

ACADEMIC PERFORMANCE, RETENTION RATES, AND PERSISTENCE RATES OF
FIRST-YEAR, FIRST-GENERATION, LATINO COLLEGE STUDENTS

by

Jaime Vargas Duran

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

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ABSTRACT

The purpose of this causal-comparative quantitative study was to examine the relationships between the efficacy of a Summer Bridge Academy (SBA) and the impact on students by measuring the Grade Point Averages (GPAs), retention rates, and persistence rates of first-generation, first-year, Latino college students who participated in a SBA at Central Valley Community College against like students who did not participate in same program. The independent variable was participation in a 6 week long SBA, which took place during the summer of 2011. The dependent variables were GPAs, retention rates, and persistence rates, and the control and intervening variables, students who are first-generation, first-year, Latino college students were statistically controlled in this study. This study was guided by the following research questions: (RQ1) Is there a significant difference in academic performance; (RQ2) Is there a significant difference in retention rates; (RQ3) Is there a significant difference in persistence rates of Summer Bridge Academy (SBA) participants against nonparticipants? The data analysis revealed a statistically significant difference in combined Summer and Fall 2011 mean GPA scores between SBA participants and the comparison group. There was no statistically significant difference in Retention and Persistence rates. College success can be defined as the ability for students to continue and persist towards their academic goals and the 2011 SBA failed to bridge the achievement gap.

Keywords: summer bridge, first-generation, college freshmen, Latino, learning community, retention, persistence

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Dedication

I dedicate this manuscript and all the work leading up its completion to my wife and kids. Adriana, you have been my rock through this challenging venture. You stepped up and often played the role of mom and dad when pressing deadlines loomed. You forgave me when I failed to do my share of the chores. You encouraged me to continue when I felt like giving up. To my children Alexiz, Elijah, and Julius. Thank you for being so understanding when I couldn't give you all the attention when it was needed. Thank you for acknowledging the stress signals in my face and my tone of voice. Thank you for not allowing my stress-induced grumpy attitude get the best of you. I hope that through witnessing my diligent and time consuming efforts, I have instilled work ethic to help you when the time comes. But it was each of your hard work that gave me the strength to overcome the various barriers I encountered along the way. I look forward to witnessing and assisting all three of you through your personal development.

Acknowledgments

I would like to acknowledge the diligent work put in over these last three years by my dissertation chair. Dr. Fontanella gave me positive words of encouragement during the phases of this journey when I lacked to see the approaching light at the end of the tunnel. He also gave me many proverbial swift kicks in the rear end when positive words of encouragement just wouldn't do. I could count on Dr. Fontanella to check in on me especially when months passed by without updates from me. I would like to thank him for not giving up on me even when I had. I would like to acknowledge Dr. Valencia and Dr. Childs in providing effective and productive feedback throughout this process. Their invaluable effort has been of great assistance in producing work of which I didn't know I was capable. Lastly, I would like to acknowledge all the students I have encountered as an academic counselor over these last 8 years. Witnessing students who come from impoverished communities and lack academic, financial, and often personal support from their families as they attempt to maneuver through the educational pipeline has been inspiring. I acknowledge all the students who I lost along the way who weren't able to overcome all the academic and personal barriers. It is my hope and desire that this manuscript helps professionals from academia in minimizing losses and maximizing success in students who have the most need.

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List of Abbreviations

Summer Bridge Academy (SBA)

First-Generation College (FGC)

CHAPTER ONE: INTRODUCTION

In this research study, the author examined first-generation, first-year, Latino college students, as well as their challenges and strengths en route to academic success. There is a notable lack of research in the literature which addresses this specific student population. This author filled this gap and identified best practices to effectively assist these students through the educational pipeline.

This chapter begins with an evaluation of the background for this study. The problem statement is then provided, followed by the purpose statement. The significance of the study is detailed, followed by the research questions which guided the study. Several hypotheses are established, followed by identification of variables. Finally, definitions of key terms are listed for clarity.

Background

Living the Great American Dream is a concept ingrained in many Americans, regardless of socioeconomic or ethnic background (Orman, 2011). Many individuals and families from countries around the world immigrate to the United States in search of endless possibilities and pursuit of this Great American Dream (Adams, 1941). In years past, it was a typical American value that success was the fruit of hard labor. Today, according to the American rule of thumb, education is the key to success (Baum & Ma, 2007). Often, it is perceived that the attainment of a college degree is linked to increased career opportunities, and the gap in income between college graduates and non-graduates is vast (Baum & Ma, 2007; Engle & Tinto, 2008). According to the U.S. Census Bureau's Current Population Survey (2009), there is a clear relationship between education and earned income for all ethnicities, genders, and ages; individuals with higher education earn a higher income. However, a discrepancy exists among

higher education attainment and ethnicity; individuals from Hispanic origin complete 4-year degrees and advanced degrees at lower percentages than their White and Black counterparts (U.S. Census Bureau, 2010).

Although a college degree is often connected to increased career opportunities (Baum & Ma, 2007), it has been found that students whose parents had college experience have increased chances of achieving higher education (Collier & Morgan, 2008; Engle, Bermeo, & O'Brien, 2006; Green, 2006; Olive, 2008; Orbe, 2008; Próspero & Vohra-Gupta, 2007). However, first-generation, Latino college students experience lagging college success at institutions across the country (Baum & Ma, 2007; Bohon, Macpherson, & Atilas, 2005). Further, first-year college students have less college success in comparison to their second-year and beyond counterparts (Mansfield, Pinto, Parente, & Wortman, 2004). Individually, the members of these populations face various barriers en route to a college education. Minimal research has been conducted on the academic performance of first-generation, first-year, Latino students.

The purpose of college Summer Bridge Academies (SBAs) is to provide interventions prior to a college student's first academic semester. The SBA at Central Valley Community College located in Central California is designed to assist first-generation, first-year Latino college students to achieve academic success, which is often halted during the first year of higher education. This program consists of six weeks of intense college instruction that includes: (a) English and Mathematics preparatory curriculum, (b) outside experiential learning activities, (c) college preparatory and learning skills curriculum, (d) academic counseling, and (e) peer mentoring. This optional program takes place during the summer after students graduate from high school. However, the impact of student participation in these programs on academic

success must be determined. Findings may provide guidance for administrators and faculty in their determination of best practices for first-year, first-generation Latino college students.

Problem Statement

There is an achievement gap in higher education. Baum and Ma (2007) and Bohon, Macpherson, and Atilas (2005) found that first-generation Latino college students transfer and graduate with four year degrees at lower rates than their White counterparts. Furthermore, college success among Hispanic/Latino college students lags nationwide (U.S. Census Bureau, 2010).

Further, first-year college students of all ethnic backgrounds have a lower rate of persistence than continuing college students (Mansfield et al., 2004). Staff of the National Center for Education Statistics (2011) estimated that only 5.9% of first-year community college cohorts from 2004 to 2008 completed a Bachelor's degree within five years.

Research on first-generation Latino students in their first year of college is minimal. This study examined this student population in an effort to fill the gap in the literature and to identify best practices.

Purpose Statement

The purpose of this causal-comparative quantitative study was to examine the relationships between the efficacy of student participation in a Summer Bridge Academy (SBA) and the impact on students. Several measurements were taken: (a) Grade Point Average (GPA), (b) retention rates, and (c) persistence rates. Comparisons were made between first-generation, first-year, Latino college students who participated in a SBA at Central Valley Community College and like students who did not participate in same program. The independent variable was defined as participation in the six-week SBA. The dependent variables were defined as

GPA, retention rates, and persistence rates. The control and intervening variables, students who are first-generation, first-year, Latino college students, were statistically controlled in this study.

Significance of the Study

In years past, the emphasis for K-12 systems, colleges, and key stakeholders was to maximize college access (Bragg, Kim, & Barnett, 2006) for all potential students, that is, regardless of ethnicity, race, gender, or level of preparation. However, according to Bragg and Durham (2012), in recent legislation, there has been a call for an increase in college success rates. This shift in emphasis has presented a dilemma for community colleges, which historically have provided access to traditionally underprepared students and are now expected to demonstrate the success of this population. Without proper interventions, many students enter institutions of higher education and are: (a) unprepared for the academic rigor (Bragg & Durham, 2012; Noel, Levitz, & Saluri, 1991); (b) uncertain of their academic goals (Noel et al., 1991); (c) unready for the transition between high school and college (Noel et al., 1991; Tinto, 1993); (d) ill prepared for the decrease in academic support (Noel et al., 1991); (e) insufficiently mature for the separation from their community (Tinto, 1993); and (e) unable to progress through the necessary stages of psychosocial development (Chickering & Reisser, 1993). At various schools, staff have adopted programs and services to address these concerns to include bridge programs (Bragg et al., 2006). Typically, the goal of these programs is to increase access to traditionally underserved students and to assist in the transition process to increase preparedness to traditionally underprepared students through outreach efforts. The SBA at Central Valley Community College is one such program, in which the staff identifies, recruits, and assists in the transition process (a) between high school and college, (b) between unprepared and prepared, and (c) between uncertainty and goal-oriented. The focus of this research study was on the first-

generation, first-year, Latino college student. However, this study may be replicated for other minority populations who face similar barriers en route to a college education. Further, this study may be replicated for the general population of first-year college students.

Research Questions

The purpose of this causal-comparative quantitative study was to examine the relationships between the efficacy of a SBA and its impact on students through measurement of the grade point average (GPA), retention rates, and persistence rates of first-generation, first-year, Latino college students who participated in a SBA at Central Valley Community College against like students who did not participate in same program. The independent variable was generally defined as participation in a six-week Summer Bridge Academy. The dependent variables were generally defined as GPA, retention rates, and persistence rates. First-generation, first-year, Latino college students were statistically controlled in this study.

Currently, there is a gap in the literature on first-year, first-generation, Latino college students. Further, there is lack of research on these students' performance if they participate in a structured learning community. Therefore, this research study was guided by the following research questions:

RQ1: Is there a significant difference in academic performance of first-year, first generation, Latino college students, who participated in a Summer Bridge Academy program, in comparison to like students who did not participate in same program?

RQ2: Is there a significant difference in student retention of first-year, first-generation, Latino college students, who participated in a Summer Bridge Academy program, in comparison to like students who did not participate in same program?

RQ3: Is there a significant difference in rates of persistence of first-year, first

generation, Latino college students, who participated in a Summer Bridge Academy program, in comparison to like students who did not participate in same program?

Null Hypotheses

The null hypotheses for this research study are as follows:

H₀₁: There is no statistically significant difference in academic performance (e.g., grade point average) of first-year, first-generation, Latino college students who participate in Summer Bridge Academy from like students who do not participate in same program.

H₀₂: There is no statistically significant difference in retention rates of first-year, first-generation, Latino college students who participate in Summer Bridge Academy from like students who do not participate in same program.

H₀₃: There is no statistically significant difference in persistence rates of first-year, first-generation, Latino college students who participate in Summer Bridge Academy from like students who do not participate in same program.

Identification of Variables

This researcher compared two sets of first-year, first-generation, Latino college students during the 2011 academic year. One set participated in the Summer Bridge Academy (SBA), and the other did not participate in the SBA. The SBA was a six-week summer academic program offered immediately following completion of high school and prior to students' first full academic semester of college. Instruction within the SBA consisted of an English reading and writing refresher course to assist participants to reach college proficiency. The program also included a guidance counseling course to increase college readiness skills. Further, students received academic advising on a weekly basis.

Variables

The independent variable for this study was students' participation in a SBA at Central Valley Community College during the 2011 summer semester. For the purpose of this study, there were several dependent variables.

1. Retention was measured in regard to students' course completion during the Fall 2011 semester. For the purpose of this study, completion of at least one college course was considered an indication of retention. Data were collected through the college data system. An independent *t*-test was performed to measure the difference in course completion between SBA participants and non-participants.
2. Persistence was measured in regard to students' enrollment in the Spring 2012 semester. Enrollment in at least one college course was considered an indication of persistence. Data were collected through the college data system. An independent *t*-test was performed to measure the difference in enrollment rates between SBA participants and nonparticipants.
3. Grade point average (GPA) is a student's college academic achievement, which is measured by points as a result of letter grades of A-F calculated by dividing the total number of grade points received by the total number attempted. Data were collected through the college data system. An independent *t*-test was conducted to measure the difference in GPAs between SBA participants and non-participants. For the purpose of this study, students' GPA will be compared at the end of the Summer 2011 semester and Fall 2011 semester.

Definitions

1. *First-Generation College Student* - College students whose parents did not attain an education past high school are termed first-generation college students (Gibbons & Borders, 2010). For the purpose of this study, the experimental and control groups consisted of first-generation college students as verified by college application data.
2. *First-Year College Student* - A student who is entering his or her first academic year in college. For the purpose of this study, the experimental and control groups consisted of first-year college students as verified by college application data.
3. *Latino* - For the purpose of this study, this term was used to describe individuals of Latin American ancestry including Mexican-Americans, Puerto Ricans, Cuban-Americans, Central Americans, and South Americans. Additionally, this term is interchangeable with *Hispanics* (Fraga, 2008). For the purpose of this study, the experimental and control groups consisted of Latino college students as verified by college application data.
4. *Summer Bridge Academy (SBA)* - A six-week summer academic program offered immediately following completion of high school and prior to students' first full academic semester. The SBA consisted of (a) an English writing course, (b) an English reading course, and (c) guidance counseling courses.
5. *Learning Community* - Students "enrolled in two or more courses that are collaboratively designed and intentionally linked by organizing themes" (James, Bruch, & Jehangir, 2006, p. 10).
6. *Experiential Learning* - A component of the SBA Enrichment Program in which students participate in learning outside of the classroom such as (a) visiting cultural centers, (b) universities, and (c) community building activities.

