Educational Experiences and Academic Adjustment of Transfer Students at the Four-Year University

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UNIVERSITY OF MIAMI

EDUCATIONAL EXPERIENCES AND ACADEMIC ADJUSTMENT OF TRANSFER STUDENTS AT THE FOUR-YEAR UNIVERSITY

By

Jacklyn A. Collins

A DISSERTATION

Submitted to the Faculty of the University of Miami in partial fulfillment of the requirements for the degree of Doctor of Education

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Doctor of Education

EDUCATIONAL EXPERIENCES AND ACADEMIC ADJUSTMENT OF TRANSFER
STUDENTS AT THE FOUR-YEAR UNIVERSITY

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Education has been perceived as the key pathway that individuals utilize to achieve economic success and upward mobility, yet how that education is acquired is not a lock-step process. According to the 2015 Signature 9 Report from the National Student Clearinghouse Research Center, students made 2.4 million (37.2%) transitions from one institution to another between 2008 and 2014 (Shapiro et al., 2015). However, according to Student Achievement Measurement (n.d.), only 11% of students who transfer from four-year to four-year institution complete a bachelor’s degree, which is much smaller than the 71.7% of full-time students who start at a four-year institution and complete a degree within six years (Shapiro et al., 2016).

Given that transfer students often struggle to complete their degree at the transferred college, the current study was an attempt to understand the role of high-impact activities on the educational experiences of transfer students as compared to non-transfer students and to examine how class preparation, student-faculty interactions, and interactions with peers and advisors may affect the GPA and educational aspirations of transfer students beyond a baccalaureate. To accomplish the proposed aims, the following two research questions were explored using 2015 National Survey of Student Engagement (NSSE) survey data collected in 2015 by a private institution in South
Florida: (1) What are the factors contributing to a difference in academic performance between transfer and non-transfer students? and (2) What are the factors that contribute to different educational aspirations beyond the bachelor’s degree for transfer and non-transfer students?

For the first research question, a hierarchical multiple regression was utilized to explore whether the self-reported GPA between transfer students and non-transfer students differs depending on the level of student engagement. Results from a hierarchical multiple regression suggest that peer relationship and class preparation might help transfer students enhance their GPA. For the second research question, a hierarchical logistic regression was used to study the differential effect of the level of student engagement on the educational aspirations beyond the baccalaureate between transfer and non-transfer students. Study findings indicate that the establishment of strong peer interactions is more likely to help transfer students pursue their education beyond a baccalaureate degree.

The current study provided empirical evidence suggesting that peer relationships might help transfer students raise their GPA and aspire beyond a baccalaureate degree. In addition, class preparation was found to be an important factor that might assist transfer students enhance their GPA. Ultimately, this study suggests the benefits of creating and implementing specific programs and initiatives to target the needs of transfer students and support them in both increasing their GPA through improved class preparation and developing critical relationships with peers and faculty.
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Chapter 1: Introduction

Education has been perceived as the key pathway that individuals utilize to achieve economic success and upward mobility. Specifically, education may help an individual improve his/her own individual skillset, which potentially might lead to higher income earning (Brock, 2010; Levine & Dean, 2012; Waiwaioloe & Elston, 2017). Long (2007) explained that the faster an individual can earn a four-year college degree, the faster they can reap the rewards from the market place. In addition, as more individuals complete their baccalaureate degree, society as a whole will also benefit from a more educated workforce (Lumina Foundation, 2017; Pascarella & Terenzini, 2005).

However, how education is acquired is not a lockstep process. Students in the United States complete their high school program and then face the decision of which educational path to take next. Hossler and Gallagher (1987) described the process of college choice as a three-stage model, which includes (1) predisposition, (2) search, and (3) choice (as cited in Bontrager & Hossler, 2014). At the first step called “predisposition”, a student evaluates several paths available to them as they approach graduation from high school and decide what to do. Some students might develop the desire to go to college and thus they seek education beyond the 12th grade. Some students may be uncertain about what they want to study, but they know they want to attend a postsecondary institution. After selecting the postsecondary education path, students gather information on different institutions that they see as potential candidates for application, which is the second step called “search”. Finally, the student applies to a specific institution or several institutions and waits for acceptance. Once the student has
reviewed all the available options, they enroll in one of the institutions, which is called the “choice” step.

Currently, students can choose from a variety of available ways to ultimately receive a baccalaureate degree in the United States. First, a baccalaureate degree can be earned by consistently attending a four-year college or university (Renn & Reason, 2013). Second, students might want to first attend different higher education institutions, programs that offer college credit for life-long learning, or correspondence courses, earn satisfactory grades on course content exams, or take an array of online programs and then transfer to the ultimate degree-conferring institution (Lumina Foundation, n.d.; Renn & Reason, 2013). Within the second option, many students attempt to complete an associate’s degree at a community/junior college before transferring to a four-year institution.

According to a 2015 report from the National Student Clearinghouse Research Center, students made 2.4 million transitions from one institution to another over a six-year period between 2008 and 2014. In August of 2014, the National Center for Education Statistics (NCES) released a report based on data from first-time beginning undergraduate students in the 2003-2004 academic year who transferred. The report stated 22% of all transfers followed the horizontal (lateral) pattern of four-year to four-year institutions, and 37% of transfers followed a vertical pattern of two-year to four-year institutions. The NCES in 2011 reported 81% of all first-time community college entry-students aspired to complete a bachelor’s degree or higher. Therefore, helping students transfer has always been the primary function of community colleges, which plays a vital
role in providing an open access entry to a bachelor’s degree (Fann, 2013; Handel, 2013a).

However, it has been shown that only 33% of community college students transfer to a four-year institution, and of that population, only 42% earn a bachelor’s degree within six years of entering postsecondary education (Jenkins & Fink, 2016). In addition, according to Student Achievement Measurement (SAM, n.d.) overall 11% of students who transfer from four-year to four-year institution complete a bachelor’s degree. These results are much smaller than the 71.7% of full-time students who start at a four-year institution and complete a degree within six years (Shapiro et al., 2016). Given that the success of transfer students at four-year institutions has been found to be challenging, the current study aimed to understand how transfer students’ experiences relating to interactions with peers, faculty, and advisors might affect their academic success after transfer, with a hope to improve their experience which might lead to successfully completing a bachelor’s degree.

Transfer Process

A transfer student is defined as any student who has a one-way transition between institutions of higher education. Horizontal or lateral transfer students are referred to as those who move from one four-year institution to another four-year institution (Archambault, 2014; Bahr, 2009; Borst, Jones, & Cohen, 2012; Goldrick-Rab & Pfeffer, 2009; Renn & Reason, 2013). Vertical transfer students are those that attended a two-year community college or junior college before enrolling in a four-year institution (Archambault, 2014; Borst, Jones, & Cohen, 2012). Throughout the current study, a transfer student has been defined as one who transfers from an institute of higher
education to a four-year institution of higher education regardless of type of transfer (vertical or horizontal/lateral).

**Vertical transfer students.** Community colleges were established to provide the first two years of postsecondary education. In 1852, Henry P. Tappan devised a plan that called for students to complete a general education program of study in a separate college before admission to a senior institution (Handel, 2013a). At a time when the capacity of the four-year institutions of higher education was limited, the two-year or junior college filled the lack of educational opportunity gap. After the Truman Commission’s report in 1946, many states expanded their two-year institution system (Quigley & Bailey, 2003), with the underlying belief that students would complete an Associate’s Degree at a junior college and then move to a four-year institution.

In a joint report by the National Center for Public Policy and Higher Education and the Institute for Higher Education Policy (2002), the transfer function of a two-year community college to a four-year institution was deemed to be the most important state policy relating to higher education (Wellman, 2002). In 2016, Anthony P. Carnevale commented that a population that learns new skills and knowledge will support the growth of the nation (Carlson, 2016). Not surprisingly, the success of the higher education system of a state translates directly to the economic competency of the state. If the workforce holds a higher level of education, the state would benefit from higher levels of production and development of intellectual property.

A student often enrolls at a two-year institution and finishes a core set of classes before transferring to a four-year institution. If a student completes the appropriate coursework equivalent to 60 credit hours, one can apply for an associate’s degree. At any point
in one’s college career, a student can complete the common application and be offered admission to a four-year institution, thereby completing a vertical transfer (Archambault, 2014). Some states offer guaranteed admission to a four-year institution upon successful completion of the Associates of Arts degree within the public system. For instance, Florida’s state-wide articulation agreement states that an individual graduating with an Associates of Arts degree from an institution within the Florida state system will be guaranteed admission to an upper division program at a state university. The individual would receive acceptance of at least 60 credit hours by the state university, and equal opportunity to enter limited access programs (Florida Department of Education, n.d.).

**Horizontal transfer students.** When a student moves between institutions within the same sector, four-year to four-year, this type of transferring is known as horizontal or lateral transfer (Archambault, 2014; Bahr, 2009; Borst, Jones, & Cohen, 2012; Goldrick-Rab & Pfeffer, 2009; Renn & Reason, 2013). According to the NCES (2014), 42.6% of first-time students in the 2003-2004 academic year completed a lateral transfer. These transfers occur for several reasons, including but not limited to the individual seeking a different academic environment, academic program opportunities, changes in financial situations, loss of scholarship, personal reasons, and family obligations (Nuñez & Yoshimi, 2016).

Similar to community college students, students attending their first four-year institution complete the common application and are offered admission to another four-year institution of their choosing. Bahr (2009) found degree completion rates are lower for students who made lateral transfer: “Degree completion is the true bottom line for college administrators, state legislators, parents, and most importantly, students – not
retention to the second year, not persistence without a degree, but completion” (p. v). It has been found that those students who move from four-year to four-year institutions often face challenges on the new campus and need assistance to obtain the baccalaureate degree (Núñez & Yoshimi, 2016; Townsand & Wilson, 2006; Tobolowsky & Cox, 2012).

**Characteristics of the Transferred Students**

The characteristics of transfer students vary widely in terms of gender, year of transfer, socioeconomic background, ethnicity, and number of transfers. First, according to the *Transfer and Mobility* report in 2015, women transfer between institutions of higher education at a slightly higher rate than men: 39% for women versus 36.8% for men (Shapiro, Dundar, Wakhungu, Yang, & Harrell, 2015). Second, the largest portion of transferring takes place during the second year of college. The 2015 *Transfer and Mobility* report found that 36.6% of transfers happened after the freshman year of college, with an additional 24.4% happening after the sophomore year of college (Shapiro et al., 2015). Public two-year institutions showed a transfer rate of 39.5%, which included 3.9% of individuals graduating with a degree. Students who started at four-year public institutions had a transfer rate of 36.5%, students starting at four-year private non-profit institutions had a transfer rate of 34.3%, and those starting at four-year private for-profit institutions had a rate of 22.9% (Shapiro et al., 2015). Third, the 2015 *Transfer and Mobility* report also stated that of the students who transferred, 45% changed institutions more than once (Shapiro et al., 2015).

In addition, as described by Hosler and Bontrager (2015), individuals from low social and economic backgrounds have been found to possess lower academic aspirations, which in turn have lead them to apply and enroll at two-year public institutions.
Socioeconomic status (SES) is described as the social standing of an individual or class of individuals, and generally this takes into account the education level achieved, the income earning potential, and the occupation attained. SES influences an individual’s place in society, access to health care, and quality of one’s life ("Education and Socioeconomic Status Factsheet", n.d.). Hosler and Bontrager (2015) explained that the social and cultural capital of these groups would impact college selection.

Lastly, students from various ethnic groups including African-Americans, Asian-Americans, and Hispanic-Americans see the benefit of attending community colleges in different ways. Bryant (2001) explained African-Americans students see the community college as assisting with their perceived personal and social development, while Asian-Americans stress the gains in math, technology, and science from community college settings. In addition, Hispanic-Americans’ self-image after transferring to other institutions were found to be increased due to the college experiences and interactions with faculty at the community college.

**Transfer Students’ Academic Adjustment at the Transferred College**

Indicators of student success at the institutions of higher education include student grade point average (GPA), re-enrollment, campus involvement, and satisfaction with the higher education environment. Student educational aspirations are developed internally as students rely on knowledge of their academic ability to develop and maintain their expectations, lowering their expectations when presented with indicators of lower academic ability and raising their expectations when given signals of higher academic ability (Jacob & Wilder, 2010). This study has defined student self-reported GPA and educational aspirations beyond obtaining the baccalaureate degree as a proxy for
student’s academic adjustment after transfer. Within this study educational aspirations are defined as future goals that will potentially be obtained.

Many studies have documented a negative impact on academic performance immediately after transfer, which is termed as “transfer shock” (Archambault, 2014; Ishitani 2008; Rhine & Milligan, 2000). Hill (1965) described transfer shock as the rapid decrease of a transfer student’s first semester grades. Grades of transfer students may drop during that first semester, which does not seem to necessarily continue throughout their enrollment at the new institution; however, it has also been shown that transfer students may have an increase in grade point average after the transfer, which is called “transfer ecstasy”. This term was first used by Nickens (1972), who theorized that some characteristics of transfer students help students achieve better after transfer, as easily as some transfer students experience a significant drop in GPA. Likewise, while findings regarding transfer students’ academic adjustment at the transferred college have been mixed, there appear to be different factors that might affect those students’ adjustment.

**Factors Affecting Transfer Students’ Academic Adjustment**

There has been extensive research conducted attempting to explain the mixed findings regarding how transfer students perform after transitioning to another institution. Most of that research has focused on factors that might affect transferred students’ academic adjustment to a four-year institution (Jenkins & Fink, 2015; Laanan, Starobin, & Eggleston, 2010). Those factors can be categorized as (1) individual characteristics, (2) family factors, (3) institutional factors, and (4) environmental factors. According to Terry T. Ishitani (2006), “student characteristics that are unique to transfer students, such
as different classification at matriculation, exhibited time-varying effects on transfer student’s persistence behavior” (p. 417).

**Individual characteristics.** Kuh (2003) described transfer students as having different social aspects which affect student academic persistence. Transfer students may be older than the traditional college age of 18-22, and thus they may need to work full time to support themselves. They could also be first-generation college students and lack the social capital other students may have (Ishitani & McKitrick, 2010; McGuire & Belcheir, 2013; Monroe, 2006). Such individual characteristics might lead to differential academic performance after transfer. For example, transfer students may have lower GPAs than non-transfer (native) students (Diaz, 1992). Santos and Sutton (2012) found that 55.6% of the class of 2001 who enrolled as full-time freshmen graduated with a cumulative GPA of 3.27 by Fall 2007. This contrasted with transfer students graduating by Fall 2007, as upper division transfers enrolling Fall 2003 had a cumulative GPA of 3.30, and lower division transfers enrolling Fall 2002 had a 3.18 cumulative GPA.

**Family factors.** Students’ responsibility for family members can impact their experience after transferring. In particular, non-traditional students may have to support themselves, support family members, and have further child care or elder care obligations. Additionally, students from a working-class background may be expected to contribute to the family support. These individuals may have pressing responsibilities, above and beyond their college course work. (Ishitani & McKitrick, 2010; McGuire & Belcheir, 2013; Monroe, 2006). Lester, Leonard, and Mathias (2013) explained that transfer students tend to be involved in multiple tasks including working a full-time job, significant family responsibilities, and strong relationships outside of the college
environment. Astin (1999) found that student involvement directly impacted learning and
development of the individual. Student performance at an institution of higher education
may be limited by “other responsibilities, as a set of competing objects that drain away
the time and energy” (Astin, 1999, p. 524).

**Institutional factors.** Transfer students discover that they must find ways to
adjust to the new institution, usually with very little support from the administration.
Admission officers, administrators, and advisors are often unaware of the needs of
transfer students, solely relying on their own limited experiences with this diverse
population (Tobolowsky & Cox, 2012). Administrators at higher education institutions
often mistakenly rely on the belief that transfer students require little extra attention as
long as they perceive them to be successful (Tobolowsky & Cox, 2012; Handel, 2013b).
Flaga (2006) found students relied on informal channels to approach issues on the path to
a baccalaureate degree and specifically identified friends and family as those to whom
they turn to for advice.

Furthermore, transfer students may not participate in high-impact activities on
campus due to low satisfaction with the four-year institution related to poor relationships
with faculty, administrators, and students. Lester, Leonard, and Mathias (2013) found that
transfer students associated engagement at the college with classroom meetings. They
also found that transfer students viewed social engagement as primarily related to family
and community. Davies and Casey (1999) stated that “[m]any transfer students
experienced an overall ‘campus culture shock’ after transferring … undesirable student
experiences included: parking, crowds, lines, and lack of individual attention” (p. 2). The
researchers also noted that transfer students felt GPAs suffered at the four-year institution, due to the lack of one-on-one interactions with faculty.

Hu, Kuh, and Li (2008) showed that student participation in inquiry-based learning activities is correlated with engagement in other educationally purposeful activities. Therefore, students can be more engaged in school work by participating in inquiry-based learning activities such as participation in research with faculty and involvement with peers and faculty outside the classroom. How such processes can be introduced by institutions of higher education was delineated by the Boyer Commission report (1998), based on ten recommendations for the revamping of undergraduate education. These included: (1) make research-based learning the standard; (2) construct an inquiry-based freshman year; (3) build on the freshman foundation; (4) remove barriers to interdisciplinary education; (5) link communication skills and course work; (6) use information technology creatively; (7) culminate with a capstone experience; (8) educate graduate students as apprentice teachers; (9) change faculty reward systems; and (10) cultivate a sense of community (Boyer Commission, 1998).

Among these factors that have been found to affect transfer students’ academic adjustment at the transferred college, the current study primarily focused on how various institutional factors have impacts on transfer student’s academic adjustment, which is defined by self-reported GPA and educational aspirations beyond obtaining the baccalaureate degree.

The Current Study

The current study aimed to understand the role of high-impact activities on the educational experiences of transfer students as compared to non-transfer students, and
examine how class preparation, student-faculty interactions, and interaction with peers and advisors may affect GPA and the educational aspirations of transfer students beyond the bachelor’s degree. In particular, this study questioned if high-impact activities that are thought to provide needed opportunities for student success are related to transfer students’ academic success. Specifically, as shown in Figure 1, the current study aimed to explain the effect of educational experiences on GPA and educational aspirations, as impacted by class preparation and interactions with peers, faculty, and advisors, and how such effects differ between transfer and non-transfer students. In order to accomplish the research goal of the current study, the following specific questions were examined:

1. What are the factors that contribute to difference in academic performance between transfer and non-transfer students?

