

DIFFERENCES IN PERSISTENCE AND GRADUATION RATES OF HISPANIC
STUDENTS IN TEXAS COMMUNITY COLLEGES:
A TEXAS STATEWIDE STUDY

A Dissertation

Presented to

The Faculty of the Department of Educational Leadership
Sam Houston State University

In Partial Fulfillment

of the Requirements for the Degree of
Doctor of Education

by

Danielle R. Stagg

May, 2017

DIFFERENCES IN PERSISTENCE AND GRADUATION RATES OF HISPANIC
STUDENTS IN TEXAS COMMUNITY COLLEGES:
A TEXAS STATEWIDE STUDY

by

Danielle R. Stagg

APPROVED:

Dr. John R. Slate
Dissertation Chair

Dr. Anthony J. Harris
Committee Member

Dr. Frederick C. Lunenburg
Committee Member

Approved:

Dr. Stacey L. Edmonson
Dean, College of Education

DEDICATION

I entered the Educational Leadership doctoral program at Sam Houston State University, during a time in my life where I experienced many changes. After I graduated college with my bachelor's degree, I returned home to Houston and lived with my mom for over 10 years. During the first three months of the program, I finally got married to my boyfriend of seven years! Not only was I married, upon return from my honeymoon, I moved out of the comfort of my mom's house into my own home with my new husband. I wish I could say that the following weeks and years were wedded bliss, but truth be told, being a wife was a different role for me and took a lot of adjustments and changes from this self-described "mama's girl." While I was busy planning my wedding, I started to notice changes in my voice; however, I brushed it off to anxiety and nervousness. When my symptoms did not improve after my wedding, I went to the doctor. A few weeks later I was diagnosed with a vocal disorder. These three milestone events all occurred in my first semester of the doctoral program.

First and foremost, I dedicate this dissertation to my mother. As a single parent raising two beautiful and intelligent girls, she was and continues to be a guiding light of motivation and support. I am so proud of my mom and each day I strive to be just a fraction of the great woman she is. I also want to thank my big sister, Nicole, who is five years older than me. As a child I grew up wanting to be just like my sissy! Today my sister is an excellent mother, daughter, sister, and attorney. She was there to listen and guide me through the trials I overcame during the course of completing my doctorate degree. Throughout my journey of attending doctoral classes and writing a dissertation, my husband has stood by my side with steadfast love and encouragement. I thank him

for making sure I had dinner when I arrived home from Tuesday night classes, avoiding my office when the door was closed, understanding my desire to keep my last name, and always seeing me for who I am.

ABSTRACT

Stagg, Danielle, *Differences in persistence and graduation rates of Hispanic students in Texas community colleges: A Texas statewide study*. Doctor of Education (Educational Leadership), May 2017, Sam Houston State University, Huntsville, Texas.

Purpose

The purpose of this journal-ready dissertation was to examine the 1-year persistence rates of Hispanic community college students in Texas for the 2007-2008 through the 2013-2014 academic years. Specifically, the relationship of the 1-year persistence rates for Hispanic students as a function of their institutional status (i.e., stayed or transferred) was analyzed. The 2-year persistence rates of Hispanic community colleges in Texas were also analyzed for the 2006-2007 through the 2012-2013 academic years. In addition, the graduation rates of Hispanic and White students in Texas community colleges from the 2008-2009 through the 2014-2015 academic years were examined. Furthermore, the degree to which a trend might be present in the graduation rates of Hispanic and White students at Texas community colleges was also ascertained.

Method

In this investigation, archival data from the Texas Higher Education Board Interactive Accountability system were downloaded and analyzed in each of the three empirical studies. Specifically, archival data were obtained for the 1-year and 2-year persistence rates of Hispanic Texas community college students. Graduation data were obtained for Hispanic and White students attending Texas community colleges.

Findings

Inferential statistics revealed the presence of statistically significant differences in the 1-year persistence rates of Hispanic students in Texas community colleges by

institutional status in the 2007-2008, 2008-2009, 2009-2010, 2011-2012, 2012-2013, and 2013-2014 academic years. Additionally, inferential statistics revealed the presence of statistically significant differences in the 2-year persistence rates of Hispanic students in Texas community colleges by institutional status in the 2006-2007 through the 2012-2013 academic years. The 1-year and 2-year persistence rates of Hispanic Texas community college students were higher when Hispanic students stayed at the same community college rather than when they transferred to a different community college.

In regard to graduation rates, inferential statistical analyses revealed statistically significant differences in the 2008-2009, 2009-2010, 2010-2011, 2011-2012, and the 2012-2013 academic years. Although both Hispanic and White students had low graduation rates from Texas community colleges, the average graduation rates of Hispanic students were lower than the average graduation rates of White students. Implications for practice and recommendations for future research were provided.

KEY WORDS: 1-Year Persistence Rates, 2-Year Persistence Rates, Graduation Rates, Hispanic, White, Texas, Community Colleges.

ACKNOWLEDGEMENTS

Being a student in the Educational Leadership Program at Sam Houston State University has been an invaluable experience for me. My dissertation chair, Dr. John R. Slate, is the epitome of professionalism, punctuality, and dedication. I sincerely appreciate the time, assistance, and encouragement he has shown toward me. I feel honored to have the opportunity to have learned from the best! I would also like to thank Dr. Anthony J. Harris and Dr. Frederick C. Lunenburg for serving on my dissertation committee and providing helpful feedback in my pursuit of writing a dissertation.

Thanks to all of my faculty members who provided me with a plethora of knowledge related to Educational Leadership: Dr. Rebecca Bustamante, Dr. Julie Combs, Dr. Matthew Fuller, Dr. Carlos Hernandez, Dr. Peggy Holzweiss, Dr. Ricardo Montelongo, Dr. George Moore, and Dr. Anthony Onwuegbuzie (Tony). I am constantly recommending my colleagues and peers to apply for the Educational Leadership program at Sam Houston State University, as in my opinion, it is one of the best in the state. I also want to extend my gratitude and appreciation for my fellow cohort members: Dorothy, Jeff, Kelley, Kim, Renee, and Sheldon. I could not have picked a better group of individuals with whom to have spent my Tuesday nights!

To my employer, Houston Community College, I thank them for giving me the time necessary to complete the program. In addition, a round of thanks goes out to the members of the Employee Tuition Assistance Program for providing a stipend each semester to assist in paying for my courses. To the late, John Corley, thanks for giving me the opportunity to fulfill my passion of teaching, believing in me, encouraging me to

get my doctoral degree, and always seeing my potential. Thanks to my current supervisor, Dr. Ritu Raju, for her encouragement and support.

TABLE OF CONTENTS

	Page
DEDICATION	iii
ABSTRACT	v
ACKNOWLEDGEMENTS.....	vii
TABLE OF CONTENTS.....	ix
LIST OF TABLES	xii
LIST OF FIGURES	xvi
CHAPTERS	
CHAPTER I: INTRODUCTION.....	1
Literature Review Search Procedures.....	1
Review of Literature	2
Statement of the Problem.....	16
Purpose of the Study	16
Significance of the Study	17
Definition of Terms.....	18
Delimitations.....	19
Limitations	20
Assumptions.....	20
Organization of the Study	21
CHAPTER II: DIFFERENCES IN 1-YEAR PERSISTENCE RATES BY INSTITUTIONAL STATUS FOR HISPANIC COMMUNITY COLLEGE STUDENTS IN TEXAS	23
Method	33

Results.....	35
Discussion.....	40
Conclusion	44
References.....	45
CHAPTER III: DIFFERENCES IN 2-YEAR PERSISTENCE RATES BY INSTITUTIONAL STATUS FOR HISPANIC COMMUNITY COLLEGE STUDENTS IN TEXAS	
	59
Method	68
Results.....	69
Discussion.....	73
Conclusion	77
References.....	78
CHAPTER IV: DIFFERENCES IN GRADUATION RATES BETWEEN HISPANIC AND WHITE STUDENTS ENROLLED IN TEXAS COMMUNITY COLLEGES	
	90
Method	97
Results.....	98
Discussion.....	101
Conclusion	104
References.....	106
CHAPTER V	
	118
Discussion.....	118
Conclusion	128

REFERENCES	130
APPENDIX.....	137
VITA.....	138

LIST OF TABLES

TABLE	Page
2.1 Descriptive Statistics for the 1-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2007-2008 Academic Year.....	50
2.2 Descriptive Statistics for the 1-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2008-2009 Academic Year.....	51
2.3 Descriptive Statistics for the 1-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2009-2010 Academic Year.....	52
2.4 Descriptive Statistics for the 1-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2010-2011 Academic Year.....	53
2.5 Descriptive Statistics for the 1-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2011-2012 Academic Year.....	54
2.6 Descriptive Statistics for the 1-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2012-2013 Academic Year.....	55
2.7 Descriptive Statistics for the 1-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2013-2014 Academic Year.....	56

2.8 Summary of Results for the 1-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2007-2008 Academic Year Through the 2013-2014 Academic Year.....	57
3.1 Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2006-2007 Academic Year.....	81
3.2 Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2007-2008 Academic Year.....	82
3.3 Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2008-2009 Academic Year.....	83
3.4 Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2009-2010 Academic Year.....	84
3.5 Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2010-2011 Academic Year.....	85
3.6 Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2011-2012 Academic Year.....	86

3.7 Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2012-2013 Academic Year.....	87
3.8 Summary of Results for the 2-Year persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2006-2007 Academic Year Through the 2012-2013 Academic Year.....	88
4.1 Descriptive Statistics for Graduation Rates of Hispanic and White Texas Community College Students in the 2008-2009 Academic Year.....	109
4.2 Descriptive Statistics for Graduation Rates of Hispanic and White Texas Community College Students in the 2009-2010 Academic Year.....	110
4.3 Descriptive Statistics for Graduation Rates of Hispanic and White Texas Community College Students in the 2010-2011 Academic Year.....	111
4.4 Descriptive Statistics for Graduation Rates of Hispanic and White Texas Community College Students in the 2011-2012 Academic Year.....	112
4.5 Descriptive Statistics for Graduation Rates of Hispanic and White Texas Community College Students in the 2012-2013 Academic Year.....	113
4.6 Descriptive Statistics for Graduation Rates of Hispanic and White Texas Community College Students in the 2013-2014 Academic Year.....	114
4.7 Descriptive Statistics for Graduation Rates of Hispanic and White Texas Community College Students in the 2014-2015 Academic Year.....	115
4.8 Summary of the Results for Graduation Rates of Hispanic and White Texas Community College Students in the 2008-2009 Academic Year Through the 2014-2015 Academic Year.....	116