7. *English Enrichment* - English taught as a refresher during the SBA to assist with reinforcements of necessary skills.
8. *Guidance Counseling Course* - During the SBA, participants took a guidance counseling course which focused on college success strategies such as (a) study skills, (b) time management skills, and (c) personal development workshops.

CHAPTER TWO: LITERATURE REVIEW

Introduction

The purpose of this study was to examine the relationships between the efficacy of student participation in a Summer Bridge Academy (SBA) and the impact on students. Several measurements were taken: (a) Grade point average (GPA), (b) retention rates, and (c) persistence rates. Comparisons were made between first-generation, first-year, Latino college students who participated in a SBA at Central Valley Community College and like students who did not participate in same program.

Typically, first-year college students have a lower rate of course completion than continuing students (Mansfield et al., 2004). In addition, first-generation Latino college students transfer and graduate with a four-year degrees at lower rates than their White counterparts (Baum & Ma, 2007; Bohon, et al., 2005). According to Settle (2011), the “opportunity to establish a model to estimate persistence of first-generation students at two-year colleges is important for students and for the educational institutions” (p. 282). A framework would assist college administrators, instructional faculty, and student services professionals in identifying best practices in assisting first-generation, first-year, Latino college students.

There is a gap in the literature in regard to study of the success rates of first-year, first-generation Latino college students who participate in a structured learning community at institutions of higher education. This study was developed to determine whether first-generation, first-year, Latino college students who participated in the Summer Bridge Academy (SBA) at Central Valley Community College achieved similar results in the area of academic performance, retention, and persistence as like students who did not participate in the SBA. In this chapter, the author describes the theoretical framework which guided this study. This

chapter then presents a review of the literature as it pertains to the various barriers faced by first-generation, Latino college students such as (a) their families, (b) the institution of higher education, (c) issues with marginalization, and (d) academic underpreparedness. Next, the author identified the challenges faced by first-year college students and the support systems which may exist for first-year, first-generation Latino college students. Two major factors in the support systems are the family and the institution. Finally, this chapter presents a review of the literature related to academic summer programs in college, followed by an introduction to the Summer Bridge Academy.

Theoretical Framework

The theoretical framework for this research is based on the identity development conceptualization of: (a) Chickering and Reisser (1993); Noel et al. (1991); and Tinto (1993). Chickering and Reisser's theory on student development is based on Chickering's (1969) first edition of *Education and Identity*. The second edition of *Education and Identity* by Chickering and Reisser provided updated theories based on research and more inclusion of various student groups (Hamrick, Evans, & Schuh, 2002). As a result, this researcher will refer to Chickering and Reiser's second edition of *Education and Identity*.

Chickering and Reisser's (1993) Theory on Student Development

Chickering and Reisser's (1993) theories on the psychosocial development of college students consist of seven vectors through which students must work. It is important to note that students travel through these vectors at different rates. Further, the vectors build upon each other, yet they are not strictly in sequential fashion. Persistence to graduation may be affected by increased isolation and marginalization (Jehangir, 2009) and lack of appropriate psychosocial development among first-generation college students (Chickering & Reisser) of any ethnicity. It

is vital that higher education practitioners recognize student development and foster it through the exploration of each of the vectors. Chickering and Reisser described this process as necessary in order for students to fully attain academic success. College programs such as a Summer Bridge Academy must therefore address all vectors within Chickering and Reisser's theory to help students through each competency and toward college success.

Development of competence. In the first vector, college students work toward the development of competences their intellectual, physical and manual, and interpersonal skills (Chickering & Reisser, 1993). Attainment of intellectual competence takes place when individuals gain specific knowledge and skills. Further, individuals strengthen their reasoning and critical thinking skills while in this vector. Physical competence involves awareness of wellness as well as physical and recreational activities. Chickering and Reisser suggested physical competence can lead to "awareness of emotions and ability to manage them" (p. 64-65). Interpersonal competence "involves effective communication and the ability to work with others" (Hamrick et al., 2002, p. 294). If and when students successfully master all areas, they will achieve a "sense of competence" (Chickering & Reisser, 1993, p. 53).

The SBA addresses this first vector by challenging students through a cohort of courses in English Reading and Writing during their first summer after high school. Participants are provided with the academic support system of a tutor as well as a guidance counseling course that addresses college study skills and critical thinking abilities. Further, students in the SBA have access to a counselor and peer mentor, which increases exposure to interpersonal contact and may develop interpersonal competence in participants.

Management of emotions. In the second vector, students are to develop their emotional intelligence. The goal for students in this vector is not to eliminate negative emotions, but "to

allow them into awareness and acknowledge them as signals” (Chickering & Reisser, 1993, p. 46). Therefore, the focus of the second vector is how students become aware of their emotions before they become unmanageable. Further, individuals become able to develop their competence to express their emotions in appropriate manners. Negative and positive emotions, such as “anxiety, depression, anger, shame, and guilt, as well as more positive emotions such as caring, optimism, and inspiration” are addressed (Evans, Forney, & Guido-DiBrito, 1998, p. 38).

The Summer Bridge Academy (SBA) addresses this vector by providing an academic counselor who teaches the guidance course to participants. The counselor also monitors participants throughout the day and week for any emotional distress. Counselors are available for personal and academic counseling on individual basis. The guidance counseling class includes lessons on emotional intelligence. This lesson may assist in developing emotional intelligence awareness in students.

Moving through autonomy toward interdependence. In the third vector, students move through autonomy toward interdependence by becoming self-sufficient and “pursuing self-chosen goals” (Chickering & Reisser, 1993, p. 47). Students continue to develop their emotional strength as they are increasingly less controlled by the opinions of others. The authors emphasized the significance of developing emotional interdependence, that is, awareness of personal connections with others. In summary, students have an increased chance of success when they “can rely on their own ability to get the information they need, move toward goals of their own choosing, and navigate from one place to another, physically and psychologically” (p. 117).

The Summer Bridge Academy (SBA) assists students through this vector by challenging students to consider their academic career path toward a chosen major. Participants are required

to meet with the counselor for educational planning, which maps courses students must take to fulfill major requirements. Students are then responsible to register for those courses in future semesters. Further, a lesson on developing interdependent relationships with their peers, counselors, and campus programs is taught within the guidance counseling course.

Developing mature interpersonal relationships. During the fourth vector, individuals continue to develop mature interpersonal relationships. In this vector, the aim is twofold: (a) the development of intimate interpersonal relationships with friends and loved ones, and (b) the development of tolerance and acceptance of intercultural and interpersonal differences (Chickering & Reisser, 1993). Although students may have grown in communication skills and in emotional intelligence, the goal for individuals in this vector is to build satisfying, long-lasting, committed relationships with others on a deeper level.

The Summer Bridge Academy (SBA) helps students to build mature interpersonal relationships by formulating the program around the learning community model. Participants are enrolled in three courses during an intense six-week session. Further, participants take part of enrichment activities, which helps with the bonding process.

Establishing identity. Establishing identity is the fifth vector identified by Chickering and Reisser (1993). According to the authors, the development of identity involves:

- comfort with body and appearance;
- comfort with gender and sexual orientation;
- sense of self in a social, historical, and cultural context;
- clarification of self-concept through roles and life-style;
- sense of self in response to feedback from valued others;
- self-acceptance and self-esteem; and

- personal stability and integration. (p. 181)

However, it should be noted that this vector has been in the process of development during each of the previous vectors. The focus of this vector is on the development of personal identity.

However, there may be varying rates in identity development because of ethnicity, culture, gender, and sexual orientation. Jehangir (2009) noted that first-generation college (FGC) students' persistence to graduation may be affected by increased isolation and marginalization. Marginalization can be attributed to conflict between the college culture and the student's home culture. Students may be caught between two cultures and desires. Participants in the Summer Bridge Academy (SBA) are placed in a learning community consisting of peers with similar cultures, which helps to bridge the gap of their college culture and home culture.

Developing purpose. The sixth vector is the development of purpose (Chickering & Reisser, 1993). Many students lack direction in regard to academic and career goals. While in this vector, college students develop personal interests and activities and establish career goals. A college student's personal interest and vocational goals are then interconnected. The goal for this vector is for students "to be intentional, to assess interests and options, to clarify goals, to make plans, and to persist despite obstacles" (Chickering & Reisser, p. 50).

Participants of the Summer Bridge Academy (SBA) are required to meet with a counselor to complete a comprehensive Student Educational Plan (SEP). This plan outlines the student's academic goal as well as necessary courses students will be required to complete each semester.

Development of integrity. The final vector is in the development of integrity (Chickering & Reisser, 1993). Within this vector, students continue to develop through three sequential stages: "humanizing values, personalizing values, and developing congruence" (Evans et al., 1998, p. 38). When students humanize values, they learn to think critically about concepts

and react accordingly. This process is different than simply reacting to situations based on parents' opinions or opinions learned during upbringing. Students develop personalizing values when they adopt their own values but also accept opinions and values of others. Students develop congruence when they match "personal values with socially responsible behavior" (Chickering & Reisser, 1993, p. 237).

It is vital that the staff of the institutions of higher education recognize student development and foster it for student success. This concept can be executed by utilizing the vectors above. Chickering and Reisser (1993) stated that use of the vectors have "enabled higher education practitioners to view their students, their courses, and their programs more clearly and to use them as beacons for change" (p. 44).

Noel, Levitz, and Saluri's Myths on Attrition

Noel, Levitz, and Saluri (1991), through research and trial, posed theories and solutions to address the issue of attrition in higher education. The authors reviewed the myths on student attrition (e.g., how institutions must lower their standards to increase student retention). However, they contended that this myth is false. Noel et al. provided an anecdote of one institution, when the president of a college instructed faculty to do everything possible to increase student retention. The faculty followed by lowering standards and inflating student grades. Students who left the college had higher grades on average than students who stayed. The president's message and the faculty actions had an opposing result; the more capable students chose to leave. The authors maintained that "if they don't sense they are learning, growing, and building skills that are preparing them for the future – they are likely to say it is not worth it" (p. 8).

Also, Noel et al. (1991) addressed the myth that student retention is the sole responsibility of student services departments within colleges and universities. However, it is vital to recognize the important role of institutional faculty and staff and their contribution to student retention efforts.

The Summer Bridge Academy (SBA) combines efforts from student services faculty and the instructional division to provide services and courses to students in a learning community model. Through this integrated system between students and faculty, peers in the learning community gain support that often is lacking for First-generation College (FGC) students. James, Bruch, and Jehangir (2006) found that participation in learning communities increased persistence and academic success rates among FGC students.

Themes of attrition. Noel et al. (1991) identified various themes that should be addressed in regard to student attrition in institutions of higher education. Knowledge of these themes allows student services professionals to move past the myths and identify the true factors in attrition.

Cost-benefit scale. Noel et al. (1991) reported that students frequently base their decision to stay in college or leave by weighing the benefits against the costs. The “cost-benefit scale” (p. 10) is used by students to analyze not only the financial cost of college attendance, but the cost of time. The commodity of time is weighed against the potential benefit that the student perceives he or she will receive through higher education. If the benefit appears to be insignificant on the scale, students are more apt to leave. Faculty can assist students by explaining to them how the course will contribute to their degree plan.

Summer Bridge Academy (SBA) academic counselors assist participants by guiding them towards a career path through career development instruction, individual assessments, and educational planning.

Academic boredom and uncertainty. Noel et al. (1991) identified academic boredom and uncertainty as a theme in attrition within institutions of higher education. As the authors noted, “One of the first objectives of an institution ought to be to help students think through, in a very rational, informed way, the kinds of careers or majors that are most appropriate for them” (p. 11). They recommended that institutional staff view all incoming freshmen students as having an undeclared major. In connection, student boredom is often a result of lack in academic direction. Students who do not have a clear objective or academic goal are therefore at risk for leaving the institution. Noel et al. (1991) noted that academic counselors should provide career counseling to assist students in the development of career paths. Further, counselors should assist students to understand the importance of successfully completion of assigned coursework based on their major. This will assist students who ask questions such as “why do I need this course; how am I going to use this course in life; and does this course apply towards my degree.” Further, students experience boredom when they are enrolled in courses that are not challenging due to inappropriate assessment as they are placed in courses for which they are overprepared. The authors recommended institutions accurately assess students so they take courses at their respective level. The authors further suggested making allowance for students to participate in accelerated studies.

Students in the Summer Bridge Academy (SBA) met with a counselor to ensure a plan is in place which outlines classes necessary toward their career path. This allows students to take necessary courses and maneuver through the pipeline.

Tinto's Theory on Student Retention

In Tinto's (1993) study on student retention, he reported that multiple variables lead to student departures from colleges and universities. However, some educators focus on "stereotypes and misconceptions" (p. 4). Tinto argued that educators instead should focus on students' education and their "social and intellectual growth" (p. 4), which will lead to higher rates of retention. Tinto's work on the causes of retention included an overview of previous philosophies (Heilbrun, 1965; Rose & Elton, 1966), which held that student personality is associated with leaving college prematurely. In addition, Tinto proposed the idea of stages of student departure. According to Stieha (2010), Tinto's theory on student persistence has been criticized for being designed for the "traditional college population and does not necessarily speak to the experience of non-traditional students or those underrepresented in higher education" (p. 238). However, the attributes of Tinto's theories will be utilized to address several issues which may appear across various student populations.

Previous theories. Student retention in higher education has been studied and researched for many decades (Tinto, 1993). Tinto cited numerous sources (Heilbrun, 1965; Rose & Elton, 1966) whose authors attempted to describe the phenomenon of student departure by the categorization of students' psychological personalities, regardless of reason for departure. Students who failed to navigate and ultimately complete their academic goals were deemed to be "less mature, more likely to rebel against authority, and more likely to be less serious in their endeavors and less dependable" (p. 85), as well as more maladjusted and hostile than those students who persisted. In this theory, it is surmised that student departure can be simply explained by students' personality traits, that is, their shortcomings. One can then conclude that retention may be increased by the careful selection of students who possess favorable traits or

simply teaching success skills to students. However, Tinto argued that there is no singular personality trait which causes students to depart before completion of their goal. Secondly, this personality deficiency theory is inconsistent and does demonstrate how and why individuals, who are categorized into personality pools, eventually leave college or persist (p. 86). Further, in this theory, the role of the institution is not addressed in regard to students' departure; this leaves the student as the sole factor in this phenomena.

