College Expectation and Matriculation: High School Students Journey to Postsecondary

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COLLEGE EXPECTATION AND MATRICULATION: HIGH SCHOOL STUDENTS JOURNEY TO POSTSECONDARY

A Dissertation

Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College in partial fulfillment of the requirements for the degree of Doctor of Philosophy

in

School of Education

by

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This dissertation is dedicated to my pastor, John and my family. I appreciate the love and support you have given me.
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“With God all things are possible.”
-Matthew 19:26

I would like to give God and Jesus Christ all of the glory for helping reach this milestone. If it was not for His knowledge, wisdom, understanding, and strength, this dissertation would have not been possible. I would like to thank my C.O.P family, who has been with me with at the beginning of this journey. I truly appreciate the encouragement, prayers, and unconditional love, which has led me to this achievement. I would like to extend my deepest appreciation to my advisor, Dr. Eugene Kennedy for his guidance, wisdom, and support through this process. He encouraged me to finish this program strong. I would like to also thank Dr. Roland Mitchell and Dr. Keena Arbuthnot for your guidance, expertise, kindness, and wisdom you have given me.

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ABSTRACT

Racial group membership and social-economic status (SES) among academically talented students are recognized as powerful predictors of matriculation and college expectations. Moving or transitioning from high school to postsecondary is an essential pathway for success in life. Previous research suggests that college enrollment is correlated to resource opportunities available to students that they can access through their relationship with their parents, peers, school staff, teachers, and others.

These relationships are vital in increasing college matriculation by providing academic assistance, emotional support, psychological encouragement, relevant information, and guidance to students in the complex college application process.

College preparatory or outreach programs in high school offer vital social strategies and academic skills that facilitate the initial and transition adjustments students need for college. This study investigates the impact of a college preparatory, outreach program (FLY Tour) on the matriculation of academically talented low SES and underrepresented youth.

Various statistical techniques were used to examine the significant relationships between matriculation, high school academics, and demographic variables with high school senior participation in the FLY Tour. The statistical techniques used included basic descriptive statistics and logistical regression analysis for research questions I, II, and III. The quantitative analysis revealed different results for FLY Tour participants and non-FLY Tour participants in the 2017-2018 cohort. Positive changes in the results occurred once gender, race/ethnicity, and social economic status (SES) were added to the logistical regression model 3. Overall, in the
quantitative analysis, the FLY Tour participants outperformed the non-participants in matriculation.

Research question IV was qualitatively analyzed by using grounded theory methodology. In using grounded theory methodology, the student responses caused various themes to emerge. From the student survey responses, the FLY Tour participants expressed positive benefits of participating in the outreach program, which yielded a positive outcome in matriculation. The quantitative and qualitative results prove that the FLY Tour program impacted student’s matriculation prediction.
CHAPTER ONE. INTRODUCTION

Education attainment is often considered a great equalizer in the United States (US) (Bates & Anderson, 2014). Moving or transitioning from secondary to postsecondary is an essential pathway for success in life, with many economic returns (Baum, Ma, & Payea, 2013; Goldin & Katz, 2008). A student who possesses a bachelor’s degree can make up to $800,000 more in lifetime income than students with only a high school diploma, even after higher education loans are subtracted (Page & Scott-Clayton, 2016). In 2015, the medium earnings that bachelor degree students received without an advanced degree and working full time was $25,600, which is 67% higher than that of high school graduates at the time (Ma, Pender, & Welch, 2016, p. 3). These are pronounced returns, particularly if financial aid is factored in (Dale & Krueger, 2014; Long, 2010). According to the traditional human capital model, these results suggest that, due to the significant earnings relative to the net costs of college, students should choose higher education over alternative postsecondary options, including direct entry into the workforce (Castleman, Owen, & Page, 2016).

However, despite the recognized benefits of postsecondary education, many academically capable high school students do not matriculate or persist to college, resulting in a troublesome loss of talent (Hudley, Moschetti, Gonzalez, Cho, Barry, & Kelly, 2009). Among these academically talented students, socioeconomic status (SES) and racial group membership have proven to be powerful predictors of college expectations and matriculation (Hudley et al., 2009). Low-income students’ enrollment rates, for example, continuously lag behind their wealthier counterparts (Adams, 2009; Castleman & Page, 2014a).
The incessant and widening matriculation gaps between low-income and minority youth and their White or more advantaged peers have been linked to academic preparations, student characteristics, and access to financial aid resources (Castleman & Page, 2014a). College choice research addresses students’ decisions about where to enroll. Alternatively, research on college retention targets college experiences of students upon matriculating from a particular postsecondary institution. However, there is a need for more research on the initiation of matriculation from high school to college (Castleman & Page, 2014b).

**Challenges to Postsecondary Matriculation**

In the US, college enrollment has experienced a consistent decline in recent years (Agger, Meece, & Byun, 2018). One of the reasons for this, as noted above, is that many capable students chose not to matriculate to a postsecondary institution (Martin, Spenner, & Mustillo, 2017). Matriculation is a significant milestone that requires students to adjust to new academic challenges, increase their level of independence, adapt to separation from family and friends, and honor the new role expected of them (Kreig, 2013). To effectively navigate these hurdles, successful students access resources through their relationship with their parents, peers, school staff, teachers, and others. These relationships can increase college matriculation by providing academic assistance, emotional support, psychological encouragement, guidance, and relevant information in navigating the college application process (Riegle-Crumb, 2010). The challenge for many low-income and minority youth is that they may not have access to these support systems and resources, thus resulting in significant challenges to postsecondary matriculation.
Challenges Associated with Academic Preparation

Low-income and minority youth are more likely than others to attend schools designated as failing or academically inadequate (Parks, 2019). In many of these settings, students may not be on grade level with respect to basic skills and may require significant remediation (Castleman & Page, 2014a). These issues coupled with the fact that in many high poverty, predominantly minority schools, teacher recruitment, and retention is often a challenge. Challenges as such means that college preparatory curriculum may be unavailable or have limited capability for serving students (Massey, Charles, Lundy, Fischer, 2003). The result with regard to postsecondary matriculation is that many low-income and minority students may be at a disadvantage due to poor grades and, in particular, poor performance on standardized tests (Martin, Spenner, & Mustillo, 2017; Plucker, Burroughs, & Songs, 2010).

Challenges Associated with Social Psychological Variables

In addition to academic preparation, many low-income and minority youth may lack the social networks and supports that help formulation of attitudes and dispositions that correlate with postsecondary matriculation. These youth, for example, are far less likely than others to have family members that have graduated from a postsecondary institution or to have peers committed to enrolling in college post high school. Low-income and minority youth are much more likely to be exposed to peers who are high school dropouts or hold negative views about the likelihood of academic success beyond high school. As a result, many of these students may lack the confidence to initiate and persist in activities that lead to matriculation (Constantine, Kindaichi, & Milville, 2007).
Challenges Associated with Counseling and Guidance

In the absence of family members who can assist with navigating the postsecondary landscape, school counselors are invaluable. Students’ high school career is a critical time during the junior and senior year to create their college portfolio. Student’s grades, course performance, and extracurricular activities influence the selectively and type of college they plan to attend (Sutton, Muller, & Langenkamp, 2013). High school counselors role consist of shaping students' high school careers and assisting them in preparing for college enrollment upon high school graduation. High school counselor responsibilities include assisting students in identifying their strengths and inner resources to achieve their goals (Paolini, 2015).

According to the American School Counselor Association (ASCA, 2012), school counselors are encouraged to realize that every student has unique abilities, goals, and interests that can to lead them to future opportunities. They are also required to understand the national, state, and local proficiencies and programs that can potentially initiate college and career readiness opportunities. These opportunities play a crucial role in engaging students in career and academic planning (Paolini, 2015). Therefore, the school counselors’ purpose is to provide students and their families with college knowledge about admissions and the complicated application process (ASCA, 2012; McKillip, Rawls, & Barry, 2012).

Access to school counselors is limited in schools with a large amount of low-income and minority youth. Further, counselors are less likely to recommend college preparatory tracks and courses for these students.
Challenges Associated with Financial Need

In addition to the barriers noted above, it is known that financial need, which is prevalent among low-income and minority youth. Financial need is a significant obstacle to postsecondary matriculation for these students. Because of this, a variety of state, federal, and institutional programs exist to assist students with a financial need (Carruthers & Fox, 2016). Research suggests that financial aid is a predictor that can increase college enrollment (Deming & Dynarski, 2010). However, the complex eligibility criteria can deter students from benefiting from these programs (Dynarski, Scott-Clayton, & Wiederspan, 2013). This is exacerbated by the fact that low-income and minority youth often lack assistance and guidance in completing the complicated application process for registration and financial aid (Bill & Melinda Gates Foundation, 2015).

Approximately half of the students with lower SES backgrounds do not complete college applications for academically rigorous institutions. Although, these students would have a higher probability of being admitted based on their credentials (Hoxby & Avery, 2013; Smith, Pender, & Howell, 2013). Students with low SES (Black and Hispanic) often lack access to adequate college counseling and social networks that offer valuable information to navigate the complex financial aid process and college admissions (Bryan, Moore-Thomas, Day-Vines, & Holcomb-McCoy, 2011).

Academically inclined students admitted into college might fail to matriculate successfully due to various reasons. Some of these academically inclined students might be unaware of the vital stages in the application/enrollment process or the complex financial aid process may hinder them. For example, the United States Department of Education (USDoE) ask a significant number of students to verify their income and assets. The students provide this
information on the Free Application for Federal Student Aid (FAFSA). Students with a lower-income family background may be challenged the most and at higher rates than average by the verification process when flagged for verification issues (Castleman & Page, 2014a).

Completing the complex financial aid and college admissions process is a must for students to matriculate to college (Bryan, Moore-Thomas, Day-Vines, & Holcomb-McCoy, 2011). Educators and policymakers have explored many reasons for differences in college matriculation rates among student groups. A primary focus of this research has been on college affordability. To address this concern, the federal and state governments and postsecondary institutions have offered subsidized loans and need-based grants to assist students for many decades.

Another approach used to address college matriculation gaps for disadvantaged students is to have these students participate in college preparatory events such as Upward Bound and GEAR UP (Castleman & Page, 2014a). Financial literacy events such as The Financial for You Literacy (FLY) Tour can help students understand the college access networks by attending the event on a college campus. The FLY Tour is a theatrical presentation that provides college access information and resources to students. The FLY Tour is hosted on college campuses yearly in September and February. The purpose of the FLY Tour is to increase financial aid awareness, academic performance, and participation in college preparatory events (2018-19 LOSFA OSSC Manual, 2018).

**Statement of the Problem**

A significant challenge that postsecondary institutions encounter is their capability of recruiting new students to increase enrollment rates. Due to the constant changes in technology
and the economy, administrators of enrollment and recruitment must devote adequate resources of money and time to enrollment management. In today’s competitive market, recruitment and admissions in the higher education industry play a significant part in students’ decision to attend college (Ruffalo Noel-Levitz, 2017). Higher education institutions with acute budget-cutting and endowments have increasingly higher risks of contacting most students to attend their campuses and “seal the deal” in a cost-effective and proficient manner (Secore, 2018).

Some of the most significant responsibilities of higher education marketers are effective communication with potential students and advertising the opportunities to attend a specific institution (Johnston, 2010). Higher education marketers sometimes have to change their communication strategies with future students, which targets the particular factors that influence a student’s decision on the type of college they attend. These strategies can range from social media platforms to printed materials and websites, to relevant conversations with family and friends, current and former students, and campus visitations and text messages from the recruiters and admissions staff (Hesel, 2004; Johnston, 2010; Ruffalo Noel-Levitz, 2017; Smith, 2005). According to research, as students visit college campuses, the yield frequently increases, and these students are more than likely to attend college. For instance, in 2013, Dartmouth University hosted an overnight campus experience event for 1,300 accepted students. After this event, Dartmouth saw a 52% increase for the class of 2018, which caused the only Ivy League college to experience growth that year (Baskin, 2015).

From a student perspective, college choice is a diverse endeavor occupied with thoughts, emotions, and conjectures from family members, friends, and outsiders such as teachers, counselors, and web sources (Hoover, 2010; Johnston, 2010; Smith, 2005). Therefore, students, parents, and recruiters carefully examine each component in the decision process, ranking the
essential elements of choosing a college over preference (Secore, 2018). Despite the significant roles that the internet and social media play, people must conduct themselves in the physical world (Fleming & Grace, 2015). College choice factors influence the decision process of the “high-touch” experiences like campus tours. These factors are known to carry more weight than their “high-tech” counterparts of virtual realities and interactive multimedia, social media platforms, and web-based forums. According to research, campus visit activities such as a tour, an open hour, a fly-in, an overnight stay, or other student-orientation events, are overwhelmingly one of the most influential sources of information that helps students decide on their college choice (Brown, 2010; Hesel, 2004; Okerson, 2016).

**Research Purpose**

The purpose of this study is two-fold. The first purpose was to examine if the Financial Literacy for You (FLY) program contributed to students matriculating to college as a college/outreach preparatory event that stimulated students’ motivation and encouragement. The second purpose is to examine if the FLY Tour had an impact on students, accounting for demographics, ACT scores, academics, financial aid eligibility, and college preparatory events.

**Research Questions**

Hence the research questions posed in this study are created to understand students matriculating to college after high school, learn about the college enrollment strategies used to encounter problems, and barriers while making a successful transition to college. This mixed-method study is guided by these research questions:

- Q1. Does the FLY Tour contribute to college matriculation rates among high school students?
• Q2. Is there a relationship between FLY Tour participation and college matriculation once academic variables (i.e., ACT and high school GPA) are considered?

• Q3. Does the relationship between FLY Tour participation and college matriculation vary by demographic characteristics (i.e., gender, race/ethnicity, SES) of students?

• Q4. How are FLY Tour experiences of students related to college matriculation decisions?

Definition of Terms for This Study

For this study, specific terms used herein were selected and defined. Definitions are as follows.

*Attainment.* This refers to achieving an educational goal such as a certificate or degree.

*College Choice.* This study refers to college choice as a ranking of college preference that students choose at the time of completing the federal aid application.

*Free Application for Federal Student Aid (FAFSA).* An application for federal aid, FAFSA, is used to participate in any federal funding programs.

*High School GPA.* This refers to the grade point average derived from course grades.

*Matriculation.* A student must apply for admission, be accepted, and declare a major to be considered as matriculated. This term will be used interchangeably with college enrollment.

*Pell Grant.* A federal grant used for financial aid funding that does not need to be repaid and is need-base.

*Persistence.* The act of continuing towards an educational goal (e.g., going to college)
CHAPTER TWO. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

Theoretical Framework

According to James Coleman (1998), social capital theory helps explain the schools’ roles (counselors, teachers, administrators) in preparing students for college matriculation. Social capital theory focuses on resources available to students within a social structure (Bourdieu, 1986; Coleman, 1988). Social capital is productive when making specific results and actions possible inside the social structure. According to Coleman (1988), “social capital inheres in the structure of relations between actors and among actors” (p. S98). Within educational research, the concept of this theory is pervasive. This pervasive concept defines what set of resources influences students’ decisions on education attainment (Bowman, Kim, Ingleby, Ford, & Sibaouih, 2018).

There are two types of social capital that are identified by Coleman: social capital within and outside the family. In the past, social capital indicated that high levels of parent and child interactions cause the parent to be more aware and involved with the student at home. Parent and child interaction can lead to educational success and high academic achievement. Moreover, social capital within and outside the family can predict students’ educational attainment and academic achievement (Sandefur, Meier, & Campbell, 2006). Parental expectations and adolescent conversations associated with pre-collegiate activities are strongly related to matriculation or college enrollment (Plank & Joran, 2001; Sandefur et al., 2006). Social capital outside of the family is relevant to the parents’ social relationships and other community adults. These relationships represent the cultural norms and the value system that can assist in the process of human capital (Coleman, 1988; Kao & Rutherford, 2007).
Coleman suggests that effective social relationships in the school lead to the investment of resources and time. Investment in resources and time leads to creating a higher level of human capital in students (Wehde-Roddiger et al., 2012). Although social relationships may be strong, weak, or absent between the student and the school staff, this provides the foundation of sharing such institutional knowledge, assistance, and norms that students need (Bryan, Farmer-Hinton, Rawls, & Woods, 2017). As social capital theory is applied in this research study, I believe that high school students who graduated are mentally and academically prepared for college and navigating the admissions and financial aid application complex process.

Research has revealed how college enrollment is related to the opportunities or assistance students have access to from their relationships with others. Some of these relationships are formed with their parents, peers, school staff, and teachers (Riegle-Crumb, 2010). In many ways, relationships can have the potential to increase college enrollment or matriculation by providing academic assistance, motivation, emotional support, and knowledgeable information and advice in pre-collegiate activities (Riegle-Crumb, 2010; Morgan, Zakhem, & Cooper, 2018; Sutton, Muller, & Langenkamp, 2013; Hudley et al., 2009). Relationships with parents, friends, school counselors, and teachers serve as the foundation of social capital that can open influential factors of increasing a students’ chance of matriculating to college and beyond (Riegle-Crumb, 2010).