5.1 Summary of Results for the 1-Year Persistence Rates by Hispanic	
Community College Student Institutional Status in Texas	120
5.2 Summary of Results for the 2-Year Persistence Rates by Hispanic	
Community College Student Institutional Status in Texas	121
5.3 Summary of Results for the Graduation Rates for Hispanic and White	
Community College Students in Texas	122

LIST OF FIGURES

FIGURES	Page
2.1 Trends in the 1-year persistence rates of Hispanic students who stayed or transferred to a different Texas community college in the 2007-2008 through the 2013-2014 academic years	58
3.1 Trends in the 2-year persistence rates of Hispanic students who stayed or transferred to a different Texas community college in the 2006-2007 through the 2012-2013 academic years	89
4.1 Trends in the graduation rates of Hispanic and White students at Texas community colleges is the 2008-2009 through the 2014-2015 academic years	117

CHAPTER I

INTRODUCTION

Hispanic students represent a growing population within American higher education institutions (Page, 2013). This growth warrants a critical review regarding the issues facing the Hispanic student population. As a demographic shift sweeps across several states in the United States, “Hispanic students constitute a critical core in influencing the landscape of higher education” (Page, 2013, p. 38). Although the number of Hispanics enrolled in higher education institutions has increased (Pew Research Center, 2015), college enrollment rates for Hispanics are lower when compared to White and Black students (McCallister, Evans, & Illich, 2010).

Despite enrollment gains for Hispanic students, the persistence and graduation rates for Hispanic students continue to fall (Pew Research Center, 2015). Actions from the federal government such as affirmative action, No Child Left Behind Act, and the Every Student Succeeds Act were initially developed to ensure success for students, increase the number of high school graduates, thereby increasing the number of students who enrolled in higher education (Fauria & Slate, 2014). In spite of these efforts, the extent to which targeted populations are persisting and graduating from college has not substantially increased.

Literature Review Search Procedures

For this journal-ready dissertation, the literature regarding persistence and graduation rates for Hispanic community college students in Texas was examined. Phrases that were used in the search for current literature were: persistence rates, graduation rates, Hispanic, community college student, and achievement gap. All

searches were conducted using the EBSCO Host database for academic journals that included scholarly peer reviewed articles.

A key word search for “persistence rate” generated 91 results and by limiting the range from 2000 to 2016 and including the word “Hispanic,” the results were reduced to seven. When “graduation rates” was used for the key word search for articles between 2000 and 2016, 2,215 articles were displayed. By including the words “community college,” the results were reduced to 196. When “Hispanic” was used for the key word article search from 2000 to 2016, 5,342 results were displayed. By including the words “community college student” the results were reduced to 16. A keyword search for achievement gap generated 9,974 results, which was reduced to 278 by including the word “Hispanic.” Articles were reviewed based upon application to persistence and graduation rates for Hispanic community college students in Texas.

Review of Literature

In 2009, President Barack Obama challenged community colleges to produce an additional five million completers by 2020 (Boggs, 2011). To meet this challenge, student retention and transfer rates at community colleges must dramatically improve (Boggs, 2011). Furthermore, community colleges will have to become more effective in assisting Black and Hispanic and low-income students in completing programs and in closing student achievement gaps (Boggs, 2011).

As open-door institutions, community colleges strive to assist underrepresented students in overcoming the challenges they face (Scoggin & Styron, 2006). During their quest to obtain a college degree, college students face a plethora of obstacles and challenges. Many students lack academic preparation, work while going to school, and

have to manage family responsibilities (Reid & Moore, 2008). Students attending community colleges primarily represent first-generation college students, adult learners, low-income, and other underrepresented subpopulations, including Hispanics (Schuetz, 2008).

Many community college students are overwhelmed by the challenges they face and therefore do not persist. Wolniak, Mayhew, and Engberg (2012) noted that the current understanding of student persistence is grounded in Tinto's integration theory. Tinto (1993) asserted that although 25% of students withdraw due to failing academically, more than 75% of students drop out of college due to difficulties in adjusting to the "organization of educational institutions, their formal structures, resources, and patterns of association" (p. 89).

Community colleges currently enroll over one-half of all beginning higher education students (Cox, Joyner, & Slate, 2011; Schuetz, 2008; Scoggin & Styron, 2006). Of note is that a large percentage of Black and Hispanic students enroll at community colleges rather than at 4-year universities (Spangler & Slate, 2015). Researchers (e.g., Crisp & Nora, 2010; Hernandez, Slate, & Joyner, 2015; Voorhees, 2001) have documented that Hispanic students have a greater likelihood of beginning their college education at community colleges. Almost one-half of Hispanic college students attend public 2-year schools (Pew Research Center, 2015). In Texas, the state of interest for this investigation, community colleges have been challenged with record enrollments and an unprecedented demographic shift (Hernandez et al., 2015; Pew Research Center, 2015). With respect to the state of interest for this investigation, Texas, Hispanics accounted for 27% of the higher education enrollment (Ryu, 2010).

Hernandez et al. (2015) noted that Hispanics in the United States have experienced considerable growth during the last decade. Moreover, Hernandez et al. (2015) stated that “from 2000-2010, the Hispanic population grew 43%, increasing from 35.3 million to 50.5 million in numeric growth” (p. 58). With respect to the state of interest in this investigation, the Hispanic population in Texas has substantially increased in the past two decades. Murdock (2011) documented that from 2000-2010, the Hispanic population in Texas grew 41.8%, increasing from 6.6 million to 9.4 million individuals.

From 2009-2010, Hispanic enrollment in colleges in the United States surged 24% (Fry, 2011). Fry (2011) suggested that population growth, increasing Hispanic high school completion rates, and the Hispanic enrollment of college eligible students accounted for the college enrollment growth of Hispanics. In 2013, 2.2 million Hispanics were enrolled in higher education institutions, compared to 728,000 individuals who were enrolled in 1993 (Pew Research Center, 2015). Moreover, Hispanic students represent the largest minority group on college campuses in the United States (Pew Research Center, 2015).

College enrollment rates for Hispanics are relatively low when compared to the college enrollment rates for White and Black students (McCallister, Evans, & Illich, 2010). Ryu (2010) documented that although college enrollment rates for Hispanics between the ages of 18-24 experienced an increase, Hispanics trailed behind at 28%, versus Asians with 63%, Whites with 45%, and Blacks with 34%. The relatively low college enrollment rates for Hispanics have been attributed to the fact that in comparison to other ethnic/racial groups, Hispanics are less likely to complete high school (National Center for Education Statistics, 2006).

Although the number of Hispanics graduating from high school has increased, Hispanic students are not persisting in higher education. In 2009, only 13.3% of Hispanics in the United States were reported to have a college degree (U.S. Census Bureau, 2009). In 2013, only 15% of Hispanics between the ages of 25 to 29 have a bachelor's degree or higher, compared to 40% of Whites, 20% of Blacks, and 60% of Asians (Pew Research Center, 2015). This gap is attributed to the fact that Hispanics are less likely to enroll in a 4-year college and enroll full-time (Pew Research Center, 2015) than are members of other ethnic/racial groups.

Kezar and Eckel (2007) noted, "bringing students into higher education is not the same thing as ensuring that they will succeed" (p. 19). Moreover, Van Dermerwe (2011) posited that once students enroll in an institution of higher education, no guarantee exists that students will persevere. As evidence of this statement, the persistence rates of Hispanic students continue to fall behind the persistence rates of White and Asian students (Kezar & Eckel, 2007; Pew Research Center, 2015).

Zarate and Burciaga (2010) documented the presence of several factors contributing to the enrollment and retention gaps between Hispanic and other ethnic/racial groups. Included factors were high Hispanic high school dropout rates, lower participation in college preparation curriculum, unequal resources, less access to financial aid, and lack of timely financial aid knowledge to Hispanic families (Greene, Marti, & McClenney, 2008; Rodriguez, 2014; Zarate & Burciaga, 2010). Although the high school dropout rate for Hispanics has dramatically decreased from 32% in 2000 to 14% in 2013, the rate remains higher than it is for Blacks, 8%, Whites, 5%, and Asians, 4% (Pew Research Center, 2015). Furthermore, Hispanic students often face deferred

enrollment in college, increased financial responsibility, and residing with family while in college (Bagnato, 2005).

Samuel and Scott (2014) noted several personal challenges facing Hispanics planning to attend college: poor academic preparation, first-generation status, misinformation, and financial constraints. One reason finances are a cause of reduced retention for Hispanic students is because many need to work while attending college (Samuel & Scott, 2014). Samuel and Scott (2014) noted that the majority of students were paying for college with cash, as many Hispanics do not take advantage of available financial aid. Students surveyed suggested that meal plans, on-campus childcare, mandatory orientation, and work-study opportunities were most influential in increasing retention. Samuel and Scott (2014) argued the importance of community colleges in creating institutional practices to support the retention of Hispanic students.

Transferring to another institution has also been linked to student persistence. To determine the relationship between persistence rates of students who stayed at the same institution compared to the persistence rates of students who transferred to other institutions, Fauria and Slate (2014) analyzed the 1-year persistence rates of White, Black, Hispanic, and Asian students who were enrolled in 4-year institutions in Texas for the 2000 and 2011 academic years. Fauria and Slate (2014) documented that the persistence rates for all four ethnic/racial groups were lower in the 2000 and the 2011 academic years when students transferred to other institutions, compared to students staying at the same institution. Regardless of ethnicity/race, students were much less likely to persist if they transferred to another institution after 1-year. Fauria and Slate

(2014) expressed the need for additional research to explore “discrepancies in persistence rates between racial groups” (p. 9).

