

Walden University ScholarWorks

Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies Collection

2020

Influence of Summer Bridge Programs on First-Generation Latino Students' Academic Success

Amber Dawn Gutzwiler Walden University

Follow this and additional works at: https://scholarworks.waldenu.edu/dissertations



Part of the Education Commons

Walden University

College of Education

This is to certify that the doctoral dissertation by

Amber Dawn Gutzwiler

has been found to be complete and satisfactory in all respects, and that any and all revisions required by the review committee have been made.

Review Committee

Dr. Briana Nicholson, Committee Chairperson, Education Faculty Dr. John Flohr, Committee Member, Education Faculty Dr. Catherine Watt, University Reviewer, Education Faculty

Chief Academic Officer and Provost Sue Subocz, Ph.D.

Walden University 2020

Abstract

Influence of Summer Bridge Programs on First-Generation Latino Students' Academic

Success

by

Amber Dawn Gutzwiler

MA, Heritage University, 2010

BA, Eastern Washington University, 2005

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Education

Walden University

December 2020

Abstract

Colleges and universities have used programs like the summer bridge program (SBP) to improve academic abilities and retention. The research on the effectiveness of SBPs is inconclusive. With a focus those on who required remediation in writing, the purpose of this quantitative quasi-experimental study was to evaluate the influence of a SBP on firstgeneration Latino students' weighted grade point average (GPA) and retention. Tinto's theory of student retention was used as the framework. To determine the effectiveness of the SBP on first-generation Latino students, this study focused on comparing the variables between those who took the SBP versus a remedial English class. Archival data of 24 first-generation Latino students took part in the SBP for writing and 40 who took remedial English was used to analyze and compare the SBP effectiveness between 2013 and 2017. The results of the Chi-Square and t-test showed statistically significant differences between students in the SBP and remedial English with weighted GPA (p =.008) and retention (p = .011) being significantly higher for students in the remedial English course compared to the SBP. The results indicate the SBP was less effective than the remedial English course and the SBP should be further evaluated to help it become more effective for all students. This study promotes social change by adding to the conversation about the potential of SBPs for first-generation Latino students and the potential to improve the SBP in one location. This information can then be used by other locations to evaluate and potentially improve their programs to serve this population of students better.

Influence of Summer Bridge Programs on First-Generation Latino Students' Academic Success

by

Amber Dawn Gutzwiler

MA, Heritage University, 2010

BA, Eastern Washington University, 2005

Doctoral Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Education

Walden University

December 2020

Dedication

This dissertation is dedicated first and foremost to the love of my life, Eric John Gutzwiler. You always believed in me and what I was capable of accomplishing. Even though cancer took you from us too soon, you remained my motivation to complete this process. I miss you every day. Always and forever.

This dissertation is further dedicated to my incredibly loving and supportive parents, Carolyn and Richard Andrews. You raised me to believe that I could do and be anything, and I have taken that and finally reached my life goal. Thank you for your never-ending love and support. This would not have been possible without you.

Finally, this dissertation is dedicated to all my amazing and supportive students, both past and present! I hope this document proves that anything is possible. No matter what the obstacles are, or how impossible the struggles seem that come along, you can accomplish anything.

Acknowledgments

I first want to thank Dr. Nicholson, my committee chair. You have always been a huge supporter of mine and always reminded me that I could complete this daunting challenge. Even when I tried to give up, you pushed me to stick it out, and I am so glad that you did.

Next, I want to thank Dr. Flohr, my methodologist. You have provided a wealth of knowledge that helped me to understand this process and my statistics better than I had ever hoped, as well as a sounding board for ideas. I could have never done this without you and your support.

I also want to thank Dr. Watt, my URR. I know this process was not easy and I did not always like the suggested changes, but I knew they were for the best. Your belief in the importance of my project and dissertation helped to fuel that fire I needed to finish.

I also want to thank my study site, particularly Dr. Sonoda for allowing me to use their data and move forward with my intended project and SaraBecca Martin for her help along the way. And of course, a huge thank you to Dr. Loren Schmidt for his belief in me and pushing me academically.

Finally, but never least, I want to thank my family, my Wildcat Family, and especially my boyfriend Jason Conatser, and my close friends: Michelle Schultz, Sara Rodriguez, Lauren Thomas, and Jennifer Hines. When I was close to giving up, you all pushed me to continue. Thank you for your continuous love and support.

Table of Contents

Li	st of Tables	iv
Li	st of Figures	V
Ch	napter 1: Introduction to the Study	1
	Introduction	1
	Background	1
	Problem Statement	3
	Purpose of the Study	4
	Research Questions and Hypotheses	5
	Theoretical Framework for the Study	6
	Nature of the Study	7
	Definitions	8
	Assumptions	9
	Scope and Delimitations	9
	Limitations	10
	Significance	11
	Summary	12
Cł	napter 2: Literature Review	14
	Introduction	14
	Literature Search Strategy	14
	Theoretical Foundation	15
	Stages of Institutional Integration	16

Student Departure	19
Academic Preparedness	24
Theoretical Limitations	25
Literature Review Related to Key Variables and Concepts	26
First-Generation Students	26
Campus Setting Influence on Latino Student Retention	32
Implications	47
Summary	48
Chapter 3: Research Method	50
Introduction	50
Research Design and Rationale	50
Methodology	53
Population	53
Sampling and Sampling Procedures	54
Procedures for Recruitment, Participation, and Data Collection	55
Instrumentation and Operationalization of Constructs	56
Threats to Validity	59
Ethical Procedures	60
Summary	60
Chapter 4: Results	62
Introduction	62
Data Collection	63

Results	67
Summary	67
Chapter 5: Discussion, Conclusions, and Recommendations	68
Introduction	68
Interpretation of Findings	69
Findings Related to the Literature	69
Findings Related to the Theoretical Framework	71
Limitations of the Study	72
Recommendations	73
Implications	75
Positive Social Change	75
Recommendation for Practice	76
Conclusion	77
References	79
Appendix A: IRB Approval Forms	91

List of Tables

Table 1. Fall Enrollments at the Study Site	53
Table 2. Symmetric Measures	64
Table 3. Chi-Square Tests	65
Table 4. Course Retention Crosstabulation	65
Table 5. Group Statistics	66
Table 6. Robust Tests of Equality of Means	66

List of Figures

Figure 1. Tinto's Model of Student Retention	
--	--

Chapter 1: Introduction to the Study

Introduction

As technology and industry continue to advance, and as jobs become more demanding, it has become increasingly evident that postsecondary degrees are necessary. Postsecondary education is also essential because it reduces the unemployment rate, which then leads to more government tax revenues and lower financial expenditures (Tinto, 1993). Despite the need for and benefits of completing a post-secondary education, only 59% of those enrolled in a four-year college finish their intended degree within 6 years (Kodama, Han, Moss, Myers, & Farruggia, 2018).

Due to low numbers of degree completion and increased pressure on universities to improve retention and graduation rates, research studies have investigated which strategies and programs lead to higher retention rates and more students graduating with a degree. However, previous research has focused mostly on retention for student populations in general or retention among certain minority groups such as African American students. This research has left out one particular minority group on college campuses around the U.S.: first-generation Latino students. This current study helped address lack of research on retention efforts, particularly summer bridge programs (SBPs) and their influence on first-generation Latino students by reviewing one particular SBP at a Hispanic serving institution (HSI) using Tinto's theory of student retention.

Background

Student retention continues to be an issue, despite the growth of technological advancements and the need for highly educated workers. Carnevale (2007) said, "we

need to dramatically increase post-secondary attainment, especially among underserved groups. Without them, we simply cannot produce enough skilled workers for the jobs of the future" (p. 34). Each departure from postsecondary education is also a loss of revenue needed to keep institutions open and running. It is for these reasons that retention has been a steady focus for all postsecondary institutions.

According to Tinto (1993), four types of personal experiences influence a student's decision to withdraw from postsecondary education: adjustment struggles, academic difficulty, incongruence with the institution's culture, and feelings of isolation. Since first-generation Latino students tend to enter college with fewer resources and have lower confidence in their abilities, most retention efforts offer academic support to promote success and address the specific issue of academic difficulty. However, there are other issues such as social integration that need to be addressed for retention efforts to have a lasting effect for first-generation Latino students. One type of program that addresses these issues is SBPs.

SBPs were developed to address the needs of students coming to college and often target first-generation, low-income, and minority students who are not yet ready for the academic rigor of college. Before freshmen begin their first semester, SBPs address both academic and institutional knowledge students need to be successful (Gonzalez Quiroz & Garza, 2018). The programs are useful in terms of preparing students for their first year by helping develop academic skills needed to succeed, particularly for Latino students.

There have been no research studies focused on how SBPs impact the retention of first-generation Latino college students specifically. If there is any hope of retaining more students, especially minority groups who need to become a more increased presence on college campuses, this lack of research needed to be remedied. One way to do this was to study a particular program at a university located in central Washington with a large number of Latino students. The study site has a student population made up of 70% Latino and 85% first-generation students, and a six-year graduation rate of 22%, it was a location with archival data to determine if this university's SBP in writing has helped this population be more successful in postsecondary education then they may have been in the past.

Problem Statement

Postsecondary student attrition rates remain higher for minority groups, despite government-sponsored programs to improve student retention (Tovar, 2015). One minority group that struggles with first-year retention are first-generation Latino students, with 8.5% of bachelor's degree holders and 13.2% of associate degree holders being Latino (Fry & Lopez, 2012). Since first-generation Latino students continue to enroll in universities in larger numbers and make up 25% of the student population at two-year institutions and 13% at four-year institutions (Fry & Lopez, 2012), their specific needs and challenges should become a focus in terms of retention efforts. One possible way to address their needs and improve college retention for this specific minority group is through the use of SBPs. However, the only way to determine if SBPs effectively address

the unique needs of this group of students is using institution-specific research with firstgeneration Latino students.

The research problem addressed by this study is the lack of current research focusing on the influence of SBPs on postsecondary retention for first-generation Latino students who require remediation in writing. Therefore, this institution-based study assessed one SBP writing program and its impact on first-generation Latino students. This institution-specific quantitative study on the effectiveness of SBPs will help explain issues involving the retention of first-generation Latino students. This research can then help other universities reflect on their own practices and how they serve first-generation Latino student populations and improve their understanding of ways to improve their retention rates.

Purpose of the Study

The purpose of this quantitative quasi-experimental study was to evaluate the potential influence of one SBP on the retention of first-generation Latino students who required remediation in writing. This study compared weighted grade point average (GPA) and second-year enrollment of first-generation remedial Latino students who chose to participate in the intensive SBP compared to those who decided to take the remedial English course during their first semester. This study also compared second-year retention and GPA between those who participated in the SBP versus those who enrolled in remedial English. Dependent variables for this research were weighted cumulative GPA at the end of the third semester and continued university enrollment into the second year (fall to fall). The independent variable for this study was the chosen

educational remediation, the SBP or fall remedial English class. The SBP for writing has been in effect longer than the SBP for math and has the highest number of Latino students enrolled, providing the potential for more data to be analyzed.

Research Questions and Hypotheses

Research questions and hypotheses driving this study were as follows:

- *RQ1:* Are there differences in terms of retention rates after three semesters between Latino first-generation students who took part in a SBP for writing and those who took remedial English?
- H_01 : There are no significant differences in terms of retention rates after three semesters between Latino first-generation students who took part in a SBP for writing and those who took remedial English.
- H_al : There are significant differences in terms of retention rates after three semesters between Latino first-generation students who took part in a SBP for writing and those who took remedial English.
- *RQ2:* Are there differences between Latino first-generation SBP writing participants' GPA by the end of the third semester and those who took remedial English?
- H_02 : There are no significant differences between Latino first-generation SBP writing participants' GPA by the end of the third semester and those who took remedial English.
- H_a2 : There are significant differences between Latino first-generation SBP writing participants' GPA by the end of the third semester and those who took remedial English.

Theoretical Framework for the Study

This study used Vincent Tinto's theory of student retention to explore and understand archival data and how the data connected to student retention. This theory was used to provide an understanding of both institutional and outside forces such as family or finances that can pose problems for at-risk students who struggle with completing their intended degree. This theory helped clarify how reasons for departure differ between students who leave in the first year versus those who leave after an extended period of time. This study only looked at student retention through enrollment beyond the first year, but Tinto's theory was used to make sense of data and why this population of students may depart before the beginning of their second year.

Tinto developed his theory of student retention using Durkheim's theory of suicide as his foundation. Tinto (1975) noted that if people entering the institution are not integrated, both socially and academically, into the institution's society, they will be much more likely to withdraw from the institution due to feelings of isolation. This theory, explained in more detail in Chapter 2, shows that social and academic integration is imperative to student success and retention within academic settings. It is this academic and social integration process that this study focused on through the evaluation of SBPs.

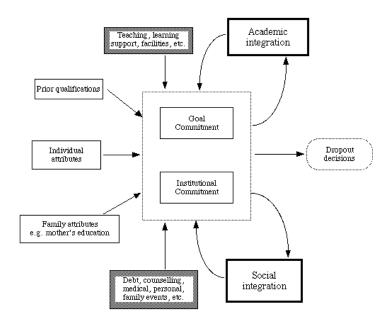


Figure 1. Tinto's model of student retention. From "Dropout from Higher Education: A Theoretical Synthesis of Recent Research" by V. Tinto, 1975,. Review of Educational Research, 45, 89-125. DOI: 10.3102/00346543045001089.

Nature of the Study

To assess the effectiveness of SBPs on first-generation remedial Latino students, this quantitative quasi-experimental study focused on one particular SBP used at a central Washington state private university as the study site. This private university serves a large population of first-generation Latino students who make up approximately 70% of the overall student population, which made it a promising location to assess the effectiveness of SBPs on this student population and their retention rates. This study compared weighted GPA and second-year enrollment of first-generation Latino students who required writing remediation and were enrolled in the institution's intensive SBP compared to those who chose to enroll in remedial English courses during their first semester.

Definitions

For this study, the following terms are defined.

First-generation students: Students who are the first of their family to attend postsecondary education as determined by the National Center for Education Statistics (NCES).

