficient financial aid plays a major role in recruitment and retention. For Hispanic students, Seidman (2005) states that the shift from grants to loans "is having a very serious impact on the Latino community," which is "relatively poor and leery of taking on debt" (p.18). As the majority of first-generation students come from these two racial backgrounds, understanding the financial circumstances they face is important.

Seidman explains that offering more institutional financial aid and scholarships instead of loans is more helpful—especially to minority students who are often first-generation students. Offering these scholarships, however, does not guarantee that these students will get involved in a living-learning program. What if a college combined the intervention of on-campus residency and a living-learning program, with financial support in the form of annual scholarships to incentivize first-generation students' participation in LLPs? What impact would this have on first-generation students' thriving in community?

#### *Gaps in the Literature*

The existing literature on first-generation students tends to have a narrow focus on their academic experience (Collier & Morgan, 2007; Lohfink & Paulsen, 2005; Lundberg

et al., 2007; Pike & Kuh, 2005; Dennis et al., 2005). These studies also tend to focus on what these students lack and not on the interventions that can make up for these shortcomings. Previous studies, however, offer a necessary foundation for understanding the unique challenges that first-generation students face in higher education. As this population continues to increase on college campuses, it is important that research begins to more specifically probe areas of the college experience that had previously been overlooked. A lot of research exists to support the fact that living on campus, especially in the first year of college, has positive outcomes for students (Blimling, 2015; Brower & Inkelas, 2010; Spanierman et al. 2013; Schudde, 2011). Living on campus, therefore, could effectively improve the college experiences of first-generation students (Pike & Kuh, 2005; Padgett et al., 2012, Inkelas et al., 2007). In spite of this, little research has been conducted to examine these suggestions. No research exists, to date, that examines the first-generation student experience in living-learning programs within the framework of thriving.

Inkelas and colleagues (2007) provide the only insight into the experience that first-generation students have within the residence hall in living-learning programs. This study focuses on these students' perceptions of their social and academic transition as a result of involvement in a living-learning program. Their focus on transition means that their attention is limited to the beginning part of the first-generation student experience. This leaves the rest of the experience as a vague unknown. This study also did not seek to provide insight into how to entice first-generation students, who often have stringent financial situations, to get involved in living-learning programs.

### Contributions of this Study

The present study seeks to illuminate part of the first-generation college student experience that has long been overlooked. This study will build on the work of Inkelas et al. (2007), focusing more specifically on the college experience of first-generation students. It will contribute to existing literature about how the experiences of first-generation students on college campuses across the U.S. may differ from their non-first-generation counterparts. The study will examine the implications that involvement in a living-learning program has on first-generation students' thriving in college. This study will also examine the effectiveness of the unique LLP Scholarship program that the study institution has implemented over the last two years. In examining these LLPs, the study will try to understand how incentivizing involvement in a living-learning program influences first-generation students' thriving throughout college.

#### Summary

The population of first-generation students participating in higher education will continue to grow as access increases. The challenge for colleges and universities is understanding how the needs of first-generation students may differ from other traditional students. First-generation students come to college with a number of challenges that can directly impact how they choose to get involved in college. The parents of first-generation students generally have not completed a baccalaureate degree. These students, as a result, tend to come to college with limited knowledge about what to expect from the college environment, how to engage—both academically and socially—and how to access necessary resources. This lack of cultural capital influences how first-generation students shape their college experience.

First-generation students are also unique in that they generally start college later than other students, work more, interact less with their peers and faculty—even within the classroom setting—and are generally from low income families. This combination of factors affects the decisions that they make on a daily basis about their time in college. As the main goal of colleges and universities is generally to educate their students, much of the research related to first-generation students has focused on their classroom experience. These studies have sought to present means through which to help first-generation students overcome many barriers to college success. In almost all first-generation student literature, scholars have referenced the potential that on-campus residency interventions could have in positively impacting these students' persistence and success in college.

Schreiner (2010) raised the point, however, that focusing on persistence and success may not fully capture the experiences of students. Instead, she suggests that the concept of thriving is better suited to understanding the student experience in college. The *Thriving Quotient* examines students' academic, intrapersonal, and interpersonal thriving. This approach allows for a greater understanding of the many varying dimensions of the student experience and how they interact with each other. Some research has been done with first-generation students and the concept of thriving. However, none of this research specifically focuses on the role of involvement in living-learning programs on first-generation students' thriving.

Inkelas et al. (2007) represented the first study to examine how this intervention actually impacted first generation students. They examined how being in a living-learning program affected how these students perceived their social and academic transition into

college. Though the scope of the study was limited, it offered some foundational findings that pointed to the specific benefits that first-generation students incur through being in a living-learning program. The present study will build on this foundation as it seeks to examine the extent to which incentivized engagement in a living-learning program influences first-generation students' thriving at a private, research university in the South.

#### CHAPTER THREE:

### Methodology

Although a significant amount of data exists about first-generation students, no other quantitative studies examine the influence of living-learning program engagement on these students' experience of thriving in college. Quantitative research uses numerical and statistical data to describe, explain, and predict phenomena. Quantitative research allows for the experiences of participants to be quantified and compared, which in turn allows for greater generalizability to or across specific populations. Using a quantitative approach in this study provides a way to measure and compare the experiences of first-generation students who participated in a living-learning program to those who did not.

This study used a quasi-experimental survey design. The purpose of the quasi-experimental design is to test causal hypotheses among participant groups that lack random assignment (Shadish et al., 2002). This design gives the researcher greater control over the selection of participants in the treatment and comparison groups (Shadish et al., 2002). As this study targets a specific group of students within the first-generation population, the quasi-experimental design allows for comparisons between those who received the intervention and those who did not.

#### Conceptual Framework

Thriving is a concept that speaks to students being fully engaged in their college experience in three areas—intellectual, social and emotional. It transcends the academic performance and graduation of students, and seek to examine the holistic experience of

students. Schreiner (2010) explains that students who are thriving are engaged in the learning process, maintain healthy connections with other, appreciate difference, have an optimistic outlook for their future, and have a desire to shape and impact their community and the world. Although somewhat like the National Survey of Student Engagement (NSSE), the *Thriving Quotient* seems to focus in a more significant way on the experiences of the student outside of the academic arena. Schreiner et al. (2012) explains that "a component largely missing [from NSSE] is the individual motivation and psychological processes that lead students to engage and fully benefit from opportunities presented in the college environment" (p. 2).

Academic thriving focused on the parts of the student experience associated with learning and academic success. It looks at the effort expended on academic and learning task, students' self-regulated learning and mastery of the educational environment (Schreiner et al., 2012). Intrapersonal thriving looks at students' "optimism and subjective well-being" which are key measure for their level of satisfaction with their college experience (Schreiner et al., 2012, p.4). Interpersonal thriving examines the connections students make with others and their openness, and appreciation of difference.

### Population, Sample, and Participants

The study population consisted of first-generation students attending a private, mid-sized, research university in the South. For the purpose of this study, three groups of students bearing similar characteristics were selected and compared in January 2017. The sample size for this study was 147. These 147 students were categorized into three groups. The first groups included students who currently are or had been in an LLP and had received a first-generation student scholarship intended to incentivize LLP

participation. The second group included first-generation students who currently are or had been in an LLP but had not received any scholarships related to LLP engagement.

Students in group 1 and 2 either currently or previously lived in one of the 11 living-learning communities and residential colleges at the study institution. These LLP students live in communities that aim to bridge the gap between the academic and social experiences of students. In these communities, students have access to faculty, professional staff, and other key social and academic resources.