Stages of student departure. Tinto's (1993) theory of stages of student departure is based on Van Gennep's (1960) *The Rites of Passage*. Tinto explained that Van Gennep explored "the rites of passage in tribal societies" and studied "the movement of individuals and societies through time and with the mechanisms which promote social stability in times of change" (p. 92). Based on his findings, Van Gennep identified three primary rites of passage in which tribe members participated during their lifetime: separation, transition, and incorporation. These stages allowed for the stability of the tribe as new generations took on adult roles and responsibilities from elders. Van Gennep hypothesized his study could be applied to various situations and settings. Tinto applied this theory to students in the higher education arena. However, Tinto acknowledged that "individuals experience these presumed stages" (p. 95) in varying forms. Individuals from different cultures may experience the transition from high school to college in different ways, dependent upon familial and cultural expectations and norms.

Separation from community. During this first stage, individuals are required to separate from their communities, which often include their high schools, families, friends, and home environments. This separation may mean that individuals must relinquish the norms and values from their upbringing in order to adapt necessary college ideals. Often, in this stage, the individual experiences a sense of isolation and stress, and it can be "temporarily disorienting"

(Tinto, 1993, p. 96). The level of intensity of the disorientation may depend on whether the choice of college is local or distant. Students who leave for a distant institution of higher education may experience higher levels of isolation and stress during this stage as they have to distance themselves physically and “socially disassociate themselves from the communities of the past” so they can be “fully incorporated into the life of the college” (Tinto, 1993, p. 96). However, such risks are not limited to students who leave the home environment for a distant college. It is more difficult for students who choose to stay home and attend a local school to separate themselves from the norms and values of their environment and/or to integrate with those from their college. Tinto (1993) reported that students who receive positive support from the home environment experience less isolation, and display higher persistence.

The Summer Bridge Academy (SBA) acts as transition from high school to college by enrolling participants in a student success course in conjunction with preparatory English courses. Further, the SBA addresses potential for feelings of isolation through the learning community cohort model, which helps to bridge the gap of students’ college culture and home culture. SBA participants are placed in a learning community consisting of peers with similar cultures.

Transition from high school to college. The transition stage occurs as students begin to withdraw from the norms and values of their old environment, but before they begin to assimilate new customs and “patterns of behavior” (Tinto, 1993, p. 97). When individuals are in this stage, they are in limbo, that is, a period of transition. The level of intensity of the transition stage depends on degree of difference between the environment and college customs. That is, students who come from home environments which are drastically different from the norms and behaviors of the college community will have more difficulty with the adjustment process. In

addition, students who have issues with the transition process may have issues with persistence during their first year in college. According to Tinto, the staff of many colleges and universities have addressed the transition issues by provision of first-year programs. The Summer Bridge Academy (SBA) is one such program designed to assist first-year students in their transition process.

Incorporation into the college community. During the final stage of departure, students have discarded previous norms and behaviors from the old community in their effort to assimilate into the society of the college (Tinto, 1993). This stage includes the process of “finding and adopting” (p. 98) such norms and patterns. Then, the students must integrate them. Unlike the tribes studied by Van Gennep (1960) whose members often experienced rituals during their rites of passage, students who enter college rarely experience a ceremony to mark their beginning of this new endeavor. Therefore, students begin their journey with minimal guidance. Further, without an official ceremony to commemorate their arrival, they experience a lack of social membership. Often, students who are unable or unwilling to maneuver through the college environment will leave early.

A goal of the Summer Bridge Academy (SBA) is for students to complete the program with a mastery of college success skills that will guide them through the rest of their college career. Further, participants have culturally themed English courses integrated in their curriculum which allow them to maintain old norms and while adopting new norms.

Challenges for First-Generation Latino College Students

First-generation Latino college students transfer and graduate with four year degrees at lower rates than their White counterparts (Baum & Ma, 2007; Bohon et al., 2005). Settle (2011) found that, in general, first-generation college students are at greater risk of dropping out before

completion of their educational goal in comparison to non first-generation college students. First-generation Latino college students face various barriers which may hinder their ability to progress through the educational pipeline. The traditional educational pipeline consists of a seamless transition from high school to college then into the workforce (Green, 2006). However, Green stated students must negotiate this educational pipeline “if they wish to thrive in an information- and service-driven economy” (p. 21). Several of these barriers are addressed in subsequent sections.

Familial

Much research has been done on the relationship of attainment of higher education and parental education. It has been found that students whose parents had college experience are more likely to achieve higher education than those whose parents had no college experience (Collier & Morgan, 2008; Engle et al., 2006; Green, 2006; Olive, 2008; Orbe, 2008; Próspero & Vohra-Gupta, 2007). Typically, many first-generation students have limited access to valuable information about the college experience from family members (Thayer, 2000). Furthermore, non first-generation college students have been found to have higher high school grade point averages (GPAs) and higher American College Test (ACT) and Scholastic Assessment Test (SAT) scores (Green, 2006; Próspero & Vohra-Gupta, 2007). In comparison, first-generation college (FGC) students “are less likely to go to college and, once on campus, less likely to persist to graduation” (Orbe, 2008, p. 82). Jehangir (2009) provided an anecdote of the phenomenon which is often experienced:

For many first-generation, low-income students college is an unknown land at which they dream of arriving one distant day. Many of them, through no small effort, arrive at our door steps only to find college to be far less magical and much more confusing than they

ever imagined. Not only must they quietly discover the unwritten rules and expectations implicit to academia, but often they must shed parts of themselves in order to do so. (pp. 33-34)

According to the National Center for Education Statistics (2005), the National Education Longitudinal Study of 1988 was conducted to determine the degree to which non first-generation college students attained a college degree in comparison to FGC students. The research cohort consisted of 7,400 students who enrolled in college between 1992 and 2000. It was found that these FGC students had a significantly lower graduation rate than students who had parents with some college experience. The findings were more significant for students who had a parent or parents with a bachelor's or higher degree. The NCES staff reported that: (a) 23% of FGC students earned a certificate or an associate's degree, (b) 24% earned a bachelor's degree or higher, (c) 43% left college with no degree, and (d) 10% did not attain a degree but were still enrolled in college. In comparison, the NCES staff reported that of the 1992-2000 cohort of students who had a parent or parents who had a minimum of a bachelor's degree: (a) 7% earned a certificate or an associate's degree, (b) 68% earned a bachelor's degree or higher, (c) 20% left college with no degree, and (d) 6% had not attained a degree but were still enrolled in college.

Marginalization

Persistence to graduation is affected by the increased isolation and marginalization among FGC students (Jehangir, 2009). The concept of the American Dream is attained through hard labor (Orman, 2011). Therefore, parents of FGC students may prefer their child to work instead of pursuing higher education (Olive, 2008). In addition, these parents may experience anxiety in thinking their child would leave them for college. As a result, many FGC students are caught between two cultures and desires. The first is the desire to keep the family members

content, while the other is the desire to pursue higher education in order to obtain a career (Wang & Castañeda-Sound, 2008). The compromise is that many of these students will live at home while they attend college. However, in an attempt to balance the two worlds, the student may experience anxiety; the academic responsibilities and family commitment may present an overload (Olive, 2008). In Jehangir's study of FGC students, she interviewed a number of FGC students, and many of these statements provide insight voices to the worlds in which these students live. Jehangir (2008) cited Law (1995), who provided a personal story to demonstrate the disconnect between a FGC student and family:

At home I could never get myself to talk about books or ideas that never intersected with the lives of my mother, brother, and cousins and extended family. To talk about my studies seemed ridiculous and stuck up at best in a context that seemed as mistrustful of academia as academia was condescending to it. (p. 34)

Many FGC students must find a balance between both realms and often struggle to find a median. At home, FGC students lack collegiate support from parents and other loved ones. At school, these students lack empathy from non first-generation college students as well as academic personnel. In a study conducted by Wang and Castañeda-Sound (2008), FGC students were found to have lower levels of academic self-efficacy. In this setting, self-efficacy can be defined as "a belief in one's ability to perform the tasks necessary for success in school" (p. 4). For FGC students who experience low academic self-efficacy, the lack of proper support systems at home and at school decrease their chances of academic success. Too often, when students are unable to maneuver in and out of both arenas, they choose to drop out of college so that they can fulfill the duties and desires of their parents.

Academic Preparation and Performance

First-generation college students are more likely to enter their first year of college education with lower academic performance than their continuing generation counterparts (NCES, 2005; Thayer, 2000). Furthermore, this student population has a lower rate of persistence than non first-generation college students. Staff of the NCES described the importance of academic preparation and its connection to overall persistence toward graduation; 40% of FGC students needed at least one remediation course in either mathematics or reading. Staff who gathered the 2010 SENSE Cohort data (Center for Community College Student Engagement, 2012) found that 66% of incoming students needed at remediation coursework in at least one area. Many students are in need of remedial courses due to lack of preparation for college placement exams. In the CCSSE Promising Practice data (2012), it was found that only 28% of students prepared for placement examination using online or printed materials. Further, only 10% of students in the same study attended a workshop prior to a college placement exam. However, it should be noted that only 44% of the colleges reported that they provided placement exam preparation programs for students. The lower levels of continuation among this population have continued to concern administrators at all levels of academia (NCES).

For Latino FGC students, the lack of college preparedness begins during the pre-college years. In the Bohon et al. (2005) study, which was conducted in Georgia, recent Latino immigrant families found the school system (e.g., grades K-12) difficult to navigate. Often, this led to a challenging matriculation process for the students. Also, the researchers identified additional obstacles in regard to student preparation for higher education: (a) a lack of parental involvement, (b) lack of stable residence, (c) lack of perceived academic incentives, and (d) minimal academic support from the schools.

Institutional

According to Schmidt (2003), since 1992, the U.S. government has identified and designated certain colleges and universities as Hispanic-Serving Institutions (HSI) if their enrollment patterns meet specific criterion. Schmidt reported that over 240 institutions received the HSI designation during the first decade of its establishment. This institutional designation was in response to the growth and expansion of the Latino population into various communities across the U.S. However, there is a discrepancy between higher education attainment and ethnicity; individuals of Hispanic origin complete four-year college degrees and above at lower rates than their White and Black counterparts (U.S. Census Bureau, 2010). Further, there is a lack of college success among many first-generation, Latino college students at institutions across the country (Baum & Ma, 2007; Bohon et al., 2005).

Although Latino students face barriers within the home, these students face numerous obstacles within the institution (Schmidt, 2003). Often, the education system poses barriers for FGC students en route to college success. All college students must endure trials and tribulations as they traverse the educational pipeline to find success. However, the traditional deficit model within the educational system must be abandoned. Typically, in the deficit model, the emphasis is placed on “students’ inabilities rather than their abilities, and encourages policies and programs that view underserved students as less than their peers” (Green, 2006, p. 24). Because of the deficit model, many educators have been prompted to provide and promote programs and services based on perceived shortcomings of this population. This model has been demonstrated to provide negative outcomes (Green, 2006). Educators’ emphasis on students’ academic deficits does not provide services that allow students to display positive traits. This model further promotes negativity in this population that already lacks in academic self-efficacy.

Socioeconomic Status

Traditionally, FGC students are low-income and minority (Olive, 2008; Próspero & Vohra-Gupta, 2007). Settle (2011) emphasized that very few, if any, institutions provide integrated support for students based upon a persistence model that includes socioeconomic status” (p. 282). For this reason it is important to discuss the barriers that low-income students encounter as found by the Pell Institute researchers (Engle & O’Brien, 2007). Low-income students may receive only limited benefits in regard to the retention efforts many institutions of higher education have in place. The following are some of the barriers these students encounter.

- Due largely to their lack of exposure to college, low-income students are not aware of the programs and services that exist on campus, or they do not understand the function these programs serve or how they could benefit from them.
- A number of programs and services, such as orientation and tutoring, are fee-based, and low-income students cannot afford them. Low-income students cannot afford the incidental costs associated with such programs (i.e., costs incurred during travel and/or in taking time off work).
- Low-income students who live and work off-campus cannot take advantage of available college services or programs because these are not offered at times that are convenient for them.
- Low-income students face difficulties with seeking and asking for help because they fear exposing or stigmatizing themselves.
- Low-income students “fall through the cracks” when retention services and programs lack centralization, coordination, or resources. Such programs were

most likely to reach low-income students when they were offered to and/or mandatory for all students. (Engle & O'Brien, 2007, pp. 4-5)

The overwhelming underservice to FGC students in institutions of higher education will continue to affect their ability to successfully advance through the educational system.

Challenges for First-Year College Students

During the first year of college, students establish a pattern which will guide their path to either success or otherwise (McCormick, 1999). McCormick (1999) found a positive correlation between a first-year student's GPA and future success as an undergraduate student.

Furthermore, first-year college students have a lower persistence rate than second-year students and beyond (Mansfield et al., 2004). In a study conducted by the NCES (2010) staff, it was estimated that 5.9 % of a first-year community college cohort during 2004-2008 completed a bachelor's degree within five years. For Hispanic students, this attainment dropped to 2.6%. Within the same 2004-2008 cohort, it was estimated that 26.4% of the students either transferred to four year institution, or attained a degree or certificate within five years (see Table 3). For Hispanic students, the attainment dropped to 17.6%.

For students who graduate from high school and plan to attend an institution of higher education, the endeavor to earn a degree can be challenging and many do not persevere. According to Tinto (1993), students often "face greater problems in meeting the academic demands of college work, in finding a suitable niche in the social and intellectual life of the college, and perhaps in obtaining sufficient financial resources" (p. 75).