   1.1. Does class preparation represented by completing reading before attending class, asking other students to explain class materials, and discussing class materials to prepare for exams relate to difference in academic performance between transfer and non-transfer students?

   1.2. Do peer interactions represented by one’s perception measured using a scale from poor to excellent relate to difference in academic performance between transfer and non-transfer students?

   1.3. Does faculty interaction represented by discussing career plans with a faculty member, discussions on class topics with faculty outside of class, and discussion of academic performance with a faculty member relate to difference in academic performance between transfer and non-transfer students?
1.4. Do relationships with faculty represented by one’s perception measured using a scale from poor to excellent relate to difference in academic performance between transfer and non-transfer students?

1.5. Do relationships with advisors represented by one’s perception measured using a scale from poor to excellent relate to difference in academic performance between transfer and non-transfer students?

2. What are the factors that contribute to the difference in educational aspiration beyond the baccalaureate degree between transfer students and non-transfer students?

2.1. Does class preparation represented by completing reading before attending class, asking other students to explain class materials, and discussing class materials to prepare for exams relate to difference in educational aspiration between transfer and non-transfer students?

2.2. Do peer interactions represented by one’s perception measured using a scale from poor to excellent relate to difference in educational aspiration between transfer and non-transfer students?

2.3. Does faculty interaction represented by discussing career plans with a faculty member, discussions on class topics with faculty outside of class, and discussion of academic performance with a faculty member relate to difference in educational aspiration between transfer and non-transfer students?

2.4. Do relationships with faculty represented by one’s perception measured using a scale from poor to excellent relate to difference in educational aspiration between transfer and non-transfer students?
2.5. Do relationships with advisors represented by one’s perception measured using a scale from poor to excellent relate to difference in educational aspiration between transfer and non-transfer students?

Theoretical Backgrounds of the Current Study

Many theories relating to postsecondary student behavior have been developed. The current study was based on the following theories: (1) Schlossberg’s transition theory, (2) Baxter-Magolda’s self-authorship, (3) Chickering’s theory of identity, (4) Kuh’s theory of student engagement, and (5) Astin’s theory of involvement. Below, each theory is briefly summarized.

Schlossberg’s transition theory. Schlossberg’s theory of transition is based on understanding aspects of how change is experienced. Goodman, Schlossberg, and Anderson (2006) described transitions as “events or non-events” that change relationships, routines, assumptions, or roles. An individual’s self-perception affects the outcome of events and non-events, as the individual may not attach meaning to a situation. Schlossberg described the process as “moving in”, “moving through”, and “moving out” (Goodman et al., 2006). These movements delineate the growth of the individual and the stages of progression.

To explain how an individual handles life changes that are occurring, Schlossberg utilized the 4S’s of Transition. Factors that help the individual cope include situation, self, support, and strategies (Goodman et al., 2006). Schlossberg also highlighted an individual’s assets and liabilities which are available to deal with transitions. These assets and liabilities are the previous experiences that an individual has had, good or bad, and how they prepare the individual for the new transition (Schlossberg, 1984, p.69; Patton,
Renn, Guido-DiBrito, & Quaye, 2016). Schlossberg’s theory of transition is used in the current study so as to explain the events or non-events that result in changes in the transferred student’s relationships, routines, assumptions, and roles.

**Baxter-Magolda’s self–authorship.** Baxter-Magolda’s self-authorship has contributed greatly to understanding the development of college-aged adults. Self-authorship is the term used for one’s internal authority. Self-authorship begins during one’s time on a college campus, though it is after graduation that significant growth towards self-authorship begins. This theory of self-authorship can be seen as a useful tool to look at the developmental level of the college student. College is the time and place that students can feel safe as they experience many new events, meet a variety of new people, engage in a diverse variety of cultures, and gain exposure to new ways of thinking. As they travel on their journey to adulthood, the college atmosphere allows this discovery to take place in an open and accepting environment (Baxter-Magolda, 2014).

Baxter-Magolda’s self-authorship theory is used in the current study so as to identify the growth in the student, specifically related to the level of maturity.

**Chickering’s theory of identity.** Chickering (1969) is well known for his theory of identity, and its relevance to student development. Chickering proposed that students develop their identities during their college years, beginning to see themselves as independent, self-directed, and knowledgeable, and move through seven vectors of growth. Those seven vectors are developing competence, managing emotions, moving through autonomy, developing mature interpersonal relationships, establishing identity, developing purpose, and developing integrity (as cited in Hinchliffe & Wong, 2012). In Chickering’s third vector, “moving through autonomy”, one can see the transfer student.
This vector is about solving one’s own problems. Achievement of goals will only be accomplished by conscious decisions and actions. Chickering’s theory of identity is used in the current study to view the individual’s autonomy, integrity, and emotional competency.

**Kuh’s theory of student engagement.** Kuh’s theory of student engagement is well respected in the higher education community. Kuh et al. (2007) transmitted the idea that a successful student is one who participates in focused activities on campus. A student who devotes time and attention to educationally concentrated activities will grow as an individual and successfully complete the baccalaureate degree. These students will develop the skill set that includes higher levels of learning within groups, the ability to engage faculty in relevant conversations, and an overall sense of competence. Kuh’s theory of student engagement is used in the current study as a way to identify learning opportunities that motivate the transferred student.

**Astin’s theory of involvement.** Astin’s involvement theory and has been utilized as a means for studying the development of college students since it was introduced. Astin’s theory provides a lens to view transfer students’ involvement and participation in campus activities; interaction with faculty, peers, and advisors; and the related impact on their educational career. Astin (1999) explains student involvement as the amount of physical and psychological energy that the student devotes to academic experiences. He further asserts that a highly involved individual spends a great deal of time on campus and is an active participant in student organizations. This type of student will interact frequently with faculty and other members of the institution community. Alternatively, an uninvolved student will spend little time on campus, choose not to join student
organizations, and have little contact with faculty, peers, or other campus community members (Astin, 1999).

Education increases an individual’s skill set, which results in greater income earning potential. Reindl (2007) argues that “[a]ccording to Jobs for the Future, by 2025 the United States must produce 25.1% more associate degree holders and 19.6% more bachelor’s degree holders over and above current production levels to meet the nation’s workforce needs” (as cited in Handel, 2013c, p. 6). As more individuals complete their baccalaureate degree, society as a whole will reap the benefits from an educated workforce. Handel (2017) reiterated that only 14% of community college students who transfer to a four-year institution complete a bachelor’s degree within 6 years. These students are influencing four-year institutions’ programs and policies. As an example of this influence, in 2009 California launched the 2015 Graduation Initiative. Through coordinated efforts at the campus level and system wide, California State University has increased its overall graduation rates to 57% (Jackson & Cook, 2016). Astin’s (1993) theory of involvement is used in this study to identify policies or procedures that increase student involvement.

Summary. The theories described above support the background characteristics and academic experiences of transfer students, which was the focus of the current study. The period of time that an individual spends at an institution of higher education is filled with many opportunities that lead to an individual’s growth. Schlossberg’s transition theory deals with events and non-events in an individual’s life, and college is undoubtedly a time period filled with expected and unexpected events. The self-authorship theory developed by Baxter-Magolda commences in the college years,
continues beyond, and may never be fully achieved. Chickering’s seven vectors highlight how individuals grow and transform throughout their life. Kuh’s student engagement theory identifies students’ desire for learning opportunities that excite them and encourage learning. Astin’s theories demonstrate that engagement of students is critical, and this can be accomplished by establishing policies and procedures for institutions to utilize.

The Significance of the Current Study

With a rapid increase in the number of transfer students at four-year institutions, it is important to understand the academic experiences of transfer students at the transferred college. There is also a need to better comprehend the choices transfer students have made about both their original and transfer institutions. In particular, due to economic challenges, many individuals start their higher education career by attending two-year colleges. Handel (2013c) notes “a significant shift in the number of high-income families (over $100,000 per year) sending their children to community colleges, increasing from 12% in 2009-2010 to 22% in 2010-2011” (p. 12). O’Meara, Hall, and Carmichael (2007) emphasized that community colleges deliver higher education at an affordable price while providing quality education with a discounted pricing scheme. Students may have decided to take the easiest route to college, choose the least expensive option, or follow family expectations. Thus, transfer students’ first choice of college enrollment may not have been appropriate and therefore the educational environment might not be correct. Understanding transfer students’ experiences, specifically the interactions with peers, faculty, and advisors, might help transfer students succeed at college and encourage administrators to put forth policies and programs to assist their transfer students.
The immediate benefits of the current study might be to assist transfer students by supporting and encouraging them to seek out relationships with peers, faculty, and advisers inside and outside the normal scope of college actions, which might further increase their awareness of the value of class preparation. The current study might particularly help parents of transfer students by re-enforcing their ability to advise and support their children to adequately prepare for class, seek out opportunities to work with faculty and peers, and take advantage of college advisement personnel. Moreover, the current study might help college personnel, including administrators, student service officers, faculty, and advisors, better assist transfer students.

First, college administrators will benefit from the new understanding of the difficulties facing the transfer student, as a new mindset could assist with the development of programs and policies to support the success of this student population. Second, student services personnel will benefit from the utilization of the information generated and the manner in which they share it with potential transfer students to clearly indicate the importance of class preparation and developing relationships on campus. Third, college faculty will benefit from this study by encouraging transfer students to participate in college events, prepare for class sessions, and develop an inquiring mind. Lastly, the study will assist accreditation teams, legislators, the general public, and researchers to facilitate students achieving a successful result of their higher education journey, the completion of their baccalaureate degree. Ultimately, the results of this study might add to the current conversation on higher education, continuing the progress of improvement of higher education in the United States.
Chapter 2: Literature Review

This study sought to understand how the educational experiences at four-year universities help transfer students’ academic adjustment. Educational experiences in this study are defined as interactions with peers, faculty outside the classroom, and advisors. This chapter first provides a background of the transfer process, including a description of college choice, degree attainment, and transfer paths. Then, theories supporting the current research are presented: (1) student transition in terms of Schlossberg’s transition theory, (2) student development in terms of Baxter-Magolda’s self-authorship theory and Chickering’s theory of identity, and (3) student engagement in terms of Kuh’s theory of student engagement and Astin’s theory of involvement. Finally, findings from the empirical research regarding factors affecting the outcomes of transfer students at institutions of higher education are discussed.

The Transfer Process

In the United States, a noteworthy number of 20- to 34-year-old’s are enrolled in college or graduate school. In Fall 2014, the total undergraduate enrollment in degree-granting postsecondary institutions was 17.3 million students, a 31% increase from 2000 when enrollment was 13.2 million students (Condition of Education, 2016). The U.S. system of postsecondary education included 4,726 Title IV degree-granting institutions in the 2012-2013 academic year (Perna & Cahalan, 2015). These institutions enrolled 20.6 million students of which 86% (18.8 million) were undergraduates. According to the National Student Clearinghouse Report (2015), from 2008 to 2014 more than 2.4 million transitions between institutions of higher education occurred. Debra Bragg (2017) has shown that transfer students take various pathways through higher education, while Hu,
Katherine, and Kuh (2011) have stated that students are using a diverse mix of institutions to gain their desired education.

While high school students may have various postsecondary options, concerns about financing higher education help explain why an increasing number first attend a community college as a more economical pathway to a baccalaureate degree. As Handel (2013c) states, “though community college costs are also rising, these institutions remain the most affordable higher education option in the United States” (p. 12). Eighty-seven percent of the Fall 2008 cohort of postsecondary students beginning at two-year institutions transferred to a four-year institution pre-degree (Shapiro et al., 2015).

Community college students may earn associate degrees before transferring, while others attend for a shorter time simply to stay in school until they can be admitted to a four-year school. In both cases, they are known as vertical transfers, students who attended a two-year community college or junior college before enrolling in a four-year institution (Archambault, 2015; Borst, Jones, & Cohen, 2012; McGuire & Belcheir, 2013). Those who transfer from one four-year institution to another are known as horizontal or lateral transfers (Archambault, 2015; Borst, Jones, & Cohen, 2012; Goldrick-Rab & Pfeffer, 2009; McGuire & Belcheir, 2013).

Each college or university reviews course transcripts from the previous institutions of both vertical and horizontal transfer students. The existence of articulation agreements benefits such transfers, as they allow comparison of courses that a student has taken at one institution of higher education to the course requirements of another postsecondary institution (Handel, 2011; Nuñez & Yoshimi, 2016; Townsend & Wilson, 2006). The main goal of articulation agreements is to give students expanded access to
learning opportunities at a reasonable cost, enabling them to begin at a community college and move on to a four-year institution, or to transfer between four-year schools.

**Challenges for Students in the Transfer Process**

Though transfer procedures can vary, there are commonalities. According to Handel’s 2013 report, “Transfer as Academic Gauntlet: The Student Perspective,” “[al]though there are over 1,200 community colleges and 2,300 four-year institutions in the United States, and the transfer process varies enormously among them, there are several tasks that every prospective transfer student must undertake” (p. 3). For example, students must depart from their current institution and physically move to another. This causes a disruption in educational environment and the individual’s life.

The transfer process appears similar to the high school senior’s college choice scenario: “Students must develop a program of study that meets the college admission requirements, decide on the schools they would like to attend, and apply to one or more four-year institutions, evaluate multiple offers of admission and once enrolled at a four-year institution persist toward the bachelor’s degree” (Handel, 2013, p. 3). However, problems exist in this seemingly easy procedure, namely communication, access to information, and transparency.

Marling (2013) highlights the importance of communication as “connecting with the students and their families and providing them timely and accurate information” (p. 80). Potential transfer students and their families need to learn the expectations of the institutions and the transfer process. Ellis (2013) noted “students across the nation are not receiving basic information about transfer to a university” (p. 74). This information is at times difficult to find; unlike materials created for the high school student, students
interested in transferring have to do individual searches for the information: “No educational organization has developed a web-based search engine that allows community college students to identify four-year institutions they may be interested in attending based on a set of criteria relevant to the transfer process” (Handel, 2013, p. 4). Fann (2013) stated that “[t]ransfer students should be provided with a holistic view of the transfer process rather than given information on an as-needed basis” (p. 28). In addition, the timing of notification of acceptance at the new institution greatly varies, as an admission status may be sent “no earlier than May 1 and as late as Aug. 1” (Handel, 2013, p. 7).

Using a transfer-receptive framework set forth by Jain et al. (2011), Wood and Moore (2014) support a positive transfer culture. This transfer-receptive framework promotes the concept that “[i]nformation on transfer should be accessible in multiple mediums (e.g. web, print) and from several sources” (p. 279). College and university websites are often not kept up to date, and broken links or out-of-date criteria can discourage the potential transfer student. In the phenomenology study by Nuñez and Yoshimi (2016), one participant said, “The only thing I don’t like about [the website] is that it really seems like sometimes it’s not kept up to date” (p. 182).

Transparency is also lacking about how higher education credits are transferred. Handel (2013) notes that “more detailed and complex information about how course credits transfer from one institution to another is difficult to find or understand” (p. 4), and Grites and McDonald (2012) point out that “[m]any students cite difficulties associated with transferring academic credit and adequate data to provide a reasonable comparison for a successful transfer” (p. 25). The acceptance of credits between
institutions is not set by universal policy. The United States does not have a policy such as the 1999 Bologna agreement on transferring credits earned at institutions of higher education (Holaday, 2012); fifty European countries signed the agreement, allowing students to easily move from one institution to another without losing credits (Crosier & Parveva, 2013). Transfer students often decide to enter a new institution without fully understanding how many credits will be accepted by the new institution: “Given variations in credit acceptance policies among four-year institutions, it is not uncommon for students’ time-to-degree to vary from one and a half to three years” (Handel, 2013, p. 8).

**Theoretical Framework of the Current Study**

The current study focused on measures relating to transfer student experiences at the transfer institution. Several relevant student development theories related to student social and psychological development were utilized as a basis of understanding. A discussion of each theory follows; these theories support the current study. Included are Schlossberg’s transition theory, Baxter-Magolda’s self-authorship theory, Chickering’s theory of identity, Kuh’s theory of student engagement, and Astin’s theory of involvement.

**Schlossberg’s theory of transition.** Schlossberg’s theory of transition is based on understanding aspects of how individuals experience change. Her model incorporates three events that some encounter over their life spans. Anticipated events are the ones that an individual has planned or expects to happen, such as graduating from high school or getting a driver’s license. Unanticipated events are not planned or expected. These might include loss of one’s home in a fire or winning the lottery. Non-events are events
that an individual expected to occur but never did, such as getting married (Goodman et al., 2006).

Schlossberg’s transitional theory has three major systematic and sequential parts: (1) Approaching the transition, (2) Taking stock of coping resources, and (3) Taking charge. The first step describes the nature of the transition, the second describes the personal attributes available to use in the transition, and the third is the way the individual manages the transition. Every transition is unique to the individual, and each individual will have a different experience as he moves through the phases of transition: “Transitions are a time of opportunity yet have the potential to be resolved either constructively or destructively” (Goodman et al., 2006, p. 49).

The first stage of transition is deemed moving-in. The individual is learning the new role or procedures, getting a handle on the environment. The next step is moving-through, continuing to grow in the new environment, asking questions to remain committed to the situation. Moving-out is the end stage of a transition; the change has ended, and the individual has incorporated the event (Goodman et al., 2006). Transfer students experience moving-in as they arrive at the new campus and experience the new culture, moving-through as they work on staying focused on coursework and the new environment, and moving-out as they no longer see themselves as a transfer student.