Two years ago, the institution began offering living-learning program (LLP) scholarships to first-generation students to promote engagement in these initiatives. It is important to note that there was not a specific living-learning program that was targeted towards the success of first-generation students. Rather, first-generation students who received the scholarship had to choose among the currently existing living-learning programs on campus. In 2015, 25 students received this scholarship. In 2016, 40 students received this scholarship. Group 1 consisted of first-generation students who were recipients of this scholarship. This study compared students in groups 1 and 2 with similar first-generation students who did not receive this scholarship and who had not been a part of an LLP—group 3. Each group consisted of 49 participants who were matched across three key variables. Table 1 below presents the three categories of students in the sample.

Table 1

Categories of students sampled

Group	N	LLP	Scholarship
1	49	Yes	Yes
2	49	Yes	No
3	49	No	No

To ensure similarity between these groups, matched sampling techniques will be used to form the control group in this study. Participants in the treatment and control groups will be matched—using—caliper matching, based on background variables including gender, race, and socioeconomic status, as measured by Pell Grant eligibility (Anderson et al., 1980; Rosenbaum & Rubin, 1985).

#### Instrument

Data was collected using the *Thriving Quotient*, a 25-item survey designed by Schreiner (2009) to measure "aspects of college student thriving that are amenable to intervention and are predictive of academic success and/or persistence" (Schreiner et al., 2009, p. 7). The 25 items of the *Thriving Quotient* divide into five scales: engaged learning, academic determination, positive perspective, social connectedness, and diverse citizenship. Responses to the survey items range on a 6-point Likert-type scale of 1=strongly agree to 6=strongly disagree. The *Thriving Quotient* is highly reliable, with an internal consistency (Cronbach's alpha) of .91. Internal consistency for each of the five scales ranges between .80 and .85.

#### **Variables**

### Independent variables

This study focuses on how an LLP and scholarship intervention can influence first-generation students' experience of thriving. These two interventions—and whether students had received both, one or neither—were the independent variables of this study. Institutional Research and Testing data at the study institution was used to determine which students met the criteria of the independent variables.

### Dependent Variables

According to Schreiner (2010) thriving "describes the experiences of college students who are fully engaged intellectually, socially, and emotionally" (p. 4). The five scales of the Thriving Quotient seek to measure these experiences and how they influence students' success and persistence in college. This study will examine how the treatment and control groups differ along these scales. Questions related to the engaged learning scale will focus on how students in the two groups vary along three components: meaningful processing, focused attention, and active participation (Schreiner, 2010). It will examine both the behavioral and psychological aspects of active engagement in the learning process. The academic determination scale will examine variances in the investment of effort, self-regulation, environmental mastery, and goal-directed thinking of first-generation students in an LLP compared to those who are not.

The positive perspective scale will measure students' optimism and explanatory style (Schreiner, 2010). The diverse citizenship scale measures students' desire for difference in their communities and interactions. It also examines their openness to difference (Schreiner, 2010). The social connectedness scale measures student's engagement in healthy relationships and support networks both on and off campus (Schreiner, 2010). These scales combine to offer insight into varying experiences of thriving in college for first-generation students in this study.

#### Limitations

This study will be the first to examine the role that living-learning program involvement has on first-generation students' thriving in college. There are a number of key limitations that must be considered in reviewing and interpreting the findings of this

study. First, this is a cross-sectional study of a relatively small sample of students, which means that data collected will only reflect the experiences of students at the point of survey completion. Second, the first-generations students and living-learning programs being studied are specific to study institution. As a result, the findings of this study may be unique to students in this environment. Third, the institutional variables specific to study institution, though not the main focus of this study, influence how each participant experiences and understands college. Fourth, the purpose, goals, and size of these LLPs all differ. As a result, the experiences of each student may vary based on the community they are engaged in. Fifth, the findings of this study also rely on self-reports. The fact that an incentive was offered might indirectly influence students to respond to items dishonestly or inaccurately. It is also possible that self-reports do not reflect reality.

# Data Analysis

A multivariate analysis of variance (MANOVA) was used to test the significance of group differences on thriving. A MANOVA can include several dependent variables that are made up of different measures of the same overarching latent variable. The concept of thriving consists of five subvariables: engaged learning, academic determination, positive perspective, diverse citizenship, and social connectedness. The level of significance is .05.

# Research Hypotheses

The null hypothesis in this study is that there will be no difference in the level of thriving exhibited by first-generation students in living-learning programs—who received the LLP scholarship—and first-generations students in an LLP with no scholarship and first-

generation students not in an LLP who did not receive the LLP scholarship. The alternative hypothesis is that first-generation students in living-learning programs, who received the LLP scholarship, will exhibit a significant difference in their level of thriving compared to first-generation student in an LLP with no scholarship and first-generation students not in a living-learning program who did not receive the LLP scholarship.

#### CHAPTER FOUR

#### Results

This study focuses on how two interventions, engagement in a living-learning program and receiving a scholarship, influence first-generation students' experience of thriving in college. Living-learning programs are residential communities on a college campus that seek to connect the academic and social experiences on a college campus (Brower & Inkelas, 2010; Pike et al., 2008; Spanierman et al., 2013). Scholarships offer financial support to students that they are not required to repay. These two interventions can have an influential role in students' transition and matriculation through college (Baksh & Hoyt, 2001; Inkelas et al., 2007). The purpose of this study is to examine how these interventions affect the experience of first-generation students. This chapter presents the results of the data analysis conducted to answer the research question of whether these interventions influence thriving. All data analyses were run in SPSS version 24.

### Research Question

The primary question that guided this study asked to what extent engagement in living-learning programs and receiving a scholarship influences first-generation students' thriving in college. To answer this question, first-generation students were sent a survey that measured their thriving and other demographic variables. The responses to the survey were analyzed to observe if the presence of one or both interventions had a significant impact on any or all of the five variables that comprise thriving.

### Descriptive Statistics

The instrument used to collect data is the *Thriving Quotient*. This instrument was sent to students in mid-January 2017 to early February 2017. The survey was administered to 147 first-generation students in three equal, preselected, and matched groups. All students were enrolled in a private, research university in the South. The groups were matched across three variables: race/ethnicity, Pell-Grant eligibility, and gender. Group 1 (N = 49) consisted of first-generation students who had received an LLP scholarship and had lived in an LLP. Group 2 (N = 49) included first-generation students who lived in an LLP but received neither the first-generation student LLP scholarship nor any other LLP scholarship offered. Group 3 (N = 49) consisted of first-generation students who had neither received any form of LLP scholarship nor lived in an LLP (see Table 1). The survey asked questions related to the five variables of thriving—engaged learning, academic determination, social connectedness, diverse citizenship and positive perspective—as defined by Schreiner (2010). There were a total of 63 responses to this survey (response rate of 43%). Only 46 responses, however, were analyzed after the data screening process and the removal of incomplete responses. The 46 complete responses include 14 from Group 1 (30%), 16 from Group 2 (35%), and 16 from Group 3 (35%). Table 2 presents the breakdown of student responses to the survey.

Table 2

Breakdown of student responses

Group	n	%
1	14	30% 35%
2	16	35%
3	16	35%

The Thriving Quotient included questions relating to the five main variables associated with thriving, as well as questions focused on sense of community, institutional integrity, spirituality, and outcome measures (e.g., whether students intended to reenroll in the institution the following year, if students intended to graduate from the institution). This study focused on the five of the nine variables that were directly associated with the concept of thriving. The engaged learning variable consisted of five questions. Academic determination, social connectedness, and diverse citizenship each had six questions, and positive perspective had two questions.