Budny and Paul (2003) described a first-year student's journey through three important transitions: academic, family, and personal. Students who do not receive the necessary support

may not be able to make a steady transition. A student's ability to make transitions in these areas can increase chances of college success in the first year and beyond.

Identification of Support Systems

Although barriers are clearly present for first-generation, first-year, Latino college students, only a limited number of motivating factors and support systems are readily available to assist these students in their journey to academic success. FGC students are motivated by intrinsic rewards in addition to the promise of economic well-being, as they achieve academic success. Olive (2008) maintained that FGC students anticipate that a college degree will bring financial rewards and honor to the family. In addition, successful completion of college will earn FGC students status and respect. First-year college students are in tremendous need of support systems to assist them as they make the necessary academic, family, and personal transition (Budny & Paul, 2003). Jehangir (2009) used the term bridge, defined as the pathway students may take in making important transitions.

Familial

First-generation Latino college students in their first year of higher education face multiple barriers as described above. The family is one barrier that may act as a hindrance to college success. However, the family can play a key role in helping students in the transition process from high school to college. The family system can act as a support system in student success, especially during the first year of college education, as "the entire family is going through a change and is experiencing both excitement and sadness" (Budny & Paul, 2003, p. 2). Parents can encourage their child to seek out new friendships. Also, parents should become familiar with the various student services provided by the college.

Institutional

The transition from high school to college is a vital step for college success. Staff and faculty of institutions of higher education have the ability to assist first-generation, first-year, Latino college student in this transition process. First, college staff can provide a mandatory orientation to all incoming students. Staff of the Center for Community College Student Engagement (CCCSE; 2012) described the various orientation programs found in colleges across the nation. They can be as short as a two hour program that is focused on registration assistance, information on supportive services, and campus tours. Also, orientation programs can be semester long that incorporates an embedded guidance counseling course (CCCSE, 2012).

Jehangir (2009) insisted that institutional staff must supply a two-way bridge to assist students to make a transition to college but also have the ability to return home. This bridge would assist students with the ability to be successful in both their college realm and their home life. This is vital for Latino students because marginalization or the fear of it may deter their ability to be successful in college. First-generation, Latino college students must have a place at school and at home. Jehangir (2009) noted that access to learning communities can provide a place where students feel acknowledged and validated. Budny and Paul (2003) identified additional objectives, which college staff should address in order to help first year students in college transition:

1. Raising the knowledge level of first-year undergraduate students and parents with regard to lifestyle changes that can occur in moving to a campus environment.
2. Developing an awareness of the services offered by the university is crucial in the creation of a productive adjustment process.

3. Expanding new students' and parents' knowledge of changes in status, residence, failure, relationships, and authority through both interactive discussions and written materials documenting success strategies.
4. Helping parents and students develop a positive attitude toward their first year at the university. (p. 1)

It is the responsibility of institutional staff to prepare students for learning while in college and beyond. Chickering and Reisser (1993) emphasized that “institutions that impart transferable skills and relevant knowledge, bolster confidence and creativity, and engender social responsibility and self-directed learning are needed more than ever” (p. 44).

Academic support programs for FGC students within colleges and universities have been developed and implemented. The focus of many programs is on increasing recruitment, retention, and graduation rates among FGC students. Federal programs such as (TRIO) are designed specifically to increase college success rates for disadvantaged students such as FGC students. According to the Office of Postsecondary Education (OPE; 2011), TRIO consists of eight different programs intended to help at-risk students “progress through the academic pipeline from middle school to postbaccalaureate programs” (para. 1). Community college and university staff utilize special programs and services to address the needs of FGC students. The emphasis of these programs is on academic factors which hinder the FGC student's ability to successfully complete college. Furthermore, Olive (2008) emphasized that these services are designed to promote “cultural, social, physical and emotional aspects of the students' well-being” (p. 86) and are intended to increase self-efficacy and self-esteem.

According to Chickering and Reisser (1993), institutional leaders must take student development into consideration. In order to be effective, it is critical for the institutions of higher

education to educate “the whole student; colleges must hire and reinforce staff members who understand what student development looks like and how to foster it” (p. 44).

Learning Communities

First-generation college students face tremendous obstacles in adjusting to the disconnect between home and school. In some colleges and universities, learning communities have been developed in order to help FGC students to bridge these two environments (James et al., 2006). A learning community is defined as the same group of students “enrolled in two or more courses that are collaboratively designed and intentionally linked by organizing themes” (p. 10). Traditionally, the purpose of learning communities have been to support FGC students during their first academic year. For first-generation, low-income students, participation in learning communities can engage the students more intensely. Jehangir (2009) stated that “learning communities have emerged as one way in which to bring interdisciplinary, multicultural curricula into a structured space that allows diverse student groups to find a sense of belonging” (p. 34). Jehangir found a higher success rate in persistence and retention for first-year students enrolled in learning communities. Through an integrated vision shared between students and faculty, peers in the learning community gain support that is often lacking for FGC students. Also, it has been found that FGC students’ participation in learning communities has increased persistence and success rates (James et al., 2006).

Summer Bridge Academy

In an effort to assist incoming first-year, first-generation college freshmen, the staff at many institutions have developed supplemental programs (Lipka, 2010). Lipka described the experience of a student who spent a month in a summer program at a Texas university, which included college orientation, basic skills advancement, as well as tutoring. The focus of this

program was to develop self-confidence in addition to college skills. Prior to the program, this student stated, “I had doubts about whether I would make it” (p. A22) as she described her anxiety about college. For this student and 90% of all students in the first summer program at this university, the scores for placement testing in English and mathematics were improved.

The Summer Bridge Academy (SBA) at Central Valley Community College is a program designed to assist 48 first-generation, first-year, Latino college students to achieve academic success and, ultimately, be able to transfer and graduate from a four-year university. To be eligible for the SBA, students must place at a remedial level in English reading and writing. This six-week program consists of the following components:

1. intensive remedial English reading and writing courses,
2. intensive college preparatory and learning skills course,
3. outdoor experiential learning activities,
4. peer mentoring, and
5. early alert and intervention.

Students in the SBA are divided into three separate learning communities in which they take courses: (a) College Writing Skills, (b) College Reading Skills, and (c) College Studies Skills. The Reading and Writing courses are one level below College Reading and Composition, that is, the English course required for university transfer. These courses are accelerated in comparison to the traditional semester-long system. The staff of the Center for Community College Student Engagement (CCCSE; 2012) emphasized that “the longer it takes a student to move through developmental education into a credit program, the more likely he or she is to drop out” (p. 14).

Staff of the CCCSE (2012) described the purpose of the student success courses, that is, to provide students with the various skills which are requisite to success in college. The content of student success courses range from lessons in “study and time-management skills to awareness of campus facilities and support services” (p. 15). The CCCSE staff found that there were only a limited number of institutions of higher education which provided required student success courses for incoming students. At SBA, students’ summer school schedule includes a one-unit college skills class, in which they learn necessary skills in the areas of (a) time management, (b) study habits, (c) goal setting, (d) life management, (e) active listening, (f) college resources, and (g) educational planning. The goal of this student success course is to provide students with an opportunity to gain knowledge and develop skills that promote students’ adaptation to college and support them in order to make a successful transition into the community college.

Staff of the CCCSE (2012) described experiential learning as hands-on education outside of the classroom with various benefits. The staff explained, “It steeps students in content, and it encourages students to make connections and forge relationships that can support them throughout college and beyond” (p. 22). During the SBA, participants had the opportunity to visit universities in California to gain firsthand knowledge of what can be expected of them when they transfer. This experience may help students to be more confident about their transfer to the university system.

According to the CCCSE (2012), the use of early alert intervention systems is a strategy that can help students who struggle in a course to initiate an intervention from staff member of the college campus. During the SBA, participants are part of a system in which the counseling staff are provided with weekly updates on students’ status or are notified when a student is at risk

of failing an English reading or writing course. Then, an assigned counselor meets with the student who is having academic struggles and develops an action plan that may encourage the student and provide guidance.

Location

The SBA provides services to 48 eligible first-year Latino college students from the Central Valley in the agricultural area of Fresno and surrounding counties. One of the most productive agriculture areas in the world (The Economist, 2010), Fresno County is also in one of the most impoverished regions. Referred to as the Appalachia of the West, Fresno and the surrounding counties of the south San Joaquin Valley are characterized by chronic unemployment, a high incidence of poverty, and low levels of educational attainment (U.S. Census Bureau, 2010). As of 2010, only 71% of Fresno County residents had completed a high school diploma, while only 29% had attained a bachelor's degree or higher. Even before the current economic recession, 16% of families and 20% of individuals were below the poverty limit.

Learning Community

The objective of learning communities is to develop and instill a sense of academic community between faculty and students as students have increased engagement opportunities. Staff of the CCCSE (2012) explained that participation in learning communities provides a sense of social community in the participants. Further, the CCCSE staff found that students in learning communities

also demonstrate greater progress in academic subjects, indicate increased satisfaction with the college, and report greater use of student support services. Taken together, these characteristics may lead to improved retention and learning outcomes. (p. 15)

The main objective of the SBA is to adequately prepare incoming first-generation, first-year students for college success. Participants are assigned to a learning community cohort in which they take an English reading, English writing, and student success courses.

Enrichment Activities

Learning important life skills is as important as the attainment of college skills. Students in the SBA program participate in various enrichment activities in order to supplement college skills with self-motivation. Enrichment activities include a one-day ropes course in which students face their fear and work in teams to accomplish various tasks. Also, student participation in the ropes course encourages the building of rapport with the counseling staff, who work within the SBA and teach the student success course. First-generation college students seldom envision moving past the community college and into a four-year university due to low levels of academic self-efficacy (Wang & Castañeda-Sound, 2008). Students in summer transition programs who are enmeshed in various student support services and activities develop self-confidence and the program assists them in envisioning the potential (Lipka, 2010).

Summary

This study was developed to determine whether first-generation, first-year, Latino college students who participated in SBA had similar results in the area of academic performance, retention, and persistence as students who did not participate in SBA. This chapter began with a review of the literature as it pertains to higher education and the significance of individuals who attain in comparison to those who do not. The theoretical framework which guided this study includes empirical research on student success by Chickering and Reisser (1993); Noel, Levitz, and Saluri (1991); and Tinto (1993). This was followed by a look at various barriers faced by first-generation Latino college students such as: (a) their families, (b) the institution of higher

education, (c) issues with marginalization, and (d) academic underpreparedness. Since the focus of this study was on first-year students, challenges faced by this population were addressed. This was followed by support systems which may be in place for first-year, first-generation, Latino college students. Support systems identified in this review of the literature include the family and the institution. Finally, a review of the literature related to academic summer programs in college was completed followed by an introduction to the SBA.

In Chapter 3, this researcher describes the research design that was used and the rationale for using an ex post facto design. This researcher then identifies the research questions which guided this study as well as the chosen hypotheses. This researcher discusses the population for this study, including the sampling procedures executed for this research. This researcher then describes the setting at which this research was conducted as well as the steps taken to assure privacy. Next, this researcher discusses the procedures used for this research including how the data was gathered. Finally, the researcher describes the analysis of the data, including the statistical procedures used during this research.

CHAPTER THREE: METHODS

Overview

First-generation community college students from Latino backgrounds transfer or graduate at lower rates than their White peers (Baum & Ma, 2007; Bohon et al., 2005). There are various factors which impede these students from being able to maneuver through the multiple layers of obstacles. The purpose of this study was to identify best practices for first-year, first-generation Latino college students to facilitate their success in college. This information could provide guidance for those administrators and faculty who work with this population. This researcher attempted to determine whether there were notable differences in academic performance, retention, and persistence for those students who participated in the Summer Bridge Academy (SBA).

Presented in this chapter are the research design, as well as the rationale for the use of this design. The research questions which guided this study are detailed, as well as the hypotheses. Next, the population for this study is discussed, to include the sampling procedures executed for this research. The setting in which this research was conducted is discussed, as well as the steps taken to assure privacy. Next, the procedures used for this research study are discussed, including how the data was collected. Finally, the procedures for the analysis of the data are described, including the statistical procedures that were used.

Design

This research study was a non-experimental causal comparative (i.e., ex-post facto) quantitative design that examined differences in: (a) academic performance (GPA), (b) retention rates, and (c) rates of persistence. An ex-post facto research design was utilized to study the differences between students' participation and non-participation in a Summer Bridge Academy

that took place during the 2011 Summer semester. This researcher compared the GPA, retention rates, and persistence rates of first-generation, first-year, Latino college students who participated in the Summer Bridge Academy (SBA) against like students who did not participate in same program. The Summer Bridge Academy at Central Valley Community College began during the 2011 academic summer semester. This researcher is a student services professional within Central Valley Community College and was one of the counselors for the Summer Bridge Academy during the 2012-2013 Academic year. Therefore, data were drawn, measured, and analyzed from institutional records for the 2011-2012 academic year. This researcher received documented permission from administrators at Central Valley Community College before data were gathered. All data were stripped of identifying information, such as student identification numbers, so as to eliminate breach of student confidentiality.

Research Questions

The purpose of this causal-comparative quantitative study was to examine the relationships between the efficacy of a Summer Bridge Academy (SBA) and the impact on students by measuring the GPA, retention rates, and persistence rates of first-generation, first year, Latino college students who participated in a SBA at Central Valley Community College. The SBA participants were compared to students who did not participate in same program. The independent variable was participation in a six week long SBA. The dependent variables were GPA, retention rates, and persistence rates. Students who are first-generation, first year, Latino college students were statistically controlled in this study.

Currently, there is a gap in the research literature about first-year, first-generation, Latino college students. Further, there is little or no research on these students' performance if they

participate in a structured learning community during the summer before entrance to college.

Therefore, this study was guided by the following research questions.

RQ1: Is there a significant difference in academic performance of first-year, first generation, Latino college students who participated in a Summer Bridge Academy program, in comparison to like students who did not participate in same program?