Schlossberg’s 4 S system is based in the second, moving-through stage, taking stock of coping resources. The 4 S system assists the individual by looking at the transition through that lens, and the individual can then access the best way to cope with the transition. What personal capital does one have to deal with the transition? Situation, self, support, and strategies, though “[t]hese four sets of variables can be regarded as
potential assets and/or liabilities” (Goodman et al., 2006). According to Chickering and Schlossberg (2002), the 4 S system is based on several underlying assumptions: (1) all four factors play a role in how the transition is handled, (2) every individual has a mixture of resources and assets available, as well as deficits, and (3) these resources and deficits/liabilities will change over time.

The first component is the situation. Questions related to this component are:
What is happening? What is the transition? Was this planned or unplanned? For certain transfer students, the move was a planned event. For others, the transfer may have occurred unexpectedly, i.e., because of a family situation. The second component, self, includes the individual’s mental and psychological strengths and weaknesses along with personal characteristics. These can be assets to help with the transition or liabilities that hinder the transition. The transfer student could feel apprehension about the transfer even when it was desired. The third component, support, encompasses social support from friends, family, and colleagues. For example, the transfer student might mingle with other transfer students on campus and develop camaraderie. The last component, strategies, relates to the variety of ways to handle the transition. The transfer student might seek out opportunities to participate in events at the new campus, take a job on campus, or inquire about working with faculty on research. Schlossberg’s theory shows the importance of recognizing that transitions in life can be expected or unexpected but can be handled successfully with the utilization of assets that each individual may hold.

**Baxter-Magolda’s theory of self-authorship.** Self-authorship is the term used to describe one’s internal authority. Baxter-Magolda’s research explains that becoming critically aware of one’s own reality, participating in a dialogue toward truth, and acting
in ways that are satisfying and just are part of a very sophisticated process (Parks, 2000, as cited by Baxter-Magolda, 2009). Baxter-Magolda asserts that a majority of college students do not develop self-authorship during their time on a college campus. It is not until after graduation that significant growth toward self-authorship begins, yet her theory has increased the understanding of college-aged adults.

In addition, self-authorship can be useful in assessing the developmental level of the college student. College is the time and place that students can feel safe as they experience many new events, meet a variety of new people, engage in diverse cultures, and gain exposure to new ways of thinking. During the students’ journey to adulthood, the college atmosphere allows that discovery to take place in an open and accepting environment (Baxter-Magolda, 2014). The journey toward self-authorship consists of four phases: Phase 1, Following formulas; Phase 2, Crossroads; Phase 3, Becoming the author of one’s life; and Phase 4, Internal foundation (Patton, Renn, Guido-DiBrito, & Quaye, 2016).

Three educational principles can be applied to practice and link the participants’ development to the goal of self-authorship: (1) validating learners as knowers, (2) situating learning in the learner’s experience, and (3) defining learning as mutually constructing meaning (Baxter-Magolda, 2001). These principles address cognitive, intrapersonal, and interpersonal aspects of development (Patton et al., 2016). In the first step, validating learners as knowers, individuals can create knowledge and make knowledge claims, giving them the recognition that they can work on what they believe. They no longer need to follow others’ beliefs but are entering the crossroads and recognizing their own internal voice (Baxter-Magolda, 2001).
The second step, situating learning in the learner’s experience, respects that the individual has entered the crossroads with knowledge gained previously. This allows individuals the ability to embrace the ideas of others or create their own ideas by analyzing their own experiences. Recognizing the complexity of knowledge creation, and the needed reflection and contributions of others, permits the mutual construction of knowledge (Baxter-Magolda, 2001). The last step, to refine learning as mutually constructing meaning, gives a voice to the internal process of becoming the author of one’s own life. This allows for the development of views and the interpretations of beliefs while listening to the perspectives and observations of others, which promotes the mutual development of knowledge (Baxter-Magolda, 2001).

Baxter-Magolda (2001) stated that “environments that were most effective in promoting self-authorship” challenged dependence on authority (as cited in Patton et al., 2016, p. 375). Student maturity is developed during this time on campus; a new campus is unfamiliar to transfer students, which provides tremendous opportunity to develop their unique outlooks, thoughts, and ideas. Transfer students show growth in maturity within the act of transferring, recognizing the need to change educational environments.

**Chickering’s theory of identity.** Chickering is well known for his theory of identity and the seven vectors that individuals may experience during their lives (Long, 2012). Chickering links college experiences with psychosocial development as represented by “vectors, areas of concern” (Jones & Abes, 2013, p. 33), each of which is directional and consequential. The seven vectors of development are (1) Developing competence, (2) Managing emotions, (3) Moving through autonomy to interdependence,

The first vector, developing competence, includes acquiring knowledge and skills. This is the ability of an individual to analyze facts and situations and, more importantly, to reason. Interpersonal skills such as the ability to communicate and work with others are honed (Patton et al., 2016). The second vector, managing emotions, includes being aware of one’s feelings and emotions and acknowledging the signals they are giving (Patton et al., 2016). The third vector, moving through autonomy to interdependence, is recognizing the independence of one’s self and understanding the interdependence of others. For example, an individual develops the ability to establish and achieve personal goals without others’ approval or reassurance. Individuals now have the capacity, knowledge, and skills to set their own schedules as well as solve problems for themselves (Patton et al., 2016).

The fourth vector is developing mature interpersonal relationships, which is related to having a world view of one’s self and others, displaying tolerance for others, understanding different cultures, and engaging in healthy intimate relationships (Patton et al., 2016). The fifth vector, establishing identity, is to accept one’s cultural heritage and show comfort with one’s body and appearance, gender, and sexual orientation (Patton et al., 2016). During this time, the college student develops purpose, engages in a career path, and sets life goals (Patton et al., 2016). Long (2012) notes that “[a]ccording to Chickering, students progress through the first four vectors during their first and second years of college, and through the last three vectors during their third and fourth years of college” (p. 43). This is the time when students are in a campus environment, and the
choice to transfer institutions of higher education reflects movement from one vector to another.

**Kuh’s theory of student engagement.** According to Kuh, a successful student is one who participates in focused activities on campus, including student-faculty interactions, study abroad, and research with faculty (Pike, Kuh, McCormick, Ethington, & Smart, 2010). Kuh (2009) states that “student engagement represents the time and effort students devote to activities that are empirically linked to desired outcomes of college and what institutions do to induce the students to participate in these activities” (p. 683).

Kuh (2009) notes that in the last decade of the 20th century, “the institution allocated its resources and arranged its curricula, other learning opportunities, and support services to encourage students to participate in activities positively associated with persistence, satisfaction, learning and graduation” (p. 685). College and university efforts to cultivate student learning and success were coupled with desires for an improved system to measure and track quality. In 1999, the National Survey of Student Engagement (NSSE) was developed to capture and document student satisfaction with their institutions of higher education (Kuh, 2009). Such information could be utilized to improve teaching and learning strategies (Pascarella, Seifert, & Blaich, 2008).

**Astin’s theory of involvement.** Astin’s involvement theory and has been used as a means for studying and understanding the development of college students since it was introduced. As Long (2012) states, “Astin proposed that students are more academically and socially proficient the more they are involved in the academic and social aspects of college life” (p. 51). Ellis (2013) characterizes high performing transfer students as
“involved” in using academic support labs, fitness centers, and career services, doing in-service projects, and seeking interactions with faculty.

Astin (1999) explains student involvement as the amount of physical and psychological energy that the student devotes to academic experiences. He further asserts that a highly involved individual spends a great deal of time on campus and is an active participant in student organizations. This type of student will interact frequently with faculty and other members of the institution community. Alternatively, an uninvolved student will spend little time on campus, choose not to join student organizations, and have little contact with faculty, peers, or other campus community members (Astin, 1999).

Astin describes five postulates of student engagement. The first, physical and psychological energy, is focused on students’ actual activities, to what extent they are engaging with campus organizations and members of the campus community. Second, involvement occurs along a continuum; students’ involvement in activities will change during their tenure at the institution. Third, involvement has both quantitative and qualitative features in that that the actual time devoted to the activity and the seriousness of students’ participation will fluctuate.

The fourth concept is that the amount of student learning and personal development associated with any educational program is directly proportional to the quality and quantity of student involvement in that program. As students’ levels of participation will vary, what they receive in exchange also will differ. Therefore, it is the student’s responsibility to be a full participant in the program, class, or instructional environment. The fifth postulate asserts that the effectiveness of any educational policy
or practice is directly related to the capacity of that policy or practice to increase student involvement. Examples include what value the student assigns to the event or how the institution organizes programs to induce student participation (Seidman, 2012).

Astin’s theory provides a lens to view transfer students’ involvement and participation in campus activities; interaction with faculty, peers, and advisors; and the related impact on their educational career. Kuh (2009) asserted that Astin’s work contributed greatly to the current knowledge about involvement’s importance to student success, including achievement and educational attainment. In their 2015 study, Fauria and Fuller examined student engagement and its relation to GPA to try to determine the impact of educationally purposeful activities (EPAs) on transfer students. Student engagement EPAs explained considerably more of the variance in the cumulative GPAs for undergraduate transfer students than for undergraduate non-transfer students.

Transfer Student Characteristics

According to recent literature, over one-third of all first-time students transferred or enrolled in a different institution of higher education before earning their baccalaureate degrees (Archambault, 2014; Shapiro et al., 2015). In 2015, the “Transfer and Mobility” report described the current student body as a more diverse population: The individuals seeking higher education reflect “adult learners, fewer full-time enrollments, and students who are generally more sensitive to the cost of their education” (Shapiro et al., 2015, p. 5). The diversity of the two-year college student population as compared to that at four-year institutions is significant: Transfers are more racially and ethnically diverse than their native counterparts, more likely to be first in their families to attend college, to
come from lower socioeconomic backgrounds, to enroll part-time, and to commute (Archambault, 2015; Ishitani, 2008; Rhine, 2010; Townsend & Wilson 2006).

Individuals from lower socioeconomic backgrounds tend to possess lower educational aspirations and to enroll in a two-year institution, possibly related to a lack of social capital (Hosler & Bontrager, 2015). Members of minority ethnic groups differ in their views of higher education’s benefits. For example, Asian-Americans often find the access to increased skills in science and math at the two-year institution an opportunity, African-American students especially benefit from the personal and social development available at the two-year institution, and Hispanics use the two-year institution to gain experience before moving to a four-year institution (Bryant, 2001).

A study by Ellis (2013) found that effective transfer students were highly self-motivated, and their goal of obtaining a baccalaureate degree was strong. In addition, “[s]uccessful transfer students [found] champions on every community college and university campus” as they looked for support from a wide array of groups, family, friends, community, and others (Ellis, 2013, p. 83). Goldrick-Rab and Pfeffer (2009) found lateral transfer students’ motivation for a change of institutions may be based on preference; they endeavor to move to a better institution of higher education. Li (2010) reported that the most frequently identified reason for transfers from one four-year institution to another was related to a program or coursework that was available. Li (2009) noted 8% of students identified financial reasons as causing the transfer, while less significant reasons included logistics and personal reasons.

The “Transfer and Mobility” report (2015) showed that women transfer at a rate of 39%, men at a rate of 36.8%. The report also included statistics on the timing of
transfers, finding that 36.6% transfer in the second year and an additional 24.4% in the third year of higher education (Shapiro et al., 2015). Li (2009) also found 18% of study participants earned a degree or certificate at their original four-year institution and then transferred to another institution.

**Transfer Student Academic Adjustment**

Townsend and Wilson (2006) found that transfer students felt unease in their new environment because they had to find out everything on their own, from where to park to how to find the registrar’s office. Burst, Jones, and Cohen (2012) noted that the transfer student population was often ignored, and Wood and Moore (2014) stated that transfer students believed “cliques” had been formed by the native student body and that transfers were outsiders.

Transfer students also often lack the ability to make friends or find study groups. Townsend and Wilson (2006) found that transfer students described classes so large they were sitting next to new people in each class meeting, and that groups seemed to have been formed in freshman year without interest in bringing in new people, i.e., transfers. In a follow up study, Townsend and Wilson (2009) found that transfer students had been able to make some social connections through clubs or fraternities aligned with educational majors. In addition, Tovar (2015) explained that the relationships students established with advisors, even in the short term, supported the success of the student. Research reflects that supportive individuals, friends, faculty, and advisors can enable overall student achievement and aspirations.

The academic changes normally felt by transfer students are labeled “transfer shock,” but that is not a complete picture. Townsend and Wilson (2006) found transfer
student perceptions of faculty at a four-year institution were wide-ranging, from “the faculty does not get to know the students,” and “it is harder for a student to get to know the faculty,” to “the faculty is interested in the students.” Townsend and Wilson (2009) suggested that academic integration at a four-year institution was affected by larger class settings, and that only after reaching senior-level classes did transfer students feel additional support.

Stewart and Martinello (2012) found that students’ academic adjustment was better when they had declared a major. Those students enrolled in major classes and exhibited higher focus in their coursework. Townley et al. (2012) conducted a study of transfer students in a STEM program and found lower GPAs were due to involvement in social workshops and research internships. They expressed the idea that the time taken for these ventures decreased study time and lowered academic outcomes.

D’Amico, Dika, Elling, Algozzine, and Ginn (2013) identified academic fit as important for the transfer student, asserting that the classroom helps create academic competence, direction, and integration. Their results, based on the first semester experience, indicate a higher GPA was related to transfer GPA, academic integration, non-traditional age, working fewer than 15 hours, class participation, and participation in a club or sport. The spring term results indicated four predictors having a positive effect on GPA: transfer GPA, academic integration, non-traditional age, and meeting with an advisor.

Student educational aspirations are subjective. Jacob and Wilder (2010) state that student aspirations are heavily influenced by societal norms; they found that socioeconomic status (SES) and academic ability were the strongest predictors of
expectations. Stinebrickner and Stinebrickner (2009) found that learning about one’s abilities also played a major role in the student’s decision-making. Jagešić (2015) reported that students who had a mean score below institutional SAT and who were enrolled in less selective institutions were more likely to experience a decrease in future educational aspirations post-college entry than students whose SAT scores were above the mean: “A student whose ability is lower in relation to his peers is more likely to experience a decrease in educational aspirations in college” (Jagešić, 2015, p. 675). Drew and Astin (1972) found an undergraduate’s aspirations are a function of college grades and academic self-concept, and Laanan, Starobin, and Eggleston (2010) found that “when transfer students were asked to respond their educational aspirations at any four-year institution, almost 80% of both male and female students in 2004-2007 indicated that they are planning to obtain a master’s degree” (p. 185).

Factors Affecting Transfer Student Academic Adjustment

Academic adjustment can be categorized into individual, engagement, and institutional characteristics. Researchers have studied each component and provided insight on the impact on students in higher educational environments.

Individual characteristics. Young and Litzler (2013) found the construct of adjustment to college is composed of three separate factors: “When students enter a new academic environment, they may not feel like they fit in a number of ways including psychologically, academically, and socially” (p. 887). Their study found transfer student adjustment similar across demographic groups, and overall findings supported the structure of adjustment being divided into academic, social, and psychological dimensions. Laanan (1996) asserted that the transfer students’ psychological and social
growth was necessitated by enrolling at a different institution of higher education. The environment and culture at the new institution would result in the individuals reassessing their viewpoints: “Factors such as increased academic demands, large lecture classes, relocation to a new environment, coping with new services not provided to them are a few of the obstacles that require transfer students to make adjustments” (Laanan, 1996, p. 81).

As noted, transfer students have often been associated with the phenomenon of transfer shock (Ishitani, 2006). However, Glass and Harrington (2002) studied students from North Carolina community college classes of 1988 and 1999 and stated that “the current study seems to indicate that transfer students do as well, and, on occasion, better than native students” (p. 425). Similarly, Stewart and Martinello (2012) found that students who had transferred from other universities received higher final grades. In their study of transfer students (vertical and horizontal) versus non-transfer students, the sample was composed of two-thirds women in both the transfer and non-transfer groups. The results based on first-semester final grades indicated that non–transfers earned a 64 overall average, yet vertical transfers earned a 65 overall average and horizontal transfers earned a 67 overall average.

McGuire and Belcheir (2013) found four unique profiles of transfer students, each having characteristics that portray capabilities and detriments. Their sample population was 52.7% female, 11% minority group, and 63% enrolled full time. In Group 1 (Old Hand at Transfer), traits included having transferred previously, earned significantly more credits, being older and married. In Group 2 (Taking Care of Basics), traits included transferred developmental credits for math and English and completed general education
core required for a four-year degree. In Group 3 (Quick Return to Four-Year Institution),
traits included lower GPA at transfer, fewer credits transferred, being younger, and
coming from the local area. Finally, in Group 4 (Community or Technical College), traits
included first-time attendance at a four-year institution, higher GPA, and no transfer of
developmental credits. The results of this study revealed significant differences in GPA
based on grouping; the Old Hands group had significantly higher GPAs with a mean of
2.77 compared to the other three groups, while the Quick Returns group had higher GPAs
than the Community College group, with a mean of 2.58 versus 2.50 (McGuire &
Belcheir, 2013).

Engagement. Fauria and Fuller (2015) showed that student engagement has a
related effect upon GPA. The purpose of their study was to determine the impact of
educationally purposeful activities (EPAs) on transferring. Fauria and Fuller found that
EPAs explained considerably more of the variance in cumulative GPAs for
undergraduate transfer students than for undergraduate non-transfer students. The NSSE
(2009) found that horizontal transfer students participated in “high-impact” activities,
such as study abroad and researching with a professor, more often than vertical transfer
students (Suri, 2009).

In “Connecting the Dots,” Kuh, Kinzie, Cruce, Shoup, and Gonyea (2007) found
relationships between student engagement as measured by NSSE and selected measures
of success in college for students from different racial and ethnic backgrounds at different
types of four-year colleges and universities: “Students who are engaged at a level that is
one standard deviation below the average have a probability of returning of .85, whereas
students who are engaged at a level that is one standard deviation above the average have
a probability of returning of .91” (p. 21). Kuh et al. (2007) also established that African-American students benefit more than White students from increasing their engagement in educationally effective activities. In another study, Pike et al. (2010) showed that being female, a transfer student, a full-time student, living on campus, and majoring in the arts and sciences were all positively related to students’ enriching educational scores.