Hispanic Serving Institutions (HSI): Any postsecondary institution that has a total enrollment of at least 25% Hispanic students, either part-time or full-time (Hispanic Association of Colleges and Universities [HACU], 1999).

Latino: Students who identify as Latino or Hispanic according to demographic data, commonly (but not exclusively) from Mexico, Cuba, Puerto Rico, Central, or South America (NCES, 1997).

Remedial English: A required semester-long English course for students who scored below average on the study site's entrance assessment exam. The course is labeled ENG 99A or B and focuses on composition, grammar, punctuation, and usage. The course also works on skills in reading, summarizing, and responding to academic text.

Retention: Continuing enrollment at the university over each consecutive year (Bir & Myrick, 2015; Cabrera, Miner, & Milem, 2013).

Student Attrition: Departure of students from a postsecondary institution (Castleman & Page, 2014).

Summer bridge program (SBP): An optional summer program that can be taken before students begin their first year at the university if they scored too low to take English 101 or college-level math during the university entrance assessment. This

summer course helps students avoid remedial courses during their first semester while still preparing them for the academic work they will be facing in college (Bir & Myrick, 2015).

Weighted grade point averages (GPA): A student's GPA is a calculation which involves dividing the number of grade points earned by the total possible grade points during a given term period (Bacon & Bean, 2006). The GPA is then weighted, a calculation based on grades and the number of college credits each term. For instance, a student GPA of 3.0 on a four-point scale is then divided by credit hours taken during the semester.

Assumptions

The current study involved evaluating the potential influence of SBPs on first-generation remedial Latino students. The first assumption for this study was that the data was originally reported accurately by students during enrollment. The second assumption was that data, once collected by the university during enrollment, was stored securely and remained accurate. Another assumption was that data collected from the university was accurately matched to student data and kept anonymous through a unique numbering system. It was assumed that data collected from the university represented the population adequately.

Scope and Delimitations

This study involved addressing what could help first-generation Latino students be more successful in postsecondary education, particularly those who already struggle academically. To address this question, this study focused on a small private university that has a large Hispanic population in central Washington. Archival data collected from the site university was limited to students who were identified as needing to take a remedial writing course program, either the SBP or remedial English course. This provided a starting point to determine the sample population and this program's impact on this population.

To keep the study focused on the target population and study site, the delimitations included limiting information to only those that fit the parameters of the independent and dependent variables. Therefore, the students not enrolled in either remedial writing program were not included or considered because this study focused on the influence of SBPs on first generation Latino students. The current study also remained focused on one study site that was easily accessible for the researcher, so other similar programs were not included. Once data was collected, the theoretical framework defined boundaries for this study. Vincent Tinto's theory of student retention provided a basis for this study. While the chosen university was not a typical university setting, with most students still living at home versus a campus setting, this theory helped to better understand placement of students.

Limitations

A limitation of this study was the limited generalizability of potential results. Since the study focused on one postsecondary institution and used archival data that the institution already had on file, it would be difficult to extrapolate results to another location.

Another limitation could be the researcher's part-time employment with the participating study site. As an adjunct faculty member at this university, this could be seen as a conflict of interest. However, the classes taught as an adjunct were not a part of the same department that runs the SBP or remedial English courses. Instead, the researcher only teaches courses such as Applied Linguistics and English Teaching Techniques. Therefore, these classes and students had no connection with those programs or to students enrolled in them. To ensure there was no connection between classes and students, data was also protected and anonymous. While this study assessed the program's effectiveness over a span of 5 years, populations and students do change. Therefore, future research studies should determine the effectiveness of SBPs using more current data and different locations.

Significance

There have been few studies addressing SBPs and their effects on first-generation remedial Latino students. This study assessed the effectiveness of one university's SBP for first-generation Latino students over a period of 5 years. It addressed how this program impacted students in terms of their GPA over their first three semesters as well as continued enrollment in the university. This study can now provide a starting point for the university to address the SBP's effectiveness in general and how it influences students. This study will also help administrators ensure they address the needs of their students, regardless of their background.

Findings from this research can be used at other universities with SBPs to help incoming and struggling students. While the student population for this study was small,

the focus on one particular group helped make the results useful for both the study site and other sites with similar student populations and issues. With these results, the study site can then begin to do the work needed to help their first-generation Latino students find success and earn their degree.

On a larger scale, the results of this study have the potential for long-lasting social change. Since there is little to no research regarding the impact SBPs have on first-generation Latino students, this study provides needed information regarding how this program influences this particular student population. This program can then be improved upon and shared to help other institutions improve their own remedial SBPs to serve this often-underrepresented population better. If universities start to see results from this program, then there will be improved college retention rates. If universities can improve the retention of first-generation Latino students, they will also be providing opportunities for them to complete their education and ensure they play an active role in their professional careers.

Summary

With 59% of students completing their postsecondary degree in 6 years (Kodama et al., 2018), researchers need to evaluate what can be done to improve retention efforts and meet the needs of all students. One way to address this need is through the use of SBPs, which have been found to have positive results, especially for minority and at-risk students (Kallison & Stader, 2012). However, the body of research regarding the impact of SBPs on first-generation Latino student populations is limited. Therefore, the purpose of this study was to evaluate the potential influence of SBPs on first-generation Latino

students. This study could be used initially to help the university to address the program's effectiveness and what could be done to improve or expand on it and better serve this particular student population. This study could also be used to fill a void in college retention literature by addressing how this program impacts first-generation Latino students specifically. This improved understanding could then help other universities better serve this population and help them fulfill their goal of earning a college degree.

Chapter 2 includes a detailed overview of Tinto's theory of student retention and different retention efforts. It then goes into detail about the specific needs of first-generation Latino students and their ability to complete their intended degree. Finally, the chapter includes discussions of studies regarding SBPs and their influence on students in general, as well as other minority groups.

Chapter 2: Literature Review

Introduction

Postsecondary degrees are vital to the growth and vitality of the United States. These degrees provide the potential for young adults to move beyond their generational income and break the cycle of income persistence, especially for those who come from a low-income background (Carnevale, Ridley, Cheah, Strohl, & Peltier Campbell, 2019). It is for this reason that postsecondary retention is more essential than ever, especially for students who are often marginalized such as first-generation Latino students.

To better understand and clarify the issue of postsecondary attrition and first-generation Latino students, Tinto's theory of student retention was used. Then, current research about retention in general and what impacts students' choice to either stay or leave their chosen postsecondary pathway are discussed. There is a focus specifically on the attrition of first-generation Latino students and issues they face as an often-marginalized population. Finally, interventions that can be used to help student retention, particularly SBPs and how they can potentially benefit first-generation Latino students are discussed.

Literature Search Strategy

To locate relevant literature, the following databases in the Walden University

Library were used: ERIC, ProQuest Central, EBSCOHost, and Walden Dissertations.

Keywords used to search these databases were: summer bridge programs, Tinto theory of student retention, summer bridge programs and first-generation Latino students, summer bridge writing programs, Latino student retention, Latino student remediation, Hispanic

student retention, and Latino first-generation college students. Primarily, scholarly and empirical journal articles were chosen in this study, particularly seminal works involving SBPs published after 2015, as well as books by key researchers in the field. Available current literature and some older sources were used to better understand the historical background of the topic.

Theoretical Foundation

Tinto's theory of student retention was used to explore and understand collected archival data. Although his original theory only accounts for those students enrolled in traditional four-year universities, it does provide a better understanding of both institutional and outside forces that can pose an issue for at-risk students, particularly for those students who historically have a higher probability of not completing their intended degree. Tinto's work provided a lens through which to view the collected archival data and better understand the potential results. However, because departure is a longitudinal process, the reasons for departure can change the longer the student is at their chosen institution (Tinto, 1993). Therefore, those looking to improve retention should keep in mind that each student departure is unique to the individual and cannot necessarily be generalized for all colleges and universities (Tinto, 1993; Tinto, 2012). Instead, departure changes depending on the person and institution.

Tinto developed his theory of student retention using Durkheim's theory of suicide as a foundation. This framework helped him outline and define the withdrawal process that students potentially experience throughout institutional or systemic withdrawal (the decision to withdraw from postsecondary education completely). If

people entering the institution are not sufficiently integrated into the society of that institution, either through moral or collective affiliation, they will be much more likely to withdraw from the institution, if not the postsecondary system completely, due to feelings of isolation (Tinto, 1975). Therefore, social and academic integration are imperative to student success and retention within academic settings.

Stages of Institutional Integration

There are stages that students must go through in order to persist in their new institution and in the community of that institution. These stages are particularly important for students joining a new university or college away from home. Before college, there are graduation ceremonies for students transitioning to high school or sometimes middle school. By contrast, these new college freshmen are expected to go through stages of separation, transition, and incorporation without any identified assistance or set ceremony to mark the occasion (Tinto, 1993).

Separation stage. Separation is the first stage for new incoming freshman. This stage can be particularly difficult for new students who have moved away from their home for the first time. While this stage is not as much of an issue for students at the study site, as many of them remain at home, it is still a change and involves separation from high school friends, a new school environment, and introduction to a new system. It is during this first stage that many new students struggle to determine where they fit in this new environment and have to learn how to let go of their past lives and associations (Tinto, 1993). This process can be disorienting and stressful, leading to at least some level of isolation as they learn to cope with changes in their social surroundings. Even

though it is a complicated process for students to move past, they are forced to face and then move on from this stage of letting go of previous communities such as social groups from high school if they hope to continue in their new environment and find long-term success (Tinto, 1993). If students are unable to let go of past social groups or to find their new place and social identity in this new setting, they will be at a much higher risk of attrition before the end of their first year (Tinto, 1993; Wibrowski et al., 2016). Conversely, if the student can get past this initial challenging stage, they move into the next stage of integration, the transition stage.

Transition stage. Once the student moves to the transition stage, the risk of withdrawal from the institution regardless of its type becomes more likely. This is partly because as students attempt to transition to their new environment, they are temporarily trapped somewhere between their old and new life and potential social circles (Tinto, 1993). The transition process can be made either easier or harder depending on established norms of the campus. If the campus has a culture that complements what students already believes, the transition will be much easier for them.

However, if campus culture conflicts with students' beliefs, then withdrawing and dropping out of their initial postsecondary institution to find another institution that mirrors their own beliefs becomes much more likely (Tinto, 1993). This is a pivotal point during which incoming students either begin to move towards integration into the institution or face being unable to let go of their previously held norms, beliefs, and association from their previous life and, in turn, depart. In the end, this part of their college transition will lead to either an easier integration or inability to manage their

separation. If they are unable to transition to their new environment, this failure to cope with their separation and move past the transition stage can pose a genuine problem, making the first 6 months especially important in terms of student persistence (Cabrera, Miner, & Milem, 2013; Tinto, 1993).

Integration stage. Once these new students find a way to transition to their new educational environment, whether through clubs, friends, or campus organizations, they will be more likely to move into the integration stage instead of withdrawing from the university or institution (Tinto, 1993). This integration, if successful, impacts the student's commitment to their goal and new institution, which can be imperative for new students who need to find success at their chosen institution. Academic and social systems, with the help of on-campus supports and faculty mentorship, can help students feel that their chosen institution supports their efforts (Tinto, 1993). In fact, those students who are involved not only move on to complete their integration into campus life and in turn their degree, but are also more likely to get involved in future endeavors and chosen careers to continue their intellectual and social development after their college years (Slanger, Berg, Fisk, & Hanson, 2015; Tinto, 1988; Tinto, 1993). However, despite the importance of intellectual and social development to integration, there is also a downside. Sometimes, these developed social relationships can distract these new students from their academic work, and in turn, lead to college or university dismissal (Tinto, 1975). While this issue is rare among those dismissed from their university, it is still an issue to consider when looking at student attrition and what causes these students to be dismissed.

With an understanding of institutional integration stages, Tinto's theory of student retention helped clarify the necessity of integration, especially in terms of academics, and how it is needed for a student to succeed in post-secondary education. Retention efforts need to be more about intellectual and social development and integration, instead of simply working to keep bodies on campus, which has never worked in the past (Upcraft et al., 2004). Therefore, the goal of these post-secondary retention efforts should be to provide for the specific needs of students to improve their education and prepare them so they could fill the jobs of tomorrow and help develop an economically strong country. (Sandoval-Lucero, Maes, & Klingsmith, 2014). To develop retention efforts that would be lasting and meaningful, it is imperative to understand what leads to student departure and what factors affect their decisions to depart from their chosen institution. Although knowing why some students chose to leave their post-secondary institution will not equate to knowing why they stay, it can help to shed light on the issues themselves (Tinto, 2012).

Student Departure

Despite common misconceptions that one common personality trait is responsible for student withdrawal from their chosen university, the reality is that there is little evidence to suggest a unique personality profile for these students (Tinto, 1993). Instead, research has found that there are a number of issues that impact student retention. Particular factors, such as individual characteristics and issues of isolation, impact student decisions to withdraw and thus can help retention efforts through a better

understanding of issues of student attrition and what can be done to combat the lasting effects of attrition on college campuses.

Individual characteristics. There are particular student demographic characteristics that can affect the likelihood of attrition, particularly family background. For example, students who come from a higher socioeconomic home tend to have lower dropout rates and a much higher rate of degree completion (Castleman & Page, 2014; Lee & Barnes, 2015; Soria, 2013). However, in recent years, the connection between persistence and family income continues to decline for new college students. Instead, research has shown that the relationship between the student and their parents and the parents' interest in their child's education, shows a much more significant impact on student persistence, particularly for Latino students (Matos, 2015). Parental expectations are almost as important in influencing a student's persistence as their own expectations (Ryan, 2016; Tinto, 1975). A student's family significantly influences a student's educational development and eventual institutional commitments.

Another individual factor to consider regarding student persistence is student goals. Student goals commonly change several times throughout the first two years of college, which can lead to uncertainty. The presence of goals, in general, does help students to persist through the difficulty of entering a new post-secondary environment (Tinto, 1993). These individual goals and expectations for future occupations are the most significant predictor of degree completion after academic ability. The higher the goal a student aims for, the more likely they are to stay in college to complete their initial degree (Matos, 2015). For example, a student who intends to go to college to complete a

master's degree is more likely to complete their bachelor's degree than those who only want to earn a bachelor's degree.