RQ2: Is there a significant difference in student retention of first-year, first-generation, Latino college students who participated in a Summer Bridge Academy program, in comparison to like students who did not participate in same program?

RQ3: Is there a significant difference in rates of persistence of first-year, first-generation, Latino college students who participated in a Summer Bridge Academy program, in comparison to like students who did not participate in same program?

Null Hypotheses

The null hypotheses for this study are as follows:

H₀₁: There is no statistically significant difference in academic performance (e.g., grade point average) of first-year, first-generation, Latino college students who participate in Summer Bridge Academy from like students who do not participate in same program.

H₀₂: There is no statistically significant difference in retention rates of first-year, first-generation, Latino college students who participate in Summer Bridge Academy from like students who do not participate in same program.

H₀₃: There is no statistically significant difference in persistence rates of first-year, first-generation, Latino college students who participate in Summer Bridge Academy from like students who do not participate in same program.

Participants and Setting

This researcher compared the difference in retention rates, persistence rates, and academic performance in students who participated in a Summer Bridge Academy (SBA) with like students who did not participate in the SBA. The experimental group consisted of 48 first-generation, first year, Latino college students who participated in the SBA. SBA participants volunteered to take part of the SBA. The comparison group consisted of 48 first-generation, first-year, Latino college students who did not participate in the SBA. The comparison group was randomly selected from a population that met the same criteria as the experimental group. There is no indication if the comparison group had the same ability to participate in the SBA. The sample size of 48 for each group was based on the number of students who participated in the SBA during the 2011 Summer session. A power analysis determined statistical power of 0.78 based on effect size of 0.5 and significance level (α) of 0.05. The statistical power for this study is less than 0.80 and therefore may pose a threat to validity. Simple quasi-random sampling was utilized to determine the comparison group. This form of sampling occurs when “all the individuals in the defined population have an equal and independent chance of being selected as a member of the sample (Gall, Gall, & Borg, 2005, p. 129). With the assistance of the college’s Institutional Research department, the following student attributes were matched to maximize sample equalization:

- first year student,
- first-generation college student,
- Latino background,
- English reading placement scores,
- English writing placement scores,

- gender ratio,
- age ranges, and
- socioeconomic Status (SES).

This research study compared two sets of data for first-year, first-generation, Latino college students during the 2011 academic year. One set consisted of students who participated in the SBA; the second groups of students consisted of those who did not participate in the SBA. The SBA was a six-week summer academic program offered immediately following completion of high school and prior to students' first full academic semester. Instruction within the SBA consisted of an English reading and writing refresher course to assist participants to reach college proficiency. The program included a guidance counseling course to increase college readiness skills. Further, students received academic advising on a weekly basis.

This study took place at a large community college located in a large rural community. The student population at this college is 46% Latino, 20% Caucasian, 20% African-American, 10% Asian, and 4% other. The female to male ratio is about 51 to 49. The summer academy took place on campus during the 2011 summer after the experimental groups' high school completion and before the beginning of their first official semester at the college. The instructors who taught the courses were standard college faculty members. The courses were conducted in standard classrooms consistent with other courses taught on campus.

Instrumentation

Data were collected from the college data system according to the procedures listed in the respective section below. The data include the grade point averages (GPAs) for students in the experimental group and control group for grades posted during the Summer and Fall 2011 semesters. Data collected included semester completion rates for the Fall 2011 semester for

control and experimental groups. Further, data were collected for enrollment rates into the Spring 2012 semester for both groups. The software program Statistical Package for Social Scientists (2015, IBM® SPSS®) was used to analyze the collected data. No additional instrumentations were used, as this was an ex-post facto research study, based on previously collected data.

Procedures

The researcher submitted and was granted a request for preliminary approval to gather data from the research site's Vice President of Student Services (see Appendix A). Next, the researcher requested and was granted permission to conduct the student by the Liberty University Internal Review Board (IRB) (see Appendix B). After approval was granted, the researcher coordinated with the site's Institutional Research department and requested grade point averages, persistence rates, and rates of retention for the 2011 Summer Bridge Academy participants. Further, the researcher gathered sample size for the control group equivalent in numbers and demographics to the 2011 Summer Bridge Academy cohort. The researcher requested a sample of control group students to ensure sample matching in the following categories: (a) English placement test levels, (b) gender, (c) ethnicity, (d) enrollment status (i.e., first-year college student), (e) socioeconomic status, and (f) age. There was no contact with students, neither surveys, observations, interviews, nor correspondence. This was an ex-post facto study and the data were already stored in the school site's database. The Appendices includes Data Collection Approval and Liberty University Internal Review Board Approval.

Data Analysis

Data were collected for the Summer Bridge Academy (SBA) participants and comparison groups to determine academic performance (i.e., GPA) during the Summer and Fall 2011

semester and completion of the Fall 2011 semester (i.e., retention). Data were also collected for the beginning of the 2012 Spring semester to determine rates of persistence in SBA participants and comparison groups. Data was categorized by gender, age, and ethnicity for each group. The collected data were maintained on a secure computer in a locked office at the school site. The data were kept confidential by the assignment of pseudonyms for the: (a) college, (b) district, (c) geographical location of the college, and (d) any other potentially identifiable information. The names of research participants and student identification numbers were stripped from the data sets.

An independent samples *t*-test was conducted to determine difference in GPA mean scores for Summer and Fall 2011 semester between students in the SBA participant group and comparison group. An alpha level of .05 was used to measure whether significant difference in GPA's were found. Use of this statistical method will support or reject **H₀₁**.

H₀₁: There is no statistically significant difference in academic performance (as shown by grade point average) of first-year, first-generation, Latino college students who participate in Summer Bridge Academy from like students who do not participate in same program.

An independent samples *t*-test was conducted to evaluate difference in rates of retention by measuring course completion for Fall 2011 courses. An alpha level of .05 was used to measure whether significant difference in persistence exists between experimental and control groups. Completion of at least one college course during the Fall 2011 semester counted as retention. Use of this statistical method will support or reject **H₀₂**.

H₀₂: There is no statistically significant difference in retention rates of first-year, first-generation, Latino college students who participate in Summer Bridge Academy from like students who do not participate in same program.

An independent samples *t*-test was conducted to evaluate difference in persistence rates by measurement of course enrollment for Spring 2012 semester. An alpha level of .05 was used to measure whether a significant difference in retention exists between experimental and control groups. Enrollment in at least one college course demonstrated persistence. Use of this statistical method will support or reject **H₀₃**.

H₀₃: There is no statistically significant difference in persistence rates of first-year, first-generation, Latino college students who participate in Summer Bridge Academy from like students who do not participate in same program.

Summary

An ex-post facto causal comparative research design was used to determine if a significant difference exists in academic performance, retention rates, and rates of persistence in students who participated in the Summer Bridge Academy participants in comparison to the control group. Each group consisted of 48 community college students. Students who are first-generation, first year, Latino college students were statistically controlled for this study. The independent variable was participation in a six week long SBA. The dependent variables were GPA, retention rates, and persistence rates. Data analysis was performed with the use of IBM® SPSS® (2015).

CHAPTER FOUR: FINDINGS

Research Questions

The purpose of this causal-comparative quantitative study was to examine the relationships between the efficacy of a SBA and its impact on students through measurement of the: grade point average (GPA), retention rates, and persistence rates of first-generation, first-year, Latino college students who participate in a SBA at Central Valley Community College against like students who did not participate in same program. The independent variable was the participation in a six week long Summer Bridge Academy. The dependent variables were GPAs, retention rates, and persistence rates. First-generation, first-year, Latino college students were statistically controlled in this study.

This research study was guided by the following research questions:

RQ1: Is there a significant difference in academic performance of first-year, first-generation, Latino college students who participated in a Summer Bridge Academy program in comparison to like students who did not participate in same program?

RQ2: Is there a significant difference in student retention of first-year, first-generation, Latino college students who participated in a Summer Bridge Academy program in comparison to like students who did not participate in same program?

RQ3: Is there a significant difference in rates of persistence of first-year, first-generation, Latino college students who participated in a Summer Bridge Academy program in comparison to like students who did not participate in same program?

Hypotheses

The null hypotheses for this research study were as follows:

H₀₁: There is no statistically significant difference in academic performance (e.g.,

grade point average) of first-year, first-generation, Latino college students who participate in Summer Bridge Academy from like students who do not participate in same program.

H₀₂: There is no statistically significant difference in retention rates of first-year, first-generation, Latino college students who participate in Summer Bridge Academy from like students who do not participate in same program.

H₀₃: There is no statistically significant difference in persistence rates of first-year, first-generation, Latino college students who participate in Summer Bridge Academy from like students who do not participate in same program.

Descriptive Statistics

Data sets for the Summer Bridge Academy (SBA) participants and the comparison group were analyzed for the Summer and Fall 2011 semesters and Spring 2012 semester. The comparison group and the SBA group each consisted of 48 participants. However, an extreme outlier was found as described in the Assumptions section below.

The data for statistically controlled attributes measured the population makeup for the SBA participants and comparison group. The SBA group consisted of a population derived of the following: First-generation College Student - 59.6%; Low Income – 85.1%; Aged 19 or younger – 66%; Hispanic – 74.5%; White – 8.5%; Asian – 14.9%; Other Races – 2.1%; and Female – 61.7%. The comparison group consisted of a population derived of the following: First-generation College Student - 56.3%; Low Income – 89.6%; Aged 19 or younger – 39.6%; Hispanic – 72.9%; White – 8.3%; Asian – 14.6%; Other Races – 4.2%; and Female – 60.4%. Appendix C displays the complete side-by-side table of statistically controlled attributes for SBA participants and the comparison groups.

Table 1 below displays mean scores and other descriptive statistics as they relate to the dependent variables for each data set.

Table 1

Descriptive Statistics – Retention, Persistence, and GPA

Comparison Group	N	Minimum	Maximum	Mean	Std. Deviation
Retention	48	0	1	0.8542	0.35667
Persistence	48	0	1	0.8542	0.35667
GPA Summer 2011	44	0	4	2.6947	1.24751
GPA Fall 2011	46	0	4	2.2214	1.15189
GPA Summer and Fall 2011	47	0	4	2.2913	1.03762
SBA Group					
Retention	47	0	1	0.8723	0.33732
Persistence	47	0	1	0.8085	0.39773
GPA Summer 2011	47	0	4	3.3422	0.79935
GPA Fall 2011	43	0	4	2.4539	1.20114
GPA Summer and Fall 2011	47	0	4	2.9162	0.79858

Results

Assumptions Tests

This researcher conducted two tests to measure and determine validity of the selected comparison group and to test for normality.

Homogeneity of variances.

Table 2 demonstrates the mean score for each statistically controlled attribute for the Summer Bridge Academy (SBA) participant group and comparison group.

Table 2

Mean Score for Statistically Controlled Attributes

		N	Mean	Std. Deviation	Std. Error Mean
First Generation	SBA Participants	47	.5957	.49605	.07236
	Non Participants	48	.4375	.50133	.07236
Low Income	SBA Participants	47	.8511	.35987	.05249
	Non Participants	48	.8958	.30871	.04456
Age Category	SBA Participants	47	1.60	1.056	.154
	Non Participants	48	1.71	.743	.107
Hispanic	SBA Participants	47	.7447	.44075	.06429
	Non Participants	48	.7292	.44909	.06482
White	SBA Participants	47	.0851	.28206	.04114
	Non Participants	48	.0833	.27931	.04031
Asian	SBA Participants	47	.1489	.35987	.05249
	Non Participants	48	.1458	.35667	.05148
Other Race	SBA Participants	47	.0213	.14586	.02128
	Non Participants	48	.0417	.20194	.02915
Female	SBA Participants	47	.6170	.49137	.07167
	Non Participants	48	.6042	.49420	.07133

Table 3 below displays the Significance (Sig.) results of Levene's Test for Equality of Variances to evaluate for sameness in the Summer Bridge Academy (SBA) participant group and comparison group. The complete table is located in Appendix D.

Table 3

Levene's Test for Equality of Variances

	Sig.
First Generation	.525
Low Income	.193
Age Category	.069
Hispanic	.735
White	.951
Asian	.933
Other Race	.260
Female	.800

There was homogeneity of variances for all attributes in SBA participants and the comparison group, as all returned p -values (Sig.) were greater than 0.05 in Levene's Tests for Equality of Variances. The results for First Generation attributes were .525; Low Income = .193; Age = .069; Hispanic = .735; White = .951; Asian = .933; Other Races = .260; and Female was .80.

Normal distribution.

Normal distribution of each dependent variable was tested using plots. The comparison group consisted of 48 participants while the SBA group consisted of 48 participants. However, an extreme outlier in Age Category was found and removed from the SBA group. The plot in Appendix E demonstrates the extreme outlier marked by *57.

A plot was developed to test for normality in Summer 2011 GPAs for SBA participants and the comparison group. One extreme outlier was found for SBA group and is labeled with

*95 in Appendix F. It was determined that leaving the outlier in the data set would not have a significant impact in the results of this study.

A Normal Q-Q plot was developed to test for normal distribution of Fall 2011 GPAs. Appendix G and H demonstrate there was normal distribution of Fall 2011 GPAs in SBA participants and the comparison group.

A Normal Q-Q plot was developed to test for normal distribution of combined Summer and Fall 2011 GPAs. Appendix I and J demonstrate there was normal distribution in SBA participants and the comparison group.

Null Hypothesis One

An independent samples *t*-test was used to analyze the first null hypothesis: There is no statistically significant difference in academic performance (as shown by grade point average) of Summer Bridge Academy participants from comparison group who did not participate in same program. An alpha level of .05 was used to measure significant difference in GPAs for the Summer 2011 and Fall 2011. Table 4 below displays the results of the independent samples *t*-tests for Summer 2011 term.