In a 2013 study, Flynn found both academic and social engagement behaviors impact degree attainment. His study explored academic engagement, which incorporates meeting with faculty informally, talking with faculty outside of class, meeting with advisors, and participating in group study. In addition, he looked at social engagement that encompasses attending art performances, participating in clubs, and participating in sports. The results of his study indicated that each engagement activity contributed positively to degree attainment. The use of a nationally representative longitudinal survey data set allowed for the movement of students between institutions of higher education, which allowed for inclusion of 8% of the sample who transferred from their original institution but did attain a baccalaureate degree within six years.

**Institutional characteristics.** Pascarella and Terenzini (1980) stated that “a significant portion of student attrition might be prevented through timely and carefully planned institutional interventions” (p. 61). Institutions of higher education work to analyze the most effective means of increasing quality of campus experiences for their student body. In 2006, Ishitani completed a longitudinal study on transfer students and their departure from four-year universities. The study was undertaken because of the perceived lack of information regarding longitudinal persistent behavior among transfer students at their senior institutions. Understanding the varying effects on transfer students’
persistence, behavior, and risk characteristics would assist administrations in designing and implementing institutional policies to support transfer students’ educational endeavors. Many prior studies have found that active learning significantly impacted social integration and indirectly molded the student’s institutional commitment and intent to return.

In a study by Fauria and Fuller (2016), student engagement EPAs were peer teaching and tutoring or peer-leadership programs that paired experienced students with less experienced students in specific academic areas. Other EPAs include research with faculty and events with peers, advisors, and faculty outside the classroom (Kuh, 2009). Research has shown the value of student participation in inquiry-based activities and the positive influence on student attainment of educational goals (Hu, Kuh, & Li, 2008). Therefore, “establishing positive, constructive dialogue between faculty, staff, and students to help students celebrate their successes and their ability to exceed the expectations of college may prove useful. The student-academic advisor relationship is key to the development of a student’s self-image that notices his or her ability to exceed expectations” (Fauria & Fuller, 2015, p. 46).

Bensimon (2007) found that the success of transfer students is primarily associated with establishing relationships with practitioners on campus. These practitioners (institutional agents)—faculty, advisors, or administrators—have the skill set to help the student feel valued, worthy, and respected (Bensimon, 2007). Martin and Dowson (2009) stressed the importance of students’ relationships with family, peers, and teachers to student goals. They concluded that “high-quality interpersonal relationships in
students’ lives contribute to their academic motivation, engagement, and achievement” (Martin & Dawson, 2009, p. 351).

Kuh (2001) applauds institutions that adopt Chickering and Gamson’s seven vectors of good practice in undergraduate education as they lead to improved student academic adjustment. In 1987, Chickering and Gamson published their theory “Seven Principles for Good Practice in Undergraduate Education.” Those principles are: (1) Faculty contact, (2) Cooperation among students, (3) Active learning, (4) Faculty gives prompt feedback, (5) Emphasizes time on task, (6) Communicates high expectations, and (7) Respects diverse talents and ways of learning.

These principles signify the following: (1) Student motivation and involvement is the cornerstone of success for a student, and recognizing or feeling that faculty cares about the individual supports the commitment of the student; (2) Students should work in a collegiate fashion, collaborating and sharing ideas (learning takes on more meaning when it is a shared experience, not isolated or highly competitive); (3) Students learn by doing. They must write about it, talk about it, and relate the information to past experiences. They need to apply the learning to their lives; (4) Students need to receive feedback quickly, as it provides opportunities for improvement; (5) Time management is a skill that students need to learn and that faculty can reinforce; (6) Setting high expectations will help the student focus beyond the norm and produce at a challenging level; (7) Each student has a unique set of skills and must be given the opportunity to showcase them (Chickering & Gamson, 1989).

The institution to which the transfer student moves should have the seven concepts in place to create an environment in which the administration, staff, and faculty
care about the success of all students. The campus environment needs to be open and inviting to create a truly collegiate feeling in the student population (Chickering & Gamson, 1989).

Institutional practices can dramatically affect transfer student populations. At times the negative results of these processes are unknown and not intentional. Gard, Paton, and Gosselin (2012) found that student experiences with advisement offices and related processes were disappointing; study participants described advisors as incompetent, ineffective, and lacking knowledge. Students were also frustrated by financial aid office delays, office hours unavailability, and lost materials. Nuñez and Yoshimi (2016) suggested that more interactions between students and advisors, administrators, and other institutional agents would lead to superior academic support, especially when institutional tools stop working. They defined these institutional tools as websites, articulation agreements, and transfer guarantees. However, Tobolowsky and Cox (2012) indicated that many administrators do not recognize a problem with the transfer student population, feeling that they do not require any specialized programming or assistance.

High-Impact Practices and Academic Success

The current study focuses on the high-impact educational experiences of class preparation and student interactions on campus in terms of their effects on transfer students’ academic performance (as measured by GPA) and educational aspirations.

Students’ interactions. Webber et al. (2013) claimed that interactions with faculty and peers help students increase positive academic outcomes, describing how an institution’s culture can benefit students through open dialogue, academic challenge, and
collaborative learning, which help increase students’ academic knowledge and their social and personal skills. Kilgo, Mollet, and Pascarella (2016) found that interactions with faculty and peers on campus, including involvements in sports, residential housing, and peer tutoring, would lead to positive psychological well-being in students and indirectly affect their academic performance and persistence. In addition, Brock (2010) discussed how participation in learning communities would enhance students’ degree completion because completing several classes with a consistent cohort leads to greater learning and supports persistence. Stinebrickner and Stinebrickner (2009) found increased study time by transfer student resulted in higher GPA.

Rendon (1994) highlighted the changing composition of student bodies across the United States, noting that many college students were women older than 25 who were first-generation and of diverse ethnic backgrounds, a description that aligns with the background characteristics of many current transfer students. Her study found that those students who became involved in “the social and academic fabric of the institution appeared to be more excited about learning” (Rendon, 1994, p. 39), that the involvement was engendered by such agents as faculty, peers, advisors, and family who validated the student, and that what happened outside the classroom was just as important as what happened inside it.

Faculty-student interactions. Kilgo and Pascarella (2015) found that faculty-guided student research positively affected academic success because students were able to connect classroom material to real-life situations; the positive effects included educational aspirations and being on time to degree. Pike, Kuh, and McCormick (2010) pointed out that while student outcomes from participation in learning communities are
complex, such involvement appears to lead to increased student engagement, which in turn may positively affect student educational attainment. Tinto (2000) explained research which includes absorption in academic work, participation in co-curricular activities, and interaction with faculty and other institutional personnel is necessary for student success.

Summary

Students’ desire to obtain a baccalaureate degree is strongly related to the economic benefits derived (Brock, 2010; Levine & Dean, 2012; Waiwaiole & Elston, 2017). Transfer students often times struggle to attain the baccalaureate degree; they might encounter “transfer shock” (Archambault, 2014; Hill, 1965; Ishitani 2008; Rhine & Milligan, 2000). This is defined as a drop in their GPA, which may have been caused by individual characteristics (deficits) such as having first-generation status, lower socioeconomic background, and/or being a non-traditional aged student (Ishitani & McKitrick, 2010; McGuire & Belcheir, 2013; Monroe, 2006).

Institutional practices and policy can be implemented to assist the transfer student population. Utilizing a transfer-receptive framework (Jain et al., 2001) would support this student population by improving the process of transfer of credits earned at prior higher educational institutions. Overall, benefits would be derived by increased communication and transparency.
Chapter 3: Method

The current study aimed to compare the self-reported experiences on participation in high-impact activities between transfer and non-transfer students, and their relation to academic performance and educational aspiration at the college as a proxy of student’s success. High-impact activities examined in the current study included interaction with faculty inside and outside the classroom setting, establishment of relationships with peers, and relationships with advisors. Research questions posited in the current study were examined using the data collected by the 2015 National Survey of Student Engagement (NSSE), particularly using seniors attending a private university located in a southeastern U.S. state. Variables of interest were seniors’ responses on their views of academic performance, class preparation, faculty interaction, advisor relationships, and peer interactions that are related to their academic performance and educational aspiration. In this chapter, details related to the population and sample, research design, data collection, variables and measures, and statistical analysis are provided.

Population and Sample

The population for the current study was seniors who attend institutions of higher education in the United States, with a special attention to college students who transferred to a four-year university. In order to make statistical inferences for the target population, this study used responses from senior class members who attended a private university located in a southeastern U.S. state and responded to the 2015 NSSE survey as distributed by the institution. The institution the sample students attend holds a Carnegie classification as a doctoral university – highest research activity, private not-for-profit, and total student population of 16,674. The undergraduate instructional program is
described as balanced arts and sciences/professions, high graduate coexistence. Graduate programs are designated as research doctoral: comprehensive programs with medical and veterinary schools. Its enrollment profile is majority undergraduate; its undergraduate profile is defined as full-time, more selective, higher transfer-in, and its size and setting is designated as large four-year, primarily residential student body. The student body of the institution is varied; it is composed of 51.2% women and 48.8% men, and 14% of the students are international. Currently 10,619 undergraduate students are enrolled full-time, and the population breakdown is as follows: 0.1% American Indian/Alaskan Native, 6.7% Asian, 8.7% Black/African-American, 25.1% Hispanic/Latino, 3.3% Multi-race (not Hispanic/Latino), 0.2% Native Hawaiian/Pacific Islander, 49.8% White, 6.1% Unknown (collegedata.com).

**Research Design**

The current study is cross-sectional and correlational in nature, where the existing secondary data is from the 2015 NSSE collected by the Office of Planning, Institutional Research, and Assessment at the sample university. The advantages of using the existing data include convenience of the information, economical collection, and feasibility for efficient analysis. The information has been collected by the university’s voluntary participation in the national survey. The disadvantages of using the existing data include timeframe issues, the aspect of non-responses, and the quality of the responses. In addition, students responded voluntarily, based on their state of mind and knowledge at the time of responding. Their responses might not be truly indicative of experiences; the date the survey was completed may have had an impact based on their individual feelings as graduation approached.
The NSSE survey launched in 2000 and updates were incorporated in 2013 (NSSE, 2013). The NSSE survey was designed to contribute an enhanced understanding of the undergraduate activities that promote beneficial results. In particular, the survey based on theory intends to provide support for ten engagement indicators, organized by four themes. The identified themes are: Academic Challenge, Learning with Peers, Experience with Faculty, and Campus Environment. The primary purpose of the survey is to provide college/university administrators with the needed information to implement educational improvement. Research supports the benefits of students engagement in high-impact activities (Astin 1999, Kuh 2001, Kuh et al. 2007, Tinto 2000).

Pascarella, Seifert, and Blaich (2010) found that the NSSE did predict important educational outcomes and was a good predictor of liberal arts outcomes. This gives the foundation for the use of the NSSE in this study. While the reliability and validity of this instrument has been not formally assessed, the *U.S. News and World Report* ranking of colleges lends support for the assumption that the widely used NSSE scales are, in “fact, measuring practices that positively influence undergraduate cognitive and personal development across a broad range of outcomes” (Pascarella, Seifert, & Blaich, 2008, p.2). However, as argued by Campbell and Cabrera (2011) who raised an issue regarding the validity of the survey, a caution regarding generalizability of the survey outcomes should be preset.

**Data Collection**

The NSSE was administrated by Indiana University at Bloomington. The Institutional Review Board of Indiana University at Bloomington allowed five direct contacts and approved contact messages to be utilized for distribution to the student
population. Students should have received no more than five email requests relating to the survey. The messages sent in those emails were developed by personnel at Indiana University. Advertisement of the survey is customizable by institutions, but must follow the parameters of the IRB guidelines, and participation by the senior class members was voluntary. The process of data collection was done by a secure web-portal.

The university which the sample students attend participated in the 2003, 2006, 2009, 2012, and 2015 NSSE (n.d.). This survey is regularly completed by first-year and senior students to document dimensions of quality in undergraduate education, primarily to assess the extent of student participation in educational practices associated with high levels of learning and development (NSSE, 2013). The NSSE gives a unique source of information relating to student participation in a range of activities and practices that research has found to be significant to undergraduate student success. These include the individuals’ interaction with faculty, advisors, and peers. In addition, self-reporting of college experiences includes student GPA and educational aspirations, and demographic information such as age, race/ethnicity, gender, family education level, housing situation, and social memberships were also gathered.

The NSSE was given to students at the sample university at three-year intervals. The data used for the current study was from the 2015 survey, which is the most recent survey response on the NSSE. Of the 2015 survey data, only data for senior students at the sample institution were obtained on April 27, 2017, upon a formal request to the sample institution’s Planning, Institutional Research and Assessment office (see Appendix 2).
Variables and Measures

Variables used in the current study include (1) transfer status, (2) gender, (3) ethnicity, (3) dependent variable 1 – educational aspiration beyond bachelor degree, (4) dependent variable 2 – self-reported GPA, (5) class preparation, (6) experiences with faculty outside the classroom, (7) perceived interaction with peers, (8) perceived interaction with faculty members, and (9) perceived interaction with advisor.

**Transfer status (TSD).** Transfer status was determined by the self-reported answers to the following question: “Did you begin college at this institution or elsewhere?”. There were two possible responses: “Started here” or “Elsewhere”. Non-transfer students are defined as those individuals who began their higher education at the current institution. Transfer students are identified as having previously attended another four-year university or having attended a community or junior college. Transfer students were coded as 1, with non-transfer students coded as 0 as a reference group.

**Gender.** Gender status was determined by the self-reported answer to the following question: “What is your gender identity?”. There were four possible responses: “man”, “woman”, “another gender identity”, and “I prefer not to respond”. Male students were coded as 1, with female students coded as 0 as a reference group.

**Ethnicity.** Ethnicity status was determined by the self-reported answer to the following question: ”What is your racial or ethnic identification?” There were eight possible responses: “American Indian or Alaska Native”, “Asian”, “Black or African American”, “Hispanic or Latino”, “Native Hawaiian or other Pacific Islander”, “White”, “Other”, and “I prefer not to respond”. Latino students were coded as 1, White Students
were coded as 2, Black Students were coded as 4, Asian students were coded as 6, with all other responses coded as 0 as a reference group.

**Dependent variables.** Two dependent variables were used in the current study. The first variable was the self-reported GPA (SRG), which was reported by answering the question: “What have most of your grades been up to now at this institution?”. Allowable responses were A, A-, B+, B, B-, C+, C, or C- or lower. A scale of 1 to 8 was utilized: 8 = A, 7 = A-, 6 = B+, 5 = B, 4 = B-, 3 = C+, 2 = C, and 1= C- or lower. The second dependent variable was educational aspiration (EA) beyond baccalaureate degree, which was self-reported by answering the question: “What is the highest level of education you ever expect to complete?”. Allowable responses were: “Some college but less than a bachelor’s degree”, “Bachelor’s degree”, “Master’s degree”, and “Doctoral or professional degree”. Students who chose “Master’s degree” or “Doctoral or professional degree” were coded as 1, with students aspiring for “Some college but less than a bachelor’s degree” or “Bachelor’s degree” being coded as 0 as a reference group.

**Class preparation (CP).** Class preparation was measured based on three questions relating to student activity towards class requirements: 1) “Come to class without completing readings or assignments?”, 2) “Asked another student to help you understand course material?”, and 3) “Explained course material to one or more students?”. Responses were on 4-point Likert scale, ranging from 1, indicating “never”, to 4, indicating “very often”; a reverse order was used for the question relating to attending class unprepared, ranging from 1, indicating “very often”, to 4, indicating “never”. A composite score was created by averaging responses on the three items, with a lower score indicating better preparation toward classroom activities (Pascarella, Seifert,
& Blaich, 2008). Reverse coding was entered into the statistical software for the second and third questions; this was done to put the student responses on the same scale, with an overall lower score reflecting higher level of class preparation. The reliability measured by Cronbach alpha was .36 for the current sample.

**Student-faculty interactions (SF).** Student-faculty experiences were measured based on three questions relating to how often students communicate with faculty. This quantified the students’ contacts with faculty outside the classroom, to analyze the quality of relationships with faculty. Questions included: 1) “Talked about career plans with a faculty member?”, 2) “Discuss your academic performance with a faculty member?”, and 3) “Discuss course topics, ideas, or concepts with a faculty member outside of class?”. Responses were on 4-point Likert scale, ranging from 1, indicating “never”, to 4, indicating “very often”. A composite score was created by averaging responses on the three items, with a higher score indicating better faculty discussions perceived. The reliability measured by Cronbach alpha was .81 for the current sample.

**Peer interactions (R-PEER).** Quality of peer interactions was measured based on one question that measured the types and level of relationships between students and other students (peers) members of the college community. The question asked was “Indicate the quality of your interactions with students at your institution.” The question was scored using a 7-point Likert scale, ranging from 1, indicating “poor”, to 7, indicating “excellent”, with a higher score indicating a higher perceived relationship.

**Faculty interactions (R-FAC).** Quality of faculty interaction was measured based on one question that measured the types and level of relationships between students and faculty members of the college community. The question asked was “Indicate the
quality of your interactions with Faculty at your institution.” The question was scored using a 7-point Likert scale, ranging from 1, indicating “poor”, to 7, indicating “excellent”, with a higher score indicating a higher perceived relationship.

**Academic advisor interactions (R-ADVIS).** Quality of academic advisor interaction was measured based on one question that measured the types and level of relationships between students and advisors on campus. The question asked was “Indicate the quality of your interactions with academic advisors at your institution.” The question was scored using a 7-point Likert scale, ranging from 1, indicating “poor”, to 7, indicating “excellent”, with a higher score indicating a higher perceived relationship.