This idea even extends to those intending to earn their doctorate degree early on in their academic careers, as they can then use this goal as a motivator to complete both their bachelor and masters' degrees. Even though these student goals can be occupational or personal educational goals, the critical aspect is that the goals are set and strong. The stronger the student's goals, the more likely the student will persist in completing their intended degree (McCoy & Winkle-Wagner, 2015). However, according to work done by Scrivener (2015), career goals, compared to other types of goals, tend to produce twice the graduation rates compared to those who did not have their end career goal in mind (as cited in Sanacore & Palumbo, 2016).

While goals are an important part of a student's motivation to complete their degree, if these goals remain unresolved, it can lead to issues of frustration and, eventually, departure without completing their intended degree (Matos, 2015). Since these individual goals are related to degree completion and departure, a lack of will or commitment will lead to a student's departure due to an inability or unwillingness to commit to their degree completion (Tinto, 2017). However, while this can be an issue, high levels of commitment from the university or college institution can help those considered low-commitment to remain in college by offering assistance programs and advisors, but it can also lead to students working to just get by instead of developing a sense of the buy-in needed to complete their intended degree (Crisp, Nora, & Taggart, 2015). While working to just get by will keep the student in school, it does need to be

addressed with positive advising and counseling to help the student reignite the passion they need to chase after their larger goals. If it is addressed early on, it can prevent the student from questioning why they are even there to begin with and can then help them develop the needed buy-in (Douglas & Attewell, 2014). Therefore, the university can play a vital role in helping students reach their end completion goal if the school intervenes early in the student's college career.

Issues of isolation on departure. Student departure or retention can be traced to the student's first contact with their chosen post-secondary institution. Departure from the institution is inevitable if students cannot integrate into their new academic setting and system, whether due to incongruence or isolation (Tinto, 1993). Incongruence, in particular, is caused when there is a mismatch between the student and the institution regarding needs, interest, and preferences. Common issues that can lead to this mismatch can be conflicting matters of institutional climate, beliefs, and processes, all of which play a substantial role in student isolation, which in turn leads to eventual institutional withdrawal (Barnett, Bork, Mayer, Pretlow, Wathington, & Weiss, 2012; McCoy & Winkle-Wagner, 2015).

Similarly, isolation is especially frequent during the first semester of freshman year if the student does not find an academic or social group that is compatible with their ideas and beliefs to establish relationships. One reason this isolation can happen is because when a student attends a new institution that they never spend time on, it leads them to realize they may be on a campus that does not fit into their set of ideas (Tinto, 1993). Another issue could be that the campus is too big, or the campus has religious

undertones that conflict with the new student's ideals. In some cases, there are even those students who are unwilling or voluntarily avoid taking part in the range of resources the campus makes available to them. It is for these reasons that initial relationships and positive exposures to the institution, both in and out of the classroom, are critical for incoming students and their ability to persist (Murphy, Gaughan, Hume, & Moore, 2010; Rath, Rock, & Laferriere, 2013).

Academic retention

Each departure impacts the institutions. Especially at smaller colleges, every departure is seen as a loss of graduates as well as a decrease in revenue needed to keep the institution open (Pike, Hansen, & Childress, 2014; Rath et al., 2013). This is especially important for private institutions, such as the study site, that rely on student tuition to cover the majority of operating costs. Since the institution has remained small, only about 910 students in total, every student who persists helps to keep the doors open and, if the students are successful, help to promote the university to others in the area. It is for this reason that retention efforts are so important for every post-secondary institution to review and improve, regardless of the type of institution (Pike et al., 2014; Rath et al., 2013).

Each institution, especially institutions that are struggling to retain their students, need to continue to improve student retention. However, it is important to remember that the point of retention is not, and should not, just be about keeping students in college (Tinto, 2012; Tinto, 2017). Instead, in order to be effective, it should be focused on committing to student welfare and a clearer commitment to their education. To do this,

institutions should first assess the intentions of new students and assist those who may be more likely to leave to go to a more appropriate setting. This could easily be done through the use of admission officers that include counseling and advising when working to recruit new students (Tovar, 2015). It will also be important for institutions to understand that there is no single path to improved retention or one magic fix, especially since variables involved with student departure are vast (Kallison Jr. & Stader, 2012; Rath et al., 2013; Tinto, 2012). Therefore, institutions that struggle to retain their students need to review a multitude of areas within their institutions to better serve their students, particularly in areas of academic preparedness.

Academic Preparedness

Academic preparedness plays a major part in student retention. Slanger et al., (2015) reviewed data from over 6,000 students to determine the factors that play a part in retention and attrition. These findings supported the already known prediction value that pre-college performance, demographic and socioeconomic factors, social and academic integration, and organizational factors have on student success in post-secondary education (Slanger et al., 2015). However, the data also showed that there is a need to assess a student's motivation and its relationship to the student's GPA, course load, and credits earned. Those students who showed a higher level of motivation had a higher GPA and more credits earned than those that showed a lower level of motivation. These motivated students have had success in their past academic endeavors and, therefore, show higher academic preparation than those who have had difficulty in the past.

However, these successes and motivation helping to fertilize success can be much more difficult for some students (Crisp, Nora, & Taggart, 2015; Pike et al., 2014).

Theoretical Limitations

While Tinto's theories and findings on student retention and institutional reform could help to minimize student withdrawal, it is essential also to consider that Tinto's theory of retention was developed primarily for a residential model of college life versus other post-secondary options of education such as community college or technical schools (Tinto, 1993; Tinto, 2012). Therefore, many of these ideas are meant to be used to improve student retention at four-year, traditional institutions. However, regardless of the intentions, many of these same stages and reasons for attrition theoretically apply to non-residential settings as well, such as community colleges and specialty, technical programs (Tinto, 1988, p. 449). Since these post-secondary institutions deal with many of the same issues for their incoming students, Tinto's theoretical model can help them to make the right choices to better serve their students.

It should also be mentioned that Tinto's model of withdrawal only explains certain aspects of attrition among students with the main attention on the impact institutions have on retention versus ideas of what students should do to minimize their risk of departure (Tinto, 1982). This can be especially true for those students who chose or have to live at home during their college years. While these students will face a much less stressful integration, in the beginning, it can prove to be more difficult in the future because they stand a much higher chance of being pulled away from this environment due to external forces such as family needs and expectations. However, these issues in

themselves can be addressed at the institutional level through intervention programs that can better assist students in their academic and social integration as a way to improve their likelihood of retention.

Despite these limitations, Tinto's theory of student retention is an ideal fit for this study because, at its core, this study is about student retention efforts and their potential to be effective. This study will add to the number of other studies that have used Tinto's theory to better understand student retention and ways that colleges and universities can reduce attrition levels. However, this study focused specifically on first-generation Latino students using Tinto's original theory as a lens to view the data results and how they can be used to improve the retention of first-generation post-secondary students at the study site.

Literature Review Related to Key Variables and Concepts First-Generation Students

First-generation students are those who come from a home environment where neither parent enrolled in a post-secondary program. Therefore, unlike those with parents who know how to navigate the post-secondary culture, these first-generation students go off to college without a clear understanding of college life and culture (Wibrowski, et al., 2016). According to Atherton (2014), these first-generation students come from households that have fewer resources and are more likely to be a racial minority. These particular students also tend to rank below traditional students regarding GPA, course completion, and scores on standardized assessments (like the SAT and ACT assessments). These challenges result in lower confidence in their ability to complete a

degree due to their struggles with a drastically different culture and difficulty connecting high school curriculum to their college courses and expectations (Atherton, 2014). This challenge can be even greater if these first-generation college students perceive high barriers to reaching their intended career, believing there is no certainty in their choice of career (Pulliam, Ieva, & Burlew, 2017). One particular first-generation minority group that needs to be addressed to improve retention rates are Latino students.

Latino students and post-secondary retention

Latinos have become the second largest racial group, projected to grow to between 31% to 50% of the population by 2060 (Crip et al., 2015; Samuel & Scott, 2014; Santiago, Calderón Galdeano, & Taylor, 2015). With this population growth, there has been a natural increase in Latino populations in the academic systems. For example, kindergarten through 12th grade enrollment has grown from 19% Latino to 24% since 2004. There has also been an increase in high school completion (increasing from 57% to 65%) which then, in turn, led to a decrease of almost half in dropout rates (only 13%) (Santiago et al., 2015). As of 2012, Latinos were the second highest racial group enrolled in post-secondary education, which has led to an increase in Latino students who hold college degrees. In fact, 1.9 million Latinos hold BA degrees in liberal arts (38%), health care (16%), and business (12%). Of those who complete their degrees, the majority of Latino students (59%) attend Hispanic Serving Institutions (HSI) (Santiago et al., 2015). While these statistics show substantial growth and progress being made to help these particular minority students, there are still areas that need to be addressed to better serve this increasing student population (Ortiz, Valerio, & Lopez., 2012).

Despite the growth of Latinos in education, according to the work of Fry and Lopez (2012), only 8.5% of four-year degrees are held by Latino students compared to the 71% of degree holders who were white. There are some reasons for this disparity, one of which is the fact that 62% of minority students, including Latino students, require at least one remedial course according to Attewell, Lavin, Domina, & Levey (as cited by Kodama et al., 2018). While many institutions have implemented programs such as advising, counseling, and community development, clearly there is a need to evaluate these services and efforts to better address the unique challenges faced by this particular group of students.

One way to do this is to assess the success of a summer bridge program at one study site. As of 2017 the site university for this study had a Latino population of about 70% and 85% first-generation college students. Of those students who entered the university as a freshman in 2011, the six-year graduation rate was only 22%. One possible way to improve this graduation rate could be the summer bridge writing program they have been running for almost 10 years. With these sorts of statistics, this location will provide a chance to see if this particular program is providing for the needs of first-generation Latino college students in particular and providing a way for them to find success in post-secondary education.

Racial challenges. Another challenge that Latino students face is racism. Though it is not always intentional, Latino students often have to face social issues of racist behaviors and attitudes of students, faculty, and staff at their post-secondary institution (Crisp et al., 2015). While many of these institutions hold classes to educate their staff

and faculty on racism and diversity, there continues to be racial issues in the system itself (Tinto, 1993). This issue is particularly difficult for Latino males who intend to get a four-year degree. According to Meier & Stewart (1991) and the National Assessment of Educational Progress (2005), they are pushed into vocational training or other less rigorous education and, if they do attend a post-secondary institution, they face more racial discrimination both inside and outside of the institution than their female counterparts (as cited in Crisp, et al., 2015). They face other issues of racism including low expectations from faculty and all-out discrimination from peers and faculty alike (Oseguera, Malcom, & Vega, 2009). According to Oseguera, Malcom, and Vega (2009), Latino students are much more likely to struggle with these issues due to disconnections between their new college environment and their home culture, as well as being underrepresented at traditionally White institutions, which can then lead to issues of low self-concept.

Racial issues can then lead to low grades, psychological distress, mistrust for the institution, and a diminished sense of belonging, these students are less likely to seek out services for support, especially when attending predominantly white institutions (Cerezo & McWhirter, 2012; Lee & Barnes, 2015). While the institution for this research is a Hispanic Serving Institution (HSI) that focuses on access and equity for all of their students, racism and outside influences can still be an issue that needs to be taken into consideration when working to improve Latino retention.

Outside influences. Outside influences can either help or hinder any student hoping to complete their post-secondary degree. However, these influences impact Latino

students, especially for undocumented students, more so than their counterparts (Ortiz et al., 2012). Sadly, some of the influences that cause Latino students to drop out of their educational journey are connected to the high poverty rate and the life-altering issues that tend to be linked to low-socioeconomic status such as teen pregnancy, substance abuse, school work load, peer pressure to quit, and needing to work to help the family economically (Sanacore & Palumbo, 2016). However, despite these outside influences that can make or break a Latino student's ability to complete their college degree, another influential outside influence continues to be their family.

While it is well known that parental education levels do lead to more student success and persistence, there is more to a parent's impact than just their educational past. For example, Latino parents are more likely to work full time and be monolingual which leads to low levels of school involvement compared to their counterparts who have higher levels of education and ten plus years of residency (Toldson & Lemmons, 2013). Despite this challenge, Latino parents are also capable of inspiring their child as academic students in ways that others are not. These Latino parents promote positive messages of hard work, how important it is to try one's best, and the need to persist in the face of low-grades (Matos, 2015; Sandoval-Lucero, et al., 2014). These expectations, along with supervision, lead to improved GPA, post-secondary expectations, attendance, high school completion, and positive attitudes toward school (Toldson & Lemmons, 2013).

Parents are the key players in closing the achievement gap for Latino students by inspiring their children. Latino students have spoken of sacrifices their parents had to

make for them to gain a formal education which then inspires them to complete their degree as their way of contributing to their family's legacy and repaying their parent's sacrifices (Matos, 2015). Therefore, institutions need to consider and treat parents as the experts on their children and begin to prepare these parents in high school for what to expect when their child enters a post-secondary institution. It would be especially beneficial for parents to be a part of the child's choice in a post-secondary institution and how this choice will impact their likelihood to complete their intended degree despite issues such as finances (Matos, 2015).

Financial impact. One issue that can negatively impact a Latino college student is the problem of financial stability. According to Aud, Fox, and KewalRamani (2010), more than 27% of Latino students attending a four-year university come from poverty compared to only 10% of their Caucasian counterparts. This hurdle is a major one for Latino students because many of them, especially first-generation Latino students, come from working-class families. Students from working class families, regardless of race or status, are less likely to graduate compared to their middle and upper-class counterparts due to lack of exposure and family knowledge of college and how it works. So even though 94% of these economically disadvantaged students want to go to college, they face the unique challenge of experiencing a new college environment that feels alien to them as they attempt to connect with wealthier peers they may not understand (Soria, 2013; Strayhorn, 2011). Though this issue can seem minor, this causes problems with the student's ability to make the needed connections on campus to make it past the transition stage and find success. Murphy and Murphy (2018) found the financial concerns about

college funding reduced their likelihood of completing their intended degree by 23%. Therefore, the amount of financial support and type of support that they can receive can become a critical aspect of higher education retention and degree completion.