# Thriving as Observed in the Three Groups

To test if there was a significant difference in thriving among the three groups, a Multivariate Analysis of Variance (MANOVA) was conducted. The independent variable was the group designation of each participant. Table 3 presents a comparison of the mean and standard deviation of the three groups across each of the variables.

Table 3

Descriptive Statistics of Thriving for Three Groups

DV	Group	M	SD	n
Engaged Learning	1	18.14	3.880	14
	2	18.88	2.872	16
	3	19.06	3.2.35	16
	Total	18.72	3.277	46
Acad. Determination	1	27.21	4.660	14
	2	29.75	3.890	16
	3	28.75	4.374	16
	Total	28.63	4.333	46
Social Connectedness	1	23.64	4.749	14
	2	24.00	2.875	16
	3	24.81	3.391	16
	Total	24.17	3.653	46
				Continued

Table 3

Descriptive Statistics of Thriving for Three Groups

DV	Group	M	SD	n
Diverse Citizenship	1	29.07	2.303	14
-	2	29.06	5.234	16
	3	27.94	3.872	16
	Total	28.67	3.995	46
Positive Perspective	1	9.00	2.075	14
-	2	9.19	2.228	16
	3	8.94	1.526	16
	Total	9.04	1.920	46

The MANOVA revealed no significant differences in the means of the three groups on any of the variables. Students in Group 1–scholarship and LLP intervention—had the lowest mean score on engaged learning, academic determination, and social connectedness; they had the second highest mean scores on diverse citizenship and positive perspective. Students in Group 2– LLP but no scholarship intervention—had the second highest scores on engaged learning and social connectedness, and they had the highest mean scores on academic determination, diverse citizenship, and positive perspective. Students in Group 3—no LLP or scholarship intervention—had the lowest mean score on diverse citizenship and positive perspective, but the highest mean score on engaged learning and social connectedness. Although the noted variations in means are slight and not statistically significant, they do provide some insight into the possible influence of the two interventions.

### Observations of Demographic Variables

Further manipulation of the data along the three matching variables revealed how the experiences of thriving may vary for students by gender, ethnicity or race, and SES.

#### Gender

Table 4 below presents data comparing the thriving of female (N=26) and male (N=20) students in the study. Analysis revealed that female participants had a lower mean score for engaged learning and positive perspective than their male counterparts. They did, however, have higher mean scores on academic determination, diverse citizenship, and social connectedness, with the greatest difference in mean score occurring on the social connectedness variable. Overall, however, the variation in mean score was not large enough for any significant conclusions to be made about the differences in experience of thriving based on gender.

Table 4

Descriptive Statistics based on Gender

DV	Gender	M	SD	n
Engaged Learning	Female	18.50	2.929	26
	Male	19.00	3.742	20
	Total	18.72	3.277	46
Acad. Determination	Female	29.04	4.441	26
	Male	28.10	4.241	20
	Total	28.63	4.333	46
Social Connectedness	Female	25.50	3.501	26
	Male	22.45	3.154	20
	Total	24.17	3.653	46
Diverse Citizenship	Female	29.19	3.644	26
_	Male	28.00	4.413	20
	Total	28.67	3.995	46
Positive Perspective	Female	8.85	2.222	26
-	Male	9.30	1.455	20
	Total	9.04	1.920	46

# Ethnicity or Race

The study sample consisted of 21 students who identified as White (45%), 14 who identified as Hispanic (30%), seven who identified as African American or Black (15%),

three who identified as Asian (6%) and one who identified as multiracial (2%). Analysis of descriptive statistics shows that first-generation students who identified as White, regardless of which of the three groups they were assigned to, consistently had the highest score on academic determination, engaged learning, and diverse citizenship. The single multiracial also shows mean scores that were the highest or among the top three on all of the variables. It was removed, however in the data screening process. Table 5 shows a breakdown of the mean scores of the four ethnic groups in the study on the five thriving variables.

Table 5

Descriptive Statistics based on Self-Identified Ethnicity

DV	Gender	M	SD	n
Engaged Learning	African	18.14	3.891	7
	American/Black			
	Asian	16.33	1.528	3
	Hispanic	18.79	3.906	14
	White	19.19	2.874	21
	Total	18.71	3.314	45
Acad. Determination	African	29.86	2.673	7
	American/Black			
	Asian	23.00	6.083	3
	Hispanic	27.86	4.786	14
	White	29.43	3.854	21
	Total	28.58	4.367	45
Social Connectedness	African	23.43	3.155	7
	American/Black			
	Asian	25.67	1.155	3
	Hispanic	25.29	3.384	14
	White	23.67	4.115	21
	Total	24.27	3.639	45

Continued

Table 5

Descriptive Statistics based on Self-Identified Ethnicity

DV	Gender	M	SD	n
Diverse Citizenship	African	27.86	3.716	7
	American/Black			
	Asian	23.00	3.606	3
	Hispanic	28.71	4.598	14
	White	29.86	3.135	21
	Total	28.73	4.019	45
Positive Perspective	African	8.86	2.673	7
•	American/Black			
	Asian	8.00	1.000	3
	Hispanic	9.79	2.045	14
	White	8.71	1.617	21
	Total	9.04	1.920	46

A second MANOVA was conducted to compare the mean scores of white students (N=21) and students of color (N=25) in the sample. Analysis revealed that white students had higher means scores than students of color on engaged learning, academic determination and diverse citizenship. Students of color, however, had higher scores on social connectedness and positive perspective. No significant difference was found in the means of white students and students of color. Table 6 presents the results of this comparison.

Table 6

Descriptive Statistics Comparing White Students and Students of Color

DV	Gender	M	SD	n
Engaged Learning	White	19.19	2.874	21
	Students of Color	18.32	3.591	25
	Total	18.72	3.277	46

Continued

Table 6

Descriptive Statistics Comparing White Students and Students of Color

DV	Gender	M	SD	n
Acad. Determination	White	29.43	3.854	21
	Students	27.96	4.668	25
	of Color			
	Total	28.63	4.333	46
Social Connectedness	White	23.67	4.115	21
	Students	24.60	3.240	25
	of Color			
	Total	24.17	3.653	46
Diverse Citizenship	White	29.86	3.135	21
	Students	27.68	4.413	25
	of Color			
	Total	28.67	3.995	46
Positive Perspective	White	8.71	1.617	21
	Students	9.32	2.135	25
	of Color			
	Total	9.04	1.920	46

### Socioeconomic Status

To examine the role of socioeconomic status on the experiences of first-generation students in this study, Pell Grant eligibility matching variable was used. Of the 46 participants who completed the survey, 30 were Pell Eligible and 16 were not.

Students who were not Pell eligible had slightly higher mean scores than those who were Pell Eligible on all variables excluding social connectedness. Table 7 presented the comparison of the mean scores and standard deviation for participants based on Pell eligibility.