High school experiences that influence the student’s readiness and orientation towards college are the foundation of Attinasi’s (1989) two-stage process of matriculating to college. Attinasi’s model categorizes high school attitudes, behaviors, and experiences as the process of “getting ready.” The encouragement and assistance provided by peers, parents, and teacher are part of the “initial expectation engendering.” Initial expectation engendering is a group of pre-collegiate activities and experiences that occur in the “getting ready” stage of matriculation. For
example, early college advice from significant relationships signal that youth are expected to matriculate to college. This input then engenders the student’s general expectation, “I will be a college student” (Hudley et al., 2009, p. 444).

The second stage of this model, “getting in,” describes the attributes and experiences students encounter immediately after matriculation. This includes strategies to utilize connections with peers and faculty to achieve their academic goals while in college. According to the model, students adjust themselves to the “get in” stage by familiarizing themselves with the college social and academic geography. In evaluating student social integration and effective study strategies at the postsecondary level, the “getting in” strategies are aligned with Attinasi’s model. During this stage, the positive self-beliefs cause students to reflect on their ability and confidence to “get in.” Attinasi’s two-stage model is a robust developmental framework focusing on high school students’ transitioning to the beginning phase of matriculation (Hudley et al., 2009).

**Literature Review**

The literature review in this research study will evaluate currently available empirical research relevant to the impact of college preparation and early college initiatives/programs. This research study will look closely at how college preparation and these programs affect matriculation and college enrollment. Specifically, this literature review provides information on peer-reviewed, scholarly studies. These scholarly studies in this research study will analyze the high school student characteristics that participated in college preparatory initiatives to help their transition to postsecondary subsequently.
Three main gaps will be addressed in this literature review. These gaps exist in current literature that provides a deeper understanding of matriculation and college enrollment: 1) early college preparation initiatives/programs, 2) college choice, and 3) transition phase. These gaps will focus on academics, financial literacy, admissions, and various college preparation programs. In connecting the gap between high school and postsecondary, researchers shed light on executing and assisting high school students with barriers and problems in the transition to college through a plethora of college preparation initiatives, planning, and programs.

Given the current growth of matriculation and college enrollment, evidence suggests school networks convey information and expectations about students going to college are more important in sending their graduating students to college. For instance, there are cohort programs such as the Posse Foundation and QuestBridge that assist and connect “broken” students (low-income) with top-ranked college partners. These college partners provide student support services through social support, academic guidance, and generous financial aid packages to students who are admitted (Agu, 2019). Research on selective college preparatory schools indicate that the “college prep” or “college-going culture” schools consists of providing rigorous and advanced and courses, personalized guidance on college planning, and resources and opportunities strategically place within the school’s budget (Bryan, Farmer-Hinton, Rawls, & Woods, 2018). Overall, more studies acknowledge the impact of early college programs has on students who matriculate after graduating from high school.

With the relevant studies in this research study, the research question must be considered by putting the scholarly literature in order from college preparation to transitioning to college. Indicating the impactful change that has occurred since the No Child Left Behind Act 2001 (2002) plays a significant role in addressing America’s education and society’s achievement gap.
This order of events will help solidify the connection of academic preparation and college preparation initiative programs. These programs are the key to transformation change that can ensure that all high school students have an equal chance to access the opportunities available to them.

**Overview of the FLY Tour**

The Financial Literacy for You (FLY Tour) is a theatrical presentation that provides college access information and resources to students. The purpose of the FLY Tour is to increase financial aid awareness, academic performance, and participation in college preparatory events. At the FLY Tour, students learn about college preparation, academic performance, financial aid for college, money management, on-campus support services, the ACT, and career fields.


**History/Background of Matriculation and College Enrollment**

The “achievement gap” has plagued the American education and society for decades (Zhao, 2016). The vast gap in academic achievement has existed along racial, ethnic, language, gender, and poverty lines. On an average, underrepresented groups from low-income families have performed worse on all the academic success indicators such as standardized test scores, high school graduation rates, and college matriculation rates (Plucker, Burroughs, & Songs, 2010; Plucker, Hardesty, & Burroughs, 2013; Reardon, 2011). Public policy and resultant legislation, No Child Left Behind (NCLB Act of 2002), has increased educators’ awareness of how much the problem has grown. There is now a call to action put in place mechanisms to
alleviate the factors that started these issues. Although these gaps have reduced some over time, there are considerable issues that remain to be addressed in closing the opportunity gap (Carter & Welner, 2013). Student performance, characteristics, and intensive coursework are the most potent predictors among pre-college variables related to postsecondary success (Morgan, Zakhem, & Cooper, 2018).

Research on the achievement gap in primary and secondary institutions primarily focuses on student performance on standardized tests. Studies of college students have shifted to a focus to consider students’ GPA or grades. Grades are imperfect measures of cognitive and learning development. These standards are different across universities, departments, and instructors. A focus on GPA is relevant to the debate in considering educational equity and excellence beyond practical issues of data availability (Martin, Spenner, & Mustillo, 2017).

In higher education research, it is vital to conceptualize on student achievement and build on prominent perspectives (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2007). As student achievement interplay with access to resources, the quality of engagement in student achievement interplay with the campus community’s engagement. According to Oates (2009), he distinguished the explanations of racial and ethnic achievement discrepancies that highlight what students “bring to” school for “what happens to” them in classroom settings. In the past, the achievement gap was viewed as attributing to inadequate levels of student success due to behavior attributes towards college. Some of those personal attributes are ability deficits and a lack of self-confidence (Solberg et al., 2007). In resonating with prevalent meritocracy concepts, this perception directed interest to possible educational inequality found in individual students, their families, and neighborhoods.
In contrast, according to recent research, there has been a rising concern on how narrow the focus is on individual characteristics (Valencia, 2010). The individual explain the group differences to emphasize negative stereotypes and redirect attention from the prominent roles higher education institutions play in student success (Swadener & Lubeck, 1995). Higher education institute agents help shape students' opportunity patterns and interactions on college campuses to foster equitable results (Bensimon, 2005).

According to research, high school experiences and family background consistently influence a students’ academic outcome to college (Lareau, 2011). Adolescent peer-groups, home environments, and school resources influence where the student will attend depending on the location, type, and selectivity of the postsecondary institution’s students attend (Klugman, 2012; Wolniak & Engberg, 2010). Black and Latinx students are more likely to live in low-income communities and attend high schools with less experienced school staff and fewer college-bound peers than White or Asian students (Massey et al., 2003).

Factors related to academic preparation and pre-college background at selective colleges and universities explain a massive but partial shortage in the achievement gap. Espenshade and Radford (2009) proposed that pre-college factors covered more than half of the cumulative GPA gap at graduation, while Bowen and Bok (1998) found that nearly half of the Black-White gap in final percentile rank in class was explained by differences in SAT scores, high school grades, socioeconomic status, and field of study. In the National Longitudinal Study of Freshman (NLSF), academic preparation factors accounted for 38% of the Black-White gaps and 32% of the Latino-White gaps in the first-semester GPA (Massey et al. 2003, p. 186-188).
Early College Preparation

Despite the high college aspirations among high school students of different backgrounds, completion gaps increased by race, income, and parent education (Kena et al., 2015). Research reveals that increasing students’ likelihood of college persistence depends mainly on improving their academic preparation (Martinez & Deil-Amen 2015). Early college preparation programs have transitioned to bridge secondary and postsecondary contexts through early introduction to college-level and rigorous coursework (Munoz, Fischetti, & Prather, 2014). Early college high schools intend to provide historically underrepresented students with opportunities to earn up to two years of college credit before graduating high school. Students earning credits before high school graduation can reduce the college cost and time to degree (Duncheon & DeMatthews, 2019).

Edmunds, Arshavsky, Lewis, Thrift, Unlu, and Furey (2017) utilized a mixed-method experiment to explore college readiness in the early college high school setting. Early colleges are small schools that merge the college-going high school with college experiences to target underrepresented college students. A total of 15 schools implemented pre-collegiate activities/initiatives that helped students gain knowledge and develop a positive college perspective beyond high school. At these activities/initiatives, students could navigate the college application process and college system with assistance. The early colleges were located on a college campus that caused students to become familiarized with the campus environment and concept of being on a campus. Some students did not know about the application process but for some students, before they started high school, the conversation about college was already initiated. Seven out of the fifteen schools suggest that they gain an understanding of what prerequisites students need before entering college and the financial aid forms students must
complete. This wealth of knowledge came from interacting with the parent regarding the process of college admissions (Edmunds et al. 2017). Gaertner, Kim, DesJardins, and McClarty (2014) revealed how college retention and college outcomes positively impacted students who completed Algebra II. Algebra II completion effect on college graduation was more significant than the impact on these students' second-year retention.

Le, Mariano, and Faxon-Mills (2016) examined how the College Bound (CB) program in St. Louis provided college readiness. The CB college readiness program was created to increase student participation of those traditionally underrepresented in higher education. Students who participated in the CB program were likely to matriculate. Students matriculating to college derived from how the program was designed. The CB staff and coaches provided students with a high level of expectations in promoting college-going norms. The college-going trends were implemented according to student and peer interactions through CB’s Character, Culture, Capacity, and Complete U component. The Complete U component provides students with advice about financial aid options available to them for college affordability (Le, Mariano, & Faxon-Mills, 2016).

To ensure students are ready for college academically, they must take rigorous courses. The concept of students taking academic courses is to ensure that they are ready academically. This is the reason why some colleges ask students to take core courses to ensure students are ready for college (Le, Mariano, & Faxon-Mills, 2016). More states, due to this occurrence, are creating foundational college-preparatory courses for all students to take. To ensure students are proficient in their reading and writing skills, some schools implement strategies for college success (Edmunds et al., 2017). Bryant and CLASP (2015) revealed high-level coursework with quality instruction that prepared students for rigorous college work by increasing their content
knowledge and cultivated their higher order of thinking. Students who had more access to college-level academics, like Algebra II completion, were more likely to seek and succeed in higher education.

Conley (2014) attested that there are roadblocks for students who want to attend college but do not enroll. This occurs because these students lack knowledge of what must be done to be college eligible. This study analyzed the relationship between 11th and 12th grade student scores in a survey designed to measure student aspirations regarding their college readiness. A significant difference existed between the students’ academic goals and their understanding and awareness of how to transition into college (Gilkey, Seburn, & Conley, 2011). The final results concluded that students who had planned on attending four-year universities had a significantly higher mean in the subscale of gauging college knowledge than the students who aspired to enrolling into a two-year college or work than those who did not have a plan after high school (Conley, 2014).

Stipanovic, Stringfield, and Witherell (2017) emphasized the effects of career pathway programming and targeted career counseling services on 71 high school seniors. The high school seniors were in seven schools engaged in school reforms funded by South Carolina’s Education and Economic Development Act (EEDA). EEDA is a statewide effort to improve academic achievement, graduation rates, and students’ chances of success in college and careers. A central finding from the interview analyses reveals that having a career major influenced students’ effort in their courses and their desire to be challenged academically. Students reported that having a career major influenced their overall effort in school, courses related to their major, and student attendance (Stipanovic, Stringfield, & Witherell, 2017).
Duncheon and DeMatthews (2019) employed deductive and inductive coding to examine the early college policy designed to analyze data regarding academic support, dual credit courses, and college readiness testing. Codes and themes emerged from the study. The four themes captured how early college principals supported students’ college preparation and transition through a) embedded supports, b) instructional rigor, c) targeted interventions, and d) student enrichment. The early college high schools in this study allowed underrepresented students to earn up to an associate degree during the ninth through twelfth grade to increase college access and opportunities for students. In the borderlands of West Texas, ten administrators used an instructional leadership framework to examine how early college principals supported students’ in college preparation while at the intersection of secondary and postsecondary education (Duncheon & DeMatthew, 2019).

Morgan, Zakhem, and Cooper (2018) suggested that the high school diploma is insufficient for students to be college ready. High schools are responsible for preparing and helping students become college-bound. This study examined participation in a rigorous secondary curriculum that provided corresponding outcomes related to college enrollment, persistence, and graduation. In seeking to understand the pre-collegiate indicators that lead to postsecondary success, counselors must focus on the students’ involvement in taking rigorous courses. These courses provide more reliable pathways to attending college. Focusing on students' involvement in high-rigor courses provided a more reliable pathway to college in seeking to understand indicators that lead to postsecondary success. The sample consists of 1,464 students who graduated from high school between 2009 and 2014. The primary analysis technique was a binary logistic regression. The results of this study confirmed that a positive relationship existed between high-rigor coursework, demographics, including gender, ethnicity,
and socioeconomic status. The educational benefits of high-rigor course participation are discussed in this study (Morgan, Zakhem, & Cooper, 2018).

**College Choice**

College information is a vital component in future attendance trends by improving students' knowledge about relevant pre-collegiate processes and financial aid. Improving students’ knowledge about pre-collegiate processes and financial aid has potential benefits regarding college cost and receiving a college education. The more knowledge and information students receive about college, coupled with assistance in searching and applying to colleges, the more likely that they will enroll in college (Bowman et al., 2018).

Pallais (2015) conducted a quantitative study to examine where students apply to significantly affect whether they attend college and the type of college they attend. In response to this, ACT in 1997 increased the number of free score reports they provide to students from three to four, which is a $6 marginal cost for each additional report. In response to this change, the widened range of ACT scores has been sent to various colleges; the low-income students attended more selective colleges. Additionally, research suggests that providing students with information about colleges or assistance with the college application process changes students’ college matriculation outcomes, particularly low-income students. Hoxby and Turner (2013) suggest sending high-achieving, low-income students application fee waivers and information about colleges and optimal application strategies induced them to attend more selective colleges.

Andrews, Ranchhod, and Sathy (2010) investigated Texas’s Top Ten Percent Rule on Texas public colleges. Due to the end of affirmative action and the Hopwood v. Texas case decision, this occurrence has caused a quick decline in underrepresented students’ enrollment at
the University of Texas at Austin and Texas A & M-College Station. To reverse this decline in underrepresented students’ enrollment at Texas’s flagship public institutions, the Texas legislature passed House Bill 588 Top Ten Percent Rule (TTPR). The TTPR was signed into law on May 20, 1997, by Governor George W. Bush. The TTPR grants automatic admission for Texas high school graduates to any public college or university in Texas. The Texas graduates must both finish in the top percentile of their graduating class and submit a completed application for admission to a qualifying postsecondary institution within two years of graduating. From 1995 to 2004, the authors found that the TTPR affected the set of colleges that student chose to attend and the targeted recruitment programs were able to attract attention of students from poor high schools that were not traditional sources of students for flagship institutions in Texas (Andrews, Ranchhod, Sathy, 2010).

In Cox’s (2016) qualitative examination of a longitudinal study of high school students, high school to college transition study examined 16 low-income, Black and Latinx students at two inner-city high schools in the Northeastern United States. Over three years, interviews were conducted during the students’ junior to one year after high school graduation. The analysis of this study highlighted the interruptions of these students’ postsecondary plans. These student’s two-year matriculation plans were delayed from what they initially created in high school. Ultimately, the findings revealed how the barriers in these students’ lives altered their matriculation decisions leading to different choices outlined in the college choice model (Cox, 2016).

Nurnberg, Schapiro, and Zimmerman (2012) highlighted an econometric analysis of matriculation decisions made by students accepted to William College. William College is one of the nation’s most highly selective colleges and universities. A yield model was used to estimate
students’ conditions applying to and being accepted by Williams for the classes of 2008 to 2012. The applicant quality was measured by standardized tests, high school GPA, and the net price a particular student encounters, race, and geographic origin, along with the student’s artistic, athletic and academic interests, are strong predictors of whether the student will matriculate to William College (Nurnberg, Schapiro, & Zimmerman, 2012).

**Transition Process**

Helping students understand the college process or transition to college gives them the opportunities to help develop a positive attitude towards college. This helps students understand how to complete college applications and navigate the college system. College visits are another activity that can help students with the admissions process of their college applications and help their parents with the FAFSA application while engaging them in the process (Edmunds et al., 2017).

Avery, Howell, and Page (2014) collaborated with College Board to conduct an Educational Longitudinal Study (ELS). ELS collected a set of college information that nationally representative a sample of students who completed college applications and were admitted. In the ELS, 39% of the students did not apply to a four-year institution. Of the remaining students who did apply to a four-year college, 31% of those students submitted at least one application, 25% submitted two applications, 17% submitted three applications, and 27% applied to four or more colleges. Applying to a sufficient number of colleges can be crucial in helping direct student outcomes in applying to four-year institutions, thus increasing the probability of college enrollment (Avery, Howell, & Page, 2014; Smith, 2013). Fu (2014) suggests that the percentages are striking how financial motivations could only explain why many of the students did not apply
if the first college application cost was nearly $2,000, which is more than a single application fee (Avery et al., 2014).