**Statistical Analysis**

The SPSS (IBM Corp., 2016) was used to answer the posited research questions. First, descriptive statistics including mean and standard deviation and/or frequency table for each of the variables used in the current study were summarized. Second, research question 1 examining the factors affecting difference in academic performance between transfer and non-transfer students was answered by running a hierarchical multiple regression with 3 blocks shown in Figure 2. Block 1 includes gender and transfer status; Block 2 includes class preparation (CP), peer relationships (PR), student faculty discussions (SF), and advisor relationships (RA); and Block 3 includes class preparation (CP), peer relationships (PR), student faculty discussions (SF), advisor relationships (RA), and their interaction with transfer status. The importance of the variable added to each block was assessed by testing the significance of $R^2$ change, and the importance of each individual variable was assessed by testing the significance of individual slope.
Third, research question 2 examining the factors contributing to difference in educational aspiration beyond baccalaureate degree between transfer and non-transfer students was answered by running a hierarchical logistic regression with 3 blocks shown in Figure 3. Block 1 includes gender and transfer status; Block 2 includes class preparation (CP), peer relationships (PR), student faculty discussions (SF), and advisor relationships (RA); and Block 3 includes class preparation (CP), peer relationships (PR), student faculty discussions (SF), advisor relationships (RA); and their interaction with transfer status. The importance of the variables added in each block was assessed by testing the significance of change in Chi-Square ($\Delta \chi^2$), and the importance of each individual variable was assessed by referring to the odds ratio (OR).

**Power Analysis**

A priori-power analysis using G-power (Erdfelder, Faul, & Buchner, 1996) indicated that the required minimum sample size was 81 to find the significance of individual slope with a statistical power of .80, given an alpha of .05, a power of .80, and a medium effect size ($f^2 = 0.15$). The current study is based on survey responses of 816 seniors, which is beyond the minimum required sample size of 81.
Chapter 4: Results

This chapter summarizes results from statistical analyses that examine two primary research questions posited in the current study. The first research question, which aims to see whether the relationship between student GPA and each predictor differs between transfer and non-transfer students, was examined using a hierarchical multiple regression. In this analysis, a number of predictors including transfer status, class preparation, faculty discussions, and relationships with peers, faculty, and advisers were regressed on the self-reported GPA. The second research question, which aims to see whether the relationship between student’s aspiration beyond the baccalaureate degree and each predictor differs between transfer and non-transfer students, was examined using hierarchical logistic regression. In particular, to answer the second set of questions the odds of one pursuing an advanced degree beyond the baccalaureate degree was predicted by transfer status, class preparation, faculty discussions, and relationships with peers, faculty, and advisers. Below, the descriptions of sample characteristics, descriptive statistics for variables, a number of preliminary analyses, and study findings are summarized.

Sample Characteristics

A total of 926 seniors from the sample institution responded to the NSSE survey administered in 2015. As shown in Table 1, participants were distributed by transfer status: 22.6% of seniors (n = 209) started elsewhere, 65.6% of seniors (n = 607) started at the sample institution and 11.9% of seniors (n = 110) did not give a response. After excluding seniors whose transfer status was unknown, a total of 816 were used in the analyses for the current study. As shown in Table 2, participants included: male transfers
who started elsewhere (8%, \( n = 67 \)), female transfers who started elsewhere (17%, \( n = 142 \)), male non-transfers who started at the sample institution (31%, \( n = 252 \)), and female non-transfers who started at the sample institution (44%, \( n = 355 \)).

In terms of ethnic backgrounds, male transfer students were: White (1.84%, \( n = 15 \)), Latino (3.31%, \( n = 27 \)), Black (.74%, \( n = 6 \)), Asian (.61%, \( n = 5 \)), Multi (.12%, \( n = 1 \)), Other (.98%, \( n = 8 \)), and No response (.61%, \( n = 5 \)). Ethnic backgrounds of female transfers were: White (5.15%, \( n = 42 \)), Latino (6.86%, \( n = 56 \)), Black (1.72%, \( n = 14 \)), Asian (.74%, \( n = 6 \)), Multi (.61%, \( n = 5 \)), Other (1.72%, \( n = 14 \)), and No response (.61%, \( n = 5 \)). Ethnic backgrounds of male non-transfers were: White (14.71%, \( n = 120 \)), Latino (6.99%, \( n = 57 \)), Black (1.35%, \( n = 11 \)), Asian (3.19%, \( n = 26 \)), Multi (1.47%, \( n = 12 \)), Other (1.96%, \( n = 16 \)), and No response (1.23%, \( n = 10 \)). Ethnic backgrounds of female non-transfers were: White (20.34%, \( n = 166 \)), Latino (8.33%, \( n = 68 \)), Black (4.29%, \( n = 35 \)), Asian (3.19%, \( n = 26 \)), Multi (1.35%, \( n = 11 \)), Other (3.19%, \( n = 26 \)), and No response (2.82%, \( n = 23 \)).

**Descriptive Statistics for GPA and Educational Aspiration**

The self-reported GPA had a mean of 6.76 with a SD of 1.31 (\( Min = 1.00, Max = 8.00 \)) for all students (\( n = 819 \)) included in the current study. Mean GPA was 6.02 (SD = 1.39, \( Min = 2.00, Max = 8.00, n = 67 \)) for male transfer students, 6.06 (SD = 1.48, \( Min = 1.00, Max = 8.00, n = 142 \)) for female transfer students, 7.04 (SD = 1.19, \( Min = 4.00, Max = 8.00, n = 252 \)) for male non-transfer students, and 6.98 (SD = 1.13, \( Min = 3.00, Max = 8.00, n = 355 \)) for female non-transfer students, respectively. In addition, as shown in Table 3, 5.29% of male transfer students (\( n = 43 \)), 13.41% of female transfer students (\( n = 109 \)), 26.81% of male non-transfer students (\( n = 218 \)), and 37.39% of
female non-transfer students \( (n = 304) \) reported that they plan to go beyond the baccalaureate degree or some college.

**Mean Difference on High-impact Activities by Gender**

A series of independent samples \( t \)-tests were performed in order to find gender difference on predictors used in the current study. Below, study findings from each independent samples \( t \)-test are summarized.

**Class preparation.** As shown in Table 4, an independent samples \( t \)-test was conducted to compare scores on class preparation reading (CPR), class preparation asking other students for help (CPAH), class preparation discussion of class work with other students (CPDS), and a composite score class preparation (CP) between males and females. Results from an independent-samples \( t \)-test suggest the significant mean difference was found between females and males on CPR \( (t(742.33) = -2.48, p = .01) \), but not on CPAH \( (t(905) = -1.41, p = .16) \), CPDS \( (t(900) = 1.04, p = .30) \), nor a composite score for class preparation \( (t(913) = -1.38, p = .17) \). Specifically, the significant mean difference on CPR by gender suggests that males \( (M = 2.27, SD = .85, n = 360) \) reported to have significantly more class preparation reading than females \( (M = 2.13, SD = .81, n = 549) \).

**Student-faculty interactions.** As shown in Table 5, an independent-samples \( t \)-test was conducted to compare scores between males and females on student-faculty interactions on career path (SFRCP), student-faculty interactions on academic performance (SFRAP), student-faculty interactions on current topics (SFRCT), and a composite score of student-faculty interactions on general topics (SF). Results from independent-samples \( t \)-tests suggest a significant difference by gender on SFRCT \( (t(863) = -3.30, p < .01) \) and SF \( (t(871) = -2.24, p = .03) \), but not on SFRCP \( (t(870) = -0.51, p = .61) \).
nor SFRAP \((t_{694.43}) = -1.92, p = .06\). The significant mean difference on SFRCT by
gender indicates that males \((M = 2.51, SD = .96, n = 344)\) reported to have significantly
student-faculty interactions on current topics than females \((M = 2.29, SD = .97, n = 521)\).
In addition, males \((M = 2.45, SD = .84, n = 347)\) reported to have significantly higher
student-faculty interactions on general topics than females \((M = 2.36, SD = .81, n = 526)\).

**Relationships with peers, faculty, and advisors.** As shown in Table 6, an
independent-samples \(t\)-test was conducted to compare male and female scores on
relationships with peers (RPEER), relationships with faculty (RFAC), relationships with
advisors (RADVIS), and a composite score of overall relationships (R). Results from an
independent-samples \(t\)-test suggest that no significant difference by gender was found on
RPEER \((t_{833}) = 1.07, p = .29\), RFAC \((t_{821}) = 0.35, p = .73\), RADVIS \((t_{829}) = -0.36, p = .72\), nor overall relationships (R) \((t_{835}) = 0.35, p = .73\).

**Mean Difference on High-impact Educational Activities by Transfer Status**

A series of independent samples \(t\)-tests were performed in order to find transfer
status difference on predictors used in the current study. Below, study findings from each
independent samples \(t\)-test are summarized.

**Class preparation.** As shown in Table 7, an independent-samples \(t\)-test was
conducted to compare scores on class preparation reading (CPR), class preparation asking
other students for help (CPAH), class preparation discussion of class work with other
students (CPDS), and a composite score CP between transfer and non-transfer (native)
students. Results from an independent-samples \(t\)-test suggest that no significant
difference was found by transfer status on CPR \((t_{807}) = 0.66, p = .51\), CPAH \((t_{810}) = -
0.68, p = .50\), CPDS \((t_{810}) = -1.53, p = .13\), nor CP \((t_{813}) = -.85, p = .39\).
**Student-faculty interactions.** As shown in Table 8, an independent-samples $t$-test was conducted to compare scores between transfer and non-transfer (native) students on student-faculty interactions on career path (SFRCP), student-faculty interactions on academic performance (SFRAP), student-faculty interactions on current topics (SFRCT), and a composite score of student-faculty interactions on general topics (SF). Results from an independent-samples $t$-test suggest a significant difference by transfer status on SFRCP ($t_{(805)} = 2.34, p = .02$) and SFRAP ($t_{(801)} = -2.09, p = .04$), but not on SFRCT ($t_{(801)} = 1.22, p = .22$), nor SF ($t_{(806)} = 0.62, p = .54$). The significant mean difference on SFRCP by transfer status indicates that non-transfer (native) students ($M = 2.65, SD = .96, n = 600$) reported to have significantly more student-faculty interactions on career path than transfer students ($M = 2.46, SD = 1.03, n = 207$). The significant mean difference on SFRAP by transfer status indicates that transfer students ($M = 2.40, SD = .94, n = 205$) reported to have significantly more student-faculty interactions on academic performance than non-transfer (native) students ($M = 2.23, SD = .95, n = 598$).

**Relationships with peers, faculty, and advisors.** As shown in Table 9, an independent-samples $t$-test was conducted to compare scores between transfer and non-transfer (native) students on relationships with peers (RPEER), relationships with faculty (RFAC), relationships with advisors (RADVIS), and a composite score of overall relationships (R). Results from an independent-samples $t$-test suggest no significant difference by transfer status on RPEER ($t_{(312.63)} = 1.54, p = .13$), RFAC ($t_{(298.76)} = -0.01, p = .99$), RADVIS ($t_{(804)} = 1.12, p = .24$), nor on overall relationships (R) ($t_{(810)} = 1.18, p = .24$).
Mean Difference on High-impact Educational Activities by Ethnicity

A series of Analysis of Variance (ANOVA) was used to examine mean differences on predictors by ethnicity. The outcomes used in ANOVA were class preparation, student-faculty interactions, quality of relationships, and their composite scores.

Class preparation. As shown in Table 10, a one-way ANOVA was conducted to compare each item score measuring class preparation and its composite score: class preparation reading (CPR), class preparation asking other students for help (CPAH), class preparation discussion of class work with other students (CPDS), and a composite score of class preparation (CP). Results from each one-way ANOVA suggest that significant mean differences were found on CPAH across different ethnic groups ($F_{(6,900)} = 3.13$, $p < .05$), but not on CPR ($F_{(6,902)} = 1.08$, $p = .37$), CPDS ($F_{(6,895)} = 0.47$, $p = .83$), and CP ($F_{(6,908)} = .67$, $p = .68$). The post-hoc analysis using Tukey suggests that the significant mean differences on CPAH by ethnicity were found in the following pairs of ethnic groups: Latino ($M = 2.51$, $SD = .87$, $n = 226$) vs. Asian ($M = 2.15$, $SD = .86$, $n = 67$), $M_{\text{diff}} = .36$, $SE = .12$, $p = .04$; White ($M = 2.52$, $SD = .89$, $n = 384$) vs. Asian ($M = 2.15$, $SD = .86$, $n = 67$), $M_{\text{diff}} = .37$, $SE = .11$, $p = .02$; and students from multi-ethnic backgrounds ($M = 2.73$, $SD = .80$, $n = 33$) vs. Asian ($M = 2.15$, $SD = .86$, $n = 67$), $M_{\text{diff}} = .59$, $SE = .18$, $p = .03$. Results suggest that Latino, White, and students from multi-ethnic backgrounds are more likely to ask for class preparation help than Asian students.

Student-Faculty interactions. As shown in Table 11, a one-way ANOVA was conducted to compare each item measuring relationships and its composite score: student-faculty interactions on career path (SFRCP), student-faculty interactions on
academic performance (SFRAP), student-faculty interactions on current topics (SFRCT), and a composite score of student-faculty interactions (SF). Results from each one-way ANOVA suggest that significant mean differences were found on SFRAP across different ethnic groups \( F(6,859) = 2.23, p < 0.05 \), but not on SFRCP \( F(6,865) = 0.88, p = .51 \), SFRCT \( F(6,858) = 0.93, p = .47 \), and SF \( F(6,866) = 1.09, p = .37 \). The post-hoc analysis using Tukey suggests that significant mean differences on SFRAP by ethnicity were found in the following pair of ethnic groups: Black \( (M = 2.60, SD = 1.01, n = 68) \) vs. White \( (M = 2.22, SD = .95, n = 371) \), \( M_{diff} = .38, SE = .12, p = .04 \). Specifically, it suggests that Black students are more likely to have discussions on academic performance with faculty than White students.

**Relationships with peers, faculty, and advisors.** As shown in Table 12, a one-way ANOVA was conducted to compare each item score measuring Quality of Relationships and its composite score: Relationships with peers (RPEER), Relationships with faculty (RFAC), Relationships with advisors (RADVIS), and a composite score of overall relationships (R). Results from a one-way ANOVA suggest that no significant mean differences were found on quality of relationships by ethnicity: RPEER \( F(6,828) = 0.60, p = .73 \), RFAC \( F(6,816) = 1.93, p = .07 \), RADVIS \( F(6,824) = 1.86, p = .09 \), and R \( F(6,830) = 1.52, p = .17 \).

**Relationships among High-impact Educational Activities and Dependent Variables**

As shown in Table 13, results from correlation analysis suggest that there were significant relationships among the following pairs of variables: \( r = -.33, p < .01 \) for GPA and transfer student status; \( r = -.10, p < .01 \) for GPA and class preparation; \( r = -.09, p < .05 \) for transfer status and gender; \( r = .09, p < .05 \) for gender and student-faculty
interactions; $r = .18, p < .01$ for class preparation and peer interactions; $r = .25, p < .01$ for class preparation and student-faculty interactions; $r = .11, p < .01$ for peer interactions and student-faculty interactions; $r = .31, p < .01$ for peer interactions and advisor interactions; $r = .18, p < .01$ for student-faculty interactions and advisor interactions.

Table 14 shows correlation among all variables separately by transfer status – correlation values shown in the upper diagonal are for transferred students and correlation values shown in the lower diagonal are for native students. For transfer students, results from correlation analysis suggest that there were significant relationships among the following pairs of variables: $r = .14, p < .05$, for class preparation and GPA; $r = .13, p < .05$, for peer interaction and GPA; $r = -.29, p < .01$, for peer interaction and class preparation; $r = -.31, p < .01$, for student-faculty interaction and class preparation; $r = -.13, p < .05$, for advisor interaction and class preparation; $r = .22, p < .01$, for student-faculty interaction and peer interaction; $r = .33, p < .01$, for advisor interaction and peer interaction; $r = .26, p < .01$, for advisor interaction and student-faculty interaction. For native students, results from correlation analysis suggest that there were significant relationships among the following pairs of variables: $r = .14, p < .05$, for GPA and class preparation; $r = .13, p < .05$, for GPA and peer interaction; $r = -.29, p < .01$, for class preparation and peer interaction; $r = -.31, p < .01$, for class preparation and student-faculty interaction; $r = .22, p < .01$, for peer interaction and student-faculty interaction; $r = .13, p < .05$, for class preparation and advisor interaction; $r = .33, p < .01$, for peer interaction and advisor interaction; $r = .26, p < .01$, for student-faculty interaction and advisor interaction.
Factors Affecting Student GPA

This section summarizes the results from the hierarchical multiple regression model predicting student GPA. In hierarchical multiple regression, as shown in Figure 2, gender, ethnicity, and transfer status was entered in Block 1, followed by class preparation (CP), peer relationships (PR), student-faculty interactions (SF), and advisor relationships (RA) in Block 2, and interaction between transfer status and each of the predictors – class preparation (CP), peer relationships (PR), student-faculty interactions (SF), and advisor relationships (RA) – in Block 3. As shown in Table 15, even though changes in $R^2$ value were not found to be statistically significant by adding predictors in Block 2 ($F_{\Delta R^2} (4,786) = 1.77, p > .05$ for Model 1 vs. Model 2) or Block 3 ($F_{\Delta R^2} (4,782) = 3.26, p > .05$ for Model 2 vs. Model 3), Model 3 was considered to be the final model due to the significant interactions found in Model 3. Below only results from Model 3 are discussed.

The overall model was found to be statistically significant ($F_{(14, 782)} = 9.58, p < .01$), with the adjusted $R^2$ value of .13, suggesting that 13% of the variation in student GPA was explained by all predictors included in Model 3. Of all predictors added in Model 3, four predictors were found to be statistically significant. These included transfer status, being black, an interaction between transfer status and class preparation, and an interaction between transfer status and relationship with peers. Specifically, the first significant predictor was transfer status ($b = -0.93, SE = .10, p < .01$), suggesting that transfer students’ mean GPA was found to be statistically lower on average by .93 point than non-transfer students. The second significant predictor was being a black ($b = -0.46, SE = .19, p < .01$), suggesting that black students’ mean GPA was found to be statistically
lower on than other students. The third significant predictor was an interaction between class preparation and transfer status ($b = .53, SE = .19, p < .05$), indicating that the effect of class preparation on the GPA was higher for transfer students when compared to non-transfer students, as shown in Figure 4. Lastly, an interaction between peer relationships and transfer status ($b = .20, SE = .08, p < .05$) was found, suggesting that the effect of peer interactions on the GPA was higher for transfer students than non-transfer students, as shown in Figure 5.