Table 4

Independent Samples t-Test for Summer 2011 GPA

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	7.847	.006	-2.967	89	.004	-.64750	.21822	-1.08110	-.21391
Equal variances not assumed			-2.926	72.408	.005	-.64750	.22128	-1.08857	-.20643

Table 4 above demonstrates the mean GPA for the Summer 2011 for SBA participants was 0.65 ($SE = 0.21822$) higher than the comparison group. There was a statistically significant difference in Summer 2011 mean GPA score between SBA participants and the comparison group, with SBA participants scoring higher than non-participants, $t(89) = 2.967$, $p = .004$.

Table 5 below displays the results of the independent samples t -tests for Fall 2011 term.

Table 5

Independent Samples t-Test for Fall 2011 GPA

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
Equal variances assumed	.630	.429	-.932	87	.354	-.23250	.24944	-.72828	.26328
Equal variances not assumed			-.931	85.960	.355	-.23250	.24979	-.72907	.26408

Table 5 above demonstrates the mean GPA for the Fall 2011 semester for SBA participants was 0.23 ($SE = 0.23250$) higher than the comparison group. There was no statistically significant difference in Fall 2011 mean GPA score between SBA participants and the comparison group $t(87) = .932, p = .354$.

For the purpose of accepting or rejecting the null hypothesis, an independent samples t -test was conducted for combined GPA for Summer and Fall 2011. Table 6 below displays the results of the independent samples t -test.

Table 6

Independent Samples t-Test for Combined Summer/Fall 2011 GPA

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	1.375	.244	-3.272	92	.002	-.62491	.19099	-1.00423	-.24559
Equal variances not assumed			-3.272	86.341	.002	-.62491	.19099	-1.00456	-.24526

Table 6 above demonstrates the mean GPA for the combined Summer and Fall 2011 GPA for SBA participants was 0.62 ($SE = 0.19099$) higher than the comparison group. There was a statistically significant difference in combined Summer and Fall 2011 mean GPA score between SBA participants and the comparison group, with SBA participants scoring higher than non-participants, $t(92) = 3.272, p = .002$.

There was a statistically significant difference between means ($p < .05$), and therefore, the null hypothesis can be rejected.

Null Hypothesis Two

An independent-samples t test was used to analyze the second null hypothesis: There is no statistically significant difference in retention rates in Summer Bridge Academy participants from comparison group who did not participate in same program. An alpha level of .05 was used to measure significant difference in Retention rates during the Fall 2011 semester. Tables 7.1

and 7.2 displays data for both groups and the results of the independent samples *t*-tests for Fall 2011 term Retention rates.

Table 7.1

Retention Means Scores

	N	Mean	Std. Deviation	Std. Error Mean
Non Participants	48	.8542	.35667	.05148
SBA Participants	47	.8723	.33732	.04920

Table 7.2

Independent Samples t-Test for Retention

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
Equal variances assumed	.261	.611	-.255	93	.799	-.01817	.07126	-.15967	.12332
Equal variances not assumed			-.255	92.890	.799	-.01817	.07121	-.15959	.12324

Table 7.2 above demonstrates that the mean Retention rate for SBA participants was 0.01817 ($SE = 0.07126$) higher than the comparison group. There was no statistically significant

difference in mean Retention rates between SBA participants and the comparison group $t(93) = .255, p = .799$.

There was no statistically significant difference between means ($p < .05$), and therefore, the null hypothesis is accepted.

Null Hypothesis Three

An independent-samples t test was used to analyze the second null hypothesis: There is no statistically significant difference in Persistence rates in Summer Bridge Academy participants from the comparison group who did not participate in same program. An alpha level of .05 was used to measure significant difference in Persistence rates into the Spring 2012 semester. Tables 8.1 and 8.2 below display Persistence data for both groups and the results of the independent samples t -tests for Persistence rates.

Table 8.1

Persistence Means Scores

	N	Mean	Std. Deviation	Std. Error Mean
Non Participants	48	.8542	.35667	.05148
Summer Bridge Participants	47	.8085	.39773	.05801

Table 8.2

Independent Samples t-Test for Persistence

Persistence	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	1.401	.240	.589	93	.557	.04566	.07747	-.10819	.19950
Equal variances not assumed			.589	91.462	.558	.04566	.07756	-.10840	.19971

Table 8.2 above demonstrates that the mean Persistence rate for SBA participants was 0.04566 ($SE = 0.0747$) lower than the comparison group. Therefore, there was no statistically significant difference in mean Persistence rates between SBA participants and the comparison group $t(93) = .589, p = .557$.

There was no statistically significant difference between means ($p < .05$), and therefore, the null hypothesis is accepted.

Summary

As a result of the data analysis and the findings, this researcher rejects the first null hypothesis as there was a statistically significant difference in combined Summer and Fall 2011 mean GPA score between SBA participants and the comparison group, with SBA participants scoring higher than non-participants. However, the second and third hypotheses were accepted, as there was no statistically significant difference in mean Retention and Persistence rates between SBA participants and the comparison group.

CHAPTER FIVE: DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Discussion

The purpose of this causal-comparative quantitative study was to examine the relationships between the efficacy of student participation in a Summer Bridge Academy (SBA) and the impact on student success.

This study was guided by and intended to answer the following: Is there a significant difference in academic performance, retention rate, and persistence rate of Summer Bridge Academy (SBA) participants and similar non participants? In this section, all null hypotheses are discussed in light of results from the previous chapter.

The first null hypothesis stated:

H₀₁: There is no statistically significant difference in academic performance (as shown by grade point average) of first-year first-generation Latino college students who participate in Summer Bridge Academy from like students who do not participate in same program.

As a result of the last chapter, there was a statistically significant difference in combined Summer and Fall 2011 mean GPA score between SBA participants and the comparison group, with SBA participants scoring higher than non-participants. Therefore, this null hypothesis was rejected.

These findings are aligned with Chickering and Reisser's (1993) Theory on Student Development. The authors were advocates for the development of students' psychosocial development in an effort to assist students through the college system successfully. As it relates to Chickering and Reisser's Development of Competence theory, the SBA participants were challenged through a cohort of courses in English Reading and Writing while receiving

supportive services such as tutoring. SBA participants were also enrolled in a guidance counseling course that addressed college study skills and critical thinking abilities.

First-generation college (FGC) students must find a healthy balance between home and school often struggle to find a median (Jehangir, 2008). At home, FGC students lack collegiate support from parents and other loved ones. At school, students lack empathy from non first-generation college students as well as academic personnel. SBA participants had access to a program counselor who monitored participants throughout the day and week for any emotional distress and was available for personal and academic counseling on individual basis. Further, SBA participants were placed in a learning community consisting of peers with similar cultures, which helped to bridge the gap of their college culture and home culture. These factors addressed issues of marginalization and contributed to increased GPAs during the Summer and Fall 2011.

The second null hypothesis stated:

H₀₂: There is no statistically significant difference in retention rates of first-year, first-Generation, Latino college students who participate in Summer Bridge Academy from like students who do not participate in same program.

The mean Retention rate for SBA participants was 0.018 higher than the comparison group ($SE = 0.07$). However, there was no statistically significant difference in mean Retention rates during the Fall 2011 semester.

Although the null hypothesis was retained, it is notable that the rate of retention was higher among SBA participants. This is supported by Noel, Levitz, and Saluri's Myths on Attrition (1991). Noel et al. (1991) reported that, often, students base their decisions to stay in college or leave by weighing the benefits against the cost. The "cost-benefit scale" (p. 10) is

used by students to analyze the financial cost of college attendance and the cost of time. The commodity of time is weighed against the potential benefit that students perceive they will receive while in higher education. If the benefit appears to be insignificant on the scale, students are more apt to leave. Further, Noel et al. (1991) identified academic boredom and uncertainty as a theme of attrition. As the authors noted, “one of the first objectives of an institution ought to be to help students think through, in a very rational, informed way, the kinds of careers or majors that are most appropriate for them” (p. 11). In connection, student boredom is often a result of lack in academic direction. Students who do not have a clear objective or academic goal are at risk for dropping out. Each Summer Bridge Academy (SBA) participant met with a counselor and developed a student education plan which outlined classes necessary that pertained to their academic goals.

In Tinto’s (1993) theory on student retention, it was reported that multiple variables exist which often lead to students’ departure from institution of higher education. During the high school to college transition stage, students begin to withdraw from the norms and values of their home environment but have not yet begun assimilating to new college customs. Students are therefore in a period of transition. The intensity level of the transition will depend on degree of difference between their home environment and college customs. Tinto argued that students who come from home environments which are drastically different from the norms and behaviors of the college community will have more difficulty with the adjustment process. The Summer Bridge Academy (SBA) addressed participants’ potential transition issues by providing courses in a learning community model and providing a program counselor. The goal of Summer Bridge Academy (SBA) is that students complete the program with a mastery of college success skills that will guide them through the rest of their college career. Further, participants enrolled in

culturally themed English courses which allowed them to maintain old norms while adopting new norms.

The third null hypothesis stated:

H₀₃: There is no statistically significant difference in persistence rates of first-year, first-generation, Latino college students who participate in Summer Bridge Academy from like students who do not participate in same program.

The mean Persistence rate for SBA participants was 0.045 lower than the comparison group ($SE = 0.07$). There was no statistically significant difference in mean Persistence rates between SBA participants and the comparison group.

These findings may be aligned with previous studies that found that, in general, first-generation college students are at greater risk of dropping out before completion of their educational goal in comparison to non first-generation college students (Settle, 2011), as students must negotiate the educational pipeline “if they wish to thrive in an information- and service-driven economy” (Green, 2006, p. 21).

Wang and Castañeda-Sound (2008) found that FGC students have lower levels of academic self-efficacy, or “a belief in one’s ability to perform the tasks necessary for success in school” (p. 4). For FGC students, who experience low academic self-efficacy, the lack of proper support systems at home and at school decrease their chances of academic success. Too often, when students are unable to maneuver in and out of both arenas, they choose to drop out of college so that they can fulfill the duties and desires of their parents.

The Persistence rates had a marginal difference in SBA and non participant groups. The lack of significant improvement is aligned with Jehangir’s (2009) study of learning communities in which multicultural curricula were utilized to allow participants to understand their cultures as

well as their peers. Participants in the learning community in the Jehangir (2009) study had significant impact on persistence. James, Bruch, & Jehangir (2006) found that learning communities were developed to help FGC students bridge the home and school environments. Traditionally, the purpose of learning communities has been to support FGC students during their first academic year. For first-generation, low-income students, participation in learning communities can be more intensely engaging. Jehangir (2009) stated that “learning communities have emerged as one way in which to bring interdisciplinary, multicultural curricula into a structured space that allows diverse student groups to find a sense of belonging” (p. 34). Jehangir found a higher success rate in persistence and retention for first-year students enrolled in learning communities in which multicultural curricula are utilized. Through an integrated vision shared between students and faculty, peers in the learning community gain the support that is often lacking for FGC students. Therefore, this researcher concludes that modification to the SBA curricula to reflect multicultural studies may assist students with isolation and marginalization and increase persistence and retention.

Conclusions

An achievement gap in higher education exists. First-generation Latino college students transfer and graduate with four-year degrees at lower rates than their White counterparts (Baum & Ma, 2007; Bohon, Macpherson, & Atilas, 2005) while college success among Hispanic/Latino college students lags nationwide (U.S. Census Bureau, 2010). Further, first-year college students of all ethnic backgrounds have lower rates of persistence than continuing college students (Mansfield et al., 2004).

Research on first-generation Latino students in their first-year of college is minimal. The purpose of this study was to examine this specific student population in an effort to fill the gap in the literature and to identify best practices.

This study was guided by and intended to answer the following: Is there a significant difference in academic performance, retention rate, and persistence rate of Summer Bridge Academy (SBA) participants and similar non participants?

Based on the findings, SBA participants had a higher combined GPA during the Summer and Fall 2011 semesters than the comparison group. However, there was no statistically significant differences in Retention or Persistence rates between the SBA and comparison groups. This researcher surmises that students in the SBA outperformed non participants during the Summer 2011 semester as a result of various factors:

- Learning Community Cohort
- Intrusive Counseling
- Intensive English preparatory instruction with cultural perspective
- Intrusive tutoring
- College success skills course

SBA participants transitioned into college more seamlessly, as the SBA assisted them with marginalization issues that often take place during students' first academic year in college.

However, the effects of the Summer Bridge Academy diminished during the Fall 2011 semester and were eliminated into the Spring 2012 semester as program participants no longer had the supportive services they acquired during the Summer 2011 semester.

Implications

According to Settle (2011), the “opportunity to establish a model to estimate persistence of first-generation students at two-year colleges is important for students and for the educational institutions” (p. 282). A framework would assist college administrators, instructional faculty, and student services professionals in identifying best practices in assisting first-generation, first-year, Latino college students.

This study provided insight in how the SBA utilized strategies with the goal of assisting participants during the beginning of their journey at the community college level. The findings illustrate success rates during the time in which students received supportive services from the SBA. However, the null hypotheses related to retention and persistence rate were accepted. Although SBA participants had higher combined GPAs in summer and fall, true success is measured by students’ ability to reach their academic objective. Therefore, this researcher recommends modification to the SBA in which other student success strategies are implemented. Jenhangir’s (2009) study of a learning community found that participants had a significant impact in long-term persistence and retention. Participants in the study were exposed to multicultural curricula which are not found in the SBA.

This research measured and analyzed the effectiveness of a transition program for Latino, first-generation college (FGC) students in their first year of community college. Although this study was primarily focused on Latino, community college students, similar programs with a modified curriculum may increase student success across other student populations who have an achievement gap in the college and university system.

This researcher surmises that the gap in the literature was addressed but not closed. Various limitations existed and recommendations for future research are addressed below.

Limitations

This study was limited by the following factors: duration of time period being studied, specific population subjects, and the ex-post facto research design. Further, threats to internal validity were encountered as this researcher was a counselor for the SBA during the 2012 Summer session.