Campus Setting Influence on Latino Student Retention

With the need for a diverse, well-educated workforce, government officials from across the country are making use of the college completion toolkit that the US Department of Education released in 2011. This toolkit provides governors with innovative strategies to help increase the number of college graduates. Considering that there is a substantial gap between the minority students who enroll and those who graduate, particularly Latino students, it is time to do whatever can be done to help improve the retention of Latino students.

According to Gonzalez (2012), the process of college choice is a "developmental transition built on a foundation of early experiences within schools, families, and communities" (p. 144). These experiences, along with high familial expectations and influences help lead first-generation, Latino students to pursue post-secondary education whether through direct enrollment in the four-year institution or transfer from a community college (Matos, 2015). However, despite any set of expectations or intentions, Latino students continue to enroll and transition to post-secondary education and graduate at much lower rates than their white peers (Duncheon, 2018). However, despite the time and effort to fit into their new environment, these first-generation, Latino students still face a harder time graduating in six years unless they chose to attend a

private, liberal arts four-year institution which increases their chance of graduating in six years almost nine times more than attending. (Wagner, 2015).

To help improve retention for first-generation Latino students attending a postsecondary institution, it is essential to consider the needs of the student population. The most important thing that needs to be done is to support students throughout their academic careers, whether through financial aid assistance programs to help them pay for school or even multicultural centers, particularly on predominantly white campuses. After all, according to Tinto (2012), improved retention and graduation depends on the resources that the institution puts into areas that impact retention. Along with these resources, it would also be beneficial for universities to work on improving the articulation for students to transfer from community colleges to their four-year institutions of choice (McCoy, 2014; Tuttle & Musoba, 2013). However, these resources alone may not always fix the problem of retention. For, example, the study site is a fouryear university that offers undergraduate and graduate programs but does not offer oncampus housing for students. Instead, students often live at home or share apartments near campus. While the institution works to help students financially and schedule classes so students can also work full time jobs, there are still areas of growth that need to be addressed to improve their graduation rates of only 22%. One way to help retention efforts, particularly for this student population, is to better address the struggles that students go through and by intervening for those students who are in need.

Minority students, particularly Latino, first-generation students, tend to enroll in two-year programs more often than four-year universities. Part of the reason for this is because they can do so with low-cost tuition and open admissions while staying close to home (Murphy & Murphy, 2018). Many choose to attend community colleges so that they can be close to their families and, in some cases, attend part-time so that they can work at the same time (Murphy & Murphy, 2018). However, more often than not, many of these minority students are overly represented in remedial courses in both reading, writing, and math and, unfortunately, are far less likely to finish their degree. In fact, though Latinos make up 14% to 16% of the community college enrollment, 53% of them leave higher education altogether, a much higher rate than any other racial group (Gonzalez, 2012; Ingram & Gonzalez-Matthews, 2013; Nunez, Sparks, & Hernandez, 2011; Tovar, 2015).

Aside from matters of academic preparedness, other factors play a part in student attrition. At the institutional level, there are problems with remedial education, financial aid, support and social services, and positive faculty relationships. In fact, a lack of access to these resources and overrepresentation in remedial education impacts student retention more than other outside factors (Ingram & Gonzalez-Matthews, 2013; Rath et al., 2013; Tovar, 2015). It is because of these factors that institutions need to make sure that they consider perspectives of minority students like first-generation Latino students, to better serve their student populations and to increase graduation rates. There is also a clear need for post-secondary institutions to address the lack of minority students transferring to four-year institutions. According to Sandoval-Lucero, Maes, and Klingsmith (2014), of the minority students attending community college intending to

transfer, only a quarter of them made the transfer. Despite many of these issues, there are some solutions that intuitions can use to help close the achievement gap.

Some possible solutions for increasing student retention can include but are not limited to, curriculum alignment, remedial education reforms, students support services, and more supportive transfer policies (Rath et al., 2013). Along with these more general changes, community colleges need to especially address the needs of their Latino students. In general, 84% of students who enroll in community colleges do not participate in the college's campus (Windham, Rehfuss, & Williams, 2014). This number increases for Latino students, particularly males, who do not feel any real connection to the campus itself. Therefore, there is a need to work on the campus environment to make it a more welcoming, nurturing environment. One way to do that is through developing relationships between the faculty and students. Research has shown that a student's relationship with faculty has a substantial impact, particularly for Asian, Latino, and Native American students, by providing positive influences that help them to successfully transition and adjust to their new environment (Samuel & Scott, 2014; Tovar, 2015). One option that these first-generation Latino students have to improve their chances of integrating into a post-secondary institution is to attend Hispanic serving institutions.

HSIs. HSIs, such as the study site, are defined as those that enroll at least 25% Latino students and, thus, receive additional Title V funding from the federal government (Nunez et al., 2011). If enrolled, Latino students are more likely to graduate from HSIs compared to Predominantly White Institutions (PWI) due to more positive experiences and outcomes when adapting to their new academic environment (Nunez et al., 2011;

Santiago, 2012; Tuttle & Musoba, 2013). However, despite this positive correlation between Latino students finding success at HSIs, 85% of Latino students who do attend a four-year university still attend PWI where they are less likely to graduate than their white peers due to academic under-preparedness and social adjustment issues, including unwelcoming, unsupportive, and hostile environment where they do not see themselves or have the mentorship they need (Lee & Barnes, 2015; McCoy, 2014). Therefore, regardless of the institution type, it is vital that intervention programs be put in place to better serve this struggling population and improve the chances of them finding success at their chosen post-secondary institution. If not, then there will be no way to reach the goals that President Obama set for increased college graduation.

Intervention Programs

Tinto (2006) said, "it is one thing to talk about the importance of increasing student retention, it is another to invest scarce resources and adopt institutional faculty and staff reward systems that promote the behaviors that would reinforce that goal" (p. 9). However, it is time to invest these resources to ensure student success for all students, regardless of who they are and where they are from originally. According to Tinto (2012), approximately 52% of students entering a 2-year college and 20% of students entering a 4-year college required at least one remedial course. Of those who required remediation, 10% to 12% required remediation in reading and writing, with only one in four being college ready in these vital subjects (Saxon & Morante, 2014). In Washington state specifically, the need for remediation has declined from 38.8% to 32.9% but is still a need to be addressed at the institutional level to help all students find success (The Office

of Superintendent of Public Instruction [OSPI], 2017). On a national level, these numbers are even worse for first-generation Latino students as only 13% of them are considered college-ready in all subjects (Bragg & Taylor, 2014; Saxon & Morante, 2014). Therefore, post-secondary institutions, regardless of whether it is a two-year or a four-year college, need to review their intervention programs to ensure they are doing what is best for their unique student populations.

Unfortunately, many post-secondary institutions rely on simple, and often short, orientation programs to address the needs of their first-year students. While these programs are implemented with good intentions, they tend to fail to provide the information new students need to establish needed contacts on their new campus. While it is true that no single intervention will fix all of the issues tied to student retention, institutions need to consider several aspects to address the special needs of their student populations including. These options could include counseling services, extracurricular programs, and purposeful faculty interactions. Research has shown that institutions, especially four-year universities, need to realize that first-year students need a better promotion of activities and programs that can help them to persist (Tinto, 1993; Tinto, 1998). These programs could include developmental education to accelerate progress, improved support services like tutoring and advising, or programs that help to develop basic skills needed for success (Bragg & Taylor, 2014). However, before choosing any program, institutions need to know more about the students they are serving, and what issues they may face that could hinder their potential to complete their degree.

Student placement tests. With a large number of students entering college underprepared academically, with 42% considered underprepared entering community college, for example, it is important to have mandatory assessments to determine the area of need (Saxon & Morante, 2014). Some common placement tests used by post-secondary institutions include the COMPASS or ACCUPLACER assessments. These two provide binary data that, theoretically, helps to place students in the right class level and determine college readiness in writing and math. However, while placement tests are important, they only give a small snapshot of the student and their skills and fails to take other variances into account. There is also the common oversight that includes not informing students about the assessment in such a way that they could prepare for it (Saxon & Morante, 2014). It is for these reasons that student placement should be handled a little differently than they have in the past to better serve the purpose of student retention.

First, according to Tinto (1993), "institutions should assess the needs of each and every individual and treat these needs on a person by person basis" (p. 191). Once these needs are better understood, then their needs can be used for screening, placement, and even freshman advising and counseling. These placement tests can also then lead to better understanding of the academic needs of at-risk students and, if done correctly, can help to begin a process of addressing these needs and monitor their skills and progress to better continue to serve them. However, it is also important when developing these sorts of assessments that they do not lead to a self-fulfilling prophecy and constriction of opportunity for those students who already struggle with college retention, such as

minority students like first-generation Latino students. It is also important that these assessments be coordinated, even before college, so that students are informed about the assessment, prepared for it, and offered assistance when needed (Saxon & Morante, 2014; Tinto, 1993). Not only could these assessments help with retention efforts for the students, but, if done well and reviewed appropriately, could also help determine what role the institution plays in students leaving.

Intervention program examples. In conjunction with properly used assessments, there should also be a set program to address the needs of first-year students. While academics are extremely important, there is also a need to encourage communities on campus and help students find what communities they can become a part of to help in their transition. These community building and connections have been shown to help cement personal affiliations that connect them to the institution (Sanacore & Palumbo, 2016). Therefore, the best first-year programs will integrate both the social and the academic aspects needed to promote student success. Not only do they help students cope with social and academic difficulties they will face during their transition to the institution, but it would also help students learn to learn and, therefore, be more successful in their college classes (Sanacore & Palumbo, 2016).

One intervention study, in particular, looked at helping Latino students increase their chances of retention through simple community building. The Latino Educational Equity Project (LEEP) provided with first-year Latino student with peer support and modeling and teaching them how to improve their social awareness and be more conscious of cultural and political forces that impact them as students (Cerezo &

McWhirter, 2012). The idea was to better facilitate their social adjustment to college, but there was no attempt at improving their academic skills to better prepare for what they would face in their classes. While the study showed the importance of peer support networks like MEChA, Latino sororities and fraternities, and CAMP (college assistance migrant program) programs, the success of the program was mixed concerning long-term retention (Cerezo & McWhirter, 2012). Another study found some success with summer interventions held between graduation from high school and the beginning of the academic year in the fall to help students attend an institution where they would have a greater probability of success, about 14% higher (Castleman & Page, 2014). Therefore, it may be more beneficial to develop a program that integrates both academic development and social development, like a summer bridge program, to improve the likelihood of students, particularly at-risk students like first-generation Latino students, to reach their goal of graduating college.

SBPs

With only 26.8% of high school students completing high-level academic work in 2004, it is not surprising that there are issues with students being able to avoid classroom difficulties when entering college (Bettinger, Boatman, & Long, 2013). After all, a student's experiences in high school are one of the most predictive variables of a student's success in their post-secondary education. However, students who struggle with reading or writing can face an increased challenge in completing their intended degree. This is especially the case when looking at college level reading and writing, where only 17% of remedial readers will earn their degree in eight years (Kallison Jr. & Stader, 2012).

Unfortunately, this reality can be hard to remedy and continues to be an issue, especially with the ever-increasing, and changing, student population.

With more students continuing to enroll in post-secondary education, particularly minority, working class, and first-generation students, it is clear that there needs to be an improvement in getting students to college in the first place. However, once these students are recruited to college, there is a need to address these unique challenges, like being unaware of tools needed to improve their transition to the institution and/or the self-efficacy to believe they can accomplish their goal in the face of these potentially unwelcoming environments (Slade, Eatmon, Staley, & Dixon 2015; Soria, 2013). Especially for those students who are part of a minority group on campus, this transition can be particularly challenging because they find it difficult to navigate the culture of the campus since they do not see themselves reflected as much on campus. Therefore, it is important to address these needs and, one way to do this, is for these institutions to implement academic programs that will address these needs while preparing students academically in order to keep them from enrolling in remedial education during their first year, which in itself reduces the likelihood of the students completing their degree in six years (Kallison Jr. & Stader, 2012). One academic, and social, program that can be used to meet both the academic and social needs of struggling students are summer bridge program.

Unlike orientation programs that instruct students how to adjust to the new demands they are facing in one or two seminar settings, a summer bridge program addresses both the social and academic that struggling students face before they even

begin their first year of school (Soria, 2013; Lee & Barnes, 2015). This particular program combines and addresses student needs in academia as well as counseling, hopefully from similar racial groups, to help with the feelings of isolation and provides them the chance to start developing relationships with academic advisors and mentors to support them during their stages of transition and, in turn, keep from placing too many students in remedial courses (Bettinger et al., 2013; Murphy et al., 2010; Soria, 2013). Moreover, since many at-risk students are particularly at-risk during the summer months following high school graduation, programs like the summer bridge program is perfect to help minimize the chance of summer melt while preparing them for the fall (Castleman & Page, 2014). However, to ensure that it is as effective as it could be, the development of the program needs to follow a certain formula for development and continuous assessment to maintain its effectiveness (Allen & Bir, 2012).

Traditionally, remedial courses that target underprepared students, whether in English or math as determined by COMPASS or ASSET tests, were classes that lasted anywhere from fifteen weeks to a whole semester, depending on the school, and focused on improving student academic skills and, theoretically, academic self-efficacy. However, these well-intended courses only count towards the student's GPA, but not towards their required courses for degree attainment. Though well intended, these classes have the problem of leaving students behind in credits to complete their degree before they could even start on their required courses (Bettinger et al., 2013; Lee & Barnes, 2015). This is where remedial courses tend to fail the students they intend to help and opens up the need for a program like a summer bridge program. SBPs offer alternative

methods for retaining students through academic and social assistance before the first day of fall quarter even begins, meaning the student will not have to be behind before they even start their core subjects. SBPs happen between the end of high school and the first year of college to help students gain the academic skills the students need to be ready for the academic and social challenges they will face during their first year of college (Mitchell, Alozie, & Wathington, 2015; Sablan, 2013; Sablan & Tierney, 2016). Therefore, students will be better prepared to find success during their first year and, in turn, be more likely to return their second year and beyond.