In a recent study in the state of interest for this investigation, Moss and Slate (2016) analyzed the 1-year persistence rates of Black and White students enrolled in Texas community colleges in the 2000 and 2013 academic years. Moss and Slate (2016) analyzed the 1-year persistence rates of Black and White students who were enrolled at the same community college and the 1-year persistence rates of Black and White students who transferred to a different community college. The 1-year persistence rates for Black and White students were statistically significantly higher in the 2000 and the 2013 academic years when students remained at the same community college. Moreover, White students were more successful than Black students when they remained at the same institution and when they transferred to a different community college.

Spangler and Slate (2015) investigated the graduation and persistence rates of Texas community college students for the 2000 through the 2010 academic years. They examined graduation and persistence rates by ethnic/racial membership (i.e., White, Black, Hispanic, and Asian). Spangler and Slate (2015) revealed an increase in the persistence and graduation rates of White, Black, Hispanic, and Asian students from the 2000 to 2010 academic year. Moreover, they documented the presence of statistically significant differences in graduation and persistence rates between White students and Black and Hispanic students (Spangler & Slate, 2015).

Despite enrollment gains in the past decade, White students consistently outperform Blacks and Hispanics in enrollment and academic performance (Greene et al., 2008). The existence of achievement gaps in higher education is well documented in the

existing research literature (Rodriguez, 2014). Reid and Moore (2008) identified the variety of challenges that many low-income and Black and Hispanic students face.

Tutoring, advanced placement classes, college preparation classes, and high school leadership programs helped prepare students for college success (Reid & Moore, 2008).

Fauria and Slate (2014) noted that programs such as the No Child Left Behind Act and affirmative action were initially developed to increase the numbers of underrepresented groups such as Black and Hispanic students who enrolled in higher education. Although the number of diverse students in higher education has increased, the extent to which targeted groups are persisting and graduating from college has not substantially increased. Thus “ensuring quality and success across this continuum is what student retention research is all about” (Kezar & Eckel, 2007, p. 55).

Review of Literature for 2-Year Persistence Rates of Hispanic College Students

In recent years, the college enrollment rate for Hispanics in the United States has increased (Pew Research Center, 2015). From 1976 to 2013, the percentage of Hispanic students who enrolled in postsecondary settings increased from 4% to 16% (National Center for Education Statistics, 2016). Throughout the United States, numerous open access institutions are available to Hispanics; however, access to higher education institutions is not the issue (Contreras & Contreras, 2015).

For Hispanic students, access to higher education is not as simple as enrolling in college. In addition to access, Hispanic college students also contend with retention, transition, and transfer issues (Page, 2013). As recent trends show an increase in the number of jobs that require postsecondary education, Hispanics are negatively influenced by their lack of academic success (Arbelo-Marrero & Milacci, 2016). Although higher

educational attainment among Hispanics has increased, Hispanics continue to trail other groups in earning a Bachelor's degree (Arbelo-Marrero & Milacci, 2016; Contreras & Contreras, 2015; Pew Research Center, 2015). A contributing factor to the lack of Hispanics earning a Bachelor's degree is that 46% of Hispanics enroll in a 2-year college (Pew Research Center, 2015).

The majority of Hispanics in higher education in the United States are likely to enroll in 2-year colleges (Contreras & Contreras, 2015; National Center for Education Statistics, 2006). Although Hispanics are becoming the largest minority group seeking college degrees, beyond going to college, Hispanics are not persisting to degree attainment (Contreras & Contreras, 2015). Contreras and Contreras (2015) documented several reasons that Hispanics are not succeeding in college. One reason Hispanic students are not persisting is that compared to their peers, Hispanics are not graduating from high school college-ready. Another reason Hispanics are not graduating from college is the fact that Hispanics are more likely to enroll in college as part-time students (Contreras & Contreras, 2015).

The national percentage of Hispanics earning an associate's degree increased by 118% from the 1999-2000 to the 2009-2010 academic years (National Center for Education Statistics, 2012). During 2009-2010, Hispanics earned 13% of all associate's degrees awarded (National Center for Education Statistics, 2012). Although national averages of the postsecondary educational status of Hispanics are useful, major differences exist across states (Perna, Li, Walsh, & Raible, 2010).

In the state of interest for this article, Texas, Cox et al., (2011) analyzed the number and percentage of associates degrees awarded to Hispanic students between the

2000 and 2008 academic year. Using data from the Texas Higher Education Coordinating Board Interactive Accountability System website, data on 76 community colleges were obtained. Cox et al. (2011) documented that the number of associates degrees awarded from 2000 to 2007 increased every year; the number decreased from 2007 to 2008. They concluded that even though the actual numbers of associates degrees awarded to Hispanic students increased, the percentage of total degrees awarded to Hispanic students did not increase. Cox et al. (2011) established that the percentage of Hispanics receiving an associate's degree did not statistically significantly change from 2000 to 2008, indicating Hispanics received degrees below the state projected target. Moreover, Cox et al. (2011) argued that the Texas initiative to close the achievement gap did not appear to have a meaningful impact.

In a similar study, Hernandez et al., (2015) analyzed the number and percentages of Hispanic college students enrolled in Texas 2-year colleges and the number of Hispanic students who obtained associate degrees for the 2000 through the 2011 academic year. Hernandez et al. (2015) documented the presence of an increase from the 2000 to the 2011 academic years in Hispanic enrollment and educational attainment. In fact, Hernandez et al. (2015) established that the average number of Hispanic students enrolled in Texas 2-year colleges in 2011 more than doubled the number of students enrolled in the 2000 academic year. As such, they suggested that 2-year Hispanic serving institutions prioritize Hispanic student college participation to secure federal funding. Also recommended was that future research be directed on the transfer outcomes of Hispanic students attending community colleges in Texas.

It is becoming more common for students to attend several higher education institutions in pursuit of a college degree (Fauria & Fuller, 2015). In fact, during the 21st century, nearly 60% of students attended several institutions, transferred, and/or co-enrolled in various institutions prior to graduating. Fauria and Fuller (2015) documented several reasons these mobility patterns are reflected in higher education. Included reasons were the increase in college tuition is prompting more students to take core classes at community colleges and students view community colleges as a “buffer” between high school and college (Fauria & Fuller, 2015, p. 39). Fauria and Fuller (2015) also noted that President Obama’s challenge to community colleges to produce an additional five million completers by 2020 (Boggs, 2011), contributing to an increase in transfers. Grites (2013) argued that institutions receiving transfer students often fail to recognize the needs of a sustained and positive transitional experience.

Fauria and Fuller (2015) described several types of transfers currently occurring: (a) reverse transfers; (b) double-dipping; and (c) stepping/stopping out. Reverse transfers refer to students who transfer from a 4-year institution to a 2-year institution (Fauria & Fuller, 2015). As the name implied, double-dipping is when a student is enrolled in more than one institution at the same time. Lastly, stepping/stopping out is when students take temporary or permanent breaks (Fauria & Fuller, 2015). In addition, Bahr (2012) addressed the increasing pattern for students to attend multiple institutions at the same level (i.e., attending two or more community colleges). Bahr (2012) described lateral transfers as students who transfer between community colleges. Bahr (2012) claimed that the lateral transfer is a very common event in the course of today’s college student’s educational journey.

The term “swirling” is used in current research to describe the mobility patterns of today’s college students (Bahr, 2012; Fauria & Slate, 2015, p. 39). Swirling is more common among students who begin their college education at a community college than it is for students who begin at a 4-year institution (Bahr, 2012). Bahr (2012) revealed that the majority of researchers on transfers and community college students have focused on upward transfers (i.e., transferring from a 2-year institution to a 4-year institution). Yet, the path to degree attainment for the typical transfer student will dramatically change over the next 10 to 15 years due to population and demographic shifts (Lester, 2006).

Fauria and Fuller (2015) argued that transfer students are less apt to attain their baccalaureate degree within six years than students who did not transfer. To determine the relationship between persistence rates of students who stayed at the same institution compared to the persistence rates of students who transferred to other institutions, Fauria and Slate (2014) analyzed data from thirty eight 4-year public institutions in Texas over an 11-year period. In their analysis, Fauria and Slate (2014) established that transfer students were four times less likely to persist after one year than were students who did not transfer. Fauria and Slate (2014) expressed the need for additional research to explore “discrepancies in persistence rates between racial groups” (p. 9).

In a recent study in the state of interest for this investigation, Moss and Slate (2015) conducted a quantitative study of the 2-year persistence rates of Black students. Using archival data, the persistence rates for Black students enrolled at all Texas community colleges were analyzed by institutional status, whether the student stayed or transferred to a different institution for the 2000 and 2012 academic year. In their analysis of the 2-year persistence rates, a statistically significant difference was not

present. Of importance regarding the 2-year persistence rate was that less than 20% of Black students persisted upon transferring to a different institution. Moss and Slate (2015) recognized the need for the persistence rates of Black and Hispanic students to increase. Recommendations for further research included additional research regarding persistence at the community college level (Moss & Slate, 2015).

Review of the Literature on the Graduation Rates of Hispanic and White Students

As open-door institutions, community colleges welcome underrepresented students to receive a college education (Scoggin & Styron, 2006). Community colleges currently enroll over one-half of all beginning higher education students (Cox et al., 2011; Schuetz, 2008; Scoggin & Styron, 2006). Moreover, a large percentage of Black and Hispanic students receive an education at community colleges (Spangler & Slate, 2015), as community colleges enroll larger percentages of non-White students (Martin, Galentino, & Townsend, 2014).

When it comes to enrolling in college, Hispanics are making big improvements. Since 1993, the number of Hispanics ages 18 to 24 enrolled in a 2- or 4-year college have more than tripled (Pew Research Center, 2015). In 1993, 728,000 Hispanics were enrolled in college; in 2013, 2.2 million Hispanics were enrolled, a 201% increase (Pew Research Center, 2015). In the same time period, college enrollment for White students increased by 14% and the enrollment rate for Black students increased 78% (Pew Research Center, 2015). College enrollment rates for Hispanics are relatively low when compared to the enrollment rates for White and Black students (McCallister, Evans, & Illich, 2010). Similarly, Ryu (2010) documented that although college enrollment rates

for Hispanics between the ages of 18-24 experienced an increase, Hispanics trailed behind at 28%, versus Asians with 63%, Whites with 45%, and Blacks with 34%.