This study researched success rates of students who participated during a Summer Bridge Academy (SBA) against similar students who did not participate in the SBA. The data which were measured included GPAs for Summer 2011, Retention during Fall 2011, and Persistence into Spring 2012. This study was limited in that success during the Spring 2012 and beyond was not measured. Student success ought to be measured by rate of students who complete their declared academic goals. This study was limited to students' first academic year. The following section includes recommendations for future research as it relates to expanding the time frame for this research and the benefits of a longitudinal study.

The focus of this study was on first-generation, Latino community college students in their first academic year of study. The specificity of this population may pose a limitation in an attempt to scale it to other student populations whom are also experience a gap in academic success. The focus on community college students may also limit this study in scalability to four-year institutions. The SBA curriculum is specific to the population of the program. Therefore, the curriculum within the SBA is a limitation as the content of curriculum is intimately tied to student outcomes. If summer bridge programs at other community colleges are employing other iterations of courses, the expected outcomes would not be automatically correlated. The following section includes recommendations for future research as it relates to expanding the scope of this study.

The ex-post facto research design is a limitation and may pose a threat to this study's validity. SBA participants were not randomly selected for the SBA. Further, non SBA participants may not have had the opportunity to participate in SBA. The following section includes recommendations for future research as it relates to utilizing an experimental research design to maximize validity.

This researcher was a student services professional within Central Valley Community College and was one of the counselors for the Summer Bridge Academy during the 2012-2013 Academic year. Internal validity may be considered as a conflict of interest may exist. This researcher addressed this potential threat to validity by researching the SBA for the 2011 Summer session, in which the researcher was not part of the SBA program. With the assistance of the college's Institutional Research department, this researcher received a random sample for the comparison group, which was similar to SBA participant group as outlined in Methodology section. Therefore, threat to internal validity was minimized.

A limitation was found in the form of threat to validity. A power analysis determined statistical power of 0.78 based on effect size of 0.5 and significance level (α) of 0.05. The statistical power for this study is less than 0.80 and therefore may pose a threat to validity as there is an increased probability of Type II errors.

Recommendations for Future Research

As stated in the previous section, this study had various limitations that may have posed a risk to the validity of the findings and also limited the effectiveness of the study. The risk of Type II errors were increased due to 0.78 statistical power. The lack of longitudinal data, participant pool, and research design are addressed below.

This study's findings are limited to the Summer 2011 semester of Summer Bridge Academy (SBA) as data were not analyzed after the 2012 Spring semester. Therefore, during the Summer 2011 semester, SBA participants demonstrated a higher GPA when compared to the non-participant group. During the SBA, participants took part of a learning community, had access to an academic counselor, received intrusive tutoring, and had culturally themed lessons embedded in their curriculum. However, rates in retention and persistence diminished after the SBA. As a result, in future research, this researcher recommends a longitudinal study to identify the effectiveness of a Summer Bridge Academy over a longer period of time. The success rates of SBA participants and comparison group ought to be analyzed at one year intervals to gain thorough insight on SBA long term effects.

In future research, this researcher recommends an inclusive pool of participants not limited by ethnic background. A study consisting of a wider range of student demographics may increase the ability to replicate and scale program to community colleges across the country. The ability to reproduce student success strategies is vastly important in colleges experiencing gaps in academic success regardless of student demographics. Research of summer programs at the four-year institution level is recommended to allow for replication of student success strategies at all institutions.

Further, a recommendation for professional practice as it relates to first-year transition programs, is to structure a SBA program so that students with diverse life experiences have participation opportunities. A program with a student population that embodies a diversity of life experiences may result in a rich learning environment which may have a significant impact on persistence.

The ex-post facto research design was determined to be a limitation to the study. In future research, this researcher recommends consideration of an experimental design. For this study, an ex-post facto design may have skewed the data, as students had the ability to volunteer for the SBA. Therefore, a student's desire to participate in a SBA may be suggestive of the student's ability to persevere with or without participation of a SBA. An experimental design would allow for the random allocation of students into participant and non-participant groups.

Further, this researcher recommends a follow-on research to this study that incorporates qualitative data in the form of case studies. Case studies can be utilized to provide explanation of causal patterns (Gall et al., 2005). Therefore, interviews of program participants may shed light on the phenomena of patterns of achievement, retention, and persistence of first-generation, first-year, Latino college students in a structure transition program.

The purpose of this study was to assist college administrators, student services professionals, and instructional faculty in developing a framework to help bridge the existing college achievement gap. Ultimately, the purpose of this study was to assist students who lack parental support, experience marginalization, and are in need of additional academic support in realizing their academic goals. As Baum and Ma (2007) contended, education is the key to success. Further, attainment of a college degree is linked to increased career opportunities, and the gap in income between college graduates and non-graduates is vast (Baum & Ma, 2007; Engle & Tinto, 2008). The study by this researcher attempted to close the literature gap by addressing the needs of students in an attempt to assist underachieving students in pursuit of the Great American Dream (Adams, 1941).

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APPENDIX A: FRESNO CITY COLLEGE DATA COLLECTION APPROVAL**Fresno City College**

1101 East University Avenue, Fresno, California 93741 Phone: 559-442-4600 FAX: 559-485-7304

Vice President of Student Services

December 3, 2015

Liberty University
1971 University Boulevard
Lynchburg, VA 24515

To Whom It May Concern,

Fresno City College is committed to providing data as it relates to Jaime Duran's doctoral dissertation on the subject of First-Generation, First-Year, Latino, Community College students who participated in a Summer Bridge Program during the 2011/12 academic year in comparison with similar students who did not participate in the Program. The data will be stripped of identifying information to allow for confidentiality.

Should you have any questions, please let me know.

Sincerely,

Christopher Villa
Vice President of Student Services

APPENDIX B: LIBERTY UNIVERSITY INTERNAL REVIEW BOARD APPROVAL

LIBERTY UNIVERSITY.

INSTITUTIONAL REVIEW BOARD

December 21, 2015

Jaime V. Duran

IRB Application 2348: Academic Performance, Retention Rates, and Persistence Rates of First-Year, First-Generation, Latino College Students in a Summer Bridge Academy

Dear Jaime,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study does not classify as human subjects research. This means you may begin your research with the data safeguarding methods mentioned in your IRB application.

Your study does not classify as human subjects research because it will not involve the collection of identifiable, private information.

Please note that this decision only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued non-human subjects research status. You may report these changes by submitting a new application to the IRB and referencing the above IRB Application number.

If you have any questions about this determination or need assistance in identifying whether possible changes to your protocol would change your application's status, please email us at irb@liberty.edu.

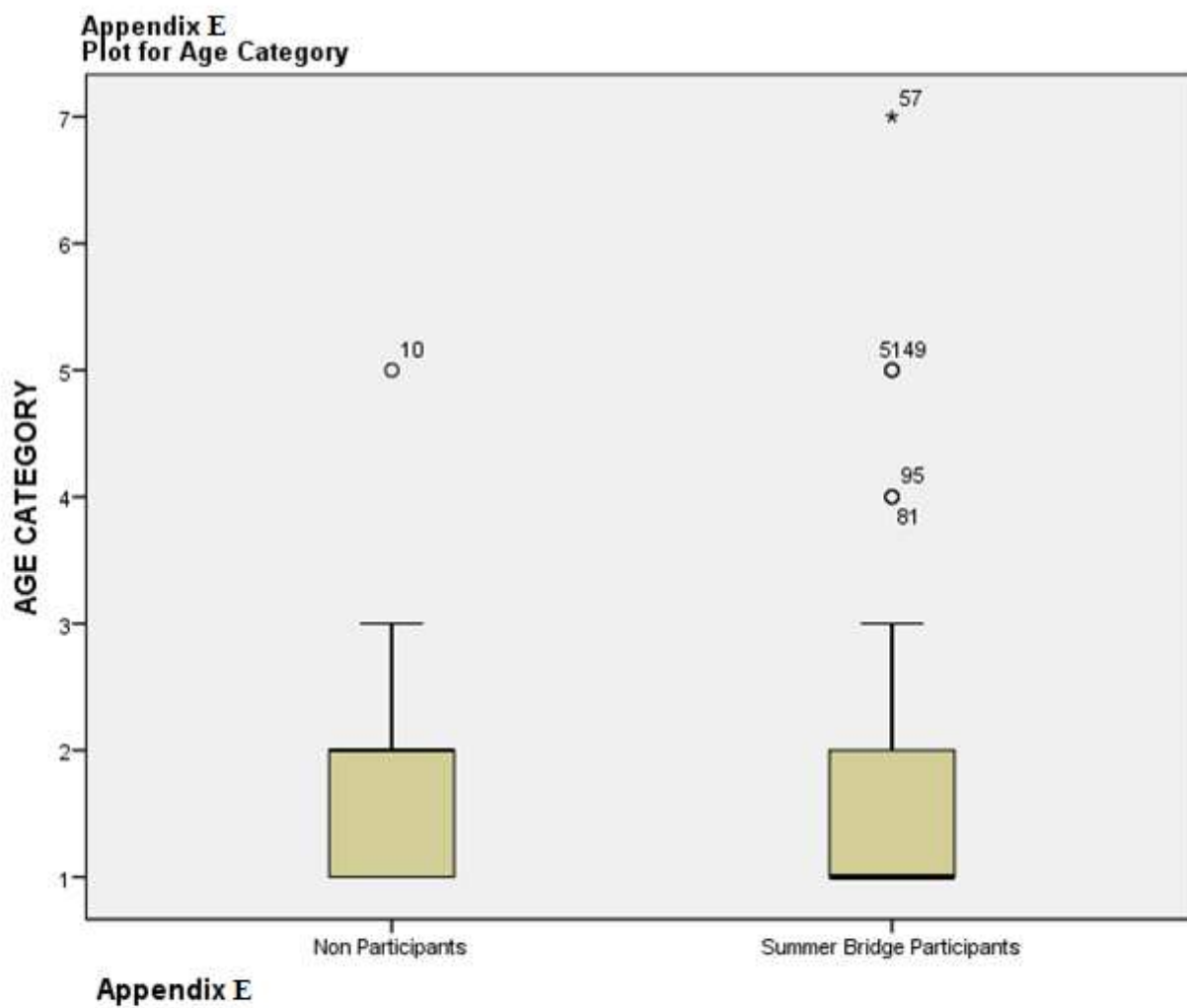
Sincerely,

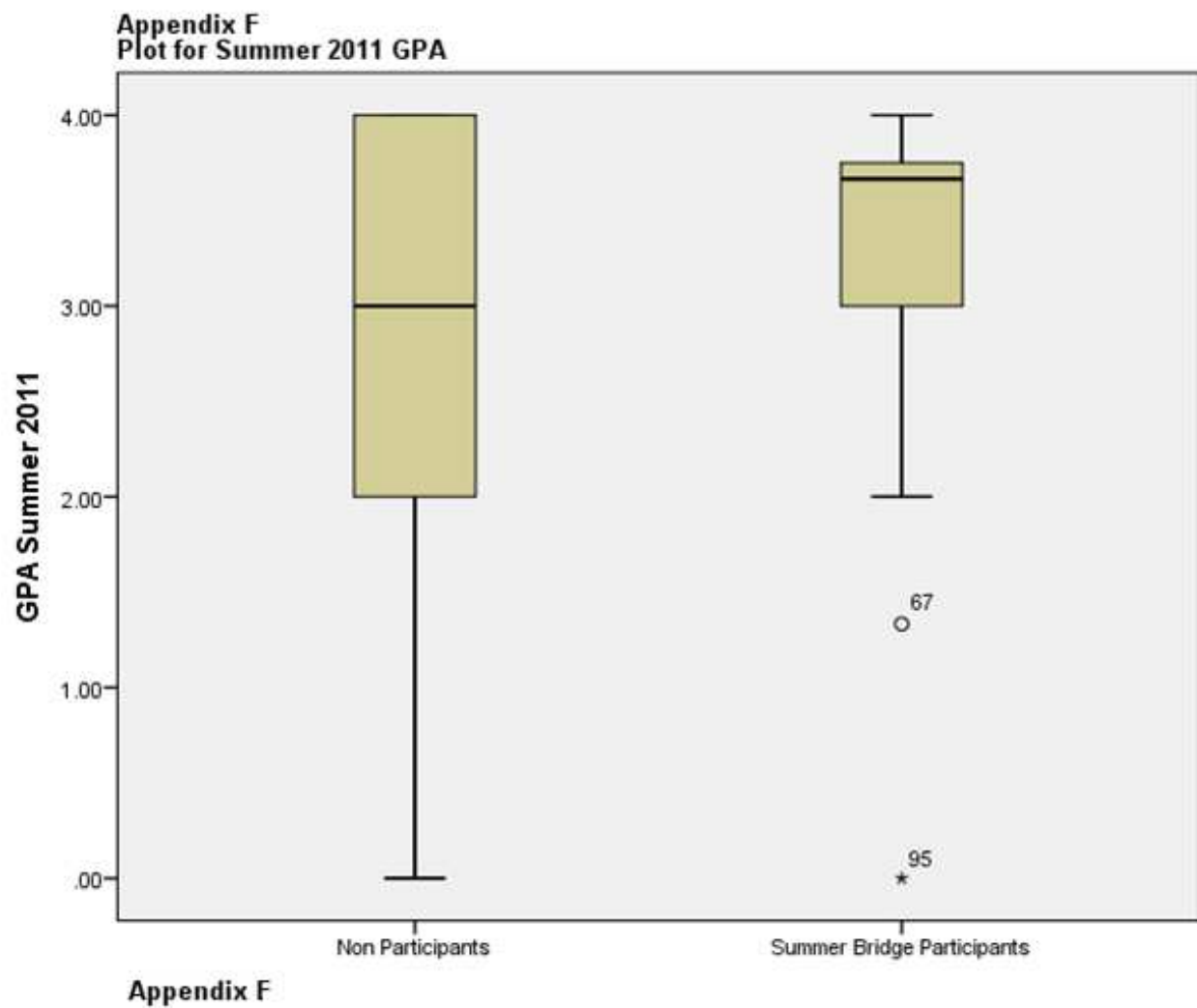
G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
The Graduate School