**Factors Affecting Student’s Educational Aspirations Beyond the Baccalaureate Degree**

The following section summarizes results from the logistic regression model, predicting the odds of students pursuing educational aspirations beyond the baccalaureate degree. As shown in Figure 3, gender, ethnicity and transfer status was entered in Block 1, followed by class preparation (CP), peer relationships (PR), student-faculty interactions (SF), and advisor relationships (RA) in Block 2 and interaction between transfer status and each of the predictors – class preparation (CP), peer relationships (PR), student faculty interactions (SF), and advisor relationships (RA) – in Block 3. As shown in Table 16, even though model comparisons indicate that Model 1 was found to be statistical significant ($\chi^2 (4) = 4.14, p > .05$ for Model 1 vs. Model 2; $\chi^2 (4) = 6.90, p > .05$ for Model 2 vs. Model 3), significant interactions found in Model 3 meant that Model 3 was determined to be the final model and discussed below.

The overall model was found to be statistically significant ($\chi^2 (14) = 31.71, p < .01$) with the Nagelkerke’s $R^2$ value of .07. Two predictors were found to be statistically significant, transfer status and interaction between transfer status and peer
relationships. The first significant predictor was transfer status \( (b = -0.73, SE = .22, p < .01, OR = .48) \), suggesting that transfer students are 52% lower in pursuing educational aspirations beyond the baccalaureate degree compared to non-transfer students. The second significant predictor was interaction between transfer status and peer relationships \( (b = .40, SE = .17, p < .05, OR = 1.49) \), indicating that the effect of peer relationships on the odds of pursuing educational aspirations beyond the baccalaureate degree was 49% higher for transfer students when compared to non-transfer students.
Chapter 5: Discussion

This chapter begins with a summary of the current study, including its purpose, rationale, and research questions, followed by a discussion of the findings and the conclusions that can be drawn from them. It then provides practical implications as well as recommendations for further research based on the findings and the current study’s limitations.

The Current Study

Higher education has become the gateway to social and economic advancement in the United States. Accordingly, the Obama Administration in 2009 promoted the awarding of more college degrees by 2020 (Grites & Duncan, 2012), and the Lumina Foundation sought a 60% increase in college degrees awarded by 2025 (Sorge, Bailey, & Moore, 2012). However, the challenge is ongoing, as many undergraduates struggle to graduate within four to six years. For example, only 15% of students who transfer from two-year to four-year institutions earn a degree in six years (Jenkins & Fink, 2016). When compared to the almost 72% six-year completion rate for full-time students who start and finish at the same four-year school (Shapiro et al., 2016), it is clear that transfer students are among those students who need assistance to complete their baccalaureate degrees.

The current study was an attempt to understand the role of high-impact activities on the educational experiences of transfer students as compared to non-transfer (native) students at a traditional not-for-profit private university. More specifically, the purpose of this study was to examine how class preparation, student-faculty interactions, and student
interaction with peers and advisors may affect the GPA and the post-baccalaureate educational aspirations of transfer students.

While there have been numerous studies conducted on the transition and adjustment of transfer students (Braggs, 2017; Cuseo, 2012; Deil-Amen & Turley, 2007; Davies & Casey, 1999; Flaga, 2006; Glass & Harrington, 2002), there are a dearth of studies on the effect of high-impact activities on the educational experiences of transfer students. As the number of transfer students in higher education continues to grow (Archambault, 2014; Coston, Lord, & Monell, 2013), it is important to understand the challenges and issues facing transfer students, which further affects their success. Those issues include low socioeconomic background, non-traditional age, family commitments, and lack of social capital (Ishitani & McKitrick, 2010; McGuire & Belcheir, 2013; Monroe, 2006).

Hu, Kuh, and Li (2008) found that participation in high-impact activities positively influences transfer students’ adjustment at their new institution. Participation in activities with peers and faculty, both inside and outside the classroom, leads to increased engagement and student success (Kuh, 2003; Rendon, 1994). Translated into practice, such understanding will support transfer student degree completion, which benefits the student, the college or university, the community, and society. The current study is important as it provides a greater understanding of the benefits associated with specific high-impact activities such as class preparation, student-faculty interactions, and interaction with peers, faculty, and advisors. This could lead to the development of programs, policies, and initiatives that focus on the benefits for transfer students.
In the current study, two research questions were examined to accomplish the primary goal:

(1.) What are the factors contributing to a difference in academic performance between transfer and non-transfer students?

(2.) What are the factors that contribute to different educational aspirations beyond the bachelor’s degree for transfer and non-transfer students?

This chapter summarizes the findings of this study, links them to existing theory and research, and provides implications for daily higher education practice.

**Summary of Findings**

The current study shows that transfer students have significantly lower GPAs and are less likely to aspire to education beyond a baccalaureate degree than non-transfer (native) students. This aligns with Hill’s (1965) seminal study establishing “Transfer Shock” and the drop in transfer students’ grades at the new institution of higher education. However, study findings from a hierarchical linear model indicate that class preparation and peer interactions help transfer students improve their academic GPA more than for non-transfer (native) students. In addition, it was found that transfer students are more likely to pursue a degree beyond the baccalaureate when they have stronger peer interactions than was the case for non-transfer students.

Preliminary analyses showed some differences based on gender, transfer status, and ethnicity. Male respondents indicated higher levels of class preparation by reading more than female respondents, and also reported having better relationships with faculty than females when discussing current and general interest topics. On a few variables, mean differences were found based on transfer status; transfer students discussed their
academic progress with faculty while non-transfer (native) students discussed career paths. Lastly, there were differences by ethnicity: Latinos, Whites, and those from multi-ethnic backgrounds were more likely than Asian students to ask classmates for help in understanding class materials, and Black students were found to be more likely than White students to discuss their academic performance with faculty.

**Linking Study Findings to Theory and Research**

Theory and research guide the understanding of transfer students, and this section compares and contrasts this study’s findings to previous findings. Foremost, transfer students have unique issues at their new campus, and may have concerns that are very different from native students, including credit transfer, financial aid, and loan deferment (Lester, 2006).

**Transfer students and academic performance.** Study results indicated that transfer students had lower GPAs than non-transfer students. This aligns with prior research such as Santos and Sutton’s (2012) study that had identical findings. Research on transfer students has suggested that the GPAs of transfer students may have fallen because of transfer shock (Archambault, 2014; Ishitani 2008; Rhine & Milligan, 2000). The drop in GPA may have also been caused by individual characteristics (deficits) such as having first-generation status, lower socioeconomic background, and/or being a non-traditional aged student (Ishitani & McKitrick, 2010; McGuire & Belcheir, 2013; Monroe, 2006).

A major factor that was found to influence transfer students’ chances of improving their GPAs was class preparation, which was found to be more beneficial for transfer students. Current research assists with understanding the nuances of the transfer
student population as it relates to class preparation. In estimating the causal effect of studying on the GPAs of two groups of freshmen, it was found that one additional study hour increased GPA by 0.36 points (Stinebrickner & Stinebrickner, 2009). More specifically, Stinebrickner and Stinebrickner (2009) have argued that low-performing students take responsibility for earning lower grades and as such expect to spend more time studying. This is in keeping with Chickering’s third vector of development: autonomy, integrity, and emotional competency.

An interesting finding of this study revealed gender differences in class preparation. Study results indicated that more male students read materials before attending class than females, which diverges from most of the prior research in this area that found that women exhibited more positive behaviors toward class preparation (Wawrzynski & Sedlacek, 2003), spent more time than men preparing for class, and reported higher GPAs (Webber, Krylow, & Zhang, 2013). This contrary result about female class preparation and reading could imply that females often underestimate themselves, which a number of studies have found. For instance, Daubman, Heatherington, and Ahn (1992) stated that women’s predictions of GPAs were lower than men’s predictions. This resonates with Kruger and Dunning’s (1999) conclusion that individuals make inaccurate determinations of their self-ability and that high performing individuals understate their levels of competence and report lower self-assessments.

In addition, seeking out faculty to discuss academic performance was found to be significant for transfer students in the current study. This is in line with Kuh and Astin’s theories in which involvement increases student motivation. Specifically, it was found that transfer students discussed academic standing with faculty to a greater extent than
non-transfer students, while non-transfer (native) students more frequently discussed career plans with faculty. These student-faculty interactions are a strong force for student achievement, and this finding aligns with a plethora of previous studies. Light (2001) asserted that overall student success was increased by engagement with faculty. Pascarella and Terenini (1990) also concluded that relationships with faculty have been noted to increase understanding of materials and assist in the development of career goals, and have been linked to continued academic accomplishments. Baxter-Magolda (2014) found that the sharing of ideas between students and faculty helps students develop self-authorship, while Kim and Sax (2009) stated that more “contact between students and faculty, both inside and outside the classroom, enhances college students’ development and learning outcomes” (p. 438). More specifically, Webber et al. (2013) reported that greater interaction with faculty increases GPA, while Nunez & Yoshimi (2016) explained that a higher level of interaction with faculty leads to superior academic results for transfer students.

**Transfer students and educational aspirations.** Study findings indicated that transfer students with lower GPAs may be less inclined to pursue graduate degrees, which agrees with research suggesting that lower GPA scores have implications for transfer students’ aspirations beyond the baccalaureate. Researchers have found a link between graduate school aspirations and undergraduate GPA (Drew & Astin, 1972; Hossler & Bontrager, 2015; Hanson, Paulsen, & Pascarella 2015; Jagešić, 2015), as students with lower undergraduate GPAs choose not to pursue graduate degrees (Hanson et al., 2015; Jagešić, 2015). Furthermore, Drew and Astin (1972) found that student grades and academic self-concept sharply affected aspirations.
The most salient finding of the current study is that strong relationships with peers influence a transfer student’s desire to go beyond the baccalaureate degree. According to Coston et al. (2013), transfer students benefit from feelings of belonging, and transfer students who experience a sense of belonging to their higher educational environment will perform at a higher level, resulting in a better GPA and increased educational aspirations. Establishing peer relationships is integral to this sense of belonging. In Astin’s (1993) influential work, the peer group was identified as the single most potent source of influence to the development and growth of an individual. Jacob and Wilder (2010) further explained that student aspirations are influenced by societal norms; peers mimic each other’s behaviors. In addition, Martin and Dawson (2009) expressed that high quality interpersonal relationships contribute to academic motivation and, in turn, achievement. They found that student goals are influenced by relationships with peers. As Bensimon (2007) stated, the success of transfer students is primarily associated with establishing relationships on campus.

**Implications for Practice**

This section discusses practical programs and initiatives to assist the transfer student population in succeeding in a higher education environment. Transfer students may have characteristics (first-generation status, lower socioeconomic background, and/or being a non-traditional aged student) that call for additional support to succeed in a higher educational environment. The practical implications for university administrators, advisors, faculty, student families, and individual students are discussed in keeping with Schlossberg’s four domains that are necessary for individuals to navigate transitions more smoothly: *situations, support, self, and strategies*. Two of the theories utilized in this
study, Chickering’s theory of identity and Baxter-Magolda’s theory of self-authorship, assert the valuable outcomes of college, developing mature interpersonal relationships, developing autonomy, and developing self-direction. The following implications provide support for the transfer student while attempting to inculcate self-reliance and autonomy.

**University administration.** Weidman (as cited in Renn & Reason, 2013) states that students’ socialization on a college campus occurs through support networks with peers and faculty. He also argues that socialization can result in assimilation and full integration into the academic culture. Transfer students benefit from this academic and social integration, and therefore the investment of administrators in learning communities can support students’ assimilation and socialization. University administrators can specifically implement a transfer student learning community, given the importance and positive impact of feelings of belonging and peer interactions for transfer students.

Learning communities have been utilized in higher education for 90 years, beginning in 1927 at the Experiment College at the University of Wisconsin (Tinto, 2000). The resurgence of learning communities was led by Evergreen State College in the 1980s (Tinto, 2000). It has been found that students participating in living, learning, and coursework communities succeed at a greater rate (Coston et al., 2013). Chickering and Reisser (1993) found that peer communities and friendships foster self-esteem and expose students to varied ways of thinking. Similarly, Light (2001) suggested that students who are happiest grow academically and spend their time in activities with peers and faculty focusing on accomplishing substantive academic work. Learning community programs at the university could thus be implemented to increase the networking opportunities available to students, particularly for transfer students. This could lead to
increased relationships with classmates, development of study groups, and potential student-faculty engagement.

**Greek life.** Greek life on college campuses in the United States has been identified as beneficial to students. For example, Astin (1993) found this kind of peer interaction was positively related to academic development. Although McGabe and Trevino (1977) found that academic dishonesty was greater among members of Greek organizations than non-members because of peer cheating and low disapproval of it among peers, other studies have reflected positive outcomes. Pacarella et al. (2001) found that individuals who participated in sororities demonstrated cognitive growth, especially in the second and third years of higher education. Chickering and Ressier (1993) asserted that members of Greek organizations experienced significant identity development during college. Transfer students should consider these campus organizations, as the social engagement and potentially positive academic benefits might help them overcome feelings of isolation and loneliness.

**Peer educators.** Students establishing peer interactions will have stronger self-efficacy and will potentially develop higher educational aspirations beyond the baccalaureate degree. Kilgo, Mollet, and Pascarella (2016) found positive benefits from the use of peer educators at the university. Students helping other students learn in a variety of environments assisted both the peer educator and the student. For example, Topping (1996) found higher class marks resulted from peer tutoring, with higher final exam grades, while Hanson, Trolian, Paulsen, and Pascarella (2016) found that peer learning supported academic success and higher GPAs. Moreover, Chickering and Reisser (1993) found that student relationships on campus promoted higher levels of self-
esteem and higher-level thinking. This could in turn lead to greater student self-efficacy; Bandura (1994) has explained that self-efficacy has been shown to have a positive impact on student performance. In addition, Liao, Edlin, and Ferdenzi (2014) asserted that college student self-efficacy affected academic achievement.

**Transfer student orientation.** The administration could also establish a transfer student orientation that would highlight available campus resources for the transfer student population, such as opportunities for working on campus, scholarships identified specifically for transfer students, and academic resources (tutoring, mentoring, and computer skills). The orientation program could be held several times during the beginning of the semester for the maximum benefit of new members on campus. The information shared with the transfer students would answer many frequently asked questions, including: Where do I park? How do I purchase a parking permit? Where is the registrar’s office? How do I drop a class? How do I get involved? (Coston et al., 2013; Townsend & Wilson, 2006).

**Transfer student center.** Funds could be allocated for the creation and support of a transfer student center at the university, a set location for students to find available resources and to meet, creating opportunities for peer relationships to develop. Dedicated staff could reach out to the transfer student population not only over the course of the first semester on campus, but also throughout transfer students’ college career. Such regular engagement is important: as Shapiro et al. (2015) found, 45% of the Fall 2008 cohort that transferred changed their institutions more than once. Support from the administration might increase the transfer student’s sense of belonging on campus, thus reducing the occurrence of multiple transfers. The administration could also utilize the transfer student
center to create a strong bond and open communication with transfer students and their families. For example, funds could be set aside to support the development of media resources, including emails, newsletters, publications, and social media.

**Enrollment management offices.** Enrollment managers can play a significant role in assisting transfer students. The mission of enrollment management is to bring diverse students to campus who can achieve academic and personal success and persist to graduation. Therefore, the strategies that effective enrollment management offices use apply to not only student enrollment but also assistance with student engagement and commitment to the institution (Seidman, 2012). To be effective, all enrollment managers must ensure that such strategies include the transfer student population.

Additionally, enrollment managers could disseminate information each academic year to raise awareness and educate the campus community about the arrival of new transfer students and the size of their population in the student body. This could be implemented via social media networks, organizational fairs, and events designed to welcome students back to campus. Faculty, advisors, staff, and current students could participate in such events to welcome the new campus community members. Campus culture could then be shared, ideas exchanged, and friendships developed in a relaxed environment.

**Workshops.** Chickering & Schlossberg (2002) argue that every transition begins with an ending; therefore, for the student who is transitioning to college there comes an end to living at home with parents and a disruption or potential ending to relationships with friends. For transfer students, these disruptions and endings continue with the move to a new campus environment. Considering this context, another format that would guide
university administrators in helping transfer students adjust to their new environment is holding workshops for faculty and advisor. Such workshops can highlight information about transfer students feeling lonesome, desolate, and overwhelmed at times (Tobolowsky & Cox, 2012), and share current research, special needs, and strategies to assist with the development of this population.

**Academic advisement offices.** The transfer process should not stop with the issuance of the acceptance letter. Advising offices throughout the campus should design and implement a system to track incoming transfer students. This would allow the sharing of critical information and assist in counteracting the neglectful attitudes of some advisors (Burst et al., 2012; Tobolowsky & Cox, 2012). Many institutions place transfer students in a temporary educational area upon enrollment in which advising support at times is lacking (Tobolowsky & Cox, 2012). Advisors should reach out to faculty directly, inquiring about the transfer student’s progress and maintaining open communication with the student. A voluntary system could provide the transfer student with support, instruction, monitoring, and guidance during college.

**Intrusive advisement.** Implementing intrusive or invasive advising might supply needed information and support to the transfer student population (Cuseo, 2012). Cuseo (2012) indicates that transfer students rate advisement as an important service, yet two-thirds forgo this process. He asserts that intrusively connecting students and advisors by requiring signatures for adding or dropping courses, for example, “provides students with the type of institutional-initiated outreach they need to achieve academically” (p. 138). Advisors could also reach out more frequently to transfer students during the semester,
using emails or other social media to facilitate this communication (Glass & Harrington, 2002).

**Advisors.** Advisors should inform the transfer student population about campus resources that are available. Transfer students should be aware of career support services, such as resume critiques, dress-for-success training, mock interview sessions, and other job-skill enhancement seminars. This is in keeping with Schlossberg’s domain of taking stock of the self in transitions. Transfer students should also be given the information and location of any educational support services on campus, including writing skills workshops, math assistance, speech and language programs, and class tutoring sessions.