Although the enrollment rate for Hispanics has increased, Hispanics continue to fall behind White students in obtaining a 4-year degree. In 2013, only 15% of Hispanics between the ages of 25-29 had a bachelor's degree or higher (Pew Research Center, 2015). In comparison, among people between the ages of 25-29, 40% of Whites, 20% of Blacks, and 60% of Asians had a bachelor's degree or higher (Pew Research Center, 2015). One reason that Hispanics are falling behind in obtaining a bachelor's degree is that of all racial/ethnic groups, Hispanics are more likely (50%) to attend a 2-year school (Pew Research Center, 2015). By comparison, 30% of Whites, 32% of Asians, and 34% of Blacks enroll in a 2-year college (Pew Research Center, 2015). Cejda and Short (2008) recommended developing programs and assistance to Hispanic families in applying to, paying for, and graduating from college.

In a recent study, Hernandez et al. (2015) analyzed the numbers and percentages of Hispanic college students who obtained associate degrees for the 2000 through the 2011 academic year. Hernandez et al. (2015) revealed an increase from 2000 to 2011 in the number of Hispanic students obtaining associate degrees at community colleges in Texas. In fact, they documented that the number of Hispanic community college students in Texas who obtained associates degrees almost tripled in the 2011 academic year as in the 2000 academic year. Furthermore, they demonstrated the presence of statistically significant increases in the number of Hispanic community college students who obtained associates degrees and the percentage of Hispanic students obtaining associate degrees from 2000 to 2011. Hernandez et al. (2015) recommended that research studies be

conducted on the transfer outcomes of Hispanic students attending community colleges in Texas.

In a similar study, Cox et al. (2011) reviewed the number and percentage of associate degrees awarded to Hispanic students by Texas community colleges in the 2000 through the 2008 academic years. Cox et al. (2011) also investigated the increase of the Hispanic adult population that received associate degrees from 2000 to 2008. Cox et al. (2011) noted that the number of associates degrees awarded from 2000 to 2007 increased every year; however, the number decreased from 2007 to 2008. Cox et al. (2011) concluded that even though the actual numbers of associates degrees awarded to Hispanics increased, the percentage of total degrees awarded did not increase. Moreover, they documented that the percentage of Hispanics receiving an associate's degree was not statistically significant between the 2000 and the 2008 academic years, indicating Hispanics received degrees below the projected target of the initiative to close the achievement gap in Texas. Moreover, Cox et al. (2011) argued that the Texas initiative to close the achievement gap did not appear to have a meaningful impact.

Similarly, Spangler and Slate (2015) investigated the graduation and persistence rates of community college students as a function of ethnicity (i.e., White, Black, Hispanic, and Asian) for the 2000 through 2010 academic years. The study included all community colleges in the state of Texas. Spangler and Slate (2015) documented an increase in the graduation and persistence rates for each ethnic group between the 2000 and 2010 academic year. Over the 10-year period, the persistence and graduation rates for Hispanic students increased from 31.52% to 41.30% (Spangler & Slate, 2015).

Statement of the Problem

To ensure that community college students accomplish their goals, higher education institutions must recognize and address the distinctive needs of underrepresented students. Hernandez et al. (2015) suggested that community college administrators gain a better understanding of how a future Texas workforce will consist of a growing Hispanic population. Additionally, “essential programming would entail creating greater opportunities for financial assistance to students that may not necessarily qualify for assistance due to lack of citizenship status” (Hernandez et al., 2015, p. 66). Solving our nation’s college graduation gap between White and minority students would better prepare our nation in meeting the economic and global problems threatening America’s future (Fauria & Slate, 2014; McGlynn, 2009).

Purpose of the Study

The purpose of this journal-ready dissertation was to examine the persistence rates and graduation rates of Hispanic community college students in Texas. The first purpose was to determine the degree to which the 1-year persistence rates of Hispanic community college students differed by their institutional status (i.e., stayed or transferred). The second purpose was to ascertain the extent to which the 2-year persistence rates of Hispanic community college students differed by their institutional status (i.e., stayed or transferred). The third purpose was to determine the degree to which the graduation rates of Hispanic and White community college students differed. Seven years of Texas community college data were analyzed. As such, the extent to which trends were present in the 1-year and 2-year persistence rates of Hispanic students who either stayed at the same community college or who transferred to a different

community college were determined. Furthermore, the degree to which a trend might be present in the graduation rates of Hispanic and White students at Texas community colleges was also ascertained. Archival data from the Texas Higher Education Coordinating Board Interactive Accountability System were analyzed to make these determinations.

Significance of the Study

The number of racially diverse students in higher education continues to increase (Crisp & Nora, 2009). Moreover, the largest percentage of Hispanic students begin their higher education at a community college (Cox et al., 2011; Page, 2013). Higher education persistence and graduation rates of Hispanic community college students continue to fall behind other ethnic/racial groups (Fauria & Slate, 2014; Hernandez et al., 2015).

The educational success of Hispanics is imperative to the economic future of Texas (Murdock, 2011). Few researchers (Fauria & Slate, 2014), however, have examined the transfer rates of Hispanic students attending Texas community colleges. As such, more empirical investigations are needed on the transfer outcomes of Hispanic students attending Texas community colleges (Hernandez et al., 2015). Findings of this study may have practical applications for community college administrators in developing effective strategies designed to strengthen institutional effectiveness and assist Black and Hispanic students in completing programs successfully (Boggs, 2011; Jenkins, 2007). Additionally, the results of this study may highlight the importance of finding initiatives to support college participation and degree attainment in Texas 2-year colleges (Hernandez et al., 2015).

Definition of Terms

To assist the reader and to establish a foundation for understanding this proposal, definitions for key terms are provided.

Graduation Rate

The Texas Higher Education Coordinating Board defines graduation rate as the “percentage of a given college-entering cohort of degree-seeking students who graduate in a specific period of time, normally six years.” “For two-year institutions, it is the students who graduate with an associate degree or certificate within two years” (Texas Higher Education Coordinating Board, 2012, p. 36).

Hispanic

Hispanic or Latino refers to “an ethnic origin of a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race” (Texas Higher Education Coordinating Board, 2012, p. 38).

One-Year Persistence Rate

This term refers to the percent of first-time entering, degree-seeking undergraduates enrolled in at least 12 semester credit hours in the fall semester who are still enrolled at the same or another institution the following fall semester. The persistence rate includes all public and independent institutions in Texas (Texas Higher Education Coordinating Board, 2012).

Persistence Rate

The Texas Higher Education Coordinating Board defines persistence rate as the rate at which students persist in higher education. Persistence rate is often measured by the percentage of students who continue in higher education from one year to the

succeeding year. The term “persistence rate” is replacing the term “retention rate” (Texas Higher Education Coordinating Board, 2012, p. 48).

Transfer Student

Moss and Slate (2016) defined transfer students as students who have previously attended another institution at the same level (e.g., 2-year to 2-year, 4-year to 4-year) who enter the reporting institution for the first time.

Two-Year Persistence Rate

This term refers to the percent of first-time entering, degree-seeking undergraduates enrolled in at least 12 semester credit hours in the fall semester who are still enrolled at the same or another institution two academic fall semesters later or who have completed a baccalaureate degree. Students who are not enrolled after the first academic year are included in the 2-year persistence rates. All public and independent institutions are included in the persistence rate (Texas Higher Education Coordinating Board, 2012).

White

White refers to a person having origins in any of the peoples of Europe, the Middle East, or North Africa (Texas Higher Education Coordinating Board, 2012, p. 68).

Delimitations

The delimitations for this journal-ready dissertation primarily involved the use of archival data. All data that were analyzed in the three articles in this journal-ready dissertation were downloaded from the Texas Higher Education Coordinating Board Interactive Accountability System. Only data from Texas 2-year public community colleges were analyzed for the 2006-2007 through the 2014-2015 academic years. The

first independent variable was limited to the student either staying at the same institution or transferring to a different institution. Data about this independent variable were obtained specifically for Hispanic students. As a result, conclusions may not be generalizable to other ethnic/racial groups (e.g., Asians, Blacks, Native Americans). The second independent variable was ethnicity/race (i.e., Hispanic, White). The dependent variables were 1-year persistence rates, 2-year persistence rates, and graduation rates.

Limitations

Several limitations were present for the three articles in this journal-ready dissertation. The primary limitation involved the sole use of archival data from the Texas Higher Education Coordinating Board Interactive Accountability System. Only quantitative data that were reported by each community college to the Texas Higher Education Coordinating Board were analyzed. Thus, an important limitation to this study is the accuracy in which institutions compile and report their data. Although results are based on data from every community college in the State of Texas, results may not be generalizable to other students at 2-year community colleges in other states.

Assumptions

Data that were analyzed in this investigation had been previously collected and verified; therefore, minimal errors were anticipated in the data set. The reporting procedures instituted for member universities are mandated and monitored by the Texas Higher Education Coordinating Board. Any errors that may exist are assumed to be random in nature and not specific to any group or variable.

Organization of the Study

In this journal-ready dissertation, three individual research investigations were conducted. In the first article, research questions were on the degree to which the 1-year persistence rates differed between Hispanic students who stayed at the same Texas 2-year community college and those students who transferred to a different 2-year college for the 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012, 2012-2013, and 2013-2014 academic years. The second journal-ready dissertation article was on the degree to which the 1-year persistence rates differed between Hispanic students who stayed at the same Texas 2-year community college and those students who transferred to a different 2-year college for the 2006-2007, 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012, and 2012-2013 academic years. Lastly, the third article involved the degree to which differences were present in the graduation rates between Hispanic and White students enrolled at Texas 2-year community colleges in the 2008-2009, 2009-2010, 2010-2011, 2011-2012, 2012-2013, 2013-2014, and 2014-2015 academic years.