In collaboration with H&R Block, Bettinger, Long, Oreopoulos, and Sanbonmatsu (2012) addressed the growing concerns of the complex and difficult to navigate the college financial aid system for students in the United States. Low-income students receiving tax preparation, in a randomized field experiment, were offered immediate assistance in streamlining the process of completing the FAFSA for themselves and their parents. The treatment participants were provided with aid estimates compared to tuition cost amounts for nearby colleges. The study's combined assistance and information caused an increase in FAFSA submissions and the likelihood of college attendance, persistence, and receipt of financial aid. In particular, high school seniors whose parents participated in the treatment were 8% points more likely to have completed two years of college, going from 28% to 36%, during the first three years after the experiment. Families who received aid information but no assistance with the FAFSA did not experience improved outcomes. The finding suggested many other opportunities for using personal assistance to increase participation in programs that require completing the forms to become eligible (Bettinger et al., 2012).

Carruthers and Fox (2016) led a quantitative study on the high school class of 2009 in Knox Achieves, a college access program located in Tennessee. Seniors participating in the program caused an increase in high school graduates' likelihood of matriculating to college. The findings suggest that scholarships not only impacted Knox Achievers, but the college enrollment and college credit gains are the largest among lower-income students who likely saw little or no scholarship aid from the program (Carruthers & Fox, 2016).
Secore (2018) described how campus visits play a major role in students’ decisions in attending college. A campus tour is a ritual event that provides future students with the opportunity to engage with the campus environment at large. Kuh (2009) suggests that the campus environment encompasses everything physical, from the building to the people and the landscape. As students partake in a campus tour, they are intrinsically connecting openly with the institution culture, climate, and ecology. During this time, students can react to evaluate and respond to the campus aesthetics and the community within. With this in mind, a person’s connection to a specific environment directly affects their response to the campus visit and tour experience, influencing their attitude towards college choice (Kuh, 2009; Okerson, 2016). Basically, “the tour is the blind date of the admissions process. Looks matter a lot to the beholder, and first impressions do much to shape future actions” (Hoover, 2010, p. 37). The campus tour is a critical outcome of students attending college. The findings and research suggest that a campus visit is a critical component of the recruitment process and is more persuasive than an attraction for prospective students (Secore, 2018).

Peter and Zambre (2017) employed randomized data from a controlled trial in Germany to examine the relationship between information and educational expectations. The data results suggest that students who received pre-collegiate knowledge and information had higher expectations regarding the opportunities available to them in receiving a well-paying job after graduating from college and obtaining a degree. Students acquiring college knowledge can lower the perceived risks of unemployment. The results were significantly positive in college enrollment for students who had parents without a college degree (Peter & Zambre, 2017). Many low-income students have inadequate knowledge regarding the financial aid and college enrollment process to encounter barriers in obtaining the information they need. From this result,
underrepresented students are less likely to complete the college-going process of completing college applications than White or high-income students, unless they receive assistance. Moreover, the White and high-income students have access to the knowledge or information they need to complete their college applications (Cabrera & La Nasa, 2001; Klasik, 2012).

**Recommendations and Strategies by Scholars**

Students’ opportunities to receive postsecondary education and how well they prepare to access this opportunity are essential to students’ academic and social development. This preparation is even more critical for low-income, underrepresented, and disabled students (Tierney, Bailey, Constantine, Finkelstein, & Hurd, 2009). Low-income, underrepresented, and disabled students often request assistance in applying for federal and state financial aid (Choy, 2001). College preparatory or outreach programs provided in high school are there to benefit the student and help them prepare for college. These programs are also there to provide critical academic skills and social strategies that facilitate the transition and initial adjustments needed for college (Saunders & Serna, 2004). Although experience with high school staff may differ for each student, young adults who often discuss their college plans with the counselors or school staff should adjust more successfully during college transition (Hudley et al., 2009). Getting more students ready for college will require an inclusive approach with multiple early interventions to tackle the myriad obstacles that low-income underrepresented students encounter in preparing for college. These early interventions can connect low-income students to college, summer programs, and other enrichment activities, financial aid awareness and opportunities, early exposure to STEM education, and college-level coursework (Wu, 2014).

The evidence from experiments is proof that the more college information and assistance is provided to students, they are more than likely to improve their informational, procedural, and
behavioral challenges in refining their college outcomes. For example, as part of the income tax preparation process, students’ parents that received assistance in completing the FAFSA were more likely to matriculate and persist in college (Bettinger et al., 2012).

High-achieving, low-income students that receive counseling regarding college, financial aid, and received college application fee waivers, are more likely to attend college while being well-matched to their academic abilities (Hoxby & Turner, 2013). High school students and recent graduates who received assistance and encouragement from peer mentors enrolled in college at higher rates than students who did not receive peer outreach (Bos, Berman, Kane, & Tseng, 2012; Carrell & Sacerdote, 2013; Castleman & Page, 2014b). Identifying the best set of colleges to apply is not a simple task. The importance of any one application depends on the likely outcomes of other applications. This logic information is challenging to grasp for high school students. To simplify this task, College Board recommends that students submit a total of four to eight applications to a combination of “reach,” “match,” and “safety” schools (Avery, Howell, & Page, 2014).

**Summary**

Access to higher education remains a challenge for many students who encounter barriers to college entry. Low-income and underrepresented students have lower college enrollment rates than other students. Academic preparation and implementing college-going cultures and strategies in high school can account for some of the college-going rates that persist among these students. College access outcomes have essential economic and social consequences of college graduates earning more than those with a high school degree (Tierney et al., 2009).
CHAPTER THREE. METHODOLOGY

A mixed-method approach was used for this research study to document the FLY Tour experiences of college-bound students and college predictors that lead to matriculation. The quantitative and qualitative data was used by collecting, analyzing, and “mixing” both types of data to understand the research problem more completely (Johnson & Christensen, 2008). Moreover, this chapter provided an overview of the methodologies used in this study. The specific research design is outlined below with the data source descriptions. The rest of the chapter covered justification for selecting the specific cohort, variables, and data analysis. In the analysis, various statistical techniques are discussed and used for quantitative and qualitative research questions.

Research Questions

Presented below are the research questions that were investigated in this study.

- Q1 Does the FLY Tour contribute to college matriculation rates among high school students?
- Q2 Is there a relationship between FLY Tour participation and college matriculation once academic variables (i.e., ACT and high school GPA) are considered?
- Q3 Does the relationship between FLY Tour participation and college matriculation vary by demographic characteristics (i.e., gender, race/ethnicity, SES) of students?
- Q4 How are FLY Tour experiences of students related to college matriculation decisions?
Research Design

This mixed method research study utilized the explanatory sequential mixed methods approach to “mix methods” that prioritized quantitative research methods and fields relatively new to qualitative methods (Creswell, 2014a; Plano Clark & Ivankova, 2016b). The purpose of this explanatory sequential mixed method research study investigated whether there was a difference in students matriculating to college predicated on their participation in the FLY Tour. In this design, quantitative data, quantitative survey data, and qualitative survey data were collected concurrently. Figure 1 below illustrates the steps to follow for an explanatory sequential mixed method. This study's mixed method approach was necessary because one type of dataset is "not sufficient" to answer the multiple types of research questions answered (Creswell & Plano Clark, 2011).

Figure 1. Explanatory Sequential Mixed Methods

The quantitative portion of the study analyzed whether participation in the FLY Tour contributes to college matriculation rates while controlling for high school GPA, ACT score, gender, and other demographics. The study's qualitative component consists of survey responses to gather individual perceptions and impressions about their FLY Tour experiences and its influence on students' college enrollment. This two-fold examination aimed to provide an empirical explanation of the quantitative results related to matriculation. Qualitatively, the students’ expressions that were captured can explain the quantitative findings. These findings can add context to the data that could nullify this research study hypothesis (Creswell & Plano
Clark, 2011). The hypothesis is that the FLY Tour will have an impact on student’s matriculation predictions.

This research design was selected to provide 1) a chance to analyze the demographic and academic data statistically concerning whether or not 2018 high school graduates in a Southeastern state in the United States enrolled in college for Fall 2018 at small, large, public, or private postsecondary institutions and 2) further understanding of the issue by surveying FLY Tour participants with open-ended questions to identify themes that were discovered from perception and impressions of their FLY Tour experience and its effect on high school seniors matriculation and attainment (Creswell & Plano Clark, 2011).

**Data and Sample**

The data examined in this mixed-method study included high school seniors who graduated from public traditional high schools during the 2017-2018 school year in the targeted southern state. This population was reduced further to those graduates at schools where at least one graduate had participated in the FLY Tour. Data on matriculation status, demographics, and academics were collected from official sources, as described below. A student must apply for admission, be accepted, and declare a major to be considered as matriculated.

**Data**

This study quantitative dataset was obtained from four secure files: high school secondary transcript information, participant information, financial aid information, and matriculation information. A secure file obtained the high school secondary transcript information from the southern state agency, Department of Education (DoE). The transcript information in this file was entered into the portal by various districts and high school for the
secondary school system sponsored by the DoE. The transcript included detailed information regarding the students’ demographics, high school records, course record (courses, hours, and grades). The DoE uses a database where the transcript information is submitted electronically to the Student Transcript System (STS). The STS is a database portal where the high school transcript records for graduation are stored.

**Participant Information.** This information was electronically received from a secure database that includes student demographic information and high school information. As part of the state-funded tuition program, the core course GPA requirements were calculated, official test scores from ACT was retrieved from the test organization. Once received, each student received a unique identification number. This unique identification number is tied to the secondary system and helps identify the students’ records for the state-funded tuition program.

**Financial Aid Information.** This information was electronically received from a secure Student Aid database. The financial aid information includes the student and financial and income information. The student and annual household income are submitted by completing the FAFSA. The FAFSA determines eligibility for federal and state aid programs such as the Pell grant. The Pell Grant is identified as a yes/no (Y/N) flag.

**High School Graduation Information.** This information was electronically received from a secure database where the participant information data is filed. The high school graduation status was identified as a yes/no (Y/N) flag.

**Matriculation Information.** This information was electronically received from the secure National Student Clearinghouse database. The National Student Clearinghouse has a database, StudentTracker, consisting of matriculation or college enrollment information and
degree data from 3,600 or more colleges and universities in public and private institutions across the United States. The StudentTracker can query student enrollment data from participating institutions’ to perform various types of educational research and analyses.

Table 1 provides a brief overview of the cohort and the origin of the quantitative data types considered in this research study.

Table 1. Cohort Year and Data Source

<table>
<thead>
<tr>
<th>Cohort Year &amp; Source (Fall, Spring Terms)</th>
<th>AY 2017-2018</th>
<th>Students who participated in FLY Tour and students at their schools who did not participate in the FLY Tour.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Education Student Transcript System Data</td>
<td>Grade 12</td>
<td>Comprehensive Transcript Data for High School grade 12</td>
</tr>
<tr>
<td>Participant Data</td>
<td>Student data</td>
<td>Comprehensive Demographic student data &amp; Test Scores</td>
</tr>
<tr>
<td>Graduation Data</td>
<td>June 2018</td>
<td>Student information related to high school graduation</td>
</tr>
<tr>
<td>Financial Aid Data</td>
<td>Pell grant data</td>
<td>Parental and Student income information completed on the FAFSA for federal and state aid program consideration</td>
</tr>
<tr>
<td>National Student Clearing House Data</td>
<td>Matriculation</td>
<td>Student matriculation and college enrollment information</td>
</tr>
</tbody>
</table>

The qualitative data used in this research study derived from survey responses of the high school seniors used in the quantitative analysis. The 2017-2018 cohort impressions and perceptions were gathered from the Qualtrics survey that was created and administered online. The data included several demographic responses and measures, with closed-ended and open-ended questions.

Data Collection

In the study, the data collection process consisted of seniors in the 2017-2018 cohort. The data collection process was done in two segments, the secondary and the matriculation data was
administered through a request to State DoE. Once the request was approved, the merge of all the data files was accomplished and delivered using secure protocols to protect the privacy of student information. The Institutional Review Board provided approval for this study (Appendix E).

The second phase of data collection for this research study started with an official request for the email addresses and phone numbers of seniors in the 2017-18 cohort. A secure file of the 2017-2018 cohort valid email addresses and phone numbers were received to protect the student information. For research question IV, the qualitative data collection procedure was used. This data collection was completed by administering a Qualtrics survey online. The survey consisted of 21 descriptive and demographic questions. Also, eight open-ended questions were included in the survey to gather the students’ perceptions of how participation in the FLY Tour may have impacted their decision to go to college. The Institutional Review Board provided approval for this part of the study (Appendix E).

Variables

For the quantitative analysis, the variables selected were categorized into five main groups:

- High School Transcript Information
- Participant Information
- Financial Aid Information
- High School Graduation Information
- Matriculation Information
**High School Transcript Information.** The information used in this research included the high school core GPA (continuous variable, scale of 0-4).

**Participant Information.** The information that was used in this research included: student race/ethnicity (categorical variable), gender (categorical variable), standardized test scores (ACT) comparable to the enrolled postsecondary institution requirements (continuous variables, range of 1-36), parental education level (continuous variable) high school graduation flag (categorical, Y/N), and FLY Tour Status (categorical, Y/N).

**Financial Aid Information.** The information used in this study consisted of the Pell Grant flag. This flag is indicated on the FAFSA for the incoming year only (categorical, Y/N). The Pell grant is flagged for financial need because it determines whether a student enrolled in college.

**High School Graduation Information.** The information used is a measure of whether students graduated from high school by June 2018 (categorical, Y/N).

**Matriculation Information.** The information used is a measure of whether students enrolled in college by the Fall 2018 semester (categorical, Y/N).

The qualitative survey was designed to capture the student demographics, impressions, and perceptions about their FLY Tour experiences and its impact on their college enrollment. The 21 survey questions complemented the quantitative results of this research study. The demographic information gathered from Qualtrics consisted of categorical variables: gender, ethnicity, high school graduation, class size, annual household income, and parents’ education levels. The eight open-ended questions were created to gather the seniors’ abstract constructs
regarding their perceptions and emotions of the FLY Tour experience. The open-ended question response was analyzed using the grounded theory method.

The definition of each variable used in the quantitative analysis is listed in Table 2. A summary of the variables can be found in Appendix A.

Table 2. Operational Meaning of Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matriculation Status</td>
<td>Whether the student enrolled in college</td>
</tr>
<tr>
<td>FLY Tour Status</td>
<td>Whether the student participated in the FLY Tour, a financial literacy event</td>
</tr>
<tr>
<td>ACT Composite Score</td>
<td>Highest level of ACT composite scores the student received</td>
</tr>
<tr>
<td>High School Overall GPA</td>
<td>Highest overall high school GPA the student received</td>
</tr>
<tr>
<td>Gender</td>
<td>Determines whether the student is a male or female</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>Determines the race or ethnicity of a student</td>
</tr>
<tr>
<td>Pell Grant Status</td>
<td>Whether the student received free federal aid, the Pell Grant</td>
</tr>
</tbody>
</table>

The cohort demographics and open-ended research questions are:

a) All students in the sample cohort demographic information were collected: gender, ethnicity, size of graduation, annual household income, and parental education level (as a substitution for social-economic status (SES)).

b) The following open-ended questions were asked from students who participated in the FLY Tour:

1. Compared to other people who did not participate in the FLY Tour, do you feel that this event contributed to your decision to attend college? Please explain.

2. In hindsight, how did the FLY Tour help prepare you for college? Please explain.

3. Did the campus tour, after the FLY Tour performance, have an influence on your transition to college? Please explain.
4. Do you feel that your high school courses or academics prepared you for college?

Please explain.

c) For those students who indicated on the survey that they did not attend college these students will be asked why they did not attend.

The following open-ended questions were then asked:

1. If you did NOT go to college after high school in Fall 2018, what would be the main reason? Please explain.

2. What are some barriers, if any, that stopped you from going to college? Please explain.

3. Are you planning on attending college in the future? Please explain your reason.

d) All of the students participating in the survey will be asked the following open-ended question:

1. Is there anything else you would like to share about your FLY Tour experience or college enrollment?

The survey instrument can be found in Appendix D.

Sample

The 2017-2018 cohort was used for this mixed-method study. The cohort consisted of graduates from traditional public high schools during the 2017-2018 school year in the targeted state. Of this number, the students' sample was further reduced to those at high schools where at least one graduate participated in the FLY Tour. This specific year was selected because these students had the opportunity to graduate and matriculate to college, which is integral to research
questions 1, 2, 3, and 4 in this study. The original sample size is N=734 (FLY Tour participants) and N=2,099 (FLY Tour non-participants).