**Transfer specialists.** Specific advisors could further be designated as transfer specialists. These advisors could establish networking relationships with community colleges in the geographic area as well as the college and universities from which many current students transfer. Such advisors might attend conferences held by the National Association of Transfer Students, thereby keeping up to date on exemplary practices in the arena of transfer students.

**Faculty.** College and university faculty can assist the transfer student population by acknowledging new students on campus. This is in line with Schlossberg’s domain of situation, which advocates assessing the situation in which the student faces transition. Faculty can discreetly ascertain the new members of the student body and offer assistance, recognizing the potential need for training relating to campus technology, understanding the campus culture, and working with academic systems. Faculty can provide additional support through increasing their student interaction opportunities, such as setting convenient times for office hours or participating in campus activities, which may create
the opportunity for open discussions outside the classroom (Light, 2001; Miller, 2012). Chickering and Reisser (1993) said faculty-student engagement has been found to be significant in the development of intellect and independent learning. This also includes the work within the classroom; teaching pedagogy can assist and support the creation of a learning environment in which students can succeed (Margolis & McCabe, 2006) and have a positive effect on undergraduate aspirations (Hanson et al., 2015).

According to Astin (1999), “frequent interaction with faculty is more strongly related to satisfaction with college than any other type of involvement or, indeed, any other student or institutional characteristic” (p. 525). Faculty engagement is a critical aspect in overall student success (Light, 2001), and meeting faculty in a relaxed environment is a great benefit to students as it helps them feel better about themselves. Interaction between students and faculty outside the classroom also leads to a significant positive view of the academic environment and higher self-reported intellectual growth (Trolian, Jach, Hanson, & Pascarella, 2016; Stage, Downey, & Dannells, 2000). Students also build higher levels of self-efficacy through interactions with faculty; they develop higher order thinking skills and problem-solving abilities (Liao et al., 2014).

Faculty could take proactive steps to assist their students by modifying course syllabi to reflect such campus resources as the writing center, tutoring, career services, and campus libraries, thus ensuring students receive that relevant information. Faculty could also allocate time during class to introduce more student interaction, including icebreakers on day one, small informal group work, and collaborative projects. In addition, faculty could invite outside speakers to inform the students about study abroad programs, library services, and career placement services.
To increase the opportunity for students to interact with faculty, office hours could be staggered and take place outside department offices. Staggering the office hours, varying the hours and days, could help more students meet with faculty outside of class. Holding office hours at a convenient campus location, for example, the library or student center, might make the student more comfortable talking to the faculty member or striking up a conversation about current class topics. Traditionally, going to a faculty office is often equated with grade issues rather than conversations of a more personal nature or intellectual discussions.

Lastly, faculty could participate in on-campus activities, establishing a presence on campus outside the classroom or lecture hall. Events such as homecoming, sports events, movies, and speakers all provide the opportunity for student-faculty interaction. Attending such campus events gives students the chance to talk to the faculty casually. Students need more interactions with faculty and, therefore, the faculty should go beyond their offices and classrooms to reach out to the students.

**Students’ families.** Continued family support for students is a necessary component in the success of the transfer student. Bandura’s (1994) theory suggests that sound social influence can build a student’s self-efficacy. As Liao et al. (2014) notes, “self-efficacy is the belief that one is capable of accomplishing a specific task” (p. 598). The family’s support of the student, along with encouraging the student to seek out help and assistance from all available sources (administrators, student services, advisors, faculty, student organizations), contributes to the educational attainment. Students’ confidence in their ability to succeed is also strengthened by the social recognition awarded them through family support (Liao et al., 2014; Rendon, 1994).
Family support also includes family encouragement of appropriate college behaviors, such as preparing for classes, taking the time to read course materials, engaging in conversations relating to classroom lessons, and participating in study sessions with other students. Family support is also valuable for students’ establishment of new peer interactions, joining college clubs, and becoming involved on campus. Partaking in social activities on campus can lead to better peer interactions, increasing the transfer student’s sense of belonging.

Positive family support of college or university academic resources is also beneficial. Parents can encourage students to use campus tutoring and career services and to take advantage of other learning opportunities; all such endeavors can result in increased academic gains. Therefore, parents and family members need to establish and maintain contact with the higher education community through paying attention to newsletters, emails, and publications from the college or university.

**Transfer students.** According to Schlossberg, students must take stock of the situation, must identify support systems, must be self-aware, and identify coping strategies to modify transitions. Transfer students have demonstrated the motivation to make a change, having chosen to take the steps to physically move from one location to another. They have had to find the necessary information and be proactive to accomplish their desired goal. However, upon gaining admission to the new institution of higher education, they cannot rest on their laurels. Once they arrive on the new campus, they must find their way once again. They have to navigate the registration process, find their way around campus, and take positive steps to make contacts on campus. They have to
find new peer groups, organizations, and resources to assist them in feeling at home on a new campus. They have to be their own advocates.

Anecdotally, an individual who had transferred from a state university to the sample university in this study shared his transfer experience. While the new university had awarded him a large scholarship, financially supporting his transfer, it neglected him in several other ways. He was not assigned an academic advisor and was not admitted into the university’s school of business, which was the overall purpose of his transfer. Significantly, he did not give up; he boldly entered advisement offices until he was satisfied with the information he could obtain, and through his own volition he successfully enrolled in several classes in the business school available to non-business school students. However, his experience underscores the issue of neglect and demonstrates that transfer students need help and support from their institutes of higher education.

Transfer students may encounter difficulties along the pathway to degree completion due to certain characteristics (deficits) that can be described as lack of economic, cultural, social, and academic capital. Many times transfer students do not have sufficient funds to attend school full time, they may be first generation students, they may be first in their network of personal relationships to attend college, and they may not have the sufficient educational foundations (Sasso & DeVitis, 2015). The study findings indicate peer interaction might improve GPA and increase aspirations to go beyond a baccalaureate degree.

Baxter-Magolda (2001) said that the years spent in college give rise to the development of one’s internal authority. Student actions should include establishing
several interpersonal relationships and seeking social support on campus (Lester, 2006; Townsend & Wilson, 2006). Transfer students’ proactive actions ought to include communicating with others that they are new to the institution. Other positive steps available to the transfer student include being open to making new friends and seeking out assistance from all areas: administrators, student services, advisors, faculty, and student organizations. Bandura’s (1994) self-efficacy theory explains that if students feel supported by peers, faculty, higher education staff, and family, they are more likely to succeed in obtaining a baccalaureate degree (Morisano, Hirsh, Peterson, Pihl, & Shore, 2010). College students particularly benefit from receiving validation from faculty, as they recognize in themselves the capacity to learn and achieve their goal (Rendon, 1994). Furthermore, personal goal setting can assist transfer students with improving their GPA and lowering stress related to the transition to a new campus (Morisano et al., 2010).

**Limitations of the Study**

The current study was done at a large research university based on information self-reported by students in Spring 2015. Therefore, results may not necessarily be generalizable to other settings and may be a threat to external validity. Moreover, this study was done at only one private university in South Florida, and therefore the ethnic diversity of the population may not be representative of all university students in the United States. The sample university reflected a traditional undergraduate enrollment (age, gender, and full-time status), but caution is advised for the application of the results to higher education as a whole. In addition, survey results indicate a majority of female respondents: Women made up 60% of the response, while men accounted for 40%. Thus, the results may reflect gender bias. A majority of the respondents indicated race/ethnicity
as White, and so results also may reflect cultural predispositions. Overall, however, the responses to the survey are believed to be similar to other survey research results.

The use of the NSSE survey may in and of itself be a limitation, as the questions are set by the developers not the researcher. Another concern is that the data was originally collected for reporting purposes that specifically align with the sample university’s interests. This includes participation in a renowned student survey to gain insight into quality student higher educational experiences, which may then assist the sample university in determining future changes and improvements. The survey contains a set of pre-existing questions that satisfy said objective. Therefore, the available data may not directly support the study research questions. It also raises the question of validity, i.e., whether the data really does measure what the researcher sought to measure and thus addresses the specific aims of the research.

The respondents to the survey self-reported their information, and this also represents a limitation. For example, social desirability bias from self-reporting may exist. The answers given by the respondents may reflect what they feel are more positive responses rather than honest answers to the questions. Respondents may have overstated their level of involvement in some areas, and underreported in other areas. This survey is capturing one point in time, and may be reflecting the individual students’ opinions based on their positive association with the completion of their baccalaureate degree. However, since self-reported data is widely used in research involving college and university students, the reliability of such data has been studied extensively (Pike et al., 2010).

Another potential limitation is that the use of secondary data did not allow the researcher to control how the data was collected. The respondents received an email
invitation to participate directly from the university. The respondents’ motivation for responding is unknown. While there is an assumption of honest thoughtful answers and sufficient time given to the survey questions, this might not have held true for all respondents. Several independent variables might have confounded with other pre-existing characteristics that have not been measured. Possible independent variables include class preparation, experiences with faculty outside the classroom, perceived interaction with peers, perceived interaction with faculty members, and perceived interaction with advisors. Overlapping or mitigating influences cannot be determined.

Finally, the lack of longitudinal data could have influenced this study, as the participants’ responses were collected only at one point in time.

**Future Research**

Future research on the subject of this study could be conducted based on a researcher-designed survey that directly gathers the data from a transfer student population in order to address the research questions. In addition, it might be possible for the researchers to administer a pre-survey as the transfer population enters the fourth year of school. In that way, specific questions can be added to measure which type of student interactions (peer, faculty, or advisor) increased educational aspirations of transfer students to the highest degree. The data could be gathered over time throughout the student’s academic career, allowing for improved ability to determine causal relationships.

Future studies might also attempt to determine the actual number of transfer students who apply and successfully enroll in graduate school. In a longitudinal study, master degree completion and eventual doctoral degree data could be obtained on this
population, giving a view into the overall higher educational achievements of transfer students. A researcher might be able to obtain actual GPAs of the student participants from the university registrar, and analyze any differences between actual GPA and self-reported GPA. This would establish the validity of the student responses.

In addition, research studies might be designed to focus on specific sub-populations of transfer students. Researchers could seek to investigate gender-specific transfer student behaviors or outcomes, for example. The current study indicated female transfer students exhibited higher aspirations for advanced degrees, which could be supported by another research study. Researchers could also focus specifically on other underserved populations, including first-generation students, low socioeconomic background students, and students of color. These populations tend to start higher education at the community college and necessitate a transfer to a four-year college or university. Research could identify actions that might assist in increasing baccalaureate degree attainment for these specific populations.

Finally, qualitative studies could be implemented to gain firsthand responses from transfer populations, focusing on the explicit needs identified by one-on-one interviews. Annually repeated, a study of this nature would generate longitudinal cross-sectional data, and analysis of such data could lead to meaningful programing initiatives in the higher education community. The transfer student population is dynamic, and research must be repeated to capture the changes in that population over time.

**Conclusion**

The United States has set a national goal to increase the number of tertiary degrees held by U.S. citizens by 2020 (Obamawhitehouse.archives.org). Setting the goal
is the first step; obtaining the goal takes work and the combined efforts of many: educators, accreditation teams, legislators, the public, and researchers. Bowen, Chingos, and McPherson (2009) explained that “the presence of high aspirations does not mean that all high aspiring students know how to translate their aspirations into realities” (p. 6). College students need assistance to complete postsecondary degrees and both fill the need of the market place and achieve personal growth (Davidson, 2017). Baxter-Magolda’s (2014) research has highlighted the process of becoming the author of one’s own life within the timeframe and environment of higher education as significant for such development. Furthermore, Schlossberg’s 4-S theory has been recognized as describing the coping mechanisms individuals utilize to handle life situations (Goodman et al., 2006). The higher education campus is the training ground for recognizing the assets and liabilities that exist in one’s life, and learning the appropriate processes to successfully overcome those obstacles in real-life situations (Goodman et al., 2006).

Chickering, Kuh, and Astin all advocate for the involvement of students in the academic and social components of their campus environment, thus unlocking their potential on several levels: academic success, productive interactions with faculty, and establishment of adult relationships. Chickering’s (1969) underlying message for the college student relates to the development of individuals to solve problems on their own; this is moving through autonomy to the interdependence vector. Kuh (2006) describes a successful student as one who participates on campus via focused activities. Finally, Astin (1999) formulates that a student who devotes time and attention to educational activities and involvement will grow as an individual.
Brock (2010) has stated that educators must act to assist in boosting completion rates, approaches must be implemented, and financial support found for these necessary strategies. Colleges and universities have the ability to help students complete their degrees. Students make personal sacrifices in order to attend institutions of higher education (Waiwaiolo & Elston, 2017); therefore, the administrations of these institutions owe them the assistance and support to complete their educational journey. The economic future of the United States resides in the goals set by the Obama administration and echoed by the Lumina foundation: the rise of the higher education degree attainment rate. The transfer student population continues to be an important factor in achieving this national goal, and decision makers at all levels must therefore act in the best interest of this student population.
References


Table 1

Comparison of Transfer Status Gender and Ethnicity

<table>
<thead>
<tr>
<th>Transfer</th>
<th>Gender</th>
<th>Ethnicity</th>
</tr>
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<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>Male</td>
</tr>
<tr>
<td>n</td>
<td>209</td>
<td>607</td>
</tr>
<tr>
<td>%</td>
<td>22.6</td>
<td>65.6</td>
</tr>
</tbody>
</table>

Note: $n = 926$
Table 2

**Comparison of Transfer Status Gender and Ethnicity**

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th></th>
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<tbody>
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<td>Latino</td>
<td>Black</td>
<td>Asian</td>
<td>Multi</td>
<td>Other</td>
<td>No Response</td>
<td>Total</td>
<td>White</td>
<td>Latino</td>
<td>Black</td>
<td>Asian</td>
<td>Multi</td>
<td>Other</td>
<td>No Response</td>
<td>Total</td>
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<td>Latino</td>
<td>Black</td>
<td>Asian</td>
<td>Multi</td>
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<td>67</td>
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<td>8</td>
<td>5</td>
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<td>15</td>
<td>27</td>
<td>5</td>
<td>67</td>
<td>1</td>
<td>8</td>
<td>5</td>
<td>67</td>
<td>42</td>
<td>56</td>
<td>14</td>
<td>6</td>
<td>5</td>
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<td>0.74%</td>
<td>8.21%</td>
<td>0.12%</td>
<td>0.98%</td>
<td>0.61%</td>
<td>5.15%</td>
<td>14.71%</td>
<td>6.99%</td>
<td>1.35%</td>
<td>1.47%</td>
<td>1.96%</td>
<td>1.23%</td>
<td>30.88%</td>
<td>20.34%</td>
<td>8.33%</td>
<td>4.29%</td>
<td>3.19%</td>
<td>1.35%</td>
<td>3.19%</td>
</tr>
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<td>Native</td>
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<td>10</td>
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<td>166</td>
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<td>355</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>14.71%</td>
<td>6.99%</td>
<td>1.35%</td>
<td>3.19%</td>
<td>30.88%</td>
<td>20.34%</td>
<td>8.33%</td>
<td>3.19%</td>
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<td>3.19%</td>
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<td>43.50%</td>
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</tr>
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</table>

*Note: n = 816*
Table 3

*Frequencies of Educational Aspirations*

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>BA or Some H.E.</td>
<td>Ph.D. or Masters</td>
</tr>
<tr>
<td>n</td>
<td>24</td>
<td>43</td>
</tr>
<tr>
<td>%</td>
<td>2.95</td>
<td>5.29</td>
</tr>
</tbody>
</table>

*Note: n = 813*
Table 4

Independent Samples t-tests for Gender Difference on Class Preparation

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th></th>
<th></th>
<th></th>
<th>Females</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CPR</td>
<td>360</td>
<td>2.27</td>
<td>0.85</td>
<td>549</td>
<td>2.13</td>
<td>0.81</td>
<td>-2.48*</td>
<td>742.33</td>
<td>0.01</td>
</tr>
<tr>
<td>CPAH</td>
<td>356</td>
<td>2.52</td>
<td>0.87</td>
<td>551</td>
<td>2.43</td>
<td>0.87</td>
<td>-1.41</td>
<td>905</td>
<td>0.16</td>
</tr>
<tr>
<td>CPDS</td>
<td>354</td>
<td>2.32</td>
<td>0.94</td>
<td>548</td>
<td>2.39</td>
<td>0.96</td>
<td>1.04</td>
<td>900</td>
<td>0.30</td>
</tr>
<tr>
<td>CP</td>
<td>362</td>
<td>2.37</td>
<td>0.60</td>
<td>553</td>
<td>2.32</td>
<td>0.58</td>
<td>-1.38</td>
<td>913</td>
<td>0.17</td>
</tr>
</tbody>
</table>

*Note: Based on results of Levene’s Test, equal variances cannot be assumed for CPR.
CPR = class prep reading, CPAH = class prep help, CPDS = Class prep discuss,
CP = composite CPR,CPAH,CPDS. */p<.05, **p<.01
Table 5

*Independent Samples t-tests for Gender Difference on Student Faculty Discussions*

<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Males</td>
<td>Females</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>n</td>
<td>M</td>
<td>SD</td>
<td>n</td>
<td>M</td>
<td>SD</td>
<td>t</td>
<td>df</td>
</tr>
<tr>
<td>SFRCP</td>
<td></td>
<td>347</td>
<td>2.60</td>
<td>1.01</td>
<td>525</td>
<td>2.56</td>
<td>0.97</td>
<td>-0.51</td>
<td>870</td>
</tr>
<tr>
<td>SFRAP</td>
<td></td>
<td>343</td>
<td>2.35</td>
<td>0.98</td>
<td>523</td>
<td>2.22</td>
<td>0.91</td>
<td>-1.92</td>
<td>694.43</td>
</tr>
<tr>
<td>SFRCT</td>
<td></td>
<td>344</td>
<td>2.51</td>
<td>0.96</td>
<td>521</td>
<td>2.29</td>
<td>0.97</td>
<td>-3.30**</td>
<td>863</td>
</tr>
<tr>
<td>SF</td>
<td></td>
<td>347</td>
<td>2.45</td>
<td>0.84</td>
<td>526</td>
<td>2.36</td>
<td>0.81</td>
<td>-2.24*</td>
<td>871</td>
</tr>
</tbody>
</table>

*Note:* Based on results of Levene’s Test, equal variances cannot be assumed for SFRAP.