Table 7

Descriptive Statistics based on Pell Grant Eligibility

DV	Pell	M	SD	n
	Eligibility			
Engaged Learning	No	19.19	3.146	16
	Yes	18.47	3.371	30
	Total	18.72	3.277	46
Acad. Determination	No	29.81	3.816	16
	Yes	28.00	4.518	30
	Total	28.63	4.333	46
Social Connectedness	No	22.38	3.243	16
	Yes	25.13	3.540	30
	Total	24.17	3.653	46
Diverse Citizenship	No	29.38	3.384	16
-	Yes	28.30	4.292	30
	Total	28.67	3.995	46
Positive Perspective	No	9.56	1.590	16
-	Yes	8.77	2.046	30
	Total	9.04	1.920	46

The descriptive statistics reveal that there is slight variation between the participants when compared across a number of independent variables. No significant difference, however, was observed in the mean scores of participants across the five thriving variables.

# Residential College

In the study sample, 30 students were members of an LLP, and 16 were not. Of the 30 in an LLP, 11 were members of a residential college, a type of LLP that is faculty-led. No significant difference was found when comparing students in LLPs to students who were not. A MANOVA comparing students in a residential college to those who were not—including students in other LLPs—revealed a significant difference in means on the diverse citizenship variable.

Table 8 below presents the means and standard deviation of students based on residential college participation.

Table 8

Descriptive Statistics based on Residential College Participation

DV	Residential	M	SD	n
	College			
Engaged Learning	No	18.34	3.62	31
	Yes	19.91	3.177	11
	Total	18.72	3.277	46
Acad. Determination	No	28.57	4.368	35
	Yes	28.82	4.423	11
	Total	28.63	4.333	46
Social Connectedness	No	24.43	3.712	35
	Yes	23.36	3.501	11
	Total	24.17	3.653	46
Diverse Citizenship	No	27.77	3.941	35
	Yes	31.55	2.659	11
	Total	28.67	3.995	46
Positive Perspective	No	9.00	1.749	35
-	Yes	9.18	2.483	11
	Total	9.04	1.920	46

Students who were members of a residential college had slightly higher mean scores on engaged learning, academic determination, and positive perspective. Members of a residential college showed significantly higher scores on diverse citizenship. The mean score for residential college members was slightly lower than non-residential college members on social connectedness.

# Analysis of Inferential Statistics

Although some minor variation was observed in the descriptive statistics, further analysis was conducted to observe whether there was a significant difference among the

three groups being studied on thriving. The level of significance used was .05, which means that there would need to be a p-value lower or equal to .05 for differences among the groups to be considered statistically significant. Significance tests of the groups revealed that there was not statistical significance in the differences found among the groups on all five of the thriving variables. Table 9 presents the significance values (p-values) and effect sizes  $(n^2)$  for the three group across the five variables.

Table 9 *Inferential Statistics of Thriving for Three Groups* 

DV	p-value	$n^2$
Engaged Learning	.733	.014
Academic Determination	.282	.057
Social Connectedness	.673	.018
Diverse Citizenship	.699	.019
Positive Perspective	.933	.003

Variations observed across Groups 1, 2, and 3 were not statistically significant because on all variables directly associated to thriving the p-value was greater than .05. Therefore, we fail to reject the null hypothesis which states that there will be no significant difference between the groups on their levels of thriving.

### Residential College

As previously noted, a statistically significant difference was found when students in residential colleges were compared to those who were not. Table 10 below presents the p-values and effect size based on membership in a residential college

Table 10

Inferential Statistics of Thriving based on Membership in Residential College

DV	p-value	$n^2$
Engaged Learning	.169	.042
Academic Determination	.871	.001
Social Connectedness	.405	.016
Diverse Citizenship	.005	.166
Positive Perspective	.788	.002

The p-value for diverse citizenship was .005, which is less than .05. This shows, therefore, that there is a statistically significant difference between students who are members of a residential college and students not in a residential college. This difference is specific to these students openness to different perspectives and willingness to engage with difference, as measured by the diverse citizenship variable.

# Analysis of Qualitative Responses

The final questions in the *Thriving Quotient* asked students to report their current perceived level of thriving based on the following definition provided by the instrument: "Thriving is defined as getting the most out of your college experience, so that you are intellectually, socially, and psychologically engaged and enjoying the college experience" (*Thriving Quotient*, 2016). Students could respond to this question by selecting: not even surviving, barely surviving, surviving, somewhat thriving, thriving most of the time, or consistently thriving. Within the sample, 6 students selected barely surviving (13%), 6 selected surviving (13%), 15 selected somewhat thriving (32.6%), 16 selected thriving most of the time (34.7%) and 3 selected consistently thriving (6.5%).

None of the 46 students selected the 'not even surviving' option. Figure 1 below shows the breakdown of self-reported levels of thriving for the 46 students in the sample.

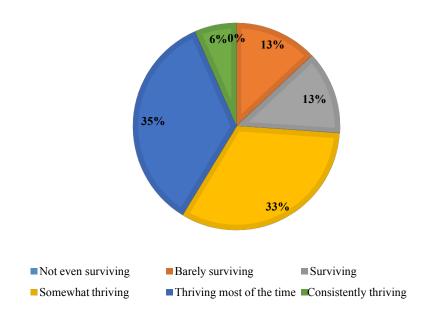


Figure 1. Self-Reported Levels of Thriving

Further examination of students' responses revealed that 3 out of 6 who responded barely surviving were members of an LLP, 5 out of 6 who responded surviving were in an LLP, 11 out of 15 who responded somewhat thriving were in an LLP, 9 out 16 who responded thriving most of the time were in an LLP, and 2 of the 3 who said they were consistently thriving were in an LLP. Figure 2 presents a comparison of the self-reported levels of thriving of students in an LLP and student who are not.

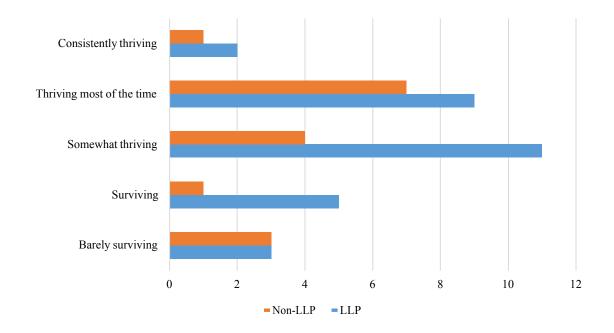


Figure 2. Comparison of Self-Reported Levels of Thriving

# Categorizing Students Reasons for Their Level of Thriving

Because no significant differences were found among the groups, further data analysis was conducted that was outside the scope of the original research question. As this study did not initially intend to include a qualitative component, the process conducted to arrive at the following categories was not as rigorous as is generally required in qualitative research. The final question on the instrument asked for students to explain their reasoning for the level of thriving they had selected in the previous question.

Analysis of students' qualitative responses was conducted to identify possible commonalities that could be categorized. Of the 46 participants, 38 responded to this question.

A basic descriptive coding approach was used to highlight primary topics and issues that students mentioned in their responses. These codes were then grouped and further evaluated for similarities. Analysis of these groups of codes revealed four main categories that student responses fit within. The categories include social connections, academics, personal, finance, and involvement. Students' assessment of their level of thriving was generally related to their experience, both positive and negative, of connections with their peers, family, the campus, and the residence hall. Students also often mentioned academic success or academic struggles in their reasoning for their level of thriving. Many students also noted financial hardship as a factor that had an effect on their thriving, even in cases where they felt they were thriving in all other areas of their lives. Future research should include more rigorous qualitative study that delves deeper into the emerging categories and themes found in this brief analysis of student responses.

#### **CHAPTER FIVE**

#### Discussion

The final chapter offers a summary of the study, discussion of the findings, implications for practice, and suggestions for future research. This study is the first to examine the effect of living-learning program and scholarship interventions on first-generation students' thriving in college. As such, it offers a foundation for further research on the effect of these and other similar interventions on the thriving of first-generation students.