Social assistance. At their core, SBPs are voluntary, short, intensive forms of intervention for at-risk students. These programs usually target first-generation, low-income, minority students who are not academically ready for their first year of college (Kallison Jr. & Stader, 2012). Often, this summer program, which can be funded through grants and federal or state money, is developed to help strengthen a student's academic and social foundation to help improve the chance of student persistence to their second year, especially for African American and Hispanic students. When done successfully, these summer programs establish high expectations, personalized attention from adult mentors, peer support, and assistance to help them access long-term interventions (Murphy & Murphy, 2018). These established relationships can then help to improve the student's institutional ties due to the improved academic and social support from the institution's faculty (Barnett et al., 2012; Bir & Myrick, 2015). When combined with academic support, the SBPs can be useful on several levels for at-risk students.

Academic assistance. Aside from social assistance, SBPs focus mostly on providing academic interventions that can often include academic instruction, tutoring, study skills instruction, mentoring and counseling, advising, and all the other needed pieces of information about college and the college process. Along with the academic assistance that it provides students, SBPs also work to orient students to the academic culture on campus to help them feel more comfortable in their new environment along with developing the self-esteem and self-efficacy needed to find success and build up their academic momentum (Mitchell et al., 2015). This could include explicit teaching of habits like studying, taking exams, how to glean information from lectures and text, and writing academic papers to improve their potential GPA, retention, and graduation rates compared to their peers (Bettinger et al., 2013; Bir & Myrick, 2015; Douglas & Attewell, 2014; Kallison Jr. & Stader, 2012; Lonn, Aguilar, & Teasley, 2015; Sablan, 2013; Slade et al., 2015; Wibrowski et al., 2016). In short, this short, intensive program provides the perfect opportunity for often marginalized, at-risk students to find success early on in their post-secondary academic career and, therefore, be more likely to complete their intended degree. However, just like every other program set up to help improve student success, it is essential to follow the research and consistently evaluate the success of the program to continue improving and serving changing student populations.

SBPs provide accelerated and focused learning opportunities to help students be better prepared for their first year of college. However, much of the research has provided differing results based on location and focus of the study. Barnett et al. (2012) found there was no long-term impact on student success. Overall, the program would not be

worth it for students unless they were able to earn 3.8 credits for their time. There were signs of significantly higher academic achievement, motivation, and college readiness, but there was no real effect on the student's sense of belonging or social connections to the campus. Lonn, Aguilar, and Teasley (2015) said that there was a moderate decrease in student mastery goal orientations. However, there were other issues that could have impacted the results, such as showing students their data or lack of faculty support of the program. These factors can alter the results of the program, but it is also important to keep in mind that the results will change from institution to institution and the program should be altered to better fit the student population that it serves. When it accurately addresses the needs of the student population in question, then the results will show the actual impact a summer bridge program can have on at-risk students.

Despite some negative results, several recent studies have shown that this simple, intense, summer program can make a positive impact on at-risk, underrepresented minority students, especially Latino students, these SBPs were particularly effective for at-risk students in helping them to gain better grades, persistence, and even degree completion. Kodama, Han, Moss, Myers, and Farruggia (2018) showed that their SBP did in fact prepare students for credit bearing classes and worked to help improve student retention. These results show positive outcomes for underrepresented, at-risk students and continue to do so even at different academic levels. In fact, even research on SBPs for minority graduate students who are looking to earn their graduate degree showed positive outcomes by helping them to shape their ideas of being a scholar and helping them find their passion for scholarship, which is ideal for all students at any level.

Even at the social development level, SBPs have been shown to help these at-risk, minority students. SBPs led to enhanced college readiness through built connections with the campus and support networks and helped to shine a light on the social challenges these students must face to find academic success during their transition to college. social media to reach and support these at-risk students in ways that best fit their needs. These results prove that it is possible to address both the academic and social aspects of student success in such a way to help students find success in their new college environment. However, to get similar results, it is vital that these programs become a part of the institution itself to find the most success for these at-risk students.

According to Slade, Eatmon, Staley, and Dixon (2015), "well-designed and implemented bridge programs not only take cues from other successful practices for enhancing academic success on a campus but are also progenitors and incubators of best practices that can be generalized for the rest of the student population, in particular freshman" (p. 136). St. John, Masse, Fisher, Moranski-Chaplin, and Lee (2013) said that those who participated in the summer bridge program had some higher GPA then typical underrepresented students. It is possible to improve instruction in general if the summer bridge program is well designed, maintained, and assessed to ensure its continued success.

It is important to note that one specific program should never be used to replace good instruction and to advise in general. It is important to incorporate the system into the institution's culture and continue to help student believe in their success long after they have left the summer bridge program in general (Bir & Myrick, 2015). It is also

important to note that there should always be consistent assessment and growth as the program continues to ensure that it continues to serve the students that need it the most while maintaining high expectations for them and what they can accomplish (Sanacore & Palumbo, 2016). Whether that is through formal evaluations and assessment, or even branching out to build relationships with feeder high schools to help the transition and program participants, expansion and evaluation will could make this the most impactful program to help these at-risk students find success in their transition and academic goals (Douglas & Attewell, 2014; Pike et al., 2014). While there are some areas SBPs can help these students find success; it will always come down to formal research and continuous assessments to ensure these students are getting the best that the university can offer them to help them reach their goal, graduation.

Implications

One student population these SBPs could impact are first-generation, Latino students. Since these students face their own particular set of challenges in completing their degree, SBPs hold the potential to make an enormous impact on struggling students and their academic journey. However, just like with any other intervention, it is essential to formally research and assess the program to determine if it is helping to bridge the academic gap and help these students find academic success, and that is what this study will accomplish.

This study formally researched the effectiveness of the summer bridge writing program at one study site, a small private university, located in central Washington state on enrolled first-generation, Latino students compared to those first-generation, Latino

students who enrolled for remedial English instead. Following Tinto's theory of student retention, the study compared and evaluated the impact this program has had on the first-generation, Latino population to determine if it has led to an increased retention rate. This study will add to the growing number of studies on SBPs and their impact on this particular population. As a part of this academic conversation, it can help other universities to review their own programs and ensure their effectiveness for all students, but especially first-generation, Latino students. The study site university will also be able to use the results to reevaluate their program and work to adapt it to better serve the needs of first-generation, Latino students, and help them find academic success.

Summary

It is imperative that colleges and universities increase the resources available for underserved minority students enrolled at their institutions. However, this also means that there needs to be services available to identify and address the needs of remedial students and improve the likelihood of them completing their degree. As Slade, Eatmon, Staley, and Dixon (2015) said, "students cannot change historical and other factors that create their personal and academic profile. However, the institution can be aware of these factors and how they impact students' likelihood of college success and can attempt to ameliorate them to whatever degree possible" (p. 132).

First-generation Latino students would benefit from institutions looking at their practices and addressing student needs. While Latinos continue to enroll in post-secondary institutions and earn degrees at higher levels than ever before, they are still falling behind their counterparts. According to Fry and Lopez (2012), 9% of Latino

students between 18 and 24 years old earn a bachelor's degree. This issue can be made worse when these students are also first-generation students who go to college without parents that can help them develop an understanding of how college life and culture works (Wibrowski et.al., 2016). If these students require remediation, the situation can become more distressing, especially since only 17% of remedial readers will earn their degree in eight years (Kallison Jr. & Stader, 2012). However, SBPs could be adapted and used to help these first-generation Latino remedial students find success.

Chapter 3: Research Method

Introduction

The purpose of this institution-based research was to improve understanding of how SBPs affect first-generation remedial Latino students. It was of particular interest to evaluate how SBPs influence their academic success and post-secondary retention. Since the Latino population is the largest minority ethnic group in the United States, and a growing population in states like Washington (Brown & Lopez, 2013), this study contributes to the body of research by focusing on one SBP at a HSI and how it influenced first-generation Latino students over the course of three semesters.

The research design for this study was based on Tinto's theory of retention and developed to expand on Tinto's work. The methodology section explains this quasi-experimental study and how it involved archival data collected from the study site located in central Washington to evaluate the influence of one SBP for writing on first-generation Latino students. Finally, potential threats to the study's validity are discussed to address any issues that could have affected the study. This study may help administrators better understand the program's effectiveness and find ways to increase student success during their first year in college.

Research Design and Rationale

To assess the effectiveness of one SBP on first-generation remedial Latino students as measured by retention and weighted GPA, a local private university was chosen as the study site. Since the study site serves a large population of Latino students (approximately 70%), it was a promising location to assess the effectiveness of this SBP

for this often-underrepresented student population. To address the gap in research, this quantitative quasi-experimental study compared GPA and second-year enrollment of first-generation Latino students who required remediation in writing. The dependent variables for this study were students' GPA at the end of their third semester at the study site and retention into their second year. The independent variable was either the SBP for writing in July or remedial English during their first semester at the university. These variables helped to answer the research questions guiding this study:

RQ1: Are there differences in terms of retention rates after three semesters between Latino first-generation students who took part in a SBP for writing and those who took remedial English?

 H_01 : There are no significant differences in terms of retention rates after three semesters between Latino first-generation students who took part in a SBP for writing and those who took remedial English.

 H_al : There are significant differences in terms of retention rates after three semesters between Latino first-generation students who took part in a SBP for writing and those who took remedial English.

RQ2: Are there differences between Latino first-generation SBP writing participants' GPA by the end of the third semester and those who took remedial English?

 H_02 : There are no significant differences between Latino first-generation SBP writing participants' GPA by the end of the third semester and those who took remedial English.

 H_a2 : There are significant differences between Latino first-generation SBP writing participants' GPA by the end of the third semester and those who took remedial English.

To answer these two research questions, archival data was used for two specific reasons. First, this helped streamline the process of determining the program's effectiveness over the course of 5 years. Second, this data collection process eliminated the time constraints of a 5-year longitudinal study while still providing the necessary evidence to answer the research questions. While the program itself has been in use since 2010, data collected during the determined 5-year time span helped determine if the program effectively addressed the academic needs of students over this time frame.

A qualitative or mixed methods study could help determine student success according to their feelings of progress and add significant participant insights to the current research. However, to observe trends, it would take more time to do a qualitative or mixed methods study. Therefore, using archival data was the best choice to collect data over a 5-year period and determine the program's long-term effectiveness. Similarly, using a qualitative or mixed methods study would mean interacting personally with students who participate in the study. As an adjunct professor, the researcher had a potential for direct contact with students which could potentially lead to bias issues. Instead, a quasi-experimental quantitative design was used to provide unbiased data to determine the program's success over time at one university.

Methodology

Population

The population for this study were first-generation Latino students enrolled in postsecondary education who required remediation in writing. The target population was students enrolled at one private university who took remedial English or a SBP for writing between the fall of 2013 and 2017, a total of 64 participants. This study excluded students who identified as Latino but were not first-generation. Online-only students were also excluded, since there was no option for SBP participation online. Since many student populations such as African Americans or low-income students have already been studied, the focus of this study was first-generation Latino students exclusively to help determine if this program could help them complete their postsecondary degrees.

Table 1

Fall Enrollments at the Study Site

Year	Male	Female	Hispanic
2013	150	501	389
2014	179	545	451
2015	196	538	466
2016	192	535	504
2017	203	531	513
Total	920	2650	2323

Note. The information in this table is based on fall 2013 and fall 2017 student enrollment data available on the IPED's website.

The subjects for this study were drawn from one private university population located in rural central Washington state. According to the Integrated Post-Secondary Education Data System (IPEDS), the student population during the study time frame, 2013 to 2017, ranged from 651 students in 2013 to 734 students in 2017. Of those enrolled, an average of 65% was listed as Hispanic/Latino, with an average of 26% male and 74% female. Of the students seeking a degree during the study time frame, approximately 85% were considered first-generation students. Those registered as first-generation Latino students and in need of writing remediation were the focus of this study.

Sampling and Sampling Procedures

The sample for this study were those students identified as first-generation Latino students needing remediation in writing who were enrolled during the fall of 2013 to 2017, according to Institutional Research Office records at the study site. Once the correct records were received, which were identified and coded to protect student identities, the data was then separated and cleaned up to include only those who were enrolled in the summer bridge program in writing and those who were enrolled in a remedial writing course during the summer or first semester of their enrollment between 2013 and 2017. Those who were not listed as first-generation or Latino were eliminated from the data set. Gender was also considered to determine if gender had any influence on the data. Weighted GPA was provided by the institution and continued enrollment for each semester were analyzed to determine the program's influence on first-generation Latino students in need of remediation. By focusing on this specific group of students, the

summer bridge writing program's effectiveness over the course of five years was analyzed.

Once the study was approved, data was collected from the Institutional Research Office at the study site. With the help of the head of the Institutional Research Office and his secretary, the data was narrowed down to include students identified as first-generation students and who self-identified as Latino. The data collection then focused on those enrolled in either the summer bridge writing program before their first year or a remedial writing course from 2013 to 2017. A priori power analysis was conducted using G*Power3 to determine the sample size needed to test the differences between two independent group means. Using a two-tailed test with an alpha of .05, the power analysis showed that a total sample of 102 participants with two equal-sized groups of n = 51 was needed to achieve a power of .80.

Procedures for Recruitment, Participation, and Data Collection

Since the project data was archival and coded to remove student names, there was no need to gain participant approval. Instead, a proposal was submitted for approval to Walden University and the IRB from the selected study site in Central Washington. Once Walden University and the study site granted approval (see Appendix A), the Institutional Research Office at the study site collected the needed archival data. Since the data used for this study was archival and unavailable until IRB approval, it was impossible to predict how many participants would be available. Once the data was pulled from the official university files, those who do not fit the specific parameters and course enrollment criteria were excluded.

Once the data was narrowed down for the target population and remedial course enrollments, the data analysis focused on student group's weighted GPA and continued enrollment over the course of the first three semesters for the identified student population. Once separated, the data was analyzed using SPSS to determine differences between the two programs and the effectiveness of both programs in terms of GPA and continued enrollment.

Instrumentation and Operationalization of Constructs

Instrumentation. For this study, each group's weighted GPA and retention were used to determine differences between those who took part in the remedial English course versus those who took part in the summer bridge program. Student weighted GPA is an effective prediction of student success, such as continued student enrollment and improved GPA (Bacon and Bean, 2006). Since the purpose of this study was to analyze the potential influence of the summer bridge writing programs on this particular group of students, weighted GPA would show whether the students did better in their course work following the program compared to those who took the remedial English course.