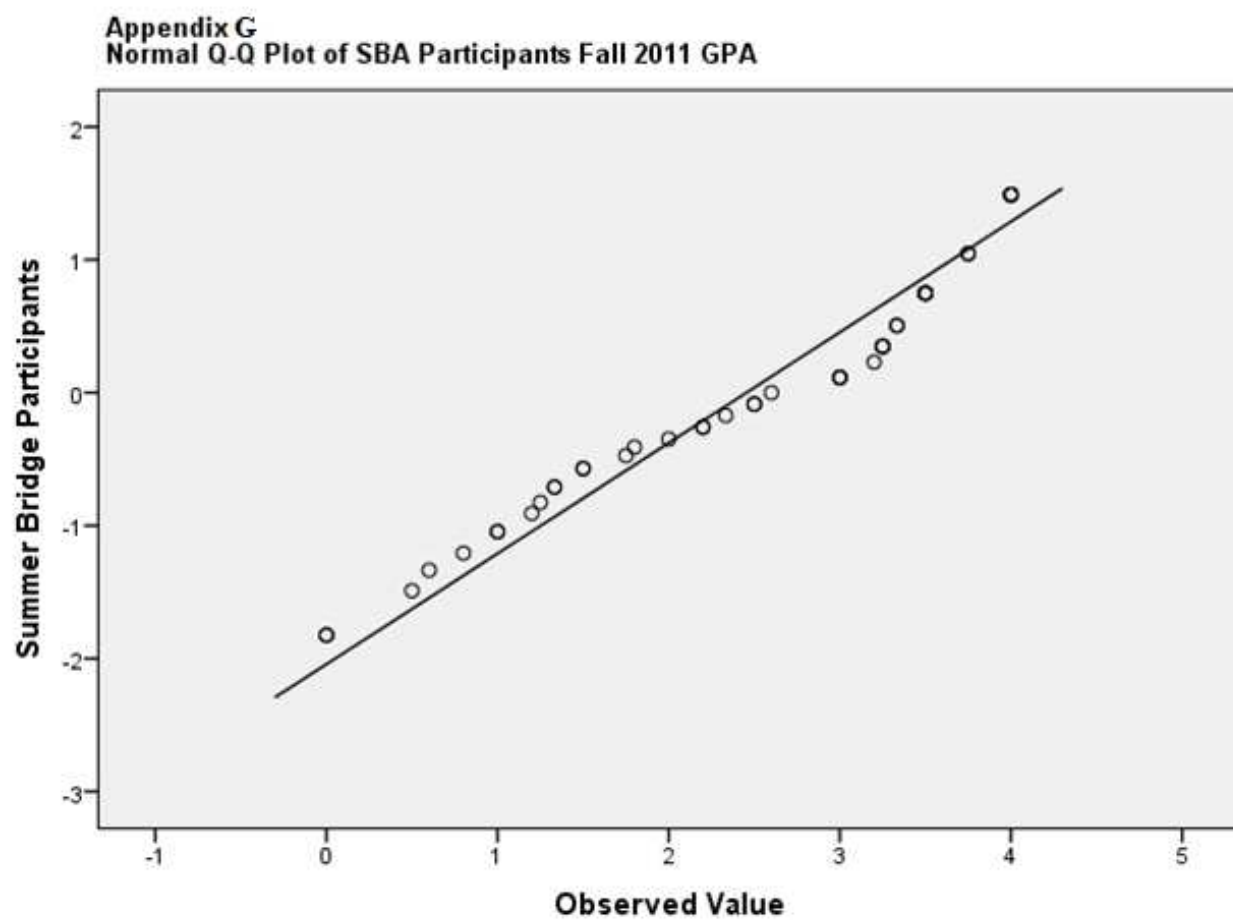
LIBERTY
UNIVERSITY.
Liberty University | Training Champions for Christ since 1971

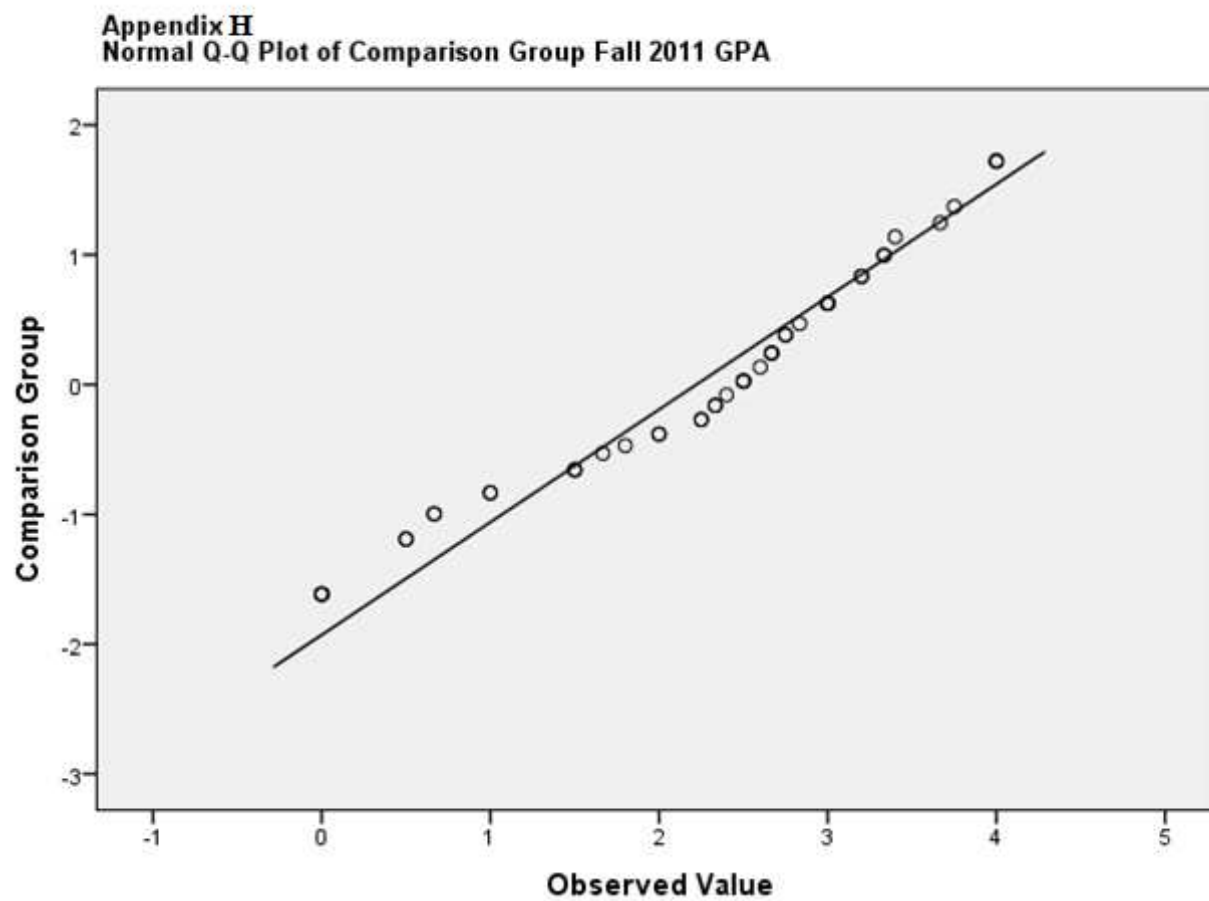
APPENDIX C: STATISTICALLY CONTROLLED ATTRIBUTES

Appendix C Statistically Controlled Attributes						
Comparison Group				SBA Group		
First-Generation College Student				First-Generation College Student		
	N	Percent			N	Percent
No	27	56.3		No	19	40.4
Yes	21	43.8		Yes	28	59.6
Total	48	100.0		Total	47	100
Low Income				Low Income		
	N	Percent			N	Percent
No	5	10.4		No	7	14.9
Yes	43	89.6		Yes	40	85.1
Total	48	100		Total	47	100
AGE CATEGORY				AGE CATEGORY		
	N	Percent			N	Percent
19 or younger	19	39.6		19 or younger	31	66
20-24	26	54.2		20-24	10	21.3
25-29	2	4.2		25-29	2	4.3
30-34	0	0		30-34	2	4.3
35-39	1	2.1		35-39	2	4.3
Total	48	100		Total	47	100
Hispanic				Hispanic		
	N	Percent		N	Percent	
No	13	27.1	No	12	25.5	
Yes	35	72.9	Yes	35	74.5	
Total	48	100	Total	47	100	
White			White			
	N	Percent		N	Percent	
No	44	91.7	No	43	91.5	
Yes	4	8.3	Yes	4	8.5	
Total	48	100	Total	47	100	
Asian			Asian			
	N	Percent		N	Percent	
No	41	85.4	No	40	85.1	
Yes	7	14.6	Yes	7	14.9	
Total	48	100	Total	47	100	
Other Race			Other Race			
	N	Percent		N	Percent	
No	46	95.8	No	46	97.9	
Yes	2	4.2	Yes	1	2.1	
Total	48	100	Total	47	100	
Gender			Gender			
	N	Percent		N	Percent	
Male	19	39.6	Male	18	38.3	
Female	29	60.4	Female	29	61.7	
Total	48	100	Total	47	100	
Appendix C						

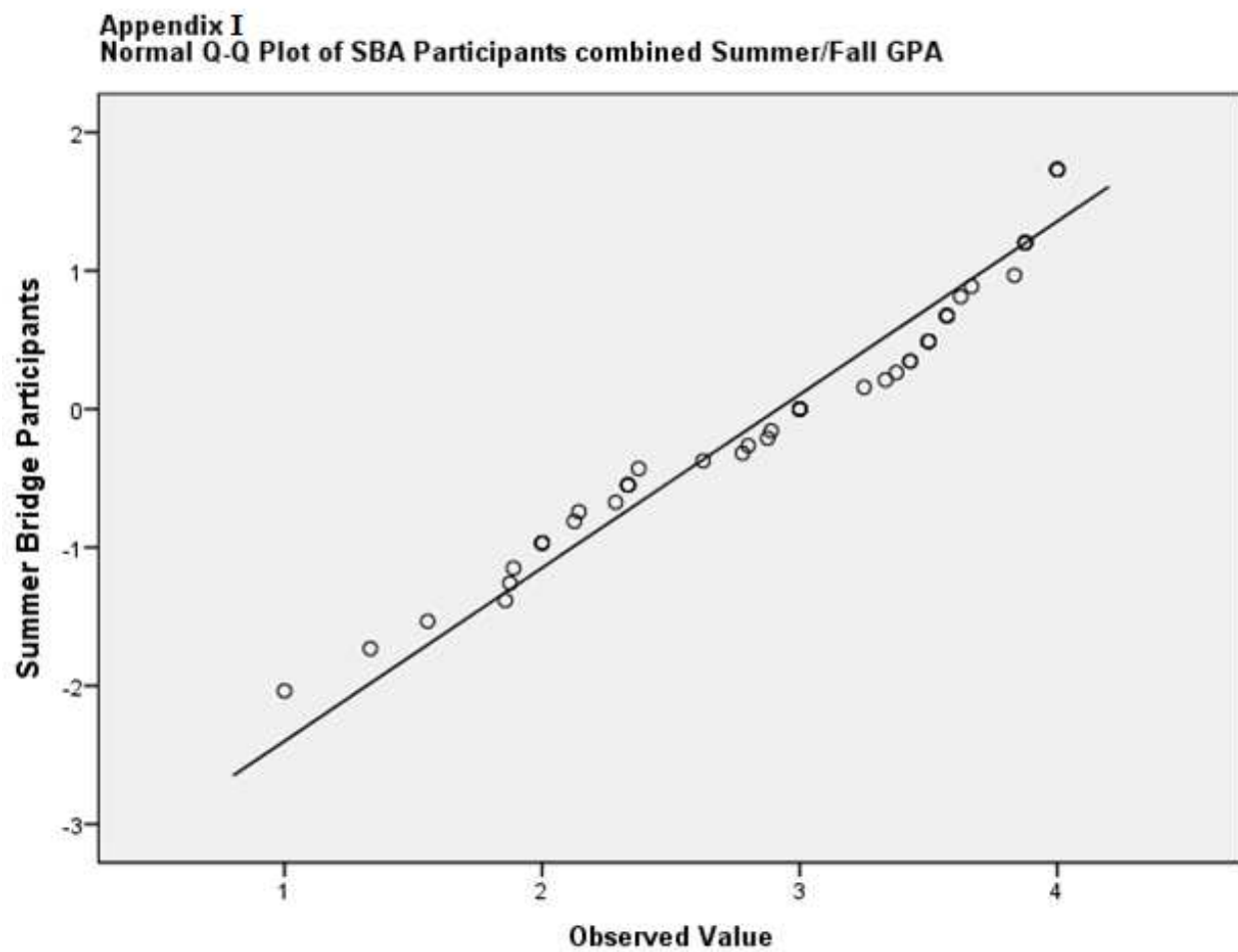
APPENDIX E: NORMALITY PLOT FOR AGE CATEGORY

APPENDIX F: NORMALITY PLOT FOR SUMMER 2011 GPA

APPENDIX G: NORMAL Q-Q PLOT OF SBA PARTICIPANT FALL 2011 GPA

APPENDIX H: NORMAL Q-Q PLOT OF COMPARISON GROUP FALL 2011 GPA

**APPENDIX I: NORMAL Q-Q PLOT OF SBA PARTICIPANT COMBINED
SUMMER/FALL 2011 GPA**



APPENDIX J: NORMAL Q-Q PLOT OF COMPARISON GROUP COMBINED
SUMMER/FALL 2011 GPA