Current literature on first-generation students tends to focus heavily on their precollege characteristics and on their experience in the classroom setting (Lohfink & Paulsen, 2005; Choy, 2001; Engle et al., 2006; Lundberg et al., 2007; Pike & Kuh, 2005). The issue with this limited focus is that it neglects the experience that these students have in the time when they are not within the academic setting. Pike and Kuh (2005), among others, have suggested an on-campus residency intervention for first-generation students (Padgett et al., 2012; Lundberg et al., 2007). No research, however, has been conducted on the experiences of first-generation students who live on campus and are engaged in a living-learning program within the thriving framework.

In recent years, living-learning programs and their effect on students have received significant attention from researchers and administrators (Pike et al., 2008; Brower & Inkelas, 2010; Spanierman et al., 2013; Inkelas et al., 2007). Most of this research has focused on the effects of LLPs on the general student population and some

targeted poulations including women in STEM (Shushok & Sriram, 2010; Sriram & Diaz, 2016). Inkelas et al. (2007) was the first study to examine how LLP engagement affects first-generation students' perception of their academic and social transition into college. The purpose of this study was to observe the impact that incentivized participation in an LLP has on first-generation students' experience of academic, intrapersonal, and interpersonal thriving in college.

# Discussion of the Findings

The guiding research question that this study attempts to address asks to what extent engagement in living-learning programs and receiving a scholarship influences first-generation students' thriving in college. This study hypothesized that, based on current research about LLPs and their benefits for students, first-generation college students who received a scholarship and participated in an LLP would show higher levels of thriving than first-generation students who received neither of the two interventions. A MANOVA, conducted to test for significant differences among the three groups in the study, revealed that there was no statistically significant difference in the level of thriving of students in the three groups. Thus, it is unclear whether the differences seen in the study sample will also be present in the greater first-generation college student population.

There are a number of possible reasons why no significance was found among the three groups. First, the study sample was relatively small. The survey was distributed to 147 first-generation students at a private, research university. Of this 147, only 46 completed the survey, which means that it may not fully represent the range of first-generation students at the institution. Second, this is a cross-sectional study. The survey,

therefore, only captures what these students perceive to be their experience of thriving up to the point of survey completion. As the survey includes students from various academic year classifications, the results present a snapshot of thriving based on their current level of development. It does not demonstrate changes that may occur in their level of thriving overtime as they engage in the LLP.

Third, the living-learning programs that students participated in are all unique to the institution. They all vary in size, purpose, and goals. These variations may influence the experiences that students have in these programs. The fact that no significant difference in thriving was found among the three groups, however, raises a question of whether LLPs offer an environment that promotes increased thriving for first-generation students who may lack academic and cultural capital.

Literature tends to emphasize that LLPs serve as a bridge between the academic and social experiences of students (Spanierman et al., 2013). It also highlights the abundance of resources—professional staff and faculty—and opportunities that are generally more present in a living-learning program community than in a traditional residence hall (Spanierman et al., 2013; Brower & Inkelas, 2010; Pike et al. 2008; Shushok, Henry, Blalock, & Sriram, 2009). Living-learning programs are also credited with encouraging and facilitating increased interaction between students and faculty (Inkelas et al., 2007; Spanierman et al., 2013).

Whether students are able to fully benefit from these vast resources may be limited to the amount of academic and cultural capital they possess. Academic and cultural capital—the experiences and knowledge students have about education inherited from parents—plays a key role in how students understand the purpose and value of a

wide array of educational programs (Winkler & Sriram, 2015). Within existing LLP literature, there seems to be an underlying assumption that students understand or should understand the value of being engaged in the community with their peers and with faculty. First-generation students who have limited cultural capital, however, may not have a shared perception of the LLP experience.

### Pre-college Characteristics

The findings of this study are interesting because they point to a number of important questions that need to be considered and investigated in future research about this student population and the role of living-learning programs. Existing research acknowledges that the pre-college characteristics common among first-generation students can influence their classroom experience, how they choose to become involved on campus, and how much they work off-campus in their time in college (Lundberg et al., 2007; Raque-Bogdan & Lucas, 2016; Engel et al., 2006; Choy, 2001). As only one other study examines first-generation student involvement in LLPs, little was known about the role these pre-college characteristics would have on these students' experiences within the living-learning program setting.

The matching variables used in this study—gender, ethnicity or race, and socioeconomic status—represent three of the most commonly considered pre-college
characteristics that affect first-generation students' college experiences. The findings
revealed that female students, regardless of group, had higher mean scores on academic
determination, social connectedness, and diverse citizenship. Male students had higher
scores on engaged learning and positive perspective. Although no conclusions can be

made about the role of the LLP in this variation, there is a question of whether aspects of the LLP community may better support female students' experiences of thriving.

An examination of ethnicity or race revealed that White students had a higher mean score in engaged learning, academic determination, and diverse citizenship across all three groups. Students of color showed a higher mean score in social connectedness and positive perspective. Although these findings do not point to the overall thriving of the students in the study, they are in line with many of Schreiner et al.'s (2012) findings regarding the difference in thriving for White students and students of other ethnic groups.

Schreiner and colleagues found that for White students, campus involvement and interactions with faulty, among other factors, were contributors to their thriving. With African American or Black students, they found that four factors including student-faculty interaction and spirituality directly influenced these students' experience of thriving. For Asian students, the percentage of female students on campus and living on campus were identified as two factors that directly impacted their thriving. For Latino students, their level of certainty about major and the percentage of female students on campus were two of a number of factors that affected their thriving.

In this study, low socioeconomic status (SES) was observed by identifying whether students were eligible for the Pell Grant. Analysis of the findings revealed that students who we not eligible for the Pell Grant had higher mean scores in engaged learning, academic determination, diverse citizenship, and positive perspective. Students who were Pell-eligible reported a higher mean score in social connectedness. These findings seem to align with much of what is already known about low SES students.

Walpole (2003) found that low SES students at four-year colleges and universities spent more time working, less time studying, were less involved on campus, and had lower GPAs compared to other high SES students.

Because low SES students have less cultural capital than high SES students, their habitus— "perceptions about opportunities and the possible and appropriate responses in any situation"—may also differ from that of high SES students (Walpole, 2003, p. 49). This habitus can change, however, as low SES students learn to make new decisions that could impact their social mobility. One of the main conclusions that Walpole made about how to support low SES college students was to encourage greater interaction with faculty. She explained that "low SES students somehow learn elements of high SES habitus through contact with faculty or student groups" (Walpole, 2003, p. 64). Living-learning programs, which often are more intentional in offering students opportunities to engage with faculty, could be highly effective in helping low SES students to reorient their habitus, but only if faculty actually interact and engage those low SES students. The question then is how well-equipped are staff and faculty within the LLP about the needs of low SES first-generation students to offer guidance to these students in their communities.

## Academic Thriving

Academic thriving is characterized by the variables engaged learning and academic determination. Engaged learning speaks to the level to which students integrate new and old knowledge, and how much they are invested in their learning outside the classroom (Schreiner, 2010). Analysis of findings from this study revealed that Group 3—no LLP and no scholarship—had the highest mean score among the groups. This

relatively small difference in the observed mean scores of the three groups could mean that students in group 3 are more intentionally seeking out learning opportunities than students in groups 1 and 2—who are in LLPs that seek to provide those opportunities.