Along with the use of weighted GPA, the present study also used retention to analyze the summer bridge program's influence. Student retention was defined as continued enrollment beyond the first year. Retention was determined based on continuous enrollment in the university from fall to spring, and then from spring to the following fall.

Operationalization. To assess the difference between those students who took part in the summer bridge writing program and remedial English course, the independent

variable was assessed to determine which was more effective for both male and female students, regardless of intended major. The independent variable was the course the students chose and successfully completed, whether the summer bridge writing program or the remedial English course. The dependent variables, group weighted GPA and continued university enrollment, will then be assessed to determine whether these independent variables influence the dependent variables.

The dependent variables were assessed using numerical and nominal representations assigned during the data input. The weighted GPA, based on the final grades and divided by the number of credit hours completed used a four-point scale of 0 to 4.00 as calculated and reported by the study site, to assess the differences in the ordinal data between the two groups throughout the time span of the study. To assess continued, consistent enrollment, the nominal data of student enrollment was coded using a 0 or 1, 0 representing those that did not return each semester and 1 representing those that did return for at least three semesters. By coding the data as discussed, it made it possible to determine if there was a significant difference in retention between the two groups.

Data analysis plan. The data analysis plan for this study included several steps. First, the data was cleaned up to remove any students who did not identify as first-generation and Latino. This led to 24 students over five years enrolled in the study site's summer bridge program and 40 students who enrolled in a remedial English course. Once the data was in order, the data was inputted into SPSS for analysis.

RQ1 was about differences in retention rates after three semesters between Latino first-generation students who took part in a SBP for writing and those who took remedial

English. The alternate hypothesis stated that there would be a significant difference between these two groups while the null hypothesis stated that there would be no statistical difference between these two groups. To answer RQ1, a Chi-Square statistical test was run using SPSS. This statistical test was used to analyze the relationship between the independent variables to show if there was a significant relationship between the chosen course, whether it be the summer bridge writing program or the remedial English course, and continued enrollment in the university as determined by crosstabulation.

RQ2 addressed differences between Latino first-generation, SBP for writing participants' GPA by the end of their third semester compared to those who took remedial English. The alternate hypothesis for this question stated that there would be a statistically significant difference in GPA between the two groups while the null hypothesis stated that there would be no statistical difference between the two groups. To test this question and these hypotheses, an independent *t*-test was ran using SPSS to determine the difference between the dependent variables. First, the results from the Levene test were reviewed to determine if there was homogeneity of the data. However, since the data did not show homogeneity, a Welch-Satterthwaite method statistical test was run to ensure the significance of the data. The results showed first if there was any significant difference in student weighted GPA between those who chose to do the remedial English course and those who participated in the SBP according to differences in mean scores.

Threats to Validity

Much like other quasi-experimental studies, there were expected issues for internal and external validity. In terms of external validity, the first issue was the interaction of selection and treatment as well as setting and treatment. Any issues with the setting or the treatment from this single setting were dealt with by connecting the results only to the university and students that are part of the study. Along with these issues, there was also the potential for an issue with the interaction of history and treatment. Since the study focused on students who were a part of the program between the years 2013 and 2017, any generalizations made from this study needed to be made cautiously, especially if they impact current populations that are a part of the program. Much like the previous issues with external validity, this was addressed by ensuring that the dates of the study were clearly stated along with a recommendation that a similar study be conducted at a later date to ensure the continued effectiveness of the program.

In terms of internal validity, it was expected that there would be no issues with history and mortality as the data was from official university records. Since the data was archival and from students who were part of the program years ago, it was possible that events could have occurred during their time at the university that influenced their retention, and these issues would not be connected to the summer bridge writing program or to the remedial course. These were issues outside of the researcher's control, but the sample size was large enough, when accounting for the size of the university, to account for issues of attrition due to external events.

Ethical Procedures

Even though the data collected was archival data that the university had already compiled, it was important to protect the rights of students and their data. Therefore, this study followed the guidelines set forth by Walden University and submitted research plans to the Institutional Review Board (IRB) of both Walden University and the study site.

Along with IRB approval from both universities, all laws set forth by the Family Educational Rights and Privacy Act (FERPA) were followed to protect students and their privacy. One way that this was done was to collect the data already coded so that no student names were used. The study focused on collective data versus specific students enrolled in either program. This helped to limit the accessibility to data and protected all participants as the study progressed.

The archival data from the chosen university was kept anonymous to protect the students' identities. Once received from the Office of Institutional Research, the data was stored on a password-protected laptop minimizing the number of those that would have access to the data. All data will then be deleted from the computer and SPSS program after three years to protect these students and their data after the study was completed and accepted by the committee and Walden University.

Summary

In this section, the methodology used for this quasi-experimental quantitative study was explained. This study examined the archival data from the study site located in Central Washington to determine the effectiveness of their summer bridge writing

program on first-generation remedial Latino students over the course of 5 years. This study helped to determine if there was a significant relationship between the summer bridge writing program and improved student success over the course of one year, including their retention for their second year of college.

The data analysis and findings of this study are discussed in chapter 4. Results from SPSS show how the relationships between the chosen program, whether it be remedial English or the SBP influence students and their academics. Finally, how this study relates to social change and potential next steps will be discussed in chapter 5. This final chapter will also include recommendations for the study site and how to better address the needs of their students, as well as ideas for future studies.

Chapter 4: Results

Introduction

The purpose of this quasi-experimental quantitative study was to determine the effectiveness of one SBP on first-generation Latino students who required remediation in writing. This research focused on the potential of this summer bridge program to help a specific population be more successful in a postsecondary institution as determined by their continued enrollment and GPA.

The following research questions and hypotheses guided this study:

RQ1: Are there differences in terms of retention rates after three semesters between Latino first-generation students who took part in a SBP for writing and those who took remedial English?

 H_01 : There are no significant differences in terms of retention rates after three semesters between Latino first-generation students who took part in a SBP for writing and those who took remedial English.

 H_al : There are significant differences in terms of retention rates after three semesters between Latino first-generation students who took part in a SBP for writing and those who took remedial English.

RQ2: Are there differences between Latino first-generation SBP writing participants' GPA by the end of the third semester and those who took remedial English?

 H_02 : There are no significant differences between Latino first-generation SBP writing participants' GPA by the end of the third semester and those who took remedial English.

 H_a2 : There are significant differences between Latino first-generation SBP writing participants' GPA by the end of the third semester and those who took remedial English.

In this chapter, results from data collected and analyzed using SPSS to determine the success of first-generation Latino students in the SBP for writing compared to those in traditional remedial English are presented. In the first part of this chapter, the purpose and research questions are briefly reviewed. This is followed by data collection methods, treatment of data, and results. Finally, results of statistical analysis organized by research question are discussed.

Data Collection

Once the Institutional Research Office had a copy of the Walden IRB approval, as well as the study site's IRB approval, the secretary collected the specified archival data for this study. She then made contact via email with a list of all students with randomized student numbers enrolled in remedial English or the SBP between the fall 2013 and spring 2017. Data had to be cleaned so that it only included those students who were identified as Hispanic/Latino and first-generation, which left a total of 64 participants who took part in either the SBP for writing or remedial English. Though this is a smaller number than suggested by G*Power analysis, it did represent 1% of the total student population over the specified 5 years.

Results

After data was collected and cleaned for the study, the final study sample included 40 first-generation Latino students enrolled in the remedial English course compared to

24 who chose to take the SBP between 2013 and 2017, leading to a total of 60 participants. Therefore, the proportion of students who decided to take the remedial English course was statistically higher than those who took part in the summer bridge program, with p < .05. In terms of gender, there were 47 female students compared to 17 male students that fit parameters of this study. However, considering that 74% of students attending the study site were female, it was logical that the majority of students in this particular study population were female (see Table 1).

To answer RQ1, a Chi-Square test was run to determine differences in retention rates between the two groups. In total, data from 64 participants were analyzed to determine whether those enrolled in the SBP or remedial English course had better retention rates. According to results of the Chi-Square test, students enrolled in the remedial English course had a retention rate of 71.4% compared to those enrolled in the SBP who had a retention rate of 28.6%, a statistically significant difference in proportions (p = .008).

Table 2
Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.333	.008
	Cramer's V	.333	.008
N of Valid Cases		64	

Table 3

Chi-Square Tests

			Asymptotic		
			Significance	Exact Sig.	Exact Sig.
	Value	Df	(2-sided)	(2-sided)	(1-sided)
Pearson Chi-Square	7.111 ^a	1	.008		_
Continuity Correction ^b	5.579	1	.018		
Likelihood Ratio	6.954	1	.008		
Fisher's Exact Test				.013	.010
N of Valid Cases	64				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.63.

b. Computed only for a 2x2 table

Table 4

Course Retention Crosstabulation

			Retention		
			0	1	Total
Course	Bridge	Count	10	14	24
		Expected Count	5.6	18.4	24.0
		% within Course	41.7%	58.3%	100.0%
		% within Retention	66.7%	28.6%	37.5%
		% of Total	15.6%	21.9%	37.5%
	RENG	Count	5	35	40
		Expected Count	9.4	30.6	40.0
		% within Course	12.5%	87.5%	100.0%
		% within Retention	33.3%	71.4%	62.5%
		% of Total	7.8%	54.7%	62.5%

To answer RQ2, an independent samples *t*-test was initially run to determine differences in weighted GPA between the 40 students who enrolled in a remedial English course and the 24 students who took the SBP. There were no outliers in the data, as

assessed by inspection of a boxplot for those participating in the remedial English group. However, Levene's test for equality of variances showed a p < .05 (p = .011), showing a violation of homogeneity. According to the results from the t-test, students who enrolled in the remedial English course had higher weighted GPA scores (M = 2.55, SD = .90) than those students who enrolled in the summer bridge program (M = 1.84, SD = 1.21), with a mean difference statistically significantly different from zero (MD = .708). Therefore, the null hypothesis can be rejected and the alternative hypothesis can be accepted. However, since the data analyzed violated homogeneity, a Welch-Satterthwaite method statistical test was run to further assess the significance of the findings from the independent t-test. Findings from this Welch test shows that despite the violation of homogeneity, the findings are still significant with a p = .018 (see Table 6).

Table 5

Group Statistics

	Course	N	Mean	Std. Deviation	Std. Error Mean
GPA	RENG	40	2.54	.90	.14
	Bridge	24	1.83	1.21	.24

Table 6

Robust Tests of Equality of Means
GPA

	Statistic ^a	df1	df2	Sig.
Welch	6.14	1	38.40	.018

a. Asymptotically F distributed.

Summary

RQ1 was assessed using a Chi-Square statistical test. Results from this statistical test showed that the remedial English course had better retention rates (71.4%) compared to those who took part in the SBP (28.6%) between 2013 and 2017.

For RQ2, an independent *t*-test was run. Results from the independent *t*-test showed that there was a statistically significant difference in terms of GPA. Those students who took part in the remedial English course had a mean average of 2.54 GPA compared to the mean average of 1.83 GPA for those who took part in the SBP between 2013 and 2017.

Chapter 5 includes a discussion of the implications of these findings and what they can mean for both the study site and future research. There will also be a discussion of research limitations and potential future studies that could continue to add to current research regarding SBPs. Finally, social change implications and potential research questions for future researchers to consider building on this research are addressed.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

With student retention rates continuing to be an issue, particularly for first-generation Latino students, SBPs provide one potential way to address their needs and help them continue in their chosen degree pathway. However, research has been inconclusive in terms of determining if these programs effectively address student needs in academics or in retention. Therefore, it is important to continue to assess the effectiveness of SBPs and find ways to improve them and better serve student populations, particularly first-generation Latino students.

The purpose of this quantitative quasi-experimental study was to evaluate the influence of one SBP for writing on the retention and weighted GPA of first-generation Latino students who required remediation in writing. This study compared weighted GPA and second-year enrollments of first-generation remedial Latino students who chose to take part in the SBP for writing compared to those who chose to take remedial English during their first semester. Dependent variables for this research were weighted cumulative GPA at the end of the third semester and continued university enrollment into the second year (fall to fall). The independent variable for this study was students' chosen choice of either the SBP for writing or fall remedial English class. The SBP for writing had been in effect the longest and had the highest number of Latino students enrolled.

Key findings regarding differences in retention rates after three semesters between Latino first-generation students who took part in a SBP for writing and Latino first-generation students who took remedial English were statistically significant. A Chi-

Square test was run to determine differences in retention rates between the two groups. According to the results, students enrolled in remedial English courses had a retention rate of 71.4% compared to those enrolled in the SBP with a retention rate of 28.6%.

Key findings regarding differences between Latino first-generation SBP participants' weighted GPA by the end of the third semester compared to those who took remedial English was also statistically significant. An independent samples t-test was used to determine differences showing that students who enrolled in the remedial English course had higher weighted GPA scores (M = 2.55, SD = .90) than those enrolled in the SBP (M = 1.84, SD = 1.21).

Interpretation of Findings

This section discusses how key findings confirm, disconfirm, or extend knowledge of SBPs and their influence on first-generation Latino students. This section will also review the findings using Tinto's theory of student retention and how this study's findings addressed the knowledge gap in regard to this particular remedial program by discussing its impact on first-generation Latino students specifically.

Findings Related to the Literature

This study confirms previous studies showing little to no gains for those who took part in the SBP at other universities. This study showed there was no long-term positive influence on student success for students who took part in the SBP. Instead, this decrease in student GPA and retention could be in part due to specific characteristics of the study site institution.

Similarly, results from this study did contradict other studies done on SBPs and the positive influence on Latino students. Results from this study showed that students who opted to take the remedial English course did better in terms of both their GPA and their retention beyond their first year compared to students who chose to take the SBP for writing.