The sampling procedure that was used for the qualitative component of this study is convenience sampling. Through using the criteria of convenience sampling, the participants were selected based on their willingness to complete the survey (Teddlie & Yu, 2007). The Qualtrics survey was sent to all of the FLY Tour participants. In this present study, the researcher is most interested in gaining more insight on the relationship between academics and whether they attend college due to participating in the FLY Tour. Student participation was collected by sign-sheets of who attended the FLY Tour. According to Collins, Onwurhuzie, and Jiao (2007), this is an example of convenience sampling. Convenience sampling is used when the researcher wants to gain a greater depth of information from FLY Tour participants' responses and develop them into themes. Online surveys were completed by FLY Tour participants in the qualitative phase of this study, which is integral to the research question IV.

**Analysis**

This study employed mixed method techniques of quantitative and qualitative data analysis. The quantitative data was further defined and evaluated using the Statistical Package for the Social Sciences (SPSS) software. The qualitative data was evaluated using Qualtrics for the online survey. In this section, these analyses are described.

**Quantitative Analyses**

The initial phase of this portion of the analysis used descriptive statistics to describe and summarize the data. Descriptive statistics are used to communicate essential and informative characteristics of datasets and report calculations for measures and observations during the
pretest or post-test stage of an experimental design (Creswell, 2014b; Lurie, Abramson, & Vail, 2011). Descriptive statistics were used to provide summary information about the FLY participants and non-participants being studied. The following statistics are reported: frequency distribution tables, percentages, and tendency measures (mean, median, and mode).

Following the descriptive statistics, logistic regression was used to address research questions 1, 2, and 3. The purpose of these analyses provided information regarding significant relationships between demographics, high school, academic background, and matriculation variables among high school senior participation in the FLY Tour and those not participating in the FLY Tour. In the logistic regression model, the dependent variable (college matriculation) is a dichotomous variable taking the values of 0 for non-occurrence and 1 for occurrence. This portion of the analysis aims to determine if participation in the FLY Tour contributes to matriculation rates, beyond the influence of academic and demographic variables considered in the study. Additionally, the FLY Tour status interactions with demographic variables were examined to determine if the effects of the tour vary for different student groups.

**Logistical Regression (LR)**

Logistic regression is a particular case of a generalized linear model where the outcome is a nominal variable. For this study, the outcome variable, matriculation status, is a dichotomy (yes/no). The predictors, X, are both continuous and nominal variables. The model can be depicted as follows:

$$\log \left[ \frac{P(Y = \text{yes} | X_1, \ldots, X_p)}{1 - P(Y = \text{yes} | X_1, \ldots, X_p)} \right] = \log \left[ \frac{\pi}{1 - \pi} \right] = \\
\alpha + \beta_1 X_1 + \ldots + \beta_p X_p = \alpha + \sum_{j=1}^{p} \beta_j X_j$$
The logistic regression model generates an equation that predicts the log of the odds of the event occurring (i.e., student matriculating to college) as a function of the independent variables in the model. Conventional regression techniques are not appropriate for this formulation, where the dependent variable is a dichotomy (DiGangi & Hefner, 2013).

The model parameter estimates \((\alpha, \beta_1, \beta_2, ..., \beta_p)\), for logistic regression analysis, should be obtained and determine how well the model fits the data (Agresti, 2007). In this study, the potential explanatory variables were examined to determine whether they were significant enough to be used in models 1, 2, and 3. The complete model, which is model 3, contained all the explanatory variables and interactions believed to influence college enrollment or matriculation.

**Model Assumptions**

Logistic regression has model assumptions that must be met before the data is analyzed. The model assumptions are as follows: the dependent variables do not need to be normally distributed, does not assume a linear relationship between the dependent and independent variables, and there is no homogeneity of variance assumption. These assumptions are evidence that the variance does not have to be the same within categories. The normally distributed error terms are not assumed, and the independent variables do not have to be interval or unbounded (Midi, Sarkar, & Rana, 2010). It is assumed that the relationship of the independent variables and the logit is linear. Additionally, it is assumed that there are no outliers and that the independent variables are not highly collinear. Various diagnostics, the goodness of the fit statistics, and residuals were examined to review these assumptions.
Analyzing the Data

The following strategies were used to address research questions, 1, 2, and 3.

**Research Question 1.** Does the FLY Tour contribute to college matriculation rates among high school students?

To address this question, a logistic regression model was fit into the data. The dependent variable was college matriculation (Yes/No), and the independent variable was participation in the FLY Tour. Matriculation was identified as a categorical variable in the dataset (1 = enrolled in the Fall 2018 semester and 0 = not enrolled in college). The analysis focused on the significance of participation in the FLY tour as a predictor. Classification accuracy and Pseudo R-square values were used as measures of the effectiveness of the model.

**Research Question 2.** Is there a relationship between FLY Tour participation and college matriculation once academic variables (i.e., ACT and high school GPA) are considered?

To address this question, a logistic regression model was fit into the data. As with the previous model, the dependent variable was college matriculation (Yes/No). However, for this model, in addition to participation in the FLY Tour, the following academic variables were entered as continuous predictors: ACT score and high school GPA. ACT composite scores ranged from 1-36, and the high school GPA ranged from 0-4.0.

**Research Question 3.** Does the relationship between FLY Tour participation and college matriculation vary by demographic characteristics (i.e., gender, race/ethnicity, SES) of students?
To address this question, demographic variables (gender, race/ethnicity, and SES) were entered into the model. The analysis focused on the significance of the individual predictors and the overall improvements in the model stemming from adding the demographic predictors: gender (1=Female, 0=Male), ethnicity, and SES (as defined by Pell Federal Grant status, 0=No Pell, 1=Received Pell). The race/ethnicity was grouped as follows: 1=White, 2=Black, 3=Hispanic, 4=Other (American Indian/Alaskan Native, Multiracial and Native Hawaiian/Other Pacific Islander/Asian). This portion of the logistic regression analysis focused on these variables' interactions with participants and non-participants of the FLY Tour participation (1=Participated, 0=Did not participate).

Qualitative Analyses

Research question IV, which is qualitative, was analyzed by using grounded theory methodology. The grounded theory methodology was used in the qualitative analysis to initiate a hypothesis from the themes captured from the survey respondents (Charmaz, 2008).

Research Question 4. How are FLY Tour experiences of students related to college matriculation decisions?

To address this question, the grounded theory methodology was used for the qualitative analysis. In grounded theory, data is used as a source to build a theory (Charmaz, 2008). In this study, the qualitative dataset included student responses to the online survey questions, which can be further interpreted as a diverse property (Charmaz, 2008). This research study focused on the different responses sought to identify common subthemes by using initial coding and grouping the themes in specific categories that can be removed to create a strong and robust framework through:
• **Organize and prepare the data.** The results from the online surveys were printed out and the charts and graphs of the participants’ responses. Sources were identified, demographics and any other information was used to help analyze the data collected.

• **Review and explore the data.** The data was read several times to get a sense of what it contained. Notes were made on the thoughts, ideas, or any questions I had about the data.

• **Create initial codes.** The highlighter was used to identify keywords and phrases, and notes were made in the margins to categorize the data or concept maps to connect with the data.

• **Review codes and revise/combine into themes.** The recurring themes, language, beliefs, and opinions of the survey participants were identified.

• **Present themes in a cohesive manner.** In considering the audience, the purpose of the study, and what content should be used was included in this framework to build on research question IV and subsequently informed the quantitative findings.

**Summary**

This explanatory sequential mixed research study was created with a robust secondary to postsecondary dataset. The dataset was used to investigate if a difference exists in students enrolling in college predicated on their participation in the FLY Tour. This dataset was also compared to those students at the same schools with similar academic backgrounds who did or did not enroll in college, which is unique to the analysis of this topic and in the literature.

The quantitative data represented secondary transcript information, participant information, financial aid information, high school graduation information, and matriculation information for each of the cases. Quantitatively, the research questions I, II, III analysis were
examined using a robust dataset with significant college enrollment predictors by univariate statistical analysis and logistical regression.

The qualitative data came from participant responses to survey questions that were administered through Qualtrics. Qualitatively, the research question IV analysis investigated the participants’ responses to eight open-ended questions, and inquired differences exist in the students’ experiences and perceptions who participated in the FLY Tour. From the student responses, grounded theory served as a foundation of discovering common themes (Appendix F).
CHAPTER FOUR. RESULTS

In chapter four, the researcher will present an analysis of my four research questions. Through this study, the researcher utilized various statistical techniques to examine and discover the significant relationships between matriculation, high school academics, and demographic variables with high school senior participation in the FLY Tour. The statistical techniques used included basic descriptive statistics (mean and standard deviation) and logistical regression analysis for research questions I, II, and III. Research question IV, which is qualitative, was analyzed by using grounded theory methodology. In using grounded theory methodology, the student responses caused various themes to emerge and induct a hypothesis.

Data Screening

The dataset was examined before any statistical analysis was reviewed. This analysis was conducted to confirm the dataset's accuracy in making sure duplicates were not present in the cases nor were erroneous codes present. The SPSS statistical software was used to calculate descriptive statistics and prove frequencies to capture the data on the distribution, median, mean, and mode of variables. The results were also reviewed to confirm that there are no outliers in the data. Various analyses were implemented and explicitly chosen to answer research questions and clarify significant relationships amongst different combinations of pre-collegiate predictor variables.

Missing Data

Although official records were used to analyses research questions 1, 2, and 3, there were several instances in which the required data were missing. The complete case method was used to address missing data, so the number of participants included in each analysis is based on what
information was provided for each variable. The cases with all of the necessary data for analysis were the only ones utilized in the study (Kang, 2013). This type of technique for handling missing data was deemed appropriate because analysis conducted with dummy coding revealed a small percentage of missing data at random (Kang, 2013). For example, if an analysis included the student ACT Composite Score and that information was not available for a particular case, then that case was excluded.

Descriptive Statistics

Tables 3 through 7 present frequencies for the study’s categorical variables and tables 8 and 9 present descriptive statistics and the box plot for the continuous variables, ACT, and high school GPA. Tables 10 and 11 present the crosstab and Cramer’s V for the interaction of FLY Tour participants and Pell Grant status. Table 3 shows a total of 2,833 students in the study, with a percentage of matriculating to a postsecondary institution being close to 50%. Of these students, 26% (734) participated in the FLY Tour. The majority of the students were Black or African American (74%) and 60% qualified for a Pell Grant, an indicator of financial need. The descriptive statistics for ACT composite scores and high school GPA are presented in Tables 8-9. The average ACT score in the sample is 17 and the average high school grade point average is 2.89.

The box plot in Figure 2 represents the cases that fall outside the 50% of normal distribution. For the ACT composite subscores, there are approximately sixteen cases (1128, 2033, 1310, 1215, 2150, 925, 2039, 2455, 880, 2495, 1811, 103, 823, 2568, 2607, 2759) that lie outside the 25% boundary of the case majority and above the mean. These cases are positioned at the higher limits of the box plot. Based on the histogram in Figure 4, no corrective actions were needed because the ACT composite scores outliers did not skew the data in the logistical
regression model 3. The box plot in Figure 3 represents the cases that fall outside the 50% of normal distribution. For the High School GPA, there are no cases that lie outside of the 25% boundary of the case majority and above the mean. Therefore, no corrective action is needed based on the visual observation of this box plot. These students are not necessarily representative of the population of high school students in Louisiana, but they representative the types of students targeted by the FLY Tour.

Table 3. Sample Overview by Matriculation Status

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1443</td>
<td>50.9</td>
<td>50.9</td>
<td>50.9</td>
</tr>
<tr>
<td>Yes</td>
<td>1390</td>
<td>49.1</td>
<td>49.1</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>2833</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 4. Sample Overview by Participants and Non-participants of the FLY Tour

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>2099</td>
<td>74.1</td>
<td>74.1</td>
<td>74.1</td>
</tr>
<tr>
<td>Yes</td>
<td>734</td>
<td>25.9</td>
<td>25.9</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>2833</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 5. Sample Overview by Gender

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1359</td>
<td>48</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>Female</td>
<td>1474</td>
<td>52</td>
<td>52</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>2833</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
Table 6. Sample Overview by Ethnicity

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>477</td>
<td>16.8</td>
<td>16.9</td>
<td>16.9</td>
</tr>
<tr>
<td>Black</td>
<td>2089</td>
<td>73.7</td>
<td>74.2</td>
<td>91.2</td>
</tr>
<tr>
<td>Hispanic</td>
<td>103</td>
<td>3.6</td>
<td>3.7</td>
<td>94.8</td>
</tr>
<tr>
<td>Other</td>
<td>146</td>
<td>5.2</td>
<td>5.2</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>2815</td>
<td>99.4</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>System</td>
<td>18</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2833</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7. Sample Overview by Pell Grant Status

<table>
<thead>
<tr>
<th>Status</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>1144</td>
<td>40.4</td>
<td>40.4</td>
<td>40.4</td>
</tr>
<tr>
<td>Yes</td>
<td>1689</td>
<td>59.6</td>
<td>59.6</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>2833</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 8. Descriptive Statistics for ACT Composite Score

<table>
<thead>
<tr>
<th>ACT Composite Score</th>
<th>N</th>
<th>Valid</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2384</td>
<td></td>
<td>449</td>
</tr>
<tr>
<td>Mean</td>
<td>17.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>3.954</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum</td>
<td>34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 9. Sample Descriptive Statistics for High School Overall GPA

<table>
<thead>
<tr>
<th>High School Overall GPA</th>
<th>N</th>
<th>Valid</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2443</td>
<td></td>
<td>390</td>
</tr>
<tr>
<td>Mean</td>
<td>2.8846</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>2.8519</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.53423</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>2.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>1.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
To analyze the FLY Tour participants and Pell Grant status, the students were categorized in one of the four ways: those who received Pell and participated, those who received Pell and did not participate, those who did not receive Pell and participated, and those who did not receive Pell and did not participate. The percentage of students who fell into one of these categories is illustrated in Table 10. The displayed data in this table shows that the percentage of students who received Pell varied greatly when measured against whether they participated in the FLY Tour.
(67% did not participate; 33% participated). Since the percentages did vary in the findings between FLY Tour participation and receipt of the Pell Grant, the data was further analyzed, as displayed in Table 10.

Table 10. FLY Tour Participants and Pell Grant Status

<table>
<thead>
<tr>
<th></th>
<th>Did Not Receive Pell</th>
<th>Received Pell</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did Not Participate</td>
<td>Count: 961</td>
<td>1138</td>
<td>2099</td>
</tr>
<tr>
<td></td>
<td>% of Total: 84%</td>
<td>67%</td>
<td>74%</td>
</tr>
<tr>
<td>Participated</td>
<td>Count: 183</td>
<td>551</td>
<td>734</td>
</tr>
<tr>
<td></td>
<td>% of Total: 16%</td>
<td>33%</td>
<td>26%</td>
</tr>
<tr>
<td>Total</td>
<td>Count: 1144</td>
<td>1689</td>
<td>2833</td>
</tr>
<tr>
<td></td>
<td>% of Total: 40%</td>
<td>60%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Further analysis of FLY Tour participation (participant, non-participant) was conducted to see if the Pell Grant status affected whether students attended the FLY Tour. In Table 11, the Cramer’s V measurement of association was used to analyze the FLY Tour Status and Pell Grant status. The findings are statistically significant (p = .000), but the Phi Coefficient (.186) suggests that there is only a negligible association. Therefore, we can accept the null hypothesis that there is no association between the FLY Tour Participants and the Pell Grant Status on whether the high school students matriculated after participating in the FLY Tour and received Pell Grant. The researcher analysis supports the conclusion that there is no association between FLY Tour Participants and the Pell Grant Status after participating in the FLY Tour.

Table 11. Cramer’s V for FLY Tour Participation and Pell Grant Status

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Approximate Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cramer's V</td>
<td>0.186</td>
<td>.000</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>2833</td>
<td>.000</td>
</tr>
</tbody>
</table>
Research Question One (RQI)

RQI: Does the FLY Tour contribute to college matriculation rates among high school students?

In order to answer this question, I utilized the logistic regression model 1 to determine if the FLY Tour participation contributed to college matriculation. The data results are shown in Table 12. The categorical variable key is in Table 15. The logistic regression results indicate that there was a statistically significant relationship between participation in the FLY Tour (Wald=73.343, df=1, p<.000), the b coefficients was negative ($B^0=-.755$), indicating that students who participated in the FLY Tour were less likely to matriculate than those that did not participate. This outcome may be a reflection of the fact that participants were selected based on a need for support or encouragement to matriculate to college after graduating from high school.