In terms of academic determination—the effort given to academic activities and ability to pursue personal goals—group 2 reported the highest mean score, which was somewhat higher than the mean score for group 1. This difference is noteworthy because students in both groups are member of LLPs, with group 1 students also receiving a scholarship. It remains unclear what role the presence or absence of the scholarship may play in the variation in mean scores.

## Intrapersonal Thriving

Positive perspective speaks to the way that students view and cope with reality.

Group 1 and 2 had slightly higher mean scores for positive perspective than group 3. One possible reason for this could be that first-generation students in an LLP tend to be surrounded by like-minded peers, who may share a major or an interest in specific themes or topics. Interactions with these peers could have a motivating effect and could help students have a more optimistic point of view when faced with stress because they can find support from their peers.

# Interpersonal Thriving

Interpersonal thriving is identified through the variables social connectedness and diverse citizenship. Social connectedness examines the relationships that students form and the sense of community they experience. A comparison of the mean scores of the three groups, however, did reveal some interesting and somewhat unexpected

information. Group 3, consisting of students who had received neither intervention, had the highest mean score on engaged learning and social connectedness. Although these variations were slight, they present a counter perspective to that of current LLP literature. Spanierman et al. (2013) found that students in an LLP tended to have a higher sense of belonging than their peers.

Tinto (1993), speaking of separation, explains that, "In order to become fully incorporated in the life of the college, [students] have to physically as well as socially dissociate themselves from the communities of the past" (p. 96). From this perspective then, students coming to college and entering the LLP community will need to sever ties with previous communities of support, at least to a small degree. Hurtado and Carter (1997), in their study of Latino students' sense of belonging, found that Latino students who maintained connections to external, familiar communities had a higher sense of belonging. Hurtado and Carter's findings may similarly apply to first-generation students, another marginalized group in higher education. It may offer one reason for why the mean score of first-generation students in Group 3—a mix of sophomores, juniors, and seniors—was higher for social connectedness than the mean score for Groups 1 and 2. For those who live off-campus, they are likely more able to maintain connections with communities of support that they had prior to starting college. They may also have found or formed new supportive communities not bound to the residence hall in the years they have been in college

Diverse citizenship looks at the openness of students, their ability to appreciate difference, and their desire to interact with difference (Schreiner, 2010). Groups 1 and 2 both had higher mean scores than group 3. Although these differences were not

statistically significant, they could possibly be attributed to the fact that within the LLP, first-generation students are interacting with students from backgrounds that differ from their own. As such, they are also being exposed to a variety of perspectives as well. Many LLPs may also seek to, through programming, engage students in conversation and activities associated with diversity or cultural education to which students in group 3 may not be as readily exposed.

The study also found that there was a statistically significant difference in the scores for diverse citizenship between students in residential colleges and those who were not. This difference could be related to the unique purpose, goals, and practices of a residential college. This finding warrants further investigation to gain a better grasp of what factors within the residential college may be contributing to this difference.

# Effect of Community Type

There is also a possibility that the differences between in LLP communities and traditional residence halls may not be enough to make a difference in first-generation students' thriving. Many of the resources present in the LLP, especially at the study institution, may also be present in traditional halls. All residence halls at the study institution, regardless of if they contain an LLP or not, follow a similar approach to residential programming for students outlined by the housing department. This approach focuses on offering a variety of experiences for students that overlap with the five thriving variables. Although students in a traditional hall may not be exposed to the same kinds of intentional programs as in an LLP, they are still engaging in similar ways within their communities.

Some traditional residence halls at the study institution also have a faculty-inresidence—faculty who live in the residence hall and who seek to engage with students in
the community. Faculty-in-residence (FIR)—in LLP halls and traditional halls alike—are
allotted a limited budget by the housing department that is specifically dedicated to
programming that facilitates intentional student-faculty interaction and academically
enriching experiences for students. Many of these traditional halls that had a faculty in
residence are also significantly smaller than some of the larger LLP halls, meaning that
there is smaller student to FIR ratio. These students may have more opportunities to
interact with the FIR than students in a larger LLP hall. First-generation students
invested in residential colleges, however, may experience a greater difference in thriving
compared to their peers in traditional halls.

Residential colleges are faculty-led communities that generally have clearly defined purposes, goals, and outcomes for students, and that are highly academically focused. They also seek to offer students a tight-knit community that supports both students' personal and academic development. These communities also tend to require that students live in the community for longer than one year. This extended live-on requirement means that these students are exposed to the benefits of engagement in the community for longer than students who may be in other types of LLPs with no such requirement. This live-on requirement may also mean that residential college communities may have a mix of students from all year classifications, adding to the diversity of perspectives in the community. This could be especially true for other types of LLPs at the study institution that generally consist mainly of first-year students and a small cohort of sophomores, juniors and seniors. First-generation students in residential

colleges may benefit from interacting with, being mentored by, and being challenged by these older students.

The fact that these communities are faculty-led also has a significant impact on these communities. This faculty member is in many cases responsible for directing the vision and purposed of the community, and ensuring that the residential college is offering meaningful academic experiences for students in the community. They generally have less restricted budgets than faculty-in-residence in other LLPs, and are therefore more able to offer meaningful social and academic programming to a greater number of students. As this faculty member has a more prominent position in the community, more students in the community may know who they are and their role in the community. This may increase students' level of comfort interacting with the faculty member. This could be especially important for first-generation students who generally do not report having positive interactions with faculty (Pike & Kuh, 2005; Lundberg et al., 2007; Terenzini et al, 1996; Padgett et al., 2012).

## *Implications for Practice*

At the private, research university where this study was conducted, first-generation students were encouraged to choose to engage in an LLP and a limited number of them received a scholarship for doing so. The findings of this study point to a number of questions that should be considered critically in future decision-making. The first question is whether this institution should continue to incentivize LLP participation for first-generation students. This study provides limited evidence that LLP participation does not have a meaningful, positive impact on first-generation students. Based on the findings of this study, being in an LLP does not definitively result in higher levels of

academic, intrapersonal, or interpersonal thriving. The combination of pre-college characteristics that students enter the community with could have an effect on their thriving. It could also be the result of assumptions and practices within the LLP that do not effectively support these students.

If LLPs are not functioning in the best interest of these students, are there changes that needed to be considered and made going forward to increase their effectiveness? Is there a need to stop looking at the LLPs as universal in their purpose and goals? Is there a specific type of LLP—residential college, major-specific, theme-based—that may have a greater influence on first-generation students and their thriving in college? Further research should investigate the impact of residential colleges, specifically, on first-generation student involvement, including their interpersonal thriving and diverse citizenship. The only statistically significant finding in this study showed that there was a significant difference between students in residential colleges and those not in a residential college (whether or not they were in another LLP) on diverse citizenship. The sample size was small, but the results certainly warrant more research in this particular area.

If institutions do choose to continue to incentivize LLP participation for first-generation students, they will need to make improvements to ensure that the experience is meaningful for students. Offering specific training for staff and faculty working within the LLP about the needs of first-generation students could help them to create intentional spaces or programs in the community that are beneficial to this population of students. LLPs could also create spaces for first-generation students to engage with each other in the community. They could also send extra communications to first-generation students

and their families about the purpose of the community and what it means to be a member of the community.

It may also be helpful for institutions to host a reception for first-generation students and their parents where they can learn more about resources available to students on campus. They can also have an opportunity to learn more about what it means for first-generation students to be a part of the LLP. This event would serve as informational, and it could also encourage continued connection and engagement with some of the familiar communities that Hurtado and Carter (1997) found were beneficial for the sense of belonging of students in their study.