While results from this study were not expected, it is possible that findings for the current study could be due to a few factors. Since this study focused solely on first-generation Latino students, their status as first-generation college students could have been a hindrance in itself. These students go to college with less knowledge of college life and culture, which can hinder their progress, especially if it feels as though they may not complete their degree to reach their intended career path. This lack of knowledge of campus life and culture could be made worse when there is a lack of connection to the campus itself. Since the study site is a smaller institution with no on campus housing or other traditional aspects that larger universities provide to help students feel connected to their new school, it could be more difficult to develop an attachment to the study site compared to other larger universities. There could have also been potential financial issues. The area around the study site is a low-income area. This could lead to concerns about college funding as well as life-altering issues that are linked to low-socioeconomic status, and could also be a reason for lower retention and GPA.

However, despite potential issues that could explain these results, consistency of data throughout the 5 study years shows that the SBP was not working for this particular student population at this particular university. While it is likely the remedial English

class may be better in terms of teaching and addressing student academic needs compared to the SBP, there is a chance that the SBP could be greatly improved. In fact, it may be beneficial to address what is being done differently between the remedial English class and SBP and how these teaching strategies or curriculum could be used for the SBP while also incorporating ways to help students through Tinto's three stages of integration.

Findings Related to the Theoretical Framework

According to Tinto (1975), there are three stages students go through when beginning their postsecondary education: separation, transition, and integration. The separation stage occurs early on in the student's first year when they first start attending their new post-secondary institution. Since there is no on-campus housing and most of the students attending the study site continue to live at home, many do not struggle with this stage compared to those who leave their homes to attend a more traditional four-year institution. Instead, it is clear that the majority of first-generation Latino students who chose to take the SBP versus the remedial English course were not able to reach the integration stage, and possibly not even the transition stage, considering that only 28.6% of them remained at the institution beyond their first year. However, there could be more reasons than no on campus housing or student living situations to explain these results.

The low retention percentage could be attributed to several factors not covered by this study. As discussed earlier, there is no on campus housing. Other potential factors could be student ages or poverty levels. However, since first-generation Latino students who attended the remedial English courses had a better retention rate of 71% and a higher weighted GPA of 2.5 compared to 1.8, it seems less likely that outside factors are the

cause of these differing results. Instead, it is more likely that the SBP does not address academic and transition needs of their students as well as the remedial English course, and therefore does not prepare them for the integration stage. Whatever the reasons are, it is clear that there are barriers for these students causing their departure and lower academic success, and these barriers should be assessed further to improve not only the program, but potentially student experiences regarding campus in general to keep them working toward their educational goals.

Limitations of the Study

This study was limited to one study site, so it would be difficult to assume that the results from this study reflect outcomes from other institutions using a similar summer bridge writing program. The use of archival data from 2013 to 2017 also makes extrapolation an issue since universities do conduct the summer bridge program slightly differently while addressing their own diverse student populations. If this study were repeated, it would be beneficial to compare the results to other groups of students enrolled at the study site. However, the results of this study do point to a need for the study site to continue to reassess and realign the summer bridge writing program's effectiveness on first-generation Latino students to ensure they are addressing the needs of this growing population of students and serving this particular student population better.

Another limitation of this study was the limited number of subjects for the study.

While a larger number of participants fitting the criteria of first-generation and Latino would have been ideal, that was not the case. Originally, a priori power analysis that was

conducted determined that the sample size needed a total sample of 102 participants with two equal sized groups of n = 51 to achieve a power of .80 (Faul, Erdfelder, Lang, & Buchner, 2007). However, once data were narrowed down, the two groups only totaled 64 participants total, with 40 participants taking part in remedial English and 24 participants taking part in the summer bridge program. This limitation added the need for a Welch statistical test to account for the lack of homogeneity of the number of students. In future studies, or if this study were repeated, it would be beneficial to pull from a larger, more equal, group set to see if the results would differ from this current study. This could include a larger time span or the inclusion of another study site to compare the results.

The final limitation of this study was the researcher's employment with the university. Since the researcher has worked at the study site for over ten years, it was initially a concern that it would impact the study or the reported results. However, this study used randomized student numbers from the university's archival data to protect student information. These results also have no bearing on the researcher or the researcher's employment since the courses are controlled and taught by another department. Therefore, the results have no connection to the researcher's employment status.

Recommendations

The results from the current study brings up new questions and the need for future studies. First, future studies should replicate this study using current student populations and their data. Another option would be to use a qualitative method to better understand

the reasonings behind the student's weighted GPA and retention. One way to do this would be to look into the potential influence this program would have in developing a student's academic skills and self-efficacy. This study could shed light on what the study site is doing well and what may need to be improved on specifically along with helping other universities begin to review their programs and needs. Another recommendation would be to use either a quantitative or mixed methods study to reassess the program using current students of all ethnic and backgrounds involved in the program to compare the results between the different study groups. Going more in-depth with all student populations could help determine if it is the program itself or an issue surrounding first-generation Latino students specifically. These future studies could help to ensure that all students, regardless of their background or ethnicity, can receive the help they need to find academic success and earn their college degree.

As for the study site, it would be beneficial for them to review the results from this study to work on the needed improvements. Once the university has a copy of the current study with the results, it could begin to open a dialogue between the university administration, program leaders, and instructors responsible for the summer bridge program and those who teach the remedial English course to ensure that everyone is on a similar page and doing what is best for all remedial students, regardless of which remediation they choose to take part in. Along with this, the study site should also review the program with a more current cohort of students. Then, assess the weighted GPA and retention rates for the different ethnic groups of students who take part in the summer bridge program compared to those who take remedial English. Looking at the data results

for all ethnic groups would provide a much larger population review and the potential success of the program for different ethnic groups of students. Data could then be used to also compare their own results to other more traditional universities to determine if having a local student population creates a barrier that has not been considered prior to this study. With the data from this and future students, along with the help of future conversations with the university administration and summer bridge program staff, the study site could begin the process of making sure all students are being taken into consideration and provided the chance to find success at their institution, regardless of background.

Implications

Positive Social Change

This study's findings foster a positive social change that will begin by helping the study site reevaluate their summer bridge program and better address the needs of their students. Though it is a small university in comparison to others across Washington state, this Hispanic Serving Institution, which serves a population of 85% first-generation students, could use this data to better serve their struggling students and improve their overall graduation rate of only 22% (Provost and Vice President for Academic Affairs, 2018). This study could then be further expanded to include the other student populations on campus, particularly Native American students who are also a population that has not been the focus of similar studies, to ensure they are meeting the needs of all students on campus. These studies could further expand on and address what specific improvements

need to be made at the study site, and others similar to it, as well as similar issues that are hindering the success of this particular SBP.

Outside of the study site, this research can help other universities to begin assessing their SBPs and, if found to have gaps, work towards improving them to serve their student populations better. Other similar studies were able to review the summer bridge program in specific locations to determine if it was effective and make suggestions to improve their effectiveness. If more locations were to follow this trend, it would be possible that with the improvements of SBPs, there could be a substantial increase in the likelihood of marginalized, at-risk populations to improve academically and reach their end goal of earning their college degree.

Recommendation for Practice

SBPs are established to serve students who need guidance and academic support to do well in college, so it is important that the program is designed and continually assessed to meet the needs of the students it serves. According to Sanacore and Palumbo (2016), these programs, while helping students to prepare for their first year of college, need to maintain high expectations for them and what they are capable of accomplishing. If done correctly, these programs could help their students find success in the academic world of the university or college and earn their post-secondary degree.

It is clear that fist-generation Latino students who enrolled in the summer bridge program at the study site were not experiencing the academic gains or improved retention from this program. Therefore, it would be important to conduct continued evaluation of the program and how effective it is for all participants. According to Sanacore and

Palumbo (2016), it is important to conduct consistent assessment to ensure that it is serving the students that need it the most. These evaluations could help to continually assess the curriculum and teaching strategies that are being used and make improvements where they are needed the most. That way, students are getting the best academic remediation possible to help their transition to their college courses. It would also be beneficial for the university to ensure that the program is also addressing the social aspect of transitioning to the university. This way, students will ideally begin to form a bond with the campus and be better prepared for the struggles ahead by knowing what resources are available to them when they do face challenges.

Therefore, it is vitally important for the institution to evaluate what the program does and what could be done to improve it for all its students, especially for their first-generation Latino students. If the site can improve this program and continue to assess it for effectiveness, there is a real chance that the retention rates for this population, and all students in the program in general, could lead to higher levels of success both in the classroom and after graduation.

Conclusion

Research on SBPs over the years has produced mixed results. This study confirmed the negative influence of the summer bridge program at the study site, showing that though it may have the potential to help first-generation Latino students, it needs to be revisited to serve this student population better.

Though the findings of this quantitative quasi-experimental study did not demonstrate the success of the study site's summer bridge program as expected, it does

provide some opportunities. First, it will provide the study site information to help them improve their summer bridge program for all students, but particularly for first-generation Latino students. This research could also help other universities assess their SBPs to serve their student populations better. After all, student retention and success should be at the forefront of university efforts to improve their student's lives by completing their college degree and preparing the future workers of this country.

References

- Allen, D. F., & Bir, B. (2012). Academic confidence and summer bridge learning communities: Path analytic linkages to student persistence. *Journal of College Student Retention: Research, Theory & Practice*, 13(4), 519-548. doi:10.2190/C S.13.4.f
- Atherton, M. C. (2014). Academic preparedness of first-generation college students:

 Different perspectives. *Journal of College Student Development*, 55(8), 824-829.

 doi:10.1353/csd.2014.0081
- Bacon, D. R., & Bean, B. (2006). GPA in research studies: An invaluable but neglected opportunity. *Journal of Marketing Education*, 28(1), 35-42. doi:10.1177/027347530528 4638
- Barnett, E. A., Bork, R. H., Mayer, A. K., Pretlow, J., Wathington, H. D., & Weiss, M. J. (2012). Bridging the gap: An impact study of eight developmental summer bridge programs in Texas. *National Center for Postsecondary Research*. Retrieved from http://www.postsec-ondaryresearch.org/research
- Bettinger, E. P., Boatman, A., & Long, B. T. (2013). Student supports: Developmental education and other academic programs. *The Future of Children*, 23(1), 93-115. doi:10.1353/foc.2 013.0003
- Bir, B., & Myrick, M. (2015). Summer bridge's effects on college student success. *Journal of Developmental Education*, 39(1), 22.

- Bragg, D. D., & Taylor, J. L. (2014). Toward college and career readiness: How different models produce similar short-term outcomes. *American Behavioral Scientist*, 58(8), 994-1017. doi:10.1177/0002764213515231
- Brown, A., & Lopez, M. H. (2013). Mapping the Latino population, by state, county and city. Retrieved from http://www.pewhis panic.org/2013/08/29/mapping-the-latino-population-by-state-county-and-city/
- Cabrera, N. L., Miner, D. D., & Milem, J. F. (2013). Can a summer bridge program impact first-year persistence and performance? A case study of the New Start Summer Program. *Research in Higher Education*, *54*(5), 481-498. doi:10.1007/s11162-013-9286-7
- Carnevale, A. P. (2007). Access to opportunity. *Education Week*, 26(40), 34. Retrieved from https://search-ebscohost-com.ezp.waldenulibrary.org/login.aspx?direct=true &db=eue&AN=507986305&site=ehost-live&scope=site.
- Carnevale, A., Ridley, N., Cheah, B., Strohl, J., & Peltier Campbell, K. (2019).

 Upskilling and downsizing in American manufacturing. doi:10.1177/00031224

 18809374
- Castleman, B. L., & Page, L. C. (2014). A trickle or a torrent? Understanding the extent of summer "melt" among college-intending high school graduates. *Social Science Quarterly*, 95(1), 202-220. doi:10.1111/ssqu.12032
- Cerezo, A., & McWhirter, B. T. (2012). A brief intervention designed to improve social awareness and skills to improve Latino college student retention. *College Student Journal*, 46(4), 867–879. Retrieved from https://search-ebsohost-com.ezp.walden

- ulibrary.org/login.aspx?direct=true&db-a9h&AN=84271984&site=ehost-live&s cope=site
- Crisp, G., Nora, A., & Taggart, A. (2015). Undergraduate Latina/o students: A systematic review of research identifying factors contributing to academic success outcomes.

 Review of Educational Research, 85(2), 249-274. doi:10.3102/0034654314551

 064
- Douglas, D., & Attewell, P. (2014). The bridge and the troll underneath: Summer bridge programs and degree completion. *American Journal of Education*, *121*(1), 87-109. doi: 10.1086/677959
- Duncheon, J. C. (2018). "You have to be able to adjust your own self": Latinx students' transitions into college from a low-performing urban high school. *Journal of Latinos and Education*, 17(4), 358-372. doi: 10.1080/15348431.2017.1355248
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. Behavior Research Methods, 39, 175-191.
- Fry, R., & Lopez, M. H. (2012). Hispanic student enrollments reach new highs in 2011.

 Washington, DC: Pew Hispanic Center. Retrieved from http://assets.pewresear

 ch.org/wp-content/uploads/sites/7/2012/08/Hispanic-Student-Enrollments-Reach
 New-Highs-in-2011_FINAL.pdf
- Gonzalez, L. M. (2012). College-level choice of Latino high school students: A social-cognitive approach. *Journal of Multicultural Counseling and Development*, 40(3), 144-155. doi: 10.1002/j.2161-1912.2012.00014

- Gonzalez Quiroz, A., & Garza, N. R. (2018). Focus on Student Success: Components for Effective Summer Bridge Programs. *Journal of Hispanic Higher Education*, 17(2), 101–111. doi: 10.1177/1538192717753988
- HACU. (1999). Hispanic-Serving Institution Definitions. Retrieved February 10, 2019, from https://www.hacu.net/hacu/HSI_Definition.asp
- Ingram, T. N., & Gonzalez-Matthews, M. (2013). Moving towards engagement:

 Promoting persistence among Latino male undergraduates at an urban community college. *Community College Journal of research and practice*, *37*(8), 636-648.

 doi: 10.1080/1066 8921003723185
- Kallison, J. M., Jr & Stader, D. L. (2012). Effectiveness of summer bridge programs in enhancing college readiness. *Community College Journal of Research and Practice*, *36*(5), 340-357. doi: 10.1080/106689 20802708595
- Kodama, C. M., Han, C. W., Moss, T., Myers, B., & Farruggia, S. P. (2018). Getting college students back on track: A summer bridge writing program. *Journal of College Student Retention: Research, Theory & Practice*, 20(3), 350-368. doi: 10.1177/1521025116670208
- Lee, J. A., & Barnes, A. R. (2015). Predominately white institutions: Transition programs to address academic under-preparedness and experiences of discrimination.