Table 12. Logistical Regression Model 1 Results for FLY Tour Status

<table>
<thead>
<tr>
<th>Variables in the Equation</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
<th>95% C.I. for EXP(B)</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FLY Tour Stat(Participated)</td>
<td>-0.755</td>
<td>0.088</td>
<td>73.343</td>
<td>1</td>
<td>0.000</td>
<td>0.470</td>
<td></td>
<td>0.396</td>
<td>0.559</td>
</tr>
<tr>
<td>Constant</td>
<td>0.524</td>
<td>0.076</td>
<td>47.066</td>
<td>1</td>
<td>0.000</td>
<td>1.689</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Variable(s) entered on step 1: FLY Tour Stat.

Research Question Two (RQII)

RQII: Is there a relationship between FLY Tour participation and college matriculation once academic variables (i.e., ACT and high school GPA) are considered?

In order to answer this question, I utilized logistic regression model 2. The results are shown in Table 13. The categorical variable key is in Table 15. The results explained that in
Model 2, 18% (Nagelkerke $R^2$) of the variance in high school students matriculating to college is correctly classified in 65.4% of the cases. In looking at the results for High School GPA, this variable has the highest significant overall effect ($Wald=117.380$, df=1, $p<.000$). The b coefficients for High School GPA is significant and positive, indicating that an increasing influence is associated with the increased odds of students achieving matriculation. The Exp(B) column (the Odds Ratio) tells us that students with the highest High School GPA are 2.971 times more likely to matriculate.

The effect of the ACT Composite Score is also significant and positive, indicating that students with a higher ACT Composite Score are more than likely to achieve matriculation. The odds ratio (OR) tells us they are 1.085 times (or 8%) more likely to achieve matriculation.

Overall, the logistic regression was done to discover the effects FLY Tour Status, ACT Composite Scores, and HS GPA would have on the likelihood that high school students would matriculate to college. From these results, the FLY Tour Stat(Participated) ($p=.001$) ACT Composite Score ($p=.000$), and HS GPA ($p=.000$), were all statistically significant. Notably, the FLY Tour's coefficient continues to be less than one, indicating that the odds of matriculation for participants is less than that of non-participants, even after controlling for academic variables.

Table 13. Logistical Regression Model 2 Results for Academic Variables

<table>
<thead>
<tr>
<th>Variables in the Equation</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
<th>95% C.I. for EXP(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
</tr>
<tr>
<td>Step 1a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FLY Tour Status(Participated)</td>
<td>-0.454</td>
<td>0.101</td>
<td>20.185</td>
<td>1</td>
<td>0.000</td>
<td>0.635</td>
<td>0.521</td>
</tr>
<tr>
<td>ACT Composite Score</td>
<td>0.082</td>
<td>0.014</td>
<td>35.825</td>
<td>1</td>
<td>0.000</td>
<td>1.085</td>
<td>1.056</td>
</tr>
<tr>
<td>High School GPA</td>
<td>1.089</td>
<td>0.101</td>
<td>117.380</td>
<td>1</td>
<td>0.000</td>
<td>2.971</td>
<td>2.440</td>
</tr>
<tr>
<td>Constant</td>
<td>-3.920</td>
<td>0.298</td>
<td>173.000</td>
<td>1</td>
<td>0.000</td>
<td>0.020</td>
<td></td>
</tr>
</tbody>
</table>

a. Variable(s) entered on step 1: FLY Tour Status, ACT Composite Score, High School GPA.
Research Question Three (RQIII)

RQIII: Does the relationship between FLY Tour participation and college matriculation vary by demographic characteristics (i.e., gender, race/ethnicity, SES) of students?

In order to answer this question, I utilized logistic regression model 3 and included interactions. The data results are shown in Table 14. The categorical variable key is in Table 15. Overall, the results suggest the model 3 was statistically significant.

The Case Processing Summary chart showed that 84.2% (2,384) of the cases are included in the data set. There are 15.8% (449) missing cases, which means that some of the cases were not included in the analysis due to missing data. The Classification Table shows that slightly more cases (Y=1,363) matriculated to college than those who did not matriculate (N=1,021). 57.2% of the time, the answer will be predicted “Yes” to matriculate.

The Variables in the Equation chart in step 0 shows the coefficient for the Constant \(B^0\)=.289. According to this table, the model with just the constant is an outcome with a statistically significant predictor \((p < .001\). The \(\exp(B)\) is the exponentiation of the \(B\) coefficient, which is the odds ratio. This value is given by default because the odds ratios can be easier to interpret than the coefficient, which is in the log-odds units, which is \(\frac{1363}{1021}= 1.335\), which means that students are 1.335 (or 34%) more likely to matriculate.

The Omnibus Tests of Model Coefficients chart shows that this model will be statistically significant \(.000\). The model in this chart is compared with the baseline model of .500. The Chi-square test is used to see if there is a significant difference between the \(-2\text{Log-likelihoods}\) of the baseline and the new models. If the new model shows that it has a reduced \(-2\text{LL}\) (2709.429) compared to the baseline, then it suggests that the new model explains more of the variance in
the outcome and is an improvement. The chi-square is highly significant (chi-square=546.265, df=9, p<.000), so our model is significantly better.

The Hosmer and Lemeshow chart tested the hypothesis if the data is a good fit for the model since the significance is p=.120 (p>.05). With this statistic significance, the model is a good fit for the data. This model is now correctly classifying the outcome for 71.6% of the cases compared to 57.2% in the null model, which is an improvement. The Classification Table showed how 79.8% of the time, the “Yes” cases can be classified/predicted as matriculating, while 60.6% of the time, the N cases can be classified/predicted as not matriculating.

This model explained that 28% (Nagelkerke R²) of the variance in high school students matriculating to college. The Variables in the Equation chart (step 1) in this model suggest that the High School GPA variable has the highest significant overall effect (Wald=103.130, df=1, p < .000). The b coefficients for High School GPA is significant and positive, indicating that increasing influence is associated with increased odds of students achieving matriculation. The Exp(B) column (the Odds Ratio) tells us that students with the highest High School GPA are 3.06 times more likely to matriculate.

The effect of the ACT Composite Score is also significant and positive, indicating that students with a higher ACT Composite Score are more than likely to achieve matriculation. The OR tells us they are 1.12 times (or 12%) more likely to achieve matriculation. Moreover, the High School GPA and ACT Composite Score are correlated with one another. A Pearson product-moment correlation was run to determine the relation between High School Overall GPA and the ACT Composite Scores. There was a moderate positive correlation between GPA and ACT composite scores, which was statistically significant (r=.609, n=2248, p<.01). This
indicates that students who scores high on the ACT Test are associated with high overall GPAs. In the Race/Ethnicity category results, the Hispanics (p<.007) were statistically significant.

The overall Wald for the FLY Tour(Participated)*Gender(Female) interaction is significant (Wald=9.042, df=1, p<.005). The interaction terms were included for FLY Tour Status and gender to determine if the relationship of a student matriculating to college varied on these characteristics. For the interaction variables, FLY Tour participants who are Female are 1.913 times (or 91%) greater of matriculating than the males not participating in the FLY Tour. The interaction is statistically significant.

Overall, logistic regression was done to discover the effects ACT Composite Scores, HS GPA, Gender, Pell Status, Race/Ethnicity, FLY Tour Status would have on the likelihood that high school students would matriculate to college. From these results, the ACT Composite Score (p=.000), HS GPA (p=.000), Race/Ethnicity( Hispanic)(p=.007), Gender (p=.003), Pell Status(Received Pell) (p=.000), FLY Tour Stat(Participated) (p=.001) and FLY Tour Stat(Participated)*Gender(Female) (p=.003) were all statistically significant except for the Race/Ethnicity(White) (p=.404), and Race/Ethnicity(Black/African American) (p=.395). The b coefficients for High School GPA, FLY Tour Stat(Participated)*Gender(Female), and ACT Composite Score are significant and positive, indicating that increasing influence is associated with increased odd of students achieving matriculation.

The histogram in Figure 4 is a graph of the values from the standardized residuals rescaled by the regression standard error. The regression assumption does hold true that the data in the histogram are normally dispersed. About 95% of the data points fall within 2σ around the fitted curved. Consequently, 95% of the standardized residual in the histogram below falls well between -1 and +1. In running the histogram for the Logistical Regression Model 3, there are no
outliners present, which show that the skew in the ACT data did not make a difference in skewing the data in the model.

Table 14. Logistical Regression Model 3 Results for Demographic Characteristics and Interaction Terms between FLY Tour Status and Gender

<table>
<thead>
<tr>
<th>Variables in the Equation</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
<th>95% C.I. for EXP(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACT Composite Score</td>
<td>0.115</td>
<td>0.015</td>
<td>60.898</td>
<td>1</td>
<td>0.000</td>
<td>1.122</td>
<td>1.090 - 1.155</td>
</tr>
<tr>
<td>High School GPA</td>
<td>1.117</td>
<td>0.110</td>
<td>103.132</td>
<td>1</td>
<td>0.000</td>
<td>3.056</td>
<td>2.463 - 3.791</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>19.513</td>
<td>3</td>
<td></td>
<td></td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race/Ethnicity(White)</td>
<td>-0.195</td>
<td>0.234</td>
<td>0.696</td>
<td>1</td>
<td>0.404</td>
<td>0.822</td>
<td>0.520 - 1.302</td>
</tr>
<tr>
<td>Race/Ethnicity(Black/African American)</td>
<td>0.183</td>
<td>0.214</td>
<td>0.724</td>
<td>1</td>
<td>0.395</td>
<td>1.200</td>
<td>0.788 - 1.827</td>
</tr>
<tr>
<td>Race/Ethnicity(Hispanic)</td>
<td>-0.992</td>
<td>0.370</td>
<td>7.167</td>
<td>1</td>
<td>0.007</td>
<td>0.371</td>
<td>0.180 - 0.767</td>
</tr>
<tr>
<td>Gender(Female)</td>
<td>-0.567</td>
<td>0.188</td>
<td>9.133</td>
<td>1</td>
<td>0.003</td>
<td>0.567</td>
<td>0.393 - 0.819</td>
</tr>
<tr>
<td>Pell Status(Received Pell)</td>
<td>-1.269</td>
<td>0.108</td>
<td>138.811</td>
<td>1</td>
<td>0.000</td>
<td>0.281</td>
<td>0.228 - 0.347</td>
</tr>
<tr>
<td>FLY Tour Status(Participated)</td>
<td>-0.65</td>
<td>0.168</td>
<td>14.919</td>
<td>1</td>
<td>0.000</td>
<td>0.522</td>
<td>0.375 - 0.726</td>
</tr>
<tr>
<td>FLY Tour Status(Participated) by Gender(Female)</td>
<td>0.649</td>
<td>0.216</td>
<td>9.042</td>
<td>1</td>
<td>0.003</td>
<td>1.913</td>
<td>1.253 - 2.919</td>
</tr>
<tr>
<td>Constant</td>
<td>-4.049</td>
<td>0.417</td>
<td>94.122</td>
<td>1</td>
<td>0.000</td>
<td>0.017</td>
<td></td>
</tr>
</tbody>
</table>

a. Variable(s) entered on step 1: ACT Composite Score, High School GPA, Race/Ethnicity, Gender, Pell Status, FLY Tour Status, FLY Tour Status * Gender

Table 15. Categorical Variable Key

<table>
<thead>
<tr>
<th>Variable with Reference Code</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race/Ethnicity(1)</td>
<td>White</td>
</tr>
<tr>
<td>Race/Ethnicity(2)</td>
<td>Black/African American</td>
</tr>
<tr>
<td>Race/Ethnicity(3)</td>
<td>Hispanic</td>
</tr>
<tr>
<td>Race/Ethnicity(4)</td>
<td>Other (American Indian/Alaskan Native, Multiracial, and Native Hawaiian/Other Pacific Islander/Asian)</td>
</tr>
<tr>
<td>Gender(0)</td>
<td>Male</td>
</tr>
<tr>
<td>Gender(1)</td>
<td>Female</td>
</tr>
<tr>
<td>Pell Status(0)</td>
<td>No Pell</td>
</tr>
<tr>
<td>Pell Status(1)</td>
<td>Received Pell</td>
</tr>
<tr>
<td>FLY Tour Status(0)</td>
<td>Did not Participate</td>
</tr>
<tr>
<td>FLY Tour Status(1)</td>
<td>Participated</td>
</tr>
</tbody>
</table>
Research Question Four (RQIV)

RQIV: How are FLY Tour experiences of students related to college matriculation decisions?

In order to answer this question, the online survey was divided into two types of questions, closed-ended and open-ended. The students who participated in the FLY Tour were asked to complete the survey to investigate the participants’ responses to 29 closed-ended and open-ended survey questions and inquired the differences that exist in the students’ experiences and perceptions of the FLY Tour. The quantitative findings complemented the 21 online closed-ended survey questions in this research study. The demographic data gathered from Qualtrics consists of categorical variables: gender, ethnicity, high school graduation class size, parents’ education levels, and FLY Tour topics. The information captured from these questions provided an overview of FLY Tour topics that were favored, why, how were the students prepared for college, and parental education level. The eight open-ended questions were created to gather abstract constructs regarding the students’ perceptions and emotions of their FLY Tour.
experience. The students’ experience was analyzed using the grounded theory method. The data results are shown in Tables 15-17 and Figures 5-11.

Profiles of Qualitative Phase Participants

The researcher captured the quantitative and qualitative data on each survey participant to create individual profiles that included data components. The quotes in each survey participation were included according to the comments that captured the essence of each students’ disposition. The comments related to his or her experience as a FLY Tour participant in the research finding.

Jill. Jill is a female whose race/ethnicity is other. In her survey, Jill reported that she had a high school cumulative GPA of 3.5 or above. Her parents’ annual household income is $50,000 and more. Jill’s parents’ highest education level is no high school for the mother and high school for the father. Jill reported that she matriculated to college in Fall 2018.

Molly. Molly is a White female. On her survey, Molly reported a high school cumulative GPA of 3.5 or above. Her parent annual household income is $45,000-$49,999. Both of Molly’s parents attended college. The highest level of education for Molly’s mother is a Bachelor’s degree and the father’s highest education level is some college. Molly reported that she matriculated to college in Fall 2018.

Lisa. Lisa is a White female. On her survey, Lisa reported that she had a high school cumulative GPA of 3.5 or above. Her parent’s annual household income is unknown. Both of Lisa parents’ highest education level is high school. Lisa reported that she matriculated to college in Fall 2018.

Raven. Raven is a Black/African American female. Raven reported that she had a high school cumulative GPA of 3.5 or above on her survey. Her parent’s annual household income is
$35,000 - $39,999. Raven’s parents’ highest education level is a Bachelor’s degree for the mother and high school for the father. Raven reported that she matriculated to college in Fall 2018.

Johnny. Johnny is a Black/African American male. On his survey, Johnny reported a high school cumulative GPA of 3.5 or above. His parent’s annual household income is unknown. Johnny parents’ highest education level is high school for the mother and no high school for the father. Johnny reported that he matriculated to college in Fall 2018.

Jana. Jana is a White female. On her survey, Molly reported that she had a high school cumulative GPA of 2.5-3.4. Her parent annual household income is $14,999 and below. Both of Jana's parents did not attend college; her parents' highest education level is no high school. Jana reported that she did not matriculate to college in Fall 2018 but plans on attending college in the future.

Qualitative Research Findings

The survey participant responses organized the qualitative research findings for this mixed methods study. The respondents were chosen based on the sample criterion of being a FLY Tour participant. All of the survey respondents who met this criterion received an invitation through email to participate in the online Qualtrics survey for three chances to win a $20 gift card (Appendix B). Of these participants, six students responded with interest in participating in the online survey. The survey participation was low given that it was administered during the summer and due to Covid-19. Each survey participant agreed to the IRB approved consent form before completing the Qualtrics survey (Appendix C).
**Demographics.** The FLY Tour participant sample used for the study’s qualitative phase consisted of six participants in Table 15 that completed the online Qualtrics survey. The survey participants were provided pseudonyms to ensure confidentiality. From these results, 83.33% were female (n=5), and 16.67% were male (n=1). For the Fall 2018 enrollment, 83.33% matriculated to college (n=5), and 16.67% did not matriculate to college (n=1). Out of the 6 participants that completed the online survey, 50% were White (n=3), 33.33% were Black/African American (n=2), and 16.67% were other (n=1). For the high school GPA, 83% earned a 3.5 or above (n=5) and 17% earned 2.5 – 3.4 (n=1). All the participants in this study's qualitative phase also participated in this study's quantitative phase, where their demographics, high school academics, and matriculation variables were included in logistical regression models.

Table 16. Survey Individual Participant Demographics

<table>
<thead>
<tr>
<th>Participant</th>
<th>Matriculated Fall 2018</th>
<th>Gender</th>
<th>Ethnicity</th>
<th>High School GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johnny</td>
<td>Yes</td>
<td>Male</td>
<td>Black/African American</td>
<td>3.5 or above</td>
</tr>
<tr>
<td>Raven</td>
<td>Yes</td>
<td>Female</td>
<td>Black/African American</td>
<td>3.5 or above</td>
</tr>
<tr>
<td>Jana</td>
<td>No</td>
<td>Female</td>
<td>White</td>
<td>2.5 - 3.4</td>
</tr>
<tr>
<td>Lisa</td>
<td>Yes</td>
<td>Female</td>
<td>White</td>
<td>3.5 or above</td>
</tr>
<tr>
<td>Molly</td>
<td>Yes</td>
<td>Female</td>
<td>White</td>
<td>3.5 or above</td>
</tr>
<tr>
<td>Jill</td>
<td>Yes</td>
<td>Female</td>
<td>Other</td>
<td>3.5 or above</td>
</tr>
</tbody>
</table>

**Education Level and Household Income.** The FLY Tour participants that completed the survey, in Figure 5, 33.3% of their mother and father education level was the same with no high school (n=2), 33.3% of their mother’s education level was high school (n=2). In comparison, 50% of their father’s education level was high school (n=3), 33.3% of their mother’s education level was a Bachelor’s Degree (n=2), 16.67% of the father’s education level was some college (n=1). Out of the six students that completed the survey, 33.33% of their household income was
unknown (n=2), 16.67% of their household income was $14,999 and below (n=1), 16.67% of their household income was $35,000-$39,999 (n=1), 16.67% of their household income was $45,000-$49,999 (n=1), and 16.67% of their household income was $50,000 and above (n=1) in Figure 6.

**Figure 5. Survey Individual Participant Mother & Father Education Level**

**Figure 6. Survey Individual Participant Household Income**

**FLY Tour Knowledge.** In figure 7, the analysis of asking the six survey participants about if their knowledge had increased about postsecondary information during the FLY Tour,
66.67% agreed that their knowledge had increased a great deal (n=4). In contrast, 33.33% agreed that their knowledge had somewhat increased. In Figure 7, the survey participants were asked how much was your knowledge increased in the following areas of the FLY Tour: taking challenging courses, ACT scores, scholarships/FAFSA/TOPS, and budgeting/college planning. In taking challenging courses, 50% thought that their knowledge was somewhat increased (n=3), 33.33% thought that their knowledge was a great deal increased (n=2), and 16.67% thought that their knowledge had increased quite a bit (n=1). For ACT scores, 50% thought that their knowledge had increased quite a bit (n=3), 33.33% thought that their knowledge was somewhat increased (n=2), and 16.67% thought that their knowledge had increased a great deal (n=1). In learning about scholarships/FAFSA/TOPS, 50% thought that their knowledge had increased a great deal, 33.33% thought that their knowledge had somewhat increased (n=2), and 16.67% thought that their knowledge had increased quite a bit. In understanding budgeting/college planning, 33.33% thought that their knowledge had increased somewhat (n=2), 33.33% thought that their knowledge had increased quite a bit (n=2), and 33.33% thought that their knowledge had increased a great deal (n=2).

Figure 7. Survey Individual Participant FLY Tour Topics – Knowledge
In figure 8, the survey respondents were asked if they participated in pre-collegiate activities after the FLY Tour performance, such as planning and budget financial aid awards and scholarships, researching and applying for more scholarships, and planning and visiting college campuses and apply to more colleges. The results are 83.3% responded yes (n=5) and 16.67% responded no (n=1) to participating in plan and budget financial aid awards and scholarships, 100% responded yes (n=6) to participating in research and apply for more scholarships, 66.67% responded yes (n=4) and 33.33% responded no (n=2) to participating in planned and visited college campus, 100% responded yes (n=6) to participating in completing the FAFSA application, and 66.67% responded yes (n=4) and 33.33% responded no (n=2) to participating in applying to more colleges. When the survey participants were asked how much their knowledge was improved about college because of the FLY Tour, 66.67% thought their knowledge improved a great deal better, while 33.33% thought their knowledge improved somewhat better.

Figure 8. Survey Individual Participant Pre-Collegiate Activities

**College Applications Applied and Colleges Accepted.** In Figure 9, when asking the survey participants about how many college applications they applied to, 50% applied to 1-2
(n=3), 33.33% applied to 3-5 (n=2), and 16.67% applied to 6 or more (n=1). The survey participants were also asked how many colleges they got accepted to, 50% got accepted to 1-2 (n=3), 33.33% got accepted to 3-5 (n=2), and 16.67% got accepted to 6 or more (n=1).

![Graph showing # of Colleges Applied & Accepted](image)

Figure 9. Survey Individual Participant Colleges Applied and Colleges Accepted

**Graduation Class.** The survey participants (graduation class of 2018), in Figure 10, were asked what their graduation class size was, 66.67% responded 100 to 300 (n=4), 16.67% responded less than 100 (n=1), and more than 300 (n=1). The survey participants were also asked how they spent their time after graduating high school, 66.67% spent time working (n=4), and 33.33% spent time help fulfilling family obligations (n=2).

![Graph showing Graduation Class Size](image)

Figure 10. Survey Individual Participant Graduation Class Size
Matriculation. The four open-ended questions concerning matriculation were selected to classify and highlight each question main thematic point in Table 16. The participants’ responses were examined more to categorize, then coded the data for analysis. Once the coding was finished, many of the students’ responses failed into each of the main categories (contributed, helpful, influence, prepared). Each of the categories was examined for divergent and commonality themes that started to reveal the FLY Tour participants' meanings, experience, and perceptions through the underpinnings of grounded theory.

As previously mentioned, the matriculation survey questions generally asked: 1) did the survey respondents feel that this event contributed to their decision to attend college? 2) did the survey respondents feel that the FLY Tour help prepare them for college? 3) did the survey respondents feel that campus tour influence their transition to college? and 4) did the survey respondents feel that their high school course or academics prepare them for college. In using grounded theory to analyze the results, the respondent answers were analyzed by the main themes. 60% (3 out of 5) of the survey respondents answered the matriculation questions. One (1 out of 5, 20%) of the respondent that matriculated to college did not answer the matriculation questions.

Contributed. Most of the survey respondents (3 out of 5, 60%) felt that the FLY Tour contributed to their decision to attend college. The survey respondents address how preparing for college, being knowledgeable of the admissions process and being motivated contributed to their college discussion. On the other hand, Raven did not think that the FLY Tour contributed to her college enrollment decision because she already wanted to attend. Lisa explains how the FLY Tour contributed to her decision of attending college:

It helped me get organized on how to prep for college and what I needed to know before getting to college.
Help. The survey respondents (3 out of 5, 60%) felt that the FLY Tour did help them prepare for college. The student addressed how insight was provided to them in preparing for college, helped them understand the college application process, and helped them understand the FAFSA application process. Raven responded that the FLY Tour did not help her much with being prepared for college. On the other hand, Molly thought differently:

In hindsight, the FLY Tour helped me prepare for college on so many levels. The application process was the most stressful because I had no idea what went into it. After going to this tour, I realized all the options available to me through aid and so forth.

Lisa explained how the FLY Tour helped her realize that she had to complete the FAFSA and other pre-collegiate activities:

It helped me realize about FAFSA and other things that needed to be done before college.

Influence. The majority of the survey respondents (4 out of 5, 80%) agreed that at the FLY Tour’s campus tour influenced them to attend college. The campus tour influence student by providing them with an understanding of what has to be done to attend college, made them feel excited about attending college, and influenced college preference and future goals. Molly explains how the campus tour influenced her decision of attending college:

The campus tour had a great deal of an influence because I had not toured that college yet. I was influenced on so many different things. Touring the colleges really opens up one’s eyes as to what they want out of a college for the next 2-4 years of their life.

Prepared. Overall, most survey participants (4 out of 5, 80%) thought that the high school courses prepared them for college on different levels. The students discussed how taking college courses while in high school helped them gain college credits, and the learning environment helped prepare them for college. Molly, one of the survey participants, wished that high school courses, “would have been a more financial focused class required for high school
seniors to take. This class could be about establishing yourself and building credit.” Jill further explains how high school classes and experiences helped prepare her for college:

There are just some classes and experiences that you can only get while in college that high school will not prepare you for. The atmosphere of classes though can be compared a bit to high school though since they are both learning environments, so nothing really changes about that; you can still be in the 'student head space' in general no matter what academic level.

Table 17. Coding Legend for Open Ended Survey Questions - Matriculation

<table>
<thead>
<tr>
<th>Question</th>
<th>Main Theme</th>
<th>Common Themes of Survey Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compared to other people who did not participate in the FLY Tour, do you feel that this event contributed to your decision to attend college? Please explain.</td>
<td>Contributed</td>
<td>0=No Answer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1=Yes, Contributed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2=No, Was Not Contributed</td>
</tr>
<tr>
<td>In hindsight, how did the FLY Tour help prepare you for college? Please explain.</td>
<td>Help</td>
<td>0=No Answer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1=Yes, Help</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2=No, Not Help</td>
</tr>
<tr>
<td>Did the campus tour, after the FLY Tour performance, have an influence on your transition to college? Please explain.</td>
<td>Influence</td>
<td>0=No Answer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1=Yes, Influence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2=No, Did Not Influence</td>
</tr>
<tr>
<td>Do you feel that your high school courses or academics prepared you for college? Please explain.</td>
<td>Prepared</td>
<td>0=No Answer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1=Yes, Prepared</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2=No, Was Not Prepared</td>
</tr>
</tbody>
</table>

**Did Not Matriculate.** The three open-ended questions regarding non-matriculation were answer by one of the survey participants (Jana) (1 out of 6, 16.67%). The non-matriculation survey questions generally asked: 1) what was the main reason the survey respondent did not go to college? 2) what are some barriers the survey respondent did not go to college? and 3) if the survey respondent is planning on going to college in the future?

Overall, Jana believed that not having enough scholarships, dealing with personal matters caused her not to attend college in Fall 2018. This survey respondent agreed there were no barriers that caused her not to attend college. When asking Jana about attending college in the
future, she agreed, “In the future, I will attend college. It has always been a dream of mine, and when the time is right I will achieve it."

For the final question, in the survey, is there anything else you would like to share about your FLY experience or college enrollment, Jill shared:

The performances were really great and entertaining. I appreciate the work and effort you guys had put into what you guys do to teach students about the college process. Becoming a college student myself, I can recognize how hard it is sometimes to juggle things, but you guys pulled everything off effortlessly and I honestly admire that. Thanks so much for what you guys do and keep up the work!

**Summary of Matriculation Qualitative Findings.** Each student that completed the open-ended matriculation questions in the online survey provided the story of their pathway in matriculating to college. The survey responses were coded by line and grouped by question. After the duplications and similarities were reviewed, they were then recoded again through using initial coding. Initial coding is sometimes referred to as open coding (Saldaña, 2009). See Appendix F for coding and theme examples for open-ended questions. According to Lawrence and Tar (2013), in using grounded theory methods, “open coding is the analytic process through which concepts are identified and their properties and dimensions are discovered in the data” (p. 32). Regardless of the question emphasis, relevant topics and areas of influence were repeated several times throughout the questions and were recognized throughout the codes. Then the themes were identified through these codes. A summary of the codes is presented in Table 18. The second column list the refined codes that were discovered after coding and recoding by each question, which is listed by occurrence within each question. The third column categorizes the main themes (academic/content knowledge, academic behaviors and attitudes, and transition knowledge) and the subthemes from the refined codes. After the additional coding analysis was completed, the themes were identified. The fourth column is N, which is the number of times
each subtheme appeared in the refined codes. The fifth column is %, which is the percentage of
the subtheme appearance in the refined codes. The sixth column is the definition of the themes.

**Academic/Content Knowledge.** The majority of the student respondents felt that the FLY Tour
provided information on preparing for college, college courses to take before going to college, and how to
become organized in high school before going to college. Jill made it evident of how the FLY Tour
provided information to about preparing for college:

> I tend to be a more independent person and my parents are not really knowledgeable about
college preparation, so the FLY Tour definitely assisted me by providing the info I needed to be prepared.

Raven further explained how taking college courses in high school academically helped her prepare for
college:

> The only thing that helped was that I was able to take college courses and gain college credit
while in high school.

**Academic Behaviors and Attitudes.** Some of the students shared how the campus tours at the
FLY Tour and their FLY Tour experience provided more insight on attending college. Jill provided more
insight on her behavior and attitudes of attending college:

> I planned on going to college, but the FLY Tour did give me more insight and reasons as to attend
college for myself and to be confident within my plan to attend college and gave me a broader
spectrum of options on where to attend.

> Campus tours helped me decide what kind of school atmosphere I wanted to be in when
attending. Tours give you a first glance of what a person can expect if they ever decide to be a
student at the campus student life wise and to experience and discover a bit of campus life.

**Transition Knowledge.** Students felt that the information they acquired at the FLY Tour about
financial aid, the FAFSA application, and the steps of completing the college application helped them
transition to college. Molly explained how the FLY Tour provided her with knowledgeable information
that she needs to know in helping her transition and apply for college:

> I was very influenced by the information related to scholarships and the type of aid that can
be received. In addition to that, the knowledge I gained from apply to colleges through this
program helped me be more open to other colleges. I really went over every aspect of the college
application experience and was very thorough as to what was needed to apply.
Raven further explained how the campus tour provided her with the transition experience of staying on campus:

It made me a bit more excited about coming and staying on campus.

Table 18. Qualitative Coded Themes-Open-Ended Matriculation Questions

<table>
<thead>
<tr>
<th>Matriculation Questions</th>
<th>Refined Codes</th>
<th>Main Theme/ Subthemes from Refined Codes</th>
<th>n</th>
<th>%</th>
<th>Main Theme Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 1</td>
<td>Organization Financial Aid/Scholarships College Application Insights to Attend College Confident Options on Where to Attend</td>
<td>Academic/Content Knowledge</td>
<td></td>
<td></td>
<td>Rigorous academic courses students take to ensure that they are ready academically.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Academic Behaviors and Attitudes</td>
<td></td>
<td></td>
<td>Student behavior and traits that would provide them with the additional skills needed for college and life beyond.</td>
</tr>
<tr>
<td>Question 2</td>
<td>Things to do before College Financial Aid/FAFSA College Application Realization of Aid Options College Preparation</td>
<td>Transition Knowledge</td>
<td></td>
<td></td>
<td>Understand the college process or transition that provide students the opportunities to develop positive attitude towards college and how to navigate the complex college application process and college system.</td>
</tr>
<tr>
<td>Question 3</td>
<td>Campus Tour Realization of College Choice Future Goals Campus Atmosphere Campus Life Motivated</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question 4</td>
<td>College Courses College Experiences Class Atmosphere Learning Environments College Credit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note*: Ten total subthemes.

This study's qualitative research was analyzed, coded, and themes were established after the quantitative data detailed analysis. Although there were some similarities in the quantitative and qualitative data findings, they will be further discussed in Chapter five. For triangulation purposes, the results in the qualitative data complimented the findings in the quantitative data. Students that completed the survey also were included in the quantitative data. According to my
hypothesis of the FLY Tour, the quantitative and qualitative results prove that this event impacted student’s matriculation prediction.

**Mixed Methods Summary**

The explanatory sequential mixed method research design was selected to incorporate the quantitative results with the students’ expressions and perceptions. The students’ responses qualitatively inform what could not be solely explained by statistical analysis.

Quantitatively, this research study's analysis revealed different results for FLY Tour participants and non-FLY Tour participants in the 2017-2018 cohort. Moreover, changes in the results occurred once gender, race/ethnicity, and social economic status (SES) were added to the logistical regression model 3. Overall, in the quantitative analysis, the FLY Tour participants outperformed the non-participants in matriculation.

Qualitatively, there were different perspectives in the student responses in the online survey. The FLY Tour participant survey respondents generally expressed positive benefits of participating in the FLY Tour, which yielded a positive outcome. The majority of the FLY Tour participants shared how they felt during their participation in the FLY Tour, which was helpful, influential, contributed, and prepared them for college. There were no doubts about the benefits of the FLY Tour participants regarding being help in preparing students for college, academically and financially, which was revealed both quantitatively and qualitatively.

However, one student brought up an issue related to providing high school students with required financial literacy and motivational classes to help prepare them for college. This finding also identifies the need for financial aid and ways for creating to improve college affordability. If the FLY Tour participants and non-FLY Tour participants did not do well academically or were not financially literate, he/she had a lower chance of matriculation. This concern did reveal the
statistical result of students' lower performance outcomes, thus resulting in some students not matriculating.
CHAPTER FIVE. DISCUSSION AND CONCLUSION

Chapter five provided a conclusion of this research, highlight relevant findings of the four research questions and literature context in the higher education field. Implications of the findings for policy and practice at the secondary and postsecondary levels are discussed. Finally, the chapter concludes with an overview of the limitation and the examination of recommendations for future research.