Being intentional about addressing the needs of first-generation students, as well as other students, may be difficult and may require further expenditure of already limited resources. The question then is whether it would be more profitable for the institution to create an LLP that is specifically for first-generation students? There a number of pros and cons that institutions would need to consider in responding to this question. These communities can offer more targeted support through staff and faculty who understand the needs of this unique population. Interactions with faculty in this community especially could help to mitigate the pressures that students feel regarding interacting with faculty. These intentional faculty interactions could also support low SES students by helping them to gain capital (Walpole, 2003).

Being in community with peers who are from similar backgrounds could possibly increase interpersonal and intrapersonal thriving. It could offer the sense of community that they need that could serve as motivation for increased thriving. Academic support opportunities could be offered within the LLP that both assist students with their

assignments and offer guidance on how to seek help from their professors or other academic success resources on campus. The LLP could offer more targeted programming in the residence hall that would offer guidance on how to navigate the college experience. These programs could also seek to expose first-generation students to high cultural capital experiences—engaging in service, studying abroad, etc.—that could impact their habitus (Walpole, 2003). These programs could also provide an opportunity for students to learn the importance of engaging difference.

One of the main cons of having a first-generation student specific LLP is that it would, in effect, segregate first-generation students from their peers. This segregation could affect how and whether students choose to engage in the larger campus community outside of the LLP. Walpole (2003) also states that low SES students could "learn the high SES habitus" through engagement with their peers. Bringing all first-generation students together may limit these interactions to mainly their experiences in the classroom. They may also not have as many opportunities to engage with and learn to appreciate difference while in a community of peers who are similar to them. If institutions of higher education are to effectively serve first-generation students in a way that positively affects their thriving in college, they will need to consider what improvements they need to make to ensure that the LLP experience is worthwhile for this growing student population.

#### Recommendations for Future Research

This study laid a foundation upon which future research can continue to build, as institutions of higher education seek to better serve the growing population of first-generation students on their campuses. One recommendation would be to conduct a

longitudinal study, with a larger sample of first-generation students, that assesses their level of thriving at multiple points during their time in the LLP. This could offer greater insight into the effect of engagement over time. This longitudinal study should also examine the role that year classification may have on the experience of thriving. A first-year and a senior first-generation student may perceive thriving in different ways, and therefore may take away different things from their LLP experience. This longitudinal study should also include more rigorous interviews with survey participants to gain a greater depth of understanding of the role of the LLP in their experience of thriving.

Another recommendation would be to expand the range of institutions that are studied. This study focused specifically on a private, research university that allowed first-generation students to opt into any LLP of their choice. Future research could examine how first-generation students experience thriving within the LLP setting at institutions of a variety of sizes and that have different student demographics. As Schreiner et al. (2012) notes, institutional characteristics can influence how students experience thriving in college.

Future research could also seek to compare institutions that have a living-learning program specifically tailored to first-generation students to those that allow first-generation students to participate in any LLP. This new knowledge could inform how administrators design communities to serve their first-generation students. It could also illuminate if either of the two models work better for serving this student population. A final recommendation would be to conduct this study annually at the initial study institution. As the number of first-generation LLP scholarships offered by the institution increases, and as changes are made, new data can be compared to results from previous

years to observe whether there has been an improvement in students' experience of thriving. The increasing diversity of college campuses requires that scholars and administrators continue to seek best practices on how to serve underrepresented student populations on their campuses.

#### Conclusion

The purpose of this study was to examine how a scholarship and living-learning program intervention would influence first-generation student thriving in college. The study compared three groups of first-generation students at a private, research university, who had received both or one or neither of the interventions. Analysis of the results from the *Thriving Quotient* revealed that no statistically significant differences existed in the level of thriving among the three groups of students in the study. This finding is important because it seems to counter the narrative presented by current literature about the benefits that students receive from engaging LLPs. This lack of difference, however, could also signify that all of the different types of communities present at the study institution are doing a good job of promoting student thriving through the variety of experiences and resources they offer for students.

As this was the first study completed to date that has sought to investigate the role that LLPs play in first-generation student thriving in college, it has raised a number of questions about the effectiveness of LLPs for this population of students. If first-generation students are not having meaningful and positive experiences of thriving in the LLP environment, should institutions continue to encourage participation in them?

Institutions now need to consider how well-equipped their LLPs are to meet the unique

needs of first-generation students, who often identify with a number of disadvantaged and intersecting identities.

Living-learning programs offer a number of benefits for students that participate in them, but if students are not able to perceive the value of the resources and opportunities offered, then is it truly serving these students' needs? First-generation students generally come to college with limited cultural capital, and may come into the LLP community not knowing what to expect or how to make the most of their experience. How then can institutions of higher education and LLPs create spaces and intentional interactions that will better support first-generation students throughout their college experience? As the first-generation student population continues to increase on college campuses, continued attention needs to be given to how best to serve this unique and underrepresented population of students.

#### BIBLIOGRAPHY

- Anderson, S., Auquier, A., Hauck, W. W., Oakes, D., Vandaele, W., & Weisberg, H. I. (1980). Statistical methods for comparative studies: techniques for bias reduction. Hoboken, NJ: John Wiley & Sons Inc.
- Astin, A. W. (1993). What matters in college: Four critical years revisited. San Francisco, CA: Jossey-Bass
- Baksh, A., & Hoyt, J.E. (2001). The effect of academic scholarships on college attendance. *College and University*, 76(4), 3-8
- Balemian, K., & Feng, J. (2013). First Generation Students: College Aspirations, Preparedness and Challenges. Presented at College Board AP Annual Conference, Las Vegas, NV
- Blimling, G. S. (2015). Student learning in college residence halls: What works, what doesn't and why. San Francisco: Jossey-Bass
- Brock, T., & Richburg-Hayes, L. (2006). Paying for persistence: Early results of a Louisiana scholarship program for low-income parents attending community college. Retrieved from MDRC Website: <a href="http://www.mdrc.org/publication/paying-persistence">http://www.mdrc.org/publication/paying-persistence</a>
- Brower, A. M., & Inkelas, K. K. (2010). Living-learning: One high impact educational practice. *Liberal Education*, 36-43
- Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin*, 39(7), 3-7.
- Choy, S. (2001). Students Whose Parents did not go to College: Postsecondary Access, Persistence, and Attainment (No. NCES 2001–126), U.S. Department of Education, National Center for Education Statistics, Washington, DC.
- Collier, P. J., & Morgan, D. L. (2008). "Is that paper really due today?": Differences in first-generation and traditional college students' understandings of faculty expectations. Higher Education, 55, 425-446.
- Dennis, J.M., Phinney, J.S., & Chuateco, L.I. (2005). The role of motivation, parental support, and peer support in the academic success of ethnic minority first-generation college students. *Journal of College Student Development*, 46(3), 223-236.