SFRCP = career, SFRAP = academics, SFRCT = discuss current topics, SF = composite SFRCP, SF = composite SFRCP, SFRAP, SFRCT. *p < .05, **p < .01
Table 6

Independent Samples t-tests for Gender Difference on Quality of Relationships

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th></th>
<th>Females</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M</td>
<td>SD</td>
<td>n</td>
</tr>
<tr>
<td>RPEER</td>
<td>328</td>
<td>5.65</td>
<td>1.28</td>
<td>507</td>
</tr>
<tr>
<td>RFAC</td>
<td>322</td>
<td>5.52</td>
<td>1.34</td>
<td>501</td>
</tr>
<tr>
<td>RADVIS</td>
<td>326</td>
<td>5.22</td>
<td>1.71</td>
<td>505</td>
</tr>
<tr>
<td>R</td>
<td>328</td>
<td>5.46</td>
<td>1.13</td>
<td>509</td>
</tr>
</tbody>
</table>

Note: Based on results of Levene’s Test, equal variances can be assumed.

RPEER = peers, RFAC = faculty, RADVIS = advisor, R = composite RPEER, RFAC, RADVIS.

*p < .05, **p < .01
Table 7

Independent Samples t-tests for Transfer Status Difference on Class Preparation

<table>
<thead>
<tr>
<th>Transfer Status</th>
<th>Transfer</th>
<th>Native</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M</td>
<td>SD</td>
<td>n</td>
<td>M</td>
</tr>
<tr>
<td>CPR</td>
<td>207</td>
<td>2.14</td>
<td>0.87</td>
<td>602</td>
<td>2.19</td>
</tr>
<tr>
<td>CPAH</td>
<td>207</td>
<td>2.51</td>
<td>0.90</td>
<td>605</td>
<td>2.46</td>
</tr>
<tr>
<td>CPDS</td>
<td>207</td>
<td>2.44</td>
<td>0.96</td>
<td>605</td>
<td>2.33</td>
</tr>
<tr>
<td>CP</td>
<td>208</td>
<td>2.36</td>
<td>0.57</td>
<td>607</td>
<td>2.32</td>
</tr>
</tbody>
</table>

Note: Based on results of Levene’s Test, equal variances can be assumed.
CPR = class prep reading, CPAH = class prep help, CPDS = Class prep discuss,
CP = composite CPR, CPAH, CPDS. * p < .05, ** p < .01
Table 8

*Independent Samples t-tests for Transfer Status Difference on Student Faculty Discussions*

<table>
<thead>
<tr>
<th>Transfer Status</th>
<th>Transfer</th>
<th>Native</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
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<td>n</td>
<td>M</td>
<td>SD</td>
<td>n</td>
<td>M</td>
</tr>
<tr>
<td>SFRCP</td>
<td>207</td>
<td>2.46</td>
<td>1.03</td>
<td>600</td>
<td>2.65</td>
</tr>
<tr>
<td>SFRAP</td>
<td>205</td>
<td>2.40</td>
<td>0.94</td>
<td>598</td>
<td>2.23</td>
</tr>
<tr>
<td>SFRCT</td>
<td>206</td>
<td>2.31</td>
<td>0.97</td>
<td>597</td>
<td>2.40</td>
</tr>
<tr>
<td>SF</td>
<td>207</td>
<td>2.39</td>
<td>0.85</td>
<td>601</td>
<td>2.43</td>
</tr>
</tbody>
</table>

*Note:* Based on results of Levene’s Test, equal variances can be assumed.

SFRCP = career, SFRAP = academics, SFRCT = discuss current topics, SF = composite SFRCP, SFRAP, SFRCT. *p < .05, **p < .01
Table 9

*Independent Samples t-tests for Transfer Status Difference on Quality of Relationships*

<table>
<thead>
<tr>
<th></th>
<th>Transfer Status</th>
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<td>n</td>
<td>M</td>
<td>SD</td>
<td>t</td>
<td>df</td>
</tr>
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<td>1.54</td>
<td>312.63</td>
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<td>1.20</td>
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<td>1.87</td>
<td>602</td>
<td>5.23</td>
<td>1.70</td>
<td>1.12</td>
<td>804</td>
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<tr>
<td>R</td>
<td>207</td>
<td>5.4</td>
<td>1.24</td>
<td>605</td>
<td>5.5</td>
<td>1.04</td>
<td>1.18</td>
<td>810</td>
</tr>
</tbody>
</table>

*Note:* Based on results of Levene’s Test, equal variances cannot be assumed for RPEER and RFAC.

RPEER = peers, RFAC = faculty, RADVIS = advisor, R = composite RPEER, RFAC, RADVIS.

* * p < .05, ** * p < .01
Table 10

ANOVA for Ethnicity Difference on Class Preparation

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Latin</th>
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<th>Other</th>
<th>No Response</th>
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<td>CPR</td>
<td>384</td>
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<tr>
<td>CPDS</td>
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<td>0.98</td>
<td>229</td>
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<tr>
<td>CP</td>
<td>387</td>
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<td>0.62</td>
<td>230</td>
<td>2.32</td>
<td>0.60</td>
<td>75</td>
</tr>
</tbody>
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Note: n = 915, *p < .05, **p < .01, CPR = class prep reading, CPAH = class prep help, CPDS = Class prep discuss, CP = composite CPR, CPAH, CPDS.
Table 11

ANOVA for Ethnicity Difference on Student Faculty Relationships

<table>
<thead>
<tr>
<th></th>
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<th>Latin</th>
<th>Black</th>
<th>Asian</th>
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<th>Other</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M</td>
<td>SD</td>
<td>n</td>
<td>M</td>
<td>SD</td>
<td>n</td>
</tr>
<tr>
<td>SFRCP</td>
<td>370</td>
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<td>218</td>
<td>2.61</td>
<td>1.03</td>
<td>70</td>
</tr>
<tr>
<td>SFRAP</td>
<td>371</td>
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<td>0.95</td>
<td>216</td>
<td>2.29</td>
<td>0.95</td>
<td>68</td>
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<tr>
<td>SFRCT</td>
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<td>0.96</td>
<td>217</td>
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<td>1.01</td>
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<tr>
<td>SF</td>
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<td>2.44</td>
<td>0.86</td>
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</table>

Note: $n = 873$, * $p < .05$, ** $p < .01$, SFRCP = career, SFRAP = academics, SFRCT = discuss current topics, SF = composite SFRCP, SFRAP, SFRCT.
Table 12

ANOVA for Ethnicity Difference on Quality Relationships

<table>
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<th>Asian</th>
<th>Multi</th>
<th>Other</th>
<th>No Response</th>
</tr>
</thead>
<tbody>
<tr>
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<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>RPEER</td>
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<td>215</td>
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<td>1.35</td>
<td>67</td>
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<tr>
<td>RFAC</td>
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<td>5.49</td>
<td>1.23</td>
<td>209</td>
<td>5.66</td>
<td>1.36</td>
<td>66</td>
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<tr>
<td>RADVIS</td>
<td>345</td>
<td>4.99</td>
<td>1.77</td>
<td>215</td>
<td>5.39</td>
<td>1.73</td>
<td>67</td>
</tr>
<tr>
<td>R</td>
<td>349</td>
<td>5.37</td>
<td>1.04</td>
<td>215</td>
<td>5.61</td>
<td>1.15</td>
<td>67</td>
</tr>
</tbody>
</table>

Note: n = 837, * p < .05, ** p < .01, RPEER = peers, RFAC = faculty, RADVIS = advisor, R = composite RPEER, RFAC, RADVIS.
Table 13

*Correlations Among Variables*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2</td>
<td>-.33**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0.04</td>
<td>-.90*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>-.10**</td>
<td>-0.05</td>
<td>0.02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0.06</td>
<td>-0.06</td>
<td>-0.03</td>
<td>.18**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0.05</td>
<td>-0.02</td>
<td>.09*</td>
<td>.25**</td>
<td>.11**</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0.05</td>
<td>-0.05</td>
<td>0.01</td>
<td>0.01</td>
<td>.31**</td>
<td>.18**</td>
</tr>
</tbody>
</table>

Note: *n = 797; *p < .05, **p < .01; 1. SRG = self-reported grades, 2. TSD = transfer status, 3. Gender, 4. CP = class preparation, 5. RP = relationship with peers, 6. SF = student-faculty discussions, 7. RA = relationship with advisors.*
Table 14

*Correlations Among Variables by Transfer Status*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>-0.02</td>
<td>-0.03</td>
<td>.14*</td>
<td>.13*</td>
<td>0.06</td>
<td>0.1</td>
</tr>
<tr>
<td>2</td>
<td>-0.02</td>
<td></td>
<td>0.04</td>
<td>0.06</td>
<td>-0.04</td>
<td>0.08</td>
<td>0.05</td>
</tr>
<tr>
<td>3</td>
<td>-0.03</td>
<td>0.04</td>
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<td>0.05</td>
</tr>
<tr>
<td>4</td>
<td>.14*</td>
<td>0.06</td>
<td>-0.05</td>
<td></td>
<td>-0.29**</td>
<td>-.31**</td>
<td>-.13*</td>
</tr>
<tr>
<td>5</td>
<td>.13*</td>
<td>-0.04</td>
<td>0.02</td>
<td>-0.29**</td>
<td></td>
<td>.22**</td>
<td>.33**</td>
</tr>
<tr>
<td>6</td>
<td>0.06</td>
<td>0.08</td>
<td>-0.05</td>
<td>-.31**</td>
<td>.22**</td>
<td></td>
<td>.26**</td>
</tr>
<tr>
<td>7</td>
<td>0.1</td>
<td>0.05</td>
<td>0.05</td>
<td>-0.13*</td>
<td>.33**</td>
<td>.26**</td>
<td></td>
</tr>
</tbody>
</table>

*Note: n = 209; * p < .05, ** p < .01; Upper diagonal values are for Transfer students and lower diagonal values are for native students; 1. SRG = self-reported grades, 2. Gender, 3. Ethnicity, 4. CP = class preparation, 5. RP = relationship with peers, 6. SF = student-faculty interactions, 7. RA = relationship with advisors.*
Table 15
Results from Hierarchical Multiple Regression Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th align="right">Block 1</th>
<th align="right"></th>
<th align="right">Block 2</th>
<th align="right"></th>
<th align="right">Block 3</th>
<th align="right"></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td align="right">b</td>
<td align="right">SE</td>
<td align="right">B</td>
<td align="right">b</td>
<td align="right">SE</td>
<td align="right">B</td>
</tr>
<tr>
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<td align="right">6.98</td>
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<td align="right">6.99</td>
<td align="right">0.12</td>
</tr>
<tr>
<td>TSD</td>
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<td align="right">-0.32</td>
<td align="right">-0.95**</td>
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<td align="right">-0.32</td>
</tr>
<tr>
<td>Gender</td>
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<td align="right">-0.01</td>
<td align="right">0.09</td>
<td align="right">0.00</td>
</tr>
<tr>
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<td align="right">0.14</td>
<td align="right">0.00</td>
<td align="right">-0.01</td>
<td align="right">0.14</td>
<td align="right">0.00</td>
</tr>
<tr>
<td>White</td>
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<td align="right">0.13</td>
<td align="right">0.05</td>
<td align="right">0.15</td>
<td align="right">0.13</td>
<td align="right">0.06</td>
</tr>
<tr>
<td>Black</td>
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<td align="right">-0.45*</td>
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<td align="right">-0.09</td>
</tr>
<tr>
<td>Asian</td>
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<td align="right">0.19</td>
<td align="right">-0.02</td>
<td align="right">-0.05</td>
<td align="right">0.19</td>
<td align="right">-0.01</td>
</tr>
<tr>
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<td align="right">0.07</td>
<td align="right">0.02</td>
<td align="right">0.09</td>
<td align="right">0.01</td>
</tr>
<tr>
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<td align="right">0.04</td>
<td align="right">0.04</td>
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<td align="right">0.05</td>
<td align="right">0.05</td>
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<td>C – SF</td>
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<td align="right">0.07</td>
<td align="right">0.06</td>
<td align="right">0.04</td>
</tr>
<tr>
<td>C – RA</td>
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<td align="right">0.03</td>
<td align="right">0.02</td>
<td align="right">0.01</td>
<td align="right">0.03</td>
<td align="right">0.02</td>
</tr>
<tr>
<td>CP – TR</td>
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</tr>
<tr>
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<td align="right"></td>
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</tr>
<tr>
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<td align="right">0.02</td>
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</tr>
<tr>
<td>RA – TR</td>
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<td align="right">0.02</td>
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<td align="right"></td>
</tr>
<tr>
<td>ΔR²</td>
<td align="right">0.01</td>
<td align="right">0.01</td>
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<td align="right"></td>
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<td align="right"></td>
</tr>
<tr>
<td>F(ΔR²)</td>
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<tr>
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<td align="right">4</td>
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<td align="right"></td>
</tr>
<tr>
<td>df2</td>
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<td align="right">782</td>
<td align="right"></td>
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<td align="right"></td>
</tr>
<tr>
<td>F</td>
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<td align="right">11.98**</td>
<td align="right">9.58**</td>
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<td align="right"></td>
<td align="right"></td>
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<tr>
<td>df2</td>
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<td align="right">786</td>
<td align="right"></td>
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<tr>
<td>R²</td>
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<td align="right">0.13</td>
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</table>

Note: *p < .05, **p < .01; 1. TSD = transfer status, 2. Gender, 3. Ethnicity, 4. CP = class preparation, 5. RP = relationship with peers, 6. SF = student-faculty interactions, 7. RA = relationship with advisors.
Table 16

Results from Logistical Multiple Regression Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Block 1</th>
<th>Block 2</th>
<th>Block 3</th>
</tr>
</thead>
<tbody>
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<td>$SE$</td>
<td>$OR$</td>
</tr>
<tr>
<td>Constant</td>
<td>2.16</td>
<td>0.28</td>
<td>8.71</td>
</tr>
<tr>
<td>TSD</td>
<td>-0.82**</td>
<td>0.21</td>
<td>0.44</td>
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<tr>
<td>Gender</td>
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<td>0.20</td>
<td>0.88</td>
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<td>Latino</td>
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<td>0.67</td>
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<td>-0.40</td>
<td>0.30</td>
<td>0.67</td>
</tr>
<tr>
<td>Black</td>
<td>-0.15</td>
<td>0.43</td>
<td>0.86</td>
</tr>
<tr>
<td>Asian</td>
<td>0.31</td>
<td>0.50</td>
<td>1.36</td>
</tr>
<tr>
<td>C-CP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C-RP</td>
<td>0.11</td>
<td>0.08</td>
<td>1.12</td>
</tr>
<tr>
<td>C-SF</td>
<td>0.04</td>
<td>0.12</td>
<td>1.05</td>
</tr>
<tr>
<td>C-RA</td>
<td>0.03</td>
<td>0.06</td>
<td>1.03</td>
</tr>
<tr>
<td>CP-TR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RP-TR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SF-TR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RA-TR</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$x^2\Delta$ | 4.14 | 6.90 |
$df(\Delta)$ | 4 | 4 |
$x^2$ | 20.68** | 24.82** | 31.71** |
$df$ | 6 | 10 | 14 |
$R^2$ | 0.04 | 0.05 | 0.07 |

Note: *p < .05, **p < .01; 1. TSD = transfer status, 2. Gender, 3. Ethnicity, 4. CP = class preparation, 5. RP = relationship with peers, 6. SF = student-faculty interactions, 7. RA = relationship with advisors.
Figure 1

Effect of educational experiences on GPA and Educational Aspirations
Figure 2

Proposed hierarchical multiple regression model to answer Research Question 1
**Figure 3**

Proposed hierarchical logistic regression model to answer Research Question 2
Figure 4

Differential effect of class preparation on GPA by transfer status
Figure 5

Differential effect of peer relationship on GPA by transfer status
### Appendix 1: Variables, Response, and Scales

<table>
<thead>
<tr>
<th>Variable</th>
<th>Code</th>
<th>Response</th>
<th>Scale</th>
</tr>
</thead>
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</tr>
<tr>
<td></td>
<td></td>
<td>Started Elsewhere</td>
<td>1</td>
</tr>
<tr>
<td>Gender</td>
<td>Gender</td>
<td>Male</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>Asian</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>0</td>
</tr>
<tr>
<td>Self-reported Grades</td>
<td>SRG</td>
<td>A through C-</td>
<td>8 – 1</td>
</tr>
<tr>
<td>Educational Aspirations</td>
<td>EA</td>
<td>Ph.D/Masters</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BA/Some College</td>
<td>0</td>
</tr>
<tr>
<td>Class Prep –Read</td>
<td>CPR</td>
<td>1. Come to class without completing readings or assignments (reverse coded)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Very Often</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Often</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sometimes</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Never</td>
<td>4</td>
</tr>
<tr>
<td>Class Prep –Help</td>
<td>CPAH</td>
<td>Very Often</td>
<td>4</td>
</tr>
<tr>
<td></td>
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<td>Often</td>
<td>3</td>
</tr>
<tr>
<td></td>
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Appendix 2 : Request letter

March 4, 2017

Office Manager, Office of Planning, Institutional Research, and Assessment
Office of Planning, Institutional Research, and Assessment

Dear Madam:

I am requesting data from the senior respondents, full and part-time, all majors, along with any available demographic data to the 2015 NSSE that was given at your institution of higher education. I will be using these data for a study entitled “EDUCATIONAL EXPERIENCES OF TRANSFER STUDENTS AT THE FOUR YEAR UNIVERSITY EXAMINED”. This study intends to examine the educational experiences of transfer students in comparison to non-transfer students and explore the potential factors affecting academic success of transfer students. The Principal Investigator for this study is Jacklyn A. Collins.

This request involves the raw data for the senior respondents for the 2015 NSSE survey given at your institution of higher education.

The contact person for this request within our organization is Jacklyn A. Collins and can be reached by e-mail at jcollins@bus.miami.edu or by phone at 305-284-9902.

Thank you.

Sincerely,

Jacklyn A. Collins
Doctoral Student