This journal-ready dissertation includes five chapters. In Chapter 1, the background of the study, statement of the problem, purpose of the study, significance of the study, definition of terms, delimitations, limitations, assumptions, and outline of the proposed journal-ready dissertation were addressed. Chapter II includes the first journal-ready dissertation article involving the 1-year persistence rates for Hispanic community college students in Texas. In Chapter III, the second journal-ready research investigation on 2-year persistence rates for Hispanic community college students in Texas is discussed. In Chapter IV, the third journal-ready research article on graduation rates for Hispanic and White students was presented. Lastly, the results from each of the three

research articles in this journal-ready dissertation were analyzed and linked to the existing research literature in Chapter V.

CHAPTER II**DIFFERENCES IN 1-YEAR PERSISTENCE RATES BY INSTITUTIONAL STATUS
FOR HISPANIC COMMUNITY COLLEGE STUDENTS IN TEXAS**

This dissertation follows the style and format of *Research in the Schools (RITS)*.

Abstract

In this investigation, the 1-year persistence rates of Hispanic students in Texas community colleges were analyzed for the 2007-2008 through the 2013-2014 academic years. Of particular interest was whether the 1-year persistence rates of Hispanic students differed by their institutional status (i.e., stayed at the same community college or transferred to a different community college). Inferential statistical analyses revealed the presence of statistically significant differences in the 1-year persistence rates of Hispanic students in Texas community colleges by institutional status in the 2007-2008, 2008-2009, 2009-2010, 2011-2012, 2012-2013, and 2013-2014 academic years. The 1-year persistence rates were higher for Hispanic Texas community college students when they stayed at the same community college rather than when they transferred to a different community college. The 1-year persistence rates of Hispanic students who stayed at the same Texas community college ranged from a low of 54% to a high of 60%. In comparison, the 1-year persistence rates of Hispanic students who transferred to a different Texas community college ranged from a low of 42% to a high of 51%.

Keywords: Hispanic students, 1-year persistence rates, Texas, community colleges, transferred, stayed

DIFFERENCES IN 1-YEAR PERSISTENCE RATES BY INSTITUTIONAL STATUS FOR HISPANIC COMMUNITY COLLEGE STUDENTS IN TEXAS

The majority of young adults in the United States recognize the value of obtaining a college education (Arredondo & Castillo, 2011; Carpenter & Ramirez, 2012).

Receiving a postsecondary degree is frequently viewed as a powerful force that leads to better paying jobs and enhances the quality of a person's life (Arredondo & Castillo, 2011; Fauria & Slate, 2014). Access to a higher education and degree obtainment is often compared to achieving the American Dream (Cox, Joyner, & Slate, 2011).

Educational attainment for underrepresented populations, especially Hispanic students, is an important issue in American postsecondary education (Hu & St. John, 2001). To provide a foundation for the reader, research related to community college enrollments, particularly as it pertains to Hispanic students, is presented in the next section.

Community College Enrollments

In 2009, President Obama challenged community colleges to produce an additional five million completers by 2020 (Boggs, 2011). To meet this challenge, student retention and transfer rates at community colleges must dramatically improve (Boggs, 2011). Furthermore, community colleges will have to become more effective in assisting Black and Hispanic and low-income students in completing programs and in closing student achievement gaps (Boggs, 2011).

As open-door institutions, community colleges strive to assist underrepresented students in overcoming the challenges they face (Scoggin & Styron, 2006). During their quest to obtain a college degree, college students face a plethora of obstacles and challenges. Many students lack academic preparation, work while going to school, and

have to manage family responsibilities (Reid & Moore, 2008). Students attending community colleges primarily represent first-generation college students, adult learners, low-income, and other underrepresented subpopulations, including Hispanics (Schuetz, 2008).

Many community college students are overwhelmed by the challenges they face and therefore do not persist. Wolniak, Mayhew, and Engberg (2012) noted that the current understanding of student persistence is grounded in Tinto's integration theory. Tinto (1993) asserted that although 25% of students withdraw due to failing academically, more than 75% of students drop out of college due to difficulties in adjusting to the "organization of educational institutions, their formal structures, resources, and patterns of association" (p. 89).

Community colleges currently enroll over one-half of all beginning higher education students (Cox et al., 2011; Schuetz, 2008; Scoggin & Styron, 2006). Of note is that a large percentage of Black and Hispanic students enroll at community colleges rather than at 4-year universities (Spangler & Slate, 2015). Researchers (e.g., Crisp & Nora, 2010; Hernandez, Slate, & Joyner, 2015; Voorhees, 2001) have documented that Hispanic students have a greater likelihood of beginning their college education at community colleges. Almost one-half of Hispanic college students attend public 2-year schools (Pew Research Center, 2015). In Texas, the state of interest for this investigation, community colleges have been challenged with record enrollments and an unprecedented demographic shift (Hernandez et al., 2015; Pew Research Center, 2015). With respect to the state of interest for this investigation, Texas, Hispanics accounted for 27% of the higher education enrollment (Ryu, 2010).

Diversity of Students Attending Community Colleges

Hernandez et al. (2015) noted that Hispanics in the United States have experienced considerable growth during the last decade. Moreover, Hernandez et al. (2015) stated that “from 2000-2010, the Hispanic population grew 43%, increasing from 35.3 million to 50.5 million in numeric growth” (p. 58). With respect to the state of interest in this investigation, the Hispanic population in Texas has substantially increased in the past two decades. Murdock (2011) documented that from 2000-2010, the Hispanic population in Texas grew 41.8%, increasing from 6.6 million to 9.4 million individuals.

From 2009-2010, Hispanic enrollment in colleges in the United States surged 24% (Fry, 2011). Fry (2011) suggested that population growth, increasing Hispanic high school completion rates, and the Hispanic enrollment of college eligible students accounted for the college enrollment growth of Hispanics. In 2013, 2.2 million Hispanics were enrolled in higher education institutions, compared to 728,000 individuals who were enrolled in 1993 (Pew Research Center, 2015). Moreover, Hispanic students represent the largest minority group on college campuses in the United States (Pew Research Center, 2015).

College enrollment rates for Hispanics are relatively low when compared to the college enrollment rates for White and Black students (McCallister, Evans, & Illich, 2010). Ryu (2010) documented that although college enrollment rates for Hispanics between the ages of 18-24 experienced an increase, Hispanics trailed behind at 28%, versus Asians with 63%, Whites with 45%, and Blacks with 34%. The relatively low college enrollment rates for Hispanics have been attributed to the fact that in comparison

to other ethnic/racial groups, Hispanics are less likely to complete high school (National Center for Education Statistics, 2006).

Although the number of Hispanics graduating from high school has increased, Hispanic students are not enrolling in higher education at desired rates. In 2009, only 13.3% of Hispanics in the United States were reported to have a college degree (U.S. Census Bureau, 2009). In 2013, only 15% of Hispanics between the ages of 25 to 29 have a bachelor's degree or higher, compared to 40% of Whites, 20% of Blacks, and 60% of Asians (Pew Research Center, 2015). This gap is attributed to the fact that Hispanics are less likely to enroll in a 4-year college and enroll full-time (Pew Research Center, 2015) than are members of other ethnic/racial groups.

Hispanic Student Persistence

Over the past 30 years, efforts have been made to increase the number of Hispanic students attending college (Kezar & Eckel, 2007). However, as Kezar and Eckel (2007) noted, "bringing students into higher education is not the same thing as ensuring that they will succeed" (p. 19). Moreover, Van Dermerwe (2011) posited that once students enroll in an institution of higher education, no guarantee exists that students will persevere. As evidence of this statement, the persistence rates of Hispanic students continue to fall behind the persistence rates of White and Asian students (Kezar & Eckel, 2007; Pew Research Center, 2015).

Zarate and Burciaga (2010) documented the presence of several factors contributing to the enrollment and retention gaps between Hispanic and other ethnic/racial groups. Included factors were high Hispanic high school dropout rates, lower participation in college preparation curriculum, unequal resources, less access to

financial aid, and lack of timely financial aid knowledge to Hispanic families (Greene, Marti, & McClenney, 2008; Rodriguez, 2014; Zarate & Burciaga, 2010). Although the high school dropout rate for Hispanics has dramatically decreased from 32% in 2000 to 14% in 2013, the rate remains higher than it is for Blacks, 8%, Whites, 5%, and Asians, 4% (Pew Research Center, 2015). Furthermore, Hispanic students often face deferred enrollment in college, increased financial responsibility, and residing with family while in college (Bagnato, 2005).

Samuel and Scott (2014) noted several personal challenges facing Hispanics planning to attend college: poor academic preparation, first-generation status, misinformation, and financial constraints. One reason finances are a cause of reduced retention for Hispanic students is because many need to work while attending college (Samuel & Scott, 2014). Samuel and Scott (2014) noted that the majority of students were paying for college with cash, as many Hispanics do not take advantage of available financial aid. Students surveyed suggested that meal plans, on-campus childcare, mandatory orientation, and work-study opportunities were most influential in increasing retention. Samuel and Scott (2014) argued the importance of community colleges in creating institutional practices to support the retention of Hispanic students.

Transferring to another institution has also been linked to student persistence. To determine the relationship between persistence rates of students who stayed at the same institution compared to the persistence rates of students who transferred to other institutions, Fauria and Slate (2014) analyzed the 1-year persistence rates of White, Black, Hispanic, and Asian students who were enrolled in 4-year institutions in Texas for the 2000 and 2011 academic years. Fauria and Slate (2014) documented that the

persistence rates for all four ethnic/racial groups were lower in the 2000 and the 2011 academic years when students transferred to other institutions, compared to students staying at the same institution. Regardless of ethnicity/race, students were much less likely to persist if they transferred to another institution after 1-year. Fauria and Slate (2014) expressed the need for additional research to explore “discrepancies in persistence rates between racial groups” (p. 9).

In a recent study in the state of interest for this investigation, Moss and Slate (2016) analyzed the 1-year persistence rates of Black and White students enrolled in Texas community colleges in the 2000 and 2013 academic years. Moss and Slate (2016) analyzed the 1-year persistence rates of Black and White students who were enrolled at the same community college and the 1-year persistence rates of Black and White students who transferred to a different community college. The 1-year persistence rates for Black and White students were statistically significantly higher in the 2000 and the 2013 academic years when students remained at the same community college. Moreover, White students were more successful than Black students when they remained at the same institution and when they transferred to a different community college.

Spangler and Slate (2015) investigated the graduation and persistence rates of Texas community college students for the 2000 through the 2010 academic years. They examined graduation and persistence rates by ethnic/racial membership (i.e., White, Black, Hispanic, and Asian). Spangler and Slate (2015) revealed an increase in the persistence and graduation rates of White, Black, Hispanic, and Asian students from the 2000 to 2010 academic year. Moreover, they documented the presence of statistically

significant differences in graduation and persistence rates between White students and Black and Hispanic students (Spangler & Slate, 2015).

Despite enrollment gains in the past decade, White students consistently outperform Blacks and Hispanics in enrollment and academic performance (Greene et al., 2008). The existence of achievement gaps in higher education is well documented in the existing research literature (Rodriguez, 2014). Reid and Moore (2008) identified the variety of challenges that many low-income and Black and Hispanic students face. Tutoring, advanced placement classes, college preparation classes, and high school leadership programs helped prepare students for college success (Reid & Moore, 2008).

Fauria and Slate (2014) noted that programs such as the No Child Left Behind Act and affirmative action were initially developed to increase the numbers of underrepresented groups such as Black and Hispanic students who enrolled in higher education. Although the number of diverse students in higher education has increased, the extent to which targeted groups are persisting and graduating from college has not substantially increased. Thus “ensuring quality and success across this continuum is what student retention research is all about” (Kezar & Eckel, 2007, p. 55).

Statement of the Problem

The numbers of racially/ethnically diverse students in higher education have increased. It estimated that by the year 2050, 30% of the United States population will be Hispanic (Crisp & Nora, 2010). As the demographic shift continues to spread throughout the United States, especially in Texas, a new problem for the Hispanic student population has developed. The question remains why so many Hispanic community college students do not obtain a college degree.

Higher education participation and persistence rates of Hispanic community college students in Texas continue to fall behind other ethnic/racial groups (Fauria & Slate, 2014; Hernandez et al., 2015). Murdock (2011) claimed that the educational success of Hispanics is imperative to the future economic success of Texas. To ensure that Hispanic community college students persist in accomplishing their educational goals, higher education institutions must recognize and address the distinctive needs of underrepresented students. Boggs (2011) argued that community colleges need to become more effective in closing achievement gaps that exist for minority students.

Purpose of the Study

The purpose of this study was to examine the extent to which differences were present in the 1-year persistence rates of Hispanic students who were enrolled at Texas community colleges in the 2007-2008 through the 2013-2014 academic years. Specifically addressed were the 1-year persistence rates by student institutional status (i.e., stayed or transferred) for Hispanic students who were enrolled in Texas 2-year community colleges. Moreover, the extent to which differences were present in the 1-year persistence rates of Hispanic students who either stayed at the same Texas community college or transferred to a different Texas community college was analyzed. The final purpose was to ascertain the extent to which the 1-year persistence rates of Hispanic students changed over the 7 years of data analyzed.

Significance of the Study

Student success in college is one of the “most visible issues that attract attention from a wide spectrum of constituencies” (Hu, McCormick, & Gonyea, 2012, p. 388). Specifically, community colleges are challenged to develop practices and policies that

will best assist nontraditional students to reach their academic and career goals, despite their ethnic background (Bush & Bush, 2005). By evaluating the 1-year persistence rates of Hispanic community college students, the effect of remaining at the same campus versus transferring to other institutions was explored. The results of this study may assist community college administrators in developing effective strategies designed to strengthen institutional effectiveness for Hispanic community college students (Jenkins, 2007).

Research Questions

The following research questions were addressed in this study: (a) What is the difference in the 1-year persistence rates by institutional status (i.e., stayed or transferred) for Hispanic students who were enrolled in Texas community colleges? and (b) To what extent are trends present in the 1-year persistence rates by student institutional status (i.e., stayed or transferred) for Hispanic students who were enrolled in Texas community colleges? The first research question was repeated for the 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012, 2012-2013, and 2013-2014 academic years. The second research question involved results from all 7 academic years.

Method

Research Design

A nonexperimental, causal comparative research design (Johnson & Christensen, 2012) was used to address the research questions present in this study. A causal comparative research design allows the relationship between “one or more categorical independent variables and one or more quantitative dependent variables” (Johnson & Christensen, 2012, p. 43) to be examined. The independent variable in this study was

student institutional status, that is, whether the student stayed at the same community college or transferred to a different community college. The dependent variables in this study were the 1-year persistence rates for each academic year. Because archival data were obtained and analyzed in this investigation, both the independent variable and the dependent variables had already occurred and, therefore, could not be manipulated.

Participants

The data that were analyzed in this research investigation were downloaded from the Texas Higher Education Coordinating Board Interactive Accountability System database. Data were grouped by ethnicity (i.e., Hispanic) and academic year. Data on these groups of students from all 2-year public community colleges in the State of Texas, who attended college during the 2007-2008 through the 2013-2014 academic years, were used in this investigation.

Instrumentation and Procedures

Data were downloaded from the Texas Higher Education Coordinating Board Interactive Accountability System. In this system, data on all 2-year community colleges in the State of Texas are represented. Community colleges in Texas comprised the participants for this study. During the 2007-2008 academic year, the Texas Higher Education Coordinating Board Interactive Accountability System dataset indicated that 69 community colleges were present. In the 2013-2014 academic year, 72 community colleges provided data that were analyzed. The data for student ethnicity/race and 1-year persistence rates were downloaded from the Texas Higher Education Coordinating Board Interactive Accountability database in an Excel format and then converted into a SPSS dataset.

Results

Prior to conducting inferential statistics to determine whether statistically significant differences were present between the 1-year persistence rates of Hispanic students who stayed at the same community college compared to Hispanic students who transferred to another community college, checks were conducted to determine the extent to which the data were normally distributed. The standardized skewness coefficients (i.e., the skewness value divided by its standard error) and the standardized kurtosis coefficients (i.e., the kurtosis value divided by its standard error) were calculated (Onwuegbuzie & Daniel, 2002). Although some of the 1-year persistence rate data were not normally distributed, a decision was made to use parametric dependent samples *t*-tests to answer the research questions. Statistical results will now be presented by academic year.

For the 2007-2008 academic year, the parametric dependent samples *t*-test revealed a statistically significant difference in the 1-year persistence rates, $t(69) = -5.29$, $p < .001$, between Hispanic students who stayed at the same Texas community college and Hispanic students who transferred to a different Texas community college after one year. This difference represented a near-large effect size (Cohen's *d*) of 0.79 (Cohen, 1988). The 1-year persistence rates of Hispanic students who stayed at the same Texas community college were 16% higher than the 1-year persistence rates of Hispanic students who transferred to a different Texas community college. Readers are directed to Table 2.1 for the descriptive statistics for this analysis.

Insert Table 2.1 about here

Concerning the 2008-2009 academic year, the parametric dependent samples t -test revealed a statistically significant difference in the 1-year persistence rates, $t(70) = -2.42, p < .001$, between Hispanic students who stayed at the same Texas community college and Hispanic students who transferred to a different Texas community college after one year. This difference represented a small effect size (Cohen's d) of 0.38 (Cohen, 1988). The 1-year persistence rates of Hispanic students who stayed at the same Texas community college were almost 10% higher than the 1-year persistence rates of Hispanic students who transferred to a different Texas community college. Delineated in Table 2.2 are the descriptive statistics for this analysis.

Insert Table 2.2 about here

With respect to the 2009-2010 academic year, the parametric dependent samples t -test revealed a statistically significant difference in the 1-year persistence rates, $t(70) = -2.17, p < .001$, between Hispanic students who stayed at the same Texas community college and Hispanic students who transferred to a different Texas community college after one year. This difference represented a small effect size (Cohen's d) of 0.34 (Cohen, 1988). The 1-year persistence rates of Hispanic students who stayed at the same Texas community college were over 6% higher than the 1-year persistence rates of

Hispanic students who transferred to a different Texas community college. Table 2.3 contains the descriptive statistics for this analysis.

Insert Table 2.3 about here

For the 2010-2011 academic year, the parametric dependent samples t -test did not reveal a statistically significant difference in the 1-year persistence rates, $t(70) = -1.62$, $p = .11$, between Hispanic students who stayed at the same Texas community college and Hispanic students who transferred to a different Texas community college after one year. The 1-year persistence rates were similar for Hispanic students who stayed at the same Texas community college and for Hispanic students who transferred to a different Texas community college. Readers are directed to Table 2.4 for the descriptive statistics for this analysis.

Insert Table 2.4 about here

Concerning the 2011-2012 academic year, the parametric dependent samples t -test revealed a statistically significant difference in the 1-year persistence rates, $t(71) = -3.30$, $p < .001$, between Hispanic students who stayed at the same Texas community college and Hispanic students who transferred to a different Texas community college after one year. This difference represented a moderate effect size (Cohen's d) of 0.52 (Cohen, 1988). The 1-year persistence rates of Hispanic students who stayed at the same Texas community college were nearly 11% higher than the 1-year persistence rates of

Hispanic students who transferred to a different Texas community college. Table 2.5 contains the descriptive statistics for this analysis.

Insert Table 2.5 about here

With respect to the 2012-2013 academic year, the parametric dependent samples *t*-test revealed a statistically significant difference in the 1-year persistence rates, $t(71) = -2.97, p < .001$, between Hispanic students who stayed at the same Texas community college and Hispanic students who transferred to a different Texas community college after one year. This difference represented a small effect size (Cohen's *d*) of 0.48 (Cohen, 1988). The 1-year persistence rates of Hispanic students who stayed at the same Texas community college were over 10% higher than the 1-year persistence rates of Hispanic students who transferred to a different Texas community college. Revealed in Table 2.6 are the descriptive statistics for this analysis.

Insert Table 2.6 about here

For the 2013-2014 academic year, the parametric dependent samples *t*-test revealed a statistically significant difference in the 1-year persistence rates, $t(71) = -2.63, p < .001$, between Hispanic students who stayed at the same Texas community college and Hispanic students who transferred to a different Texas community college after one year. This difference represented a small effect size (Cohen's *d*) of 0.42 (Cohen, 1988). The 1-year persistence rates of Hispanic students who stayed at the same Texas

community college were over 8% higher than the 1-year persistence rates of Hispanic students who transferred to a different Texas community college. Presented in Table 2.7 are the descriptive statistics for this analysis.

Insert Table 2.7 about here

The final research question regarding an analysis of seven years of data for Hispanic students who stayed at the same Texas community college and for Hispanic students who transferred to a different community college will now be addressed. As indicated in Figure 2.1, trends were present in the 1-year persistence rates by student institutional status (i.e., stayed or transferred) for Hispanic students who were enrolled in Texas community colleges. The 1-year persistence rates of Hispanic students who stayed at the same Texas community college were consistently higher than the 1-year persistence rates of Hispanic students who transferred to a different Texas community college. Over the seven years of data analyzed herein, the 1-year persistence rates of Hispanic students who stayed at the same Texas community college, increased by 2%. During the same 7-year time period, the 1-year persistence rates of Hispanic students who transferred to a different Texas community college fluctuated; however, readers should also note that the 1-year persistence rates for Hispanic students who transferred to a different Texas community college increased by 9%.

Insert Figure 2.1 about here

Discussion

In this investigation, the degree to which differences were present in the 1-year persistence rates by institutional status (i.e., stayed or transferred) was addressed for Hispanic students in Texas community colleges. Seven years of archival data from the Texas Higher Education Coordinating Board Interactive Accountability System were obtained and examined to determine whether the 1-year persistence rates of Hispanic students in Texas community colleges differed by student institutional status. In the 2007-2008 academic year, a total of 70 Texas community colleges provided data. For the 2008-2009 through the 2010-2011 academic years, 71 Texas community colleges provided data. Lastly, during the 2011-2012 through the 2013-2014 academic years, data were available from 72 Texas community colleges.

For the seven years of academic data that were analyzed, statistically significant differences were present in the 2007-2008, 2008-2009, 2009-2010, 2011-2012, 2012-2013, and 2013-2014 academic years. Only in the 2010-2011 academic year was a statistically significant difference not present in the 1-year persistence rates of Hispanic students by their institutional status. Although a statistically significant difference was not present in the 2010-2011 academic year, the 1-year persistence rates of Hispanic students who stayed at the same community college in Texas were higher than the 1-year persistence rates of Hispanic students who transferred to a different Texas community college. The 1-year persistence rates of Hispanic students who stayed at the same Texas community college ranged from a low of 54% to a high of 60%. In comparison, the 1-year persistence rates of Hispanic students who transferred to a different Texas community college ranged from a low of 42% to a high of 51%. Presented in Table 2.8 is

a summary of the results for the 1-year persistence rates of Hispanic students by their institutional status (i.e., stayed or transferred) in Texas community colleges across all seven academic years.

Insert Table 2.8 about here

Connections with Existing Literature

Several researchers (Fauria & Slate, 2014; Moss & Slate, 2016) have previously analyzed the persistence rates of Hispanic students. In this multiyear, statewide investigation, the 1-year persistence rates of Hispanic students in Texas community colleges were higher when Hispanic students stayed at the same Texas community college than when they transferred to a different Texas community college. These results were consistent with Fauria and Slate (2014) wherein the 1-year persistence rates of Hispanic students attending 4-year institutions in Texas were lower when students transferred to another institution after 1-year than when they remained at the same 4-year institution. In the 1999-2000 academic year, Fauria and Slate (2014) noted a 47% difference in the 1-year persistence rate for Hispanic students who stayed at the same institution, compared to Hispanic students who transferred to a different institution. Similarly, in the 2010-2011 academic year, Hispanic students who stayed at the same 4-year institution in Texas had a 51% higher 1-year persistence rate than Hispanic students who transferred to a different postsecondary institution

Similarly, the results were also consistent with Moss and Slate (2016) wherein the 1-year persistence rates for Black and White students were statistically significantly

higher when students remained at the same community college than when transferring to a different community college. The 1-year persistence rate for Black students who stayed at the same Texas community college in the 1999-2000 academic year was 36% higher than the 1-year persistence rate for Black students who transferred to a different Texas community college (Moss & Slate, 2016). In comparison, the 1-year persistence rate for White students who stayed at the same Texas community college in the 1999-2000 academic year was 45% higher than the 1-year persistence rate for Black students who transferred to a different Texas community college (Moss & Slate, 2016). In academic year 2013, the 1-year persistence rate for Black students who stayed at the same Texas community college was 35% higher than the 1-year persistence rate for Black students who transferred to a different Texas community college (Moss & Slate, 2016).

Moreover, the 1-year persistence rate for White students who stayed at the same Texas community college in academic year 2013 was 41% higher than the 1-year persistence rate for White students who transferred to a different Texas community college (Moss & Slate, 2016).

Implications for Policy and Practice

In this investigation, the 1-year persistence rates of Hispanic students in Texas community colleges were lower when Hispanic community college students transferred to a different community college after the first year than when they stayed at the same community college. As documented in this multiyear, statewide investigation, Hispanic community college students are less likely to persist when they transfer to a different community college than when they remain at the same community college. As such, community college leaders are encouraged to conduct an audit of the 1-year persistence

rates of their Hispanic students. By examining their 1-year persistence rates, community colleges can then determine the degree to which their existing programs are meeting the needs of their Hispanic students with regard to persistence. Their audit could also provide directions for creating new or modifying their existing programs to meet the needs of their Hispanic students better. Community college leaders are also encouraged to extend their evaluations to other student groups such as Black students and students in poverty. Community colleges with high 1-year persistence rates are encouraged to examine their programs to determine which components are effective in increasing the 1-year persistence rates for Hispanic students. Moreover, community colleges with high 1-year persistence rates should share their efforts with other community colleges.

Community colleges that enroll transfer students need to develop programs designed to identify the needs of this growing population. Academic counselors at community colleges need to communicate with Hispanic students the importance of remaining at the same community college.

Recommendations for Future Research

In this multiyear, statewide investigation, differences in the 1-year persistence rates by institutional status for Hispanic students at Texas community colleges were established. As such, findings from this investigation are supportive of Hernandez et al.'s (2015) recommendation that future research be directed toward the transfer outcomes of Hispanic students attending Texas community colleges. Although the transfer outcomes of Hispanic students were examined in this investigation, researchers should consider extending this study to the 1-year persistence rates of other ethnic/racial groups. Another recommendation is to replicate this investigation in other states to determine the extent to

which the results of Hispanic students' 1-year persistence rates might be generalizable to other states, especially in states with a large Hispanic population. Researchers are also encouraged to examine each community college in Texas to identify those colleges with high 1-year persistence rates for Black students who stay at the same campus and for Hispanic students who transfer to a different campus. Similarly, future investigations could also be conducted on Texas community colleges with the lowest 1-year persistence rates of Hispanic students. Researchers interested in a qualitative study should consider obtaining insights from Hispanic students, faculty, staff, and administrators into reasons Hispanic students transfer to different institutions at the same level. In addition, qualitative studies to identify reasons transfer students' 1-year persistence rates are lower than the 1-year persistence rates of students who stayed at the same institution might be useful.

Conclusion

In this investigation, the degree to which the 1-year persistence rates of Hispanic students in Texas community colleges differed by student institutional status (i.e., stayed or transferred) was examined. Data were analyzed for the 2007-2008 through the 2013-2014 academic years. Statistically significant differences were present in six of the seven academic years. In all seven academic years, however, the 1-year persistence rates were higher for Hispanic students who stayed at the same Texas community college than for Hispanic students who transferred to a different Texas community college. As such, results from this investigation were congruent with Fauria and Slate's (2014) study in that Hispanic students were more likely to persist when they stayed at the same community college than when they transferred to a different community college.

References

- Arredondo, P., & Castillo, L. G. (2011). Latina/o student achievement: A collaborative mission of professional associations of higher education. *Journal of Hispanic Higher Education, 10*, 6-17. doi:10.1177/1538192710391907
- Bagnato, K. (2005). The clock is ticking. *Diverse Issues in Higher Education, 22*(16), 22-24.
- Boggs, G. R. (2011). Community colleges in the spotlight and under the microscope. *New Directions for Community Colleges, 156*, 3-22. doi:10.1002/cc.462
- Bush, E. C., & Bush, L. (2005). Black male achievement and the community college. *Black Issues in Higher Education, 22*(2), 44.
- Carpenter, D. M., & Ramirez, A. (2012). Exploring the underachievement gap. *Christian Higher Education, 11*(2), 115-130. doi:10.1080/15363759.2012.624458
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Cox, S., Joyner, S. A., & Slate, J. R. (2011). Differences in Hispanic graduation rates at Texas community colleges over time. *Community College Enterprise, 17*, 62-76.
- Crisp, G., & Nora, A. (2010). Hispanic student success: Factors influencing the persistence and transfer decisions of Latino community college students enrolled in developmental education. *Research in Higher Education, 51*(2), 175-194. doi:10.1007/s11162-009-9151-
- Fauria, R. M., & Slate, J. R. (2014). Persistence rate differences of university students by race: A within groups comparison. *International Journal of University Teaching and Faculty Development, 4*(1), 1-10.

- Fry, R. (2011). *Hispanic college enrollment spikes, narrowing gaps with other groups*. Retrieved from Pew Hispanic Center website:
<http://www.pewhispanic.org/2011/08/25/hispanic-college-enrollment-spikes-narrowing-gaps-with-other-groups/>
- Greene, T. G., Marti, C. N., & McClenney, K. (2008). The effort-outcome gap: Differences for African American and Hispanic community college students in student engagement and academic achievement. *Journal of Higher Education, 79*, 513-539. doi:10.1353/jhe.0.0018
- Hernandez, J., Slate, J. R., & Joyner, S. A. (2015). Demographic changes of Hispanic populations and Hispanic student enrollment in Texas community colleges: A literature review. *NCPEA Educational Leadership Review of Doctoral Research, 2*, 57-69.
- Hu, S., McCormick, A., & Gonyea, R. (2012). Examining the relationship between student learning and persistence. *Innovative Higher Education, 37*, 387-395. doi:10.1007/s10755-011-9209-5
- Hu, S., & St. John, E. P. (2001). Student persistence in a public higher education system: Understanding racial and ethnic differences. *Journal of Higher Education, 72*, 265-286. doi:10.2307/2649332
- Jenkins, D. (2007). Institutional effectiveness and student success: A study of high-and low-impact community colleges. *Community College Journal of Research & Practice, 31*, 945-962. doi:10.1080/03601270701632057
- Johnson, B., & Christensen, L. (2012). *Educational research: Quantitative, qualitative, and mixed approaches* (4th ed.). Thousand Oaks, CA: Sage

- Kezar, A., & Eckel, P. (2007). Learning to ensure the success of students of color: A systemic approach to effecting change. *Change*, 39(4), 18-24.
doi:10.3200/CHNG.39.4.18-25
- McCallister, L., Evans, J., & Illich, P. (2010). Perceptions about higher education among parents of Hispanic students in middle school: Implications for community colleges. *Community College Journal of Research and Practice*, 34, 784-796.
doi:10.1080/10668920802605254
- Moss, S., & Slate, J. R. (2016). Differences in Black and White students' persistence rates in Texas community colleges by institutional status. *Journal of Basic and Applied Research International*, 13, 206-213.
- Murdock, S. H. (2011). *Population change in Texas: Implications for the labor force, education, and economic development*. Symposium conducted for the Texas Workforce Commission, Houston, TX. Retrieved from
<http://hobbycenter.rice.edu/Content.aspx?id=2147484115>
- National Center for Education Statistics. (2006). *Profile of undergraduates in U.S. postsecondary education institutions: 2003-04*. Washington, DC: U.S. Department of Education.
- Onwuegbuzie, A. J., & Daniel, L. G. (2002). Uses and misuses of the correlation coefficient. *Research in the Schools*, 9(1), 73-90.
- Pew Research Center. (2015). *Facts about Latinos and education*. Retrieved from
<http://www.pewresearch.org/fact-tank/2015/05/26/5-facts-about-latinos-and-education/>

- Reid, M. J., & Moore, J. L., III. (2008). College readiness and academic preparation for postsecondary education: Oral histories of first-generation urban college students. *Urban Education, 43*, 240-261. doi:10.1177/0042085907312346
- Rodríguez, B. A. (2014). The threat of living up to expectations: Analyzing the performance of Hispanic students on standardized exams. *Journal of Hispanic Higher Education, 13*, 191-205. doi:10.1177/1538192714531292
- Ryu, M. (2010). *Minorities in higher education: Twenty-fourth status report*. Washington, DC: American Council on Education.
- Samuel, K. R., & Scott, J. A. (2014). Promoting Hispanic student retention in two Texas community colleges. *Research in Higher Education, 25*, 1-12.
- Schuetz, P. (2008). Developing a theory-driven model of community college student engagement. *New Directions for Community Colleges, 144*, 17-28. doi:10.1002/cc.342
- Scoggin, D., & Styron, R. A. (2006). Factors associated with student withdrawal from community college. *Community College Enterprise, 12*(1), 111-124.
- Spangler, J. M., & Slate, J. R. (2015). Texas community college graduation and persistence rates as a function of student ethnicity. *Community College Journal of Research and Practice, 39*, 741-753. doi:10.1080/10668926.2013.878261
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago, IL: University of Chicago Press.
- U.S. Census Bureau. (2009). *Current population survey, annual social and economic supplement, 2008*. Retrieved from <http://www.census.gov/population/www/socdemo/hispanic/cps2008.html>

Van Dermerwe, C. (2011). Mapping a retention index across the student continuum.

Journal of Institutional Research, 16(2), 52-68.

Voorhees, R. (2001). Financing community colleges for a new century. In M. B. Paulsen

& J. C. Smart (Eds.), *The finance of higher education: Theory, research, policy,*

and practice (pp. 39-52). New York, NY: Agathon.

Wolniak, G. C., Mayhew, M. J., & Engberg, M. E. (2012). Learning's weak link to

persistence. *The Journal of Higher Education*, 83, 795-823.

Zarate, E., & Burciaga, R. (2010). Latinos and college access: Trends and future

directions. *Journal of College Admission*, 209, 24-29.

Table 2.1

Descriptive Statistics for the 1-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2007-2008 Academic Year

Institutional Status	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
Stayed	70	57.68	10.79
Transferred	70	41.76	26.37

Table 2.2

Descriptive Statistics for the 1-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2008-2009 Academic Year

Institutional Status	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
Stayed	71	57.11	9.68
Transferred	71	48.96	28.81

Table 2.3

Descriptive Statistics for the 1-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2009-2010 Academic Year

Institutional Status	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
Stayed	71	57.27	9.73
Transferred	71	50.31	27.02

Table 2.4

Descriptive Statistics for the 1-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2010-2011 Academic Year

Institutional Status	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
Stayed	71	54.40	8.95
Transferred	71	49.08	28.56

Table 2.5

Descriptive Statistics for the 1-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2011-2012 Academic Year

Institutional Status	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
Stayed	72	56.30	9.63
Transferred	72	45.39	28.15

Table 2.6

Descriptive Statistics for the 1-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2012-2013 Academic Year

Institutional Status	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
Stayed	72	58.04	10.05
Transferred	72	47.64	28.97

Table 2.7

Descriptive Statistics for the 1-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2013-2014 Academic Year

Institutional Status	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
Stayed	72	59.76	7.71
Transferred	72	51.09	28.09

Table 2.8

Summary of Results for the 1-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2007-2008 Academic Year Through the 2013-2014 Academic Year

Academic Year	Effect Size	Higher Persistence Rate
2007-2008	Moderate	Stayed
2008-2009	Small	Stayed
2009-2010	Small	Stayed
2010-2011	N/A	Stayed
2011-2012	Moderate	Stayed
2012-2013	Small	Stayed
2013-2014	Small	Stayed

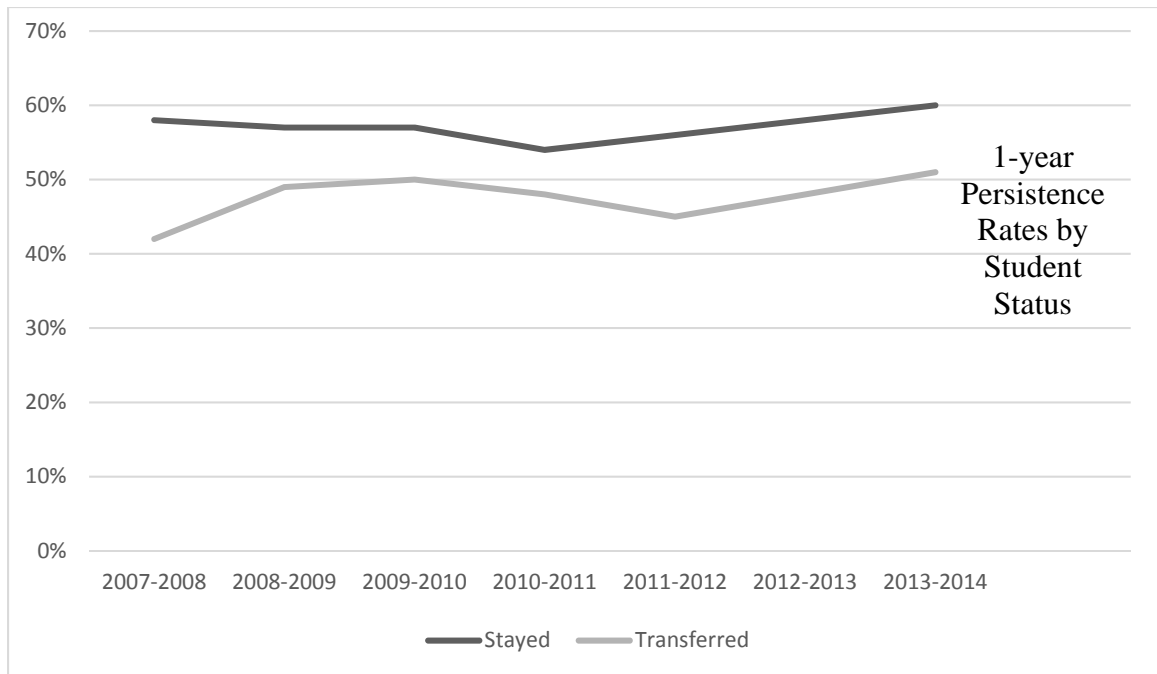


Figure 2.1. Trends in the 1-year persistence rates of Hispanic students who stayed or transferred to a different Texas community college in the 2007-2008 through the 2013-2014 academic years.

CHAPTER III**DIFFERENCES IN 2-YEAR PERSISTENCE RATES BY INSTITUTIONAL STATUS
FOR HISPANIC COMMUNITY COLLEGE STUDENTS IN TEXAS**

This dissertation follows the style and format of *Research in the Schools (RITS)*.

Abstract

In this investigation, the 2-year persistence rates of Hispanic students in Texas community colleges were analyzed for the 2006-2007 through the 2012-2013 academic years. Of particular interest was whether the 2-year persistence rates of Hispanic students different by their institutional status (i.e., stayed at the same community college or transferred to a different community college). Inferential statistical analyses revealed the presence of statistically significant differences in the 2-year persistence rates of Hispanic students in Texas community colleges by institutional status in the 2006-2007 through the 2012-2013 academic years. The 2-year persistence rates were higher for Hispanic Texas community college students when they stayed at the same community college rather than when they transferred to a different community college. Implications of findings are discussed, as