Summary of the Study

This explanatory sequential mixed-methods study entailed three quantitative research questions and one qualitative research question. The first three quantitative research questions aimed to analyze whether participation in the FLY Tour contributes to matriculation while controlling for matriculation predictors 1) high school GPA, 2) ACT composite score, 3) gender, 4) social economic status (SES), and 4) other demographics. The qualitative research questions sought to capture the individual responses of student impressions and perceptions about their FLY Tour experiences and its impact on their college enrollment to further inform the statistical findings. The resulting discussion considered the results of each research question. The current literature context examined college/outreach preparatory events' predictive nature in providing pertinent information on matriculation and college enrollment.

Research Questions I, II, and III Overview: The Effects of FLY Tour Participation on Matriculation, Academics, and Demographics

This study sought to examine the FLY Tour's effect on matriculation by using a robust quantitative dataset. The comprehensive dataset included detailed student level information from secondary to postsecondary of the student cohort that allowed for the analysis of matriculation
predictors. Once the matriculation data and FLY participants and non-participants were added in
the logistical regression model 1 for research question I, then the study added academics in the
logistical regression model 2 for research question II. In the logistical regression model 3 for
research III, the demographic was added further to study the FLY Tour's interactions on
matriculation rates. Moreover, the high school cumulative GPA was used for the purposes of this
study and the 2017-18 cohort.

**Research Question I:** *Does the FLY Tour contribute to college matriculation rates
among high school students?*

The quantitative results for logistical regression model 1 indicated there was a
statistically significant relationship between participation in the FLY Tour (p<.000).
Furthermore, the b coefficients were negative (B0=-.755), indicating that students that
participated in the FLY Tour were less likely to matriculate than those that did not participate.
Students who participated in the FLY Tour matriculation rate was 49.1% (1,390) and the non-
participants matriculation rate was 50.9% (1,443). This is because the participants were selected
based on a need for support or encouragement to attend college after their high school
graduation. Although the dataset in this research study was more comprehensive than some
empirical studies in the literature, Kreig (2013) suggests that matriculation is a significant
milestone that requires students to adjust to new academic challenges. In adjusting to these a new
challenges, students have to increase their independence level, adapt to separation from family
and friends, and honor the new role expected of them.

**Research Question II:** *Is there a relationship between FLY Tour participation and
college matriculation once academic variables (i.e., ACT and high school GPA) are considered?
In the logistical regression model 2, when academics, ACT Composite scores, and high school GPA were added to discover whether the relationship between the FLY Tour and matriculation varied between groups, participation, and non-participation. The results explained that in Model 2, 18% (Nagelkerke $R^2$) of the variance in high school students matriculating to college were correctly classified in 65.4% of the cases. The effect of the ACT Composite Score was also significant and positive, indicating that students with a higher ACT Composite Score were more than likely to achieve matriculation. In looking at the results for High School GPA, this variable has the highest significant overall effect (Wald=117.380, df=1, p<.000). The b coefficients for High School GPA was significant and positive, indicating that an increasing influence is associated with the increased odds of students achieving matriculation. Overall, logistic regression was done to discover the effects FLY Tour Status, ACT Composite Scores, and HS GPA would have on the likelihood that high school students would matriculate to college. The mean of the ACT composite score for the group (participants and non-participants) was 17.64, while the mean of the high school GPA was 2.89. From these results, the FLY Tour Stat(1) (p=.001), ACT Composite Score (p=.000), and HS GPA (p=.000) were all statistically significant. After controlling for the academic variables, it is notable that the coefficient for the FLY Tour continues to be less than one, indicating that the odds of matriculation for participants is less than that of non-participants. The current literature in this study (Duncheon & DeMatthews, 2019; Gaertner et al., 2014; Martinez & Deil-Amen, 2015; Munoz, Fischetti, & Prather, 2014) uses academics as a predictor of college success and matriculation.

**Research Question III:** Does the relationship between FLY Tour participation and college matriculation vary by demographic characteristics (i.e., gender, race/ethnicity, SES) of students?
When demographic characteristics (gender, race/ethnicity, and Pell grant (SES)) were added to the logistical regression model 3, the overall results were statistically significant. There are 15.8% (449) missing cases, which means that some of the cases were not included in the analysis due to missing data. This model explained that 28% (Nagelkerke R²) of the variance in high school students matriculating to college. In this model, the High School GPA variable had the highest significant overall effect (Wald=103.130, df=1, p < .000). The b coefficients for High School GPA is significant and positive, indicating that increasing influence is associated with increased odds of students achieving matriculation.

The overall Wald for the FLY Tour(Participated)*Gender(Female) interaction was significant (Wald=9.042, df=1, p<.005). The interaction terms were included for FLY Tour Status and Gender to determine if the relationship of students matriculating to college varied on these characteristics. For the interaction variables, FLY Tour participants who are Female are 1.913 times (or 91%) greater of matriculating than the males not participating in the FLY Tour. The interaction is statistically significant. The gender is 52% (1,474) female and 48% (1,359) males. The FLY Tour groups are 25.9% (734) participants and 74.1% (2,099) non-participants. Overall, logistic regression was done to discover the effects ACT Composite Scores, HS GPA, Gender, Race/Ethnicity, FLY Tour Status would have on the likelihood that high school students would matriculate to college. The b coefficients for High School GPA, FLY Tour Stat(Participated)*Gender(Female), and ACT Composite Score are significant and positive, indicating that increasing influence is associated with increased odd of students achieving matriculation. This finding is similar to the current narratives promoting matriculation predictors as a measure of increasing the likelihood of student matriculating or enrolling into college (Bryant, 2015; Le, Mariano, & Faxon-Mills, 2016; Stipanovic, Stringfield, & Witherell, 2017).
Research Question IV Overview: The Results of the Qualitative Online Survey

The student’s impressions and perceptions included in survey responses provided an understanding of how students felt or perceived the FLY Tour upon their collegiate aspirations and motivation to matriculate. The information gathered from the closed-ended questions on demographic information, and categorical variables (gender, ethnicity, high school graduation class size, parents’ education levels, and FLY Tour topics) provided an overview of FLY Tour topics. Some of these topics were favored, why, how the students prepared for college, and the students provided their parent’s education level. The open-ended questions captured the emotions and perceptions of the students’ experience of the FLY Tour. Through using grounded theory, three overarching themes emerged from the student responses: 1) academic/content knowledge, 2) academic behaviors, and 3) attitudes and transition knowledge. Four themes emerged from the matriculation survey questions: 1) contributed, 2) help, 3) influence, and prepared.

Research Question IV: How are FLY Tour experiences of students related to college matriculation decisions?

The information gathered from the closed-ended questions on demographic information and categorical variables provided an overview of FLY Tour topics that were favored and why the students were prepared for college. In the area of demographics, most of the survey participants were females who had matriculated in Fall 2018, had a 3.5 GPA or above. Most of their father’s education level was high school, while the mother education level was similar with either no high school, high school, or a bachelor’s degree. Most of the students agreed that their knowledge increased a great deal from the FLY Tour about college. For the FLY Tour topics, most of the student’s knowledge increased a great deal about scholarships, the FAFSA
application, and TOPS. The pre-collegiate activities that most of the students did after the FLY Tour was research and apply for more scholarships and complete the FAFSA application, while most of them applied to and got accepted to 1 to 2 colleges. Most of the survey respondents’ graduation class size was 100 to 300 students.

From all of the themes from the open-ended questions, the overarching patterns emerged from the student responses in the matriculation and non-matriculation open-ended questions 1) the majority of the students felt that the FLY Tour provided information on how to prepare them for college, college courses to take, and how to become organized, 2) some of the students shared how the campus tour provided more insight, influence, and contribute to them wanting to attending college, 3) most of the students felt that the information they acquired at the FLY Tour regarding financial aid, the FAFSA application, and steps of completing the college application helped them in transitioning to college, and 4) one student had mixed feelings about their FLY Tour experience because they had already wanted to attend college, although the campus tour caused this student to become excited about college, 5) one of the students did not matriculate but shared how they are still planning on attending college in the future because it is their dream.

Overall, the survey respondents were forthcoming in how the FLY Tour covered all the significant stages in transitioning from high school to college. In the survey, the students responded on similar concerns and critical viewpoints exist in current literature (Andrews, Ranchhod, & Sathy, 2010; Avery, Howell, & Page, 2014; Duncheon & DeMatthews, 2019) shared by administrators at the state levels regarding college preparation and transition through a) embedded support, b) instructional rigor, c) targeted interventions, and d) student enrichment in similar college preparatory/outreach initiatives like the FLY Tour on college enrollment. College preparation, academic behaviors and attitudes, the transition from secondary to
postsecondary, and financial aid are all known catchwords in the higher education field regarding the FLY Tour’s growth and promotion. These catchwords were mentioned by the students in their descriptive statements about their experiences of the FLY Tour.

**Limitations and Future Research**

**Limitations**

In any research conducted, there are some aspects of the study that pose limitations in some way. The first limitation of this study is the lack of student responses in the online qualitative survey. This study included six participants, five of them were females and one of them was a male. The racial demographics were three Whites, two Black/African Americans, and one unknown. While the number of survey participants may appear low, these participants were fair. They represented the number of seniors that participated in the FLY Tour given the data collected over the summer and due to Covid-19.

The second limitation is related to the participant’s perspectives being limited to those students who only participated in the FLY Tour and the timing of when the survey was sent to students. The third limitation is the race/ethnicity category of “other.” More specific results might have been yield with more defined race/ethnicity categories. Participants who did not describe themselves as Whites, Black/African Americans, or Hispanics were included in a fourth category called “other.” If more students are encouraged to participate in a subsequent survey of this nature, the number of participants might lend itself to race/ethnicity categories that are more defined. Consequently, this might produce significantly different statistical results.

The fourth limitation is that these results are not to be applied to all high school seniors in the nation or the southern state of the United States. Instead, these results speak to the 26 public high schools where seniors participated or did not participate in the FLY Tour. Moreover,
researchers throughout the nation can review this information and work to determine if their structure and programming can benefit high school seniors. The themes and take-a-ways from this study were brought to light for the critical need for college/outreach preparatory events like the FLY Tour (financial literacy events) at educational agencies and school districts.

**Future Research**

Although, future studies regarding the topics of college enrollment and financial literacy are abundant, this study will examine future research of the FLY Tour program. As mentioned previously, this study planned to include the FLY Tour participants and non-participants from the 2017-2018 cohort. Given that college/outreach preparatory events similar to the FLY Tour (financial literacy events) could perhaps, be compared with early college program outcomes.

Finally, the responses of the students who participated in this college/outreach preparatory event eloquently articulated their first-hand experience of the FLY Tour and how the influence of this opportunity can have an impression on students through college. The qualitative analysis added a level of depth and description to the statistical findings, which could not be accomplished through numbers alone. In the future, as this topic is studied, it would be helpful to consider using a mixed methods research design to reveal the quantitative results and the qualitative responses of the group being observed.

A future research could be done on the FLY Tour participants that matriculated to college. A longitudinal study could be done to see if the matriculated students persist to the 2nd year of college and how well they did in Math.
Implications for Policy and Practice

Early college programs like college/outreach preparatory events are used to simplifying the process of transitioning students to college. These programs and events can help students transition to college by providing them with the knowledge and pertinent information they need. This information and knowledge will help them save tuition dollars, reduce the time to degree, get started on their college career, and increase college access for underrepresented groups. Although these programs and events are much needed, these are all ambitious propositions on early college enrollment and matriculation programs. Since college preparation to transitioning to college is an impactful change, the No Child Left Behind Act 2001 plays a key role in addressing America's achievement gap and society. Early college programs are a must in helping students achieve this goal in college enrollment and helping alleviate the struggle that low-income students encounter in transitioning to college. The national, district, and state outcomes use the same measurements to access institutional success at the secondary and postsecondary levels. Although there is evidence in various empirical studies, it supports the connections between those measurements and outcomes at the national, district, and state levels for college readiness.

This study’s implications and results provide an evident prospective to highlight current policy and practices based on how this robust dataset was used, which provided detailed official transcript information, financial aid information, and matriculation information by a case-level data set. Due to the lack of access to student level data of this quality, few studies are available of this nature. Consequently, legislators, stakeholders, and policymakers at the state and federal levels have disseminated early college programs like the FLY Tour. Early college programs are used as a bridge to increase matriculation and graduation rates through the No Child Left Behind
Act 2001, while reducing financial aid debt and the time to earn a degree without the benefit of providing relevant evidence. Relevant evidence is used to support the establishment of these policies. The reality of this southern state and the FLY Tour program in question was that those who participated in the FLY Tour outperform the students who did not participate in the FLY Tour.

The public schools that attended the FLY Tour hosted by a state agency submit all of their secure files: high school secondary transcripts, participant information, financial aid information, high school graduation information, and matriculation, to the state agency. The high school secondary transcripts and high school graduation information were obtained through a secure file from the state’s Department of Education (DoE). The matriculation information was obtained through a secure file from the Nation Student Clearinghouse database, StudentTracker. This type of data reveals that each student record can be utilized to study the effects of secondary influences on college empirically, regarding the matriculation and college enrollment rates.

**Recommendations**

Many researchers in the field of college readiness specifically that there is a need for students to become college ready academically as early as middle school and continue during high school (Cave et al., 2018; Lombardi et al., 2018; Malin, Bragg, & Hackmann, 2017). College readiness is an imperative need for student success in college and life afterward. The literature from Conley (2010) addresses the needs of moving beyond ideal college strategies within middle and high schools but provides a feasible blueprint for programmatic change.

A high-quality, comprehensive education is no longer just a pathway to opportunity, but it is a requirement for success in today’s global economy (Edmunds et al., 2017). A
comprehensive education must promote academic knowledge and skills, individual and social
competencies, and the essentials middle and high school students will need to endure the
challenges and relationships of the modern world (Malin, Bragg, & Hackmann, 2017). Due to
economic progress and education attainment, it is a national imperative that educating every
student in American to graduate from high school must be prepared professionally, academically,
socially, emotionally ready for college and career (Partnerships, Not Pushouts, 2014).

To ensure that this national imperative is a success, legislators, districts, and schools must
provide students with a positive, safe, supportive, equitable, and challenging learning
environment. A learning environment depends on the educators and staff employed at the
schools and implement policies that encourage more robust student-centered support and
community, and school partnerships (Marlin, Bragg, & Hackmann, 2017). These partnerships
will require the school districts to move forward to educational models and college-going
cultures that strive to educate the whole child and involve the entire community (Partnerships,
Not Pushouts, 2014).

Education reforms must seek to improve the standards for all students and assess them
more comprehensively (Conley, 2014). Career counseling can be provided to students, early as
middle school, to increase students’ awareness of the possible training and educational
opportunities available to them after high school. Career counseling can help students develop
decision-making and other skills needed for college (Glessner, Rockinson-Szapkiw, & Lopez,
2017). Every other sector in society is increasing the amount of information generated and using
it to make informed decisions. Education reform reinforces the need and urgency for K-12 and
postsecondary education systems to collaborate on developing radically new methods to analyze,
capture, and use a wider array of information to inform their decisions and maximize student
success (Conley, 2014). Postsecondary institutions can partner with middle and high schools to promote student success regarding college and career demands in the 21st century. Postsecondary institutions can work with schools to implement programs and interventions that communicate the importance of a college education and provide a model of possibility for all citizens to enroll in college, thus removing perception barriers (Glessner, Rockinson-Szapkiw, & Lopez, 2017).

**Conclusion**

As one of the first to address the topic of college/outreach preparatory events, the Financial Literacy for You Tour (FLY Tour), this mixed method study examined the effectiveness of this program through using this research design. This research design study captured this program's value quantitatively through statistical outcomes via logistical regression and qualitatively through survey responses of students' impressions and perceptions.

The statistical results highlight the positive relationship between a robust program on financial literacy (FLY Tour) and several matriculation or college enrollment measures. In contrast, less positive results were discovered for students who did not participate in the FLY Tour in this southern state of the United States. The FLY Tour, a college/outreach preparatory event, highlighted 1) the worth of financial literacy programs and 2) the outcomes that some college/outreach preparatory events are not producing the same results that need to be addressed. The students’ impressions and experiences of the FLY Tour were both positive and negative attributes. This findings provided a realistic view of their perspectives. It is evident that college/outreach preparatory events like the FLY Tour are beneficial for students in this Southern state.
Additionally, the relevant literature governing the opportunities college/outreach preparatory events serve as a solution for college readiness, postsecondary institution concerns of high school graduation rates, matriculation/college enrollment rates, financial aid debt, must be reconsidered. In a more realistic manner, the narrative must be adjusted to some of the inconsistencies in policies controlling college readiness predictors and observe the relevant studies such as this one have found.

Students who partake in early college/outreach preparatory events like the FLY Tour want to transform these favorable occasions into postsecondary success. Although there is work to be done, all of the college/outreach preparatory events must be transformed to a quality level when more students have the same opportunities readily available for them to succeed at the postsecondary level.

The quantitative and qualitative results helped remind me of the respect these students deserve as they work in persisting to college on earning a degree. The decision to pursue college can be made at any point in their life. It is never too early or late to pursue a bachelor’s degree. Although everyone’s obstacles will vary, knowing how to overcome them and bounce back from adversity is what separates each person from another.
APPENDIX A. SUMMARY OF VARIABLES

<table>
<thead>
<tr>
<th>Level</th>
<th>Type</th>
<th>Measurement</th>
<th>Statistical Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School GPA</td>
<td>Independent</td>
<td>Continuous</td>
<td>Logistical Regression</td>
</tr>
<tr>
<td>ACT Composite Score</td>
<td>Independent</td>
<td>Continuous</td>
<td>Logistical Regression</td>
</tr>
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<td>Logistical Regression</td>
</tr>
<tr>
<td>FLY Tour Status</td>
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<td>Categorical</td>
<td>Logistical Regression</td>
</tr>
<tr>
<td>Matriculation Status</td>
<td>Dependent</td>
<td>Categorical</td>
<td>Logistical Regression</td>
</tr>
</tbody>
</table>
APPENDIX B. SURVEY EMAIL

To: sjoh179@lsu.edu

Bc: FLY Tour Participant Email Addresses

Subject: The FLY Tour Experience!

Greetings!

My name is Sabrina Johnson and I am a PhD student at Louisiana State University A & M College. I am conducting a research project to determine the impact of participation in the Financial Literacy for You (FLY) Tour program. I am contacting you to request your participation in this study. Participation involves completing an online survey through Qualtrics, which should take approximately 20-30 minutes. The survey consists of demographic questions and questions about your FLY Tour experience when you were a 2018 senior and attended one of the FLY Tour programs in Fall 2017 or Spring 2018. If you agree to participate, prior to starting the survey you will need to complete the consent form, indicating your willingness to participate in the study. Once the consent form is completed, you can complete the survey. Please click the link to access the consent form and survey: http://lsu.qualtrics.com/jfe/form/SV_cOsrpndGHb9sTZP.

- When the consent form and survey are completed, your name will be put into a drawing to receive one out of the three $20 gift cards from participating in the study.

*Deadline to complete the consent form and survey: July 18, 2020.*

Please know that your participation is voluntary, and should you participate, all of the information shared will be anonymous. This research interest me because I believe that is important for education researchers to better understand the experiences of high school students and provide programs to help them enroll into college. If you have any question about this study or the survey, please contact me via e-mail Sjoh179@lsu.edu. This study has been approved by the LSU IRB. For questions concerning participant rights, please contact the IRB Chair, Alex Cohen, at 225-578-8692, or irb@lsu.edu. Thank you for your time and I look forward in hearing from you!

Sincere thanks,

Sabrina Johnson, M.Ed.
Doctoral Candidate, Higher Education Administration
College of Human Science & Education
Louisiana State University
Sjoh179@lsu.edu
APPENDIX C. INFORMED CONSENT FORM

Consent Script

1. **Study Title:** College Expectation and Matriculation

2. **Purpose of the Study:** The purpose of this research project is to determine the impact of participation in the Financial Literacy for You (FLY) program. The study will be conducted online through Qualtrics and you will spend approximately 20-30 minutes completing a questionnaire about your experiences as a participant in the project.

3. **Subject Inclusion & Exclusion:** Individuals who participated in the FLY Tour program and are between the ages of 18 and 21 who do not report psychological or neurological conditions, this is what will include you in the study. Individuals who were not a participant of the FLY Tour Program and does not meet the age requirement and does show psychological or neurological conditions will not be able to participate in the survey, this is what will exclude you from the study. To participate in this study, you must meet the requirements of both the inclusion and exclusion criteria.

4. **Risks:** This study does not present any risks for participants

5. **Benefits:** The participants name will be put into a drawing to receive one out of the three $20 gift cards to participate in the study. Additionally, the study may yield valuable information about students who have matriculated to college.

6. **Investigator:** The following investigators are available for questions about this study, M-F, 8:00 a.m. – 3:00 p.m., Sabrina Johnson, 225-335-8906, sjoh179@lsu.edu and Dr. Eugene Kennedy, 225-578-2193, ekennedy@lsu.edu.

7. **Right to Refuse:** Subjects may choose not to participate or to withdraw from the study at any time without penalty or loss of any benefit to which they might otherwise be entitled.

8. **Privacy:** Results of the study may be published, but no names or identifying information will be included in the publication. Subject identity will remain confidential unless disclosure is required by law.

9. This study may be published, but no names or identifying information will be included in the publication. Subject identity will remain confidential unless disclosure is required by law.

10. This study has been approved by the LSU IRB. For questions concerning participant rights, please contact the IRB Chair, Alex Cohen, at 225-578-8692 or irb@lsu.edu.

11. By continuing to this survey, you are giving consent to participate in this study.

12. Your information or biospecimens collected as part of the research, even if identifiers are removed, may be used, or distributed for future research.

   _____ Yes, I give permission.

   _____ No, I do not give permission.
<p>| | |</p>
<table>
<thead>
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<tbody>
<tr>
<td>1.</td>
<td>Name:</td>
</tr>
<tr>
<td>2.</td>
<td>Phone Number:</td>
</tr>
<tr>
<td>3.</td>
<td>Email Address:</td>
</tr>
<tr>
<td>4.</td>
<td>Sex:</td>
</tr>
<tr>
<td>5.</td>
<td>Ethnicity/Race:</td>
</tr>
<tr>
<td>6.</td>
<td>Mother’s Educational Level:</td>
</tr>
<tr>
<td>7.</td>
<td>Father’s Educational Level:</td>
</tr>
<tr>
<td>8.</td>
<td>Household Income:</td>
</tr>
<tr>
<td>9.</td>
<td>High School Name:</td>
</tr>
<tr>
<td>10.</td>
<td>High School GPA:</td>
</tr>
</tbody>
</table>
11. How much was your knowledge increased about postsecondary information during the FLY Tour? | A great deal  
| Quite a bit  
| Somewhat

12. How much was your knowledge increased in the following areas at the FLY Tour?

| Area                        | A great deal  
|-----------------------------| Quite a bit  
|------------------------------| Somewhat      

| Taking Challenging Courses  | A great deal  
|------------------------------| Quite a bit  
| Scholarship/FAFSA/TOPS      | Somewhat      
| Budgeting/College Planning  | A great deal  
|------------------------------| Quite a bit  
| Scholarship/FAFSA/TOPS      | Somewhat      
| ACT/SAT Scores              | A great deal  
|------------------------------| Quite a bit  
| Scholarship/FAFSA/TOPS      | Somewhat      
| Taking Challenging Courses  | A great deal  
|------------------------------| Quite a bit  
| Scholarship/FAFSA/TOPS      | Somewhat      
| ACT/SAT Scores              | A great deal  
| Taking Challenging Courses  | Quite a bit  
| Scholarship/FAFSA/TOPS      | Somewhat      
| ACT/SAT Scores              | A great deal  
| Taking Challenging Courses  | Somewhat      
| Scholarship/FAFSA/TOPS      | A great deal  
| ACT/SAT Scores              | Quite a bit  
| Taking Challenging Courses  | Somewhat      

13. After the FLY Tour performance, did you do any of the following pre-collegiate activities?

| Activity                                | Yes / No  
|-----------------------------------------|----------- 
| Plan & budget financial aid awards and scholarships | Yes / No  
| Research & apply for more scholarships | Yes / No  
| Planned & visited college campus        | Yes / No  
| Complete the FAFSA Application          | Yes / No  
| Apply to more colleges                  | Yes / No  
| How much was your knowledge improved about because of the event? | A great deal better  
| Quite a bit better  
| Somewhat better  
| About what was expected                  

14. How much was your knowledge improved about because of the event?

| Area                        | A great deal better  
|-----------------------------| Quite a bit better  
| Scholarship/FAFSA/TOPS      | Somewhat better  
| Taking Challenging Courses  | About what was expected

15. How many colleges did you apply to?

| None |
| 1-2  |
| 3-5  |
| 6 or more |

16. How many colleges did you get accepted to?

| None |
| 1-2  |
| 3-5  |
| 6 or more |

17. Graduated High School: | Yes / No  

18. Graduation Date: | _________________  

19. Graduation Class Size:

| Less than 100 |
| 100 to 300    |
| More than 300 |

20. How did you spend your time after graduating high school?

| Worked |
| Helped fulfilling family obligations |

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<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please skip to questions 26-28 if you did NOT attend college.</td>
<td></td>
</tr>
<tr>
<td><strong>Open-Ended Questions</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Matriculated to College:</strong></td>
<td></td>
</tr>
<tr>
<td>22. Do you feel that the FLY Tour contribute to your decision of wanting to attend college? Please explain.</td>
<td></td>
</tr>
<tr>
<td>23. In hindsight, how did the FLY Tour help prepare you for college? Please explain.</td>
<td></td>
</tr>
<tr>
<td>24. Did the campus tour, after the FLY Tour performance, have an influence on you attending college? Please explain.</td>
<td></td>
</tr>
<tr>
<td>25. Do you feel that your high school courses prepared you for college? Please explain.</td>
<td></td>
</tr>
<tr>
<td><strong>Did not attend college:</strong></td>
<td></td>
</tr>
<tr>
<td>26. If you did NOT go to college after high school in Fall 2018, what would be the main reason? Please explain.</td>
<td></td>
</tr>
<tr>
<td>27. What are some barriers, if any, that stopped you from going to college? Please explain.</td>
<td></td>
</tr>
<tr>
<td>28. Are you planning on attending college in the future? Please explain your reason.</td>
<td></td>
</tr>
<tr>
<td><strong>All survey participants:</strong></td>
<td></td>
</tr>
<tr>
<td>29. Is there anything else you would like to share about your FLY Tour experience or college enrollment?</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX E. LOUISIANA STATE UNIVERSITY INSTITUTION REVIEW BOARD APPLICATIONS FOR EXEMPTION FROM INSTITUTIONAL OVERSIGHT

ACTION ON EXEMPTION APPROVAL REQUEST

TO: Sabrina Johnson  
    Education

FROM: Dennis Landin  
    Chair, Institutional Review Board

DATE: November 25, 2019

RE: IRB# E12022

TITLE: College Expectation and Matriculation


Review Date: 11/22/2019

Approved X Disapproved

Approval Date: 11/23/2019 Approval Expiration Date: 11/22/2022

Exemption Category/Paragraph: 2a: 4b

Signed Consent Waived?: No

Re-review frequency: Three years

LSU Proposal Number (if applicable):

By: Dennis Landin, Chairman

PRINCIPAL INVESTIGATOR: PLEASE READ THE FOLLOWING – Continuing approval is CONDITIONAL on:

1. Adherence to the approved protocol, familiarity with, and adherence to the ethical standards of the Belmont Report, and LSU’s Assurance of Compliance with DHHS regulations for the protection of human subjects.
2. Prior approval of a change in protocol, including revision of the consent documents or an increase in the number of subjects over that approved.
3. Obtaining renewed approval (or submittal of a termination report), prior to the approval expiration date, upon request by the IRB office (irrespective of when the project actually begins); notification of project termination.
4. Retention of documentation of informed consent and study records for at least 3 years after the study ends.
5. Continuing attention to the physical and psychological well-being and informed consent of the individual participants, including notification of new information that might affect consent.
6. A prompt report to the IRB of any adverse event affecting a participant potentially arising from the study.
8. SPECIAL NOTE: When emailing more than one recipient, make sure you use bcc. Approvals will automatically be closed by the IRB on the expiration date unless the PI requests a continuation.

* All investigators and support staff have access to copies of the Belmont Report, LSU’s Assurance with DHHS, DHHS (45 CFR 46) and FDA regulations governing use of human subjects, and other relevant documents in print in this office or on our World Wide Web site at http://www.lsu.edu/irb
TO:                     Johnson, Sabrina Juanita  
                       Conversion Organizational Unit  
FROM:                   Alex Cohen  
DATE:                   08-Jul-2020  
RE:                     E12022  
TITLE:                  College Expectation and Matriculation  
New Protocol/Modification/Continuation: **Modification**  
Review Type:            Exempt Review  
Risk Factor:            Minimal  
Review Date:            08-Jul-2020  
Status:                 Approved  
Approval Date:          08-Jul-2020  
Approval Expiration Date: 22-Nov-2022  
Re-review frequency:    *(annual unless otherwise stated)*  
Number of subjects approved:  
By:                     Alex Cohen, Chairman  

Continuing approval is **CONDITIONAL** on:  

1. Adherence to the approved protocol, familiarity with, and adherence to the ethical standards of the Belmont Report, and LSU’s Assurance of Compliance with DHHS regulations for the protection of human subjects.*  
2. Prior approval of a change in protocol, including revision of the consent documents or an increase in the number of subjects over that approved.  
3. Obtaining renewed approval (or submittal of a termination report), prior to the approval expiration date, upon request by the IRB office (irrespective of when the project actually begins); notification of project termination.  
4. Retention of documentation of informed consent and study records for at least 3 years after the study ends.  
5. Continuing attention to the physical and psychological well-being and informed consent of the individual participants, including notification of new information that might affect consent.  
6. A prompt report to the IRB of any adverse event affecting a participant potentially arising from the study.  
8. **SPECIAL NOTE:** When emailing more than one recipient, make sure you use bcc.
## APPENDIX F. CODING AND THEME EXAMPLES FOR OPEN-ENDED QUESTIONS

<table>
<thead>
<tr>
<th>Transcript</th>
<th>Initial Coding</th>
<th>Subthemes</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you feel that the FLY Tour contribute to your decision of wanting to attend college? Please explain. Yes, I was very influenced by the information related to scholarships and the type of aid that can be received. In addition to that, the knowledge I gained from apply to colleges through this program helped me be more open to other colleges.</td>
<td>Scholarships and Type of aid</td>
<td>Affordability</td>
<td>Transition Knowledge</td>
</tr>
<tr>
<td></td>
<td>Knowledge I gained</td>
<td>College Knowledge</td>
<td>Transition Knowledge</td>
</tr>
<tr>
<td>2. In hindsight, who did the FLY Tour help you prepare for college? Please explain. In hindsight, it did... I tend to be more independent person and my parents aren't really knowledgeable about college preparation so the FLY tour definitely assisted me by providing the info I needed to be prepared.</td>
<td>I tend to be more independent person</td>
<td>Goal Driven</td>
<td>Academic Behaviors &amp; Attitudes</td>
</tr>
<tr>
<td></td>
<td>Info I needed to be prepared</td>
<td>College Preparation/College Knowledge</td>
<td>Academic/Content Knowledge/Transition</td>
</tr>
<tr>
<td>3. Did the campus tour, after the FLY Tour performance, have an influence on you attending college? Please explain. Yes, the campus tours helped me decide what kind of school atmosphere I wanted</td>
<td>Campus Tours Helped me decide</td>
<td>College Choice Motivation</td>
<td>Transition Knowledge</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Academic Behaviors &amp; Attitudes</td>
</tr>
</tbody>
</table>
to be in when attending. Tours gave you a first glance of what a person can expect if they ever decide to be a student at the campus student life and to experience and discover a bit of campus life.

<table>
<thead>
<tr>
<th>Campus atmosphere</th>
<th>College Choice</th>
<th>Transition Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take college courses</td>
<td>Academic Preparation College preparation</td>
<td></td>
</tr>
<tr>
<td>Gain college credit</td>
<td>Academic/Content Knowledge Academic/Content Knowledge</td>
<td></td>
</tr>
</tbody>
</table>

4. Do you feel that your high school courses prepared you for college? Please explain. The only thing that helped was that I was able to take college courses and gain college credit while in high school.
REFERENCES


Okerson, J. R. (2016). *Beyond the campus tour: College choice and the campus visit*. Williamsburg, VA: College of William and Mary. [https://scholarworks.wm.edu/cgi/viewcontent.cgi?article=1004&context=etd](https://scholarworks.wm.edu/cgi/viewcontent.cgi?article=1004&context=etd)


VITA

Sabrina J. Johnson, a California native, moved to Baton Rouge, Louisiana as a young child. She graduated from Tara High School in 1997 and began her college education at the University of Phoenix. In 2012, Johnson graduated with a Bachelor of Arts degree in Business Management from the Baton Rouge campus of the University of Phoenix. She received a Master’s degree in Higher Education Administration at LSU in 2015. After serving as a graduate student at LOSFA, she got promoted to a Program Coordinator role. Johnson has continued to serve in the higher education field, while pursuing her Doctoral degree in Higher Education Administration. Her professional interests include helping students and families become college and career ready, exploring new ways of presenting reports and data, and learning new software and programs. Sabrina resides in Baton Rouge and now works as a Data and Logistical Support Specialist.