- Dynarski, S. M. (1999). Does aid matter? Measuring the effect of student aid on college attendance and completion. American Economic Review, 93, 279-288.
- Engle, J., Bermeo, A., & O'Brien, C. (2006). Straight from the source: What works for first-generation college students. Retrieved from The Pell Institute Website: <a href="http://www.pellinstitute.org/publications-Straight\_from\_the\_Source.shtml">http://www.pellinstitute.org/publications-Straight\_from\_the\_Source.shtml</a>
- Hurtado, S., & Carter, D.F. (1997). Effect of college transition and perceptions of the campus racial climate on Latino college students' sense of belonging. *Sociology of Education*, 70(4), 324-345.
- Inkelas, K.K., Daver, Z. E., Vogt, K.E., Leonard, J.B. (2007). Living-learning programs and first-generations college students' academic and social transition. *Research in Higher Education*, 8(4), 403-434.
- Kuh, G. D., Kinzie, J., Schuh, J. H., Whitt, E. J., & Associates. (2005). *Student success in college: Creating conditions that matter*. San Francisco: Jossey-Bass
- Lohfink, M.M, & Paulsen, M.B. (2005). Comparing the determinants of persistence for first-generation and continuing-generation students. *Journal of College Student Development*, 46(4), 409-428.
- Lundberg, C. A., Schreiner, L. A., Hovaguimian, K. D., & Miller, S. S. (2007). First-generation status and student race/ ethnicity as distinct predictors of student involvement and learning. *NASPA Journal*, *44*, 57-83.
- National Center for Education Statistics, U.S. Department of Education. (2010). Profile of Undergraduate Students 2007-2008. (NCES 2010-205). Retrieved at <a href="http://nces.ed.gov/pubs2010/2010205.pdf">http://nces.ed.gov/pubs2010/2010205.pdf</a>
- National Center for Education Statistics, U.S. Department of Education. (2016). The condition of education. (NCES 2016-144). Retrieved at <a href="http://nces.ed.gov/pubs2016/2016144.pdf">http://nces.ed.gov/pubs2016/2016144.pdf</a>
- Opidee, I. (2015). Supporting first-gen college students. University Business. Retrieved from <a href="https://www.universitybusiness.com/article/supporting-first-gen-college-students">https://www.universitybusiness.com/article/supporting-first-gen-college-students</a>.
- Padgett, R.D., Johnson, M.P., & Pascarella, E.T. (2012). First-generation undergraduate students and the impact of the first year of college: Additional evidence. Journal of College Student Development, 53 (2), 243-266.
- Pascarella, E. T., Pierson, C. T., Wolniak, G. C., and Terenzini, P. T. (2004). First-generation college students: Additional evidence on college experiences and outcomes [Electronic version]. *The Journal of Higher Education* 75: 249–284.

- Pascarella, E. T., & Terenzini, P. T. (2005). How college affects students. Vol. 2: A third decade of research. San Francisco: Jossey-Bass.
- Pascarella, E. T., & Terenzini, P. T. (1991). How college affects students: Findings and insights from twenty years of research. San Francisco: Jossey-Bass.
- Pike, G. R., & Kuh, G. D. (2005). First- and second-generation college students: A comparison of their engagement and intellectual development. *Journal of Higher Education*, 76(3), 276-300.
- Pike, G. R., Kuh, G., & McCormick, A. (2008). *Learning community participation and educational outcomes: Direct, indirect and contingent relationships.* Paper presented at the 2008 Association for the Study of Higher Education Conference in Jacksonville, FL.
- Raque-Bogdan, T, L., & Lucas, M. S. (2016). Career aspirations and the first generation student: Unraveling the layers with social cognitive career theory. *Journal of College Student Development*, 57(3), 248-262
- Reason, R. D. (2009). An examination of persistence research through the lens of a comprehensive conceptual framework. *Journal of College Student Development*, 50(6), 659-682.
- Rosenbaum, P. R., & Rubin, D. R. (1985). Constructing a control group using multivariate matched sampling methods that incorporate the propensity score. *The American Statistician*, 39(1), 33-38
- Schreiner, L. A., McIntosh, E. J., Nelson, D., & Pothoven, S. (2009). *The thriving quotient: Advancing the assessment of student success*. Paper presented at the Association for the Study of Higher Education, Vancouver, BC.
- Schreiner, L. A. (2010). *The "thriving quotient": A new vision of student success*. About Campus, 15: 2–10.
- Schreiner, L. A. (2010). *Thriving in the classroom*. About Campus, 15: 2–10.
- Schreiner, L. A. (2010). *Thriving in the community*. About Campus, 15: 2–11.
- Schreiner, L.A., Kammer, R., Primrose, B., & Quick, D. (2012). *Predictors of thriving in students of color: Differential pathways to college success*. Paper presented at the Association for the Study of Higher Education, Charlotte, NC.
- Schreiner, L. A., Vetter, D., Kammer, R., Primrose, B., & Quick, D. (2011). *Pathways to thriving for students of color*. Presentation at NASPA, Philadelphia, PA.

- Schudde, L. T. (2011). The causal effect of campus residency on college student retention. *The Review of Higher Education*, 34(4), 581-610
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). Experimental and quasi-experimental design for generalized casual inference. Boston: Houghton Mifflin Company
- Smith, N. (2012). First generation college students. Presented at The Council of Independent Colleges Walmart Symposium (2014).
- Seidman, A. (2005). Minority student retention: Resources for practitioners. *New Directions for Institutional Research*, 125, 7-24.
- Shushok Jr., F., Douglas, V. H., & Blalock, G., & Sriram, R. R. (2009). Learning at any time: supporting student learning wherever it happens. About Campus, 14(1), 10-15.
- Shushok Jr., F., & Sriram, R. R. (2010). Exploring the effect of a residential academic affairs-student affairs partnership: The first year of an engineering and computer science living-learning center. *Journal of College & University Student Housing*, 36(2), 61-81
- Spanierman, L. B., Soble, J. R., Mayfield, J. B., Neville, H. A., Aber, M, Khuri, L., De La Rosa, B. (2013). Living learning communities and students' sense of community and belonging. *Journal of Student Affairs Research and Practice*, 50(3), 308-325
- Sorcinelli, M. D. (1991). Research findings on the Seven Principles. In A. W. Chickering & Z. Gamson (Eds.), *Applying the Seven Principles for Good Practice in Undergradu*ate Education, pp. 13-25). San Francisco, CA: Jossey-Bass.
- Sriram, R., & Diaz, C. (2016). STEM as "minority": A phenomenological cast study of how students of color perceive their experience in a STEM living-learning program. *Journal of Learning Spaces*, 5(1), 9-18.
- Stephens, N. M., Fryberg, S. A., Markus, H. R., Johnson, C., & Covarrubias, R. (2012). Un- seen disadvantage: How American universities' focus on independence undermines the academic performance of first-generation college students. *Journal of Personality and Social Psychology*, 102(6), 1178–1197.
- Terenzini, P. T., Pascarella, E. T., & Blimling, G. S. (1996). Students' out of classroom experiences and their influence on learning and cognitive development: A literature review. *Journal of College Student Development*, *37*(2), 149-162.

- Terenzini, P. T., Springer, L., Yaeger, P. M., Pascarella, E. T., & Nora, A. (1996). First-generation college students: Characteristics, experiences, and cognitive development. *Research in Higher Education*, *37*(1), 1-22.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*. (2nd ed.). Chicago: University of Chicago Press.
- Walpole, M. (2003). Socioeconomic status and college: How SES affects college experiences and outcomes. *The Review of Higher Education*, 27(1), 45-73.
- Wentzel, J. N., O'Toole, D., & Peterson, S. (1999). Factors affecting student retention probabilities: A case study. *Journal of Economics and Finance*, 23(1), 45-55.
- Winkler, C., & Sriram, R. (2015). Development of a scale to measure academic capital in high-risk college students. *The Review of Higher Education*, 38(4), 565-587