 *Translational Issues in Psychological Science, 1(4), 401. doi: 10.1037/tps0000 043

- Lonn, S., Aguilar, S. J., & Teasley, S. D. (2015). Investigating student motivation in the context of a learning analytics intervention during a summer bridge program.

 *Computers in Human Behavior, 47, 90-97. doi: 10.1016/j.chb.2014.07.013
- Matos, J. M. (2015). La familia: The important ingredient for Latina/o college student engagement and persistence. *Equity & Excellence in Education*, 48(3), 436-453. doi: 10.1080/10665684.2015.1056761
- McCoy, D. L. (2014). A phenomenological approach to understanding first-generation college students' of color transitions to one "extreme" predominantly white institution. *College Student Affairs Journal*, 32(1), 155-169. Retrieved from https://ezp.waldenulibrary.org/login?url=https://search-proquest-com.ezp.wal denulibrary.org/docview/1611 000661?accountid=14872.
- McCoy, D. L., & Winkle-Wagner, R. (2015). Bridging the divide: Developing a scholarly habitus for aspiring graduate students through summer bridge programs participation. *Journal of College Student Development*, *56*(5), 423-439. doi: 10.1353/csd.2015.0054
- Mitchell, C. E., Alozie, N. M., & Wathington, H. D. (2015). Investigating the potential of community college developmental summer bridge programs in facilitating student adjustment to four-year institutions. *Community College Journal of Research and Practice*, 39(4), 366-382. doi: 10.1080/10668926.2014.981891
- Murphy, J. P., & Murphy, S. A. (2018). Get ready, get in, get through: Factors that influence Latino college student success. *Journal of Latinos and Education*, *17*(1), 3-17. DOI: 10.1080/15348431.2016.1268139

- Murphy, T. E., Gaughan, M., Hume, R., & Moore, S. G., Jr. (2010). College graduation rates for minority students in a selective technical university: Will participation in a summer bridge program contribute to success?. *Educational Evaluation and Policy Analysis*, 32(1), 70-83. doi: 10.3102/016237 3709360064
- Núñez, A. M., Sparks, P., & Hernández, E. A. (2011). Latino access to community colleges and Hispanic-serving institutions: A national study. *Journal of Hispanic Higher Education*, *10*(1), 18-40. doi: 10. 1177/1538192710391801
- The Office of Superintendent of Public Instruction (OSPI). (2017, August 10).

 Postsecondary Remediation Rates Decreasing; Enrollment Rates Steady, Data

 Show. Retrieved January 8, 2020, from https://www.k12.wa.us/about-ospi/press-releases/postsecondary-remediation-rates-decreasing-enrollment-rates-steady-data-show.
- Ortiz, C. J., Valerio, M. A., & Lopez, K. (2012). Trends in Hispanic academic achievement: Where do we go from here?. *Journal of Hispanic Higher Education*, *11*(2), 136-148. doi: 10.1177/1538192712437935
- Pike, G. R., Hansen, M. J., & Childress, J. E. (2014). The influence of students' precollege characteristics, high school experiences, college expectations, and initial enrollment characteristics on degree attainment. *Journal of College Student Retention: Research, Theory & Practice*, 16(1), 1-23. doi: 10.2190/CS.16.1.a
- Postsecondary National Policy Institute (PNPI). (2018, September 28). Factsheets: First Generation Students. Retrieved February 11, 2019, from http://pnpi.org/first-generation-students/

- Provost and Vice President for Academic Affairs. (2018). Retrieved August 7, 2019, from https://www.heritage.edu/about-heritage-university/provost-and-vp-for-academic-affairs/.
- Pulliam, N., Ieva, K. P., & Burlew, L. (2017). The relationship between perceived career barriers and career decision self-efficacy on initial career choice among low-income, first generation, pre-freshman, college-bound students. *Journal of College Access*, *3*(2), 7. Retrieved from https://scholarworks.wmich.edu/cgi/viewcontent.cg i?article=1058&context=jca
- Rath, B., Rock, K., & Laferriere, A. (2013). Pathways through college: Strategies for improving community college student success. *Hartford, CT: Our Piece of the Pie.* Retrieved from http://opp.org/wp-content/uploads/2017/06/Pathways-through-College-OPP-April-2013.pdf.
- Ryan, S. (2016). Ambitions in action: Investigating college enrollment among Hispanic youth who expect to complete a bachelor's degree. *Journal of Hispanic Higher Education*, *15*(1), 3-21. doi: 10. 1177/1538192715584191
- Sablan, J. R. (2013). The challenge of summer bridge programs. *American Behavioral Scientist*. doi: 10.1177/00027 64213515234
- Sablan, J. R., & Tierney, W. G. (2016, January). Evaluating college-ready writing and college knowledge in a summer bridge program. In *The Educational Forum* (Vol. 80, No. 1, pp. 3-20). Routledge. doi: 10.1080/0013172 5.2015.1105341

- Samuel, K. R., & Scott, J. A. (2014). Promoting Hispanic student retention in two Texas community colleges. *Research in Higher Education Journal*, 25. Retrieved from https://files.eric.ed. gov/fulltext/EJ1055319.pdf.
- Sanacore, J., & Palumbo, A. (2016). Graduating from college: The impossible dream for most first-generation students. *International Journal of Progressive Education* (Vol. 12, No. 2, pp. 23-33). Retrieved from http://web.b.ebscohost.com.ezp. waldenulibrary.org.
- Sandoval-Lucero, E., Maes, J. B., & Klingsmith, L. (2014). African American and Latina(O) community college students' social capital and student success. *College Student Journal*, 48(3), 522–533. Retrieved from https://ezp.waldenulibrary. org/login?url =https://search.e bscohost.com/login.aspx?direct=true&db=a9h&AN=98748718&site=ehostlive&scope=site.
- Santiago, D., Calderón Galdeano, E., & Taylor, M. (2015, January). Factbook: The condition of Latinos in education 2015. Retrieved from https://www.nccpsafety.org/assets/files/library/The_Condition_of_Latinos_in_Education.pdf.
- Santiago, D. A. (2012). Public policy and Hispanic-serving institutions: From invention to accountability. *Journal of Latinos and Education*, 11(3), 163-167. doi: 10.1080/15348431.2012.686367
- Saxon, D. P., & Morante, E. A. (2014). Effective student assessment and placement:

 Challenges and recommendations. *Journal of Developmental Education*, 24-31.

 Retrieved from https://ncde.appstate.edu/sites/ncde.appstate.edu/files/37-3%2

- 0Saxon%20%26%20 Morante%20-%20Effective%20Student%20Assess%20%26%20Placement.pdf.
- Slade, J., Eatmon, D., Staley, K., & Dixon, K. G. (2015). Getting into the pipeline:

 Summer bridge as a pathway to college success. *The Journal of Negro Education*,

 84(2), 125-138. doi: 10.7709/jnegroeducation.84.2.0125
- Slanger, W. D., Berg, E. A., Fisk, P. S., & Hanson, M. G. (2015). A longitudinal cohort study of student motivational factors related to academic success and retention using the college student inventory. *Journal of College Student Retention:*Research, Theory & Practice, 17(3), 278-302. doi: 10.1177/152102 5115575701
- Soria, Krista. (2013). Creating a successful transition for working-class first-year students. *Journal of College Orientation and Transition*. Retrieved from the University of Minnesota Digital Conservancy. Retrieved from http://hdl.handle.n et/11299/150275.
- Stewart, S., Lim, D. H., & Kim, J. (2015). Factors influencing college persistence for first-time students. *Journal of Developmental Education*, *38*(3), 12. Retrieved from https://ezp.wa.ldenulibrary.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=109313200&site=ehost-live&scope=site.
- St. John, E. P., Massé, J. C., Fisher, A. S., Moronski-Chapman, K., & Lee, M. (2013).

 Beyond the bridge. *American Behavioral Scientist*, 58(8), 1051-1070.

 doi:10.1177/0002764 213515233

- Strayhorn, T. L. (2011). Bridging the pipeline: Increasing underrepresented students' preparation for college through a summer bridge program. *American Behavioral Scientist*, 55(2), 142-159. doi: 10.1177/0002764210381871
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of educational research*, 45(1), 89-125. doi: 10.3102/0034 6543045001089
- Tinto, V. (1982). Limits of theory and practice in student attrition. *The Journal of Higher Education*, 53(6), 687-700. doi: 10.2307/1981525
- Tinto, V. (1988). Stages of student departure: Reflections on the longitudinal character of student leaving. *The Journal of Higher Education*, 438-455. doi: 10.1080/002215 46.1988.1178 0199
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago, IL. The University of Chicago Press.
- Tinto, V. (1998). Colleges as communities: Taking research on student persistence seriously. *The review of higher education*, 21(2), 167-177. Retrieved from https://muse-jhu-edu.ezp. waldenulibrary.org/article/30046.
- Tinto, V. (2012). *Completing college: rethinking institutional action*. Chicago, IL: The University of Chicago Press.
- Tinto, V. (2017). Through the eyes of students. *Journal of College Student Retention:*Research, Theory & Practice, 19(3), 254-269. doi: 10.1177/1521025115621917
- Toldson, I. A., & Lemmons, B. P. (2013). Social demographics, the school environment, and parenting practices associated with parents' participation in schools and

- academic success among Black, Hispanic, and white students. *Journal of Human Behavior in the Social Environment*, 23(2), 237-255. doi: 10.1080/10911359.20 13.747407
- Tovar, E. (2015). The role of faculty, counselors, and support programs on Latino/a community college students' success and intent to persist. *Community College Review*, *43*(1), 46-71. doi: 10.1177/0091552114553788
- Tuttle, L. V., & Musoba, G. D. (2013). Transfer student persistence at a Hispanic-serving university. *Journal of Latinos and Education*, 12(1), 38-58. doi: 10.1080/153484 31.20 13.734248
- Upcraft, M. L., Gardner, J. N., & Barefoot, B. O. (2004). *Challenging and supporting*the first-year student: A handbook for improving the first year of college.

 Indianapolis, IN. Jossey-Bass, An Imprint of Wiley.
- U. S. Department of Education's National Center for Education Statistics (NCES).(1997). Definitions for New Race and Ethnicity Categories. Retrieved January 8,2020, from https://nces.ed.gov/ipeds/report-your-data/race-ethnicity-definitions.
- Wagner, J. M. (2015). Hispanic minority college students at selective colleges: What matters with degree completion?. *Journal of Hispanic Higher Education*, 14(4), 303-326. doi: 10.1177/1538192714568807
- Wibrowski, C. R., Matthews, W. K., & Kitsantas, A. (2016). The role of a skills learning support program on first-generation college students' self-regulation, motivation, and academic achievement a longitudinal study. *Journal of College Student Retention: Research, Theory & Practice*, doi: 10.1177/1521025116629152

Windham, M. H., Rehfuss, M. C., Williams, C. R., Pugh, J. V., & Tincher-Ladner, L. (2014). Retention of first-year community college students. *Community College Journal of Research and Practice*, *38*(5), 466-477. doi: 10.1080/10668926.2012. 743867

Appendix A: IRB Approval Forms

Dear Ms. Gutzwiler,

This email is to notify you that the Institutional Review Board (IRB) confirms that your study entitled, "Influence of Summer Bridge Programs on First-Generation Latino Students' Academic Success," meets Walden University's ethical standards. Our records indicate that you will be analyzing data provided to you by Heritage University as collected under its oversight. Since this study will serve as a Walden doctoral capstone, the Walden IRB will oversee your capstone data analysis and results reporting. The IRB approval number for this study is 02-26-20-0488317.

This confirmation is contingent upon your adherence to the exact procedures described in the final version of the documents that have been submitted to IRB@mail.waldenu.edu as of this date. This includes maintaining your current status with the university and the oversight relationship is only valid while you are an actively enrolled student at Walden University. If you need to take a leave of absence or are otherwise unable to remain actively enrolled, this is suspended.

If you need to make any changes to your research staff or procedures, you must obtain IRB approval by submitting the IRB Request for Change in Procedures Form. You will receive confirmation with a status update of the request within 1 week of submitting the change request form and are not permitted to implement changes prior to receiving approval. Please note that Walden University does not accept responsibility or liability for research activities conducted without the IRB's approval, and the University will not accept or grant credit for student work that fails to comply with the policies and procedures related to ethical standards in research.

When you submitted your IRB materials, you made a commitment to communicate both discrete adverse events and general problems to the IRB within 1 week of their occurrence/realization. Failure to do so may result in invalidation of data, loss of academic credit, and/or loss of legal protections otherwise available to the researcher.

Both the Adverse Event Reporting form and Request for Change in Procedures form can be obtained at the Documents & FAQs section of the Walden web site: http://academicguides.waldenu.edu/researchcenter/orec

Researchers are expected to keep detailed records of their research activities (i.e., participant log sheets, completed consent forms, etc.) for the same period of time they retain the original data. If, in the future, you require copies of the originally submitted IRB materials, you may request them from Institutional Review Board.

Both students and faculty are invited to provide feedback on this IRB experience at the link below:

http://www.surveymonkey.com/s.aspx?sm=qHBJzkJMUx43pZegKlmdiQ_3d_3d

Congratulations!
Bryn Saunders
Research Ethics Support Specialist
Office of Research Ethics and Compliance

Email: irb@mail.waldenu.edu

Phone: (612-)312-1336 Fax: (626-)605-0472

Walden University 100 Washington Ave. S, Suite 900 Minneapolis, MN 55401

March 19, 2019

(a) Heritage University

Dear Ms. Gutzwiler,

I am approving your request to pull existing archival data on our Summer Bridge Programs. I want to stress that you will need to protect all identities of the students whose information you are using to identify student GPA's and if they went onto the second year at Heritage University. Please make it clear in your IRB application on how you are protecting those individuals identity and using only existing information in our archival data system for your research.

Thank you,

Kazuhiro Sonoda, Ph.D.

Provost/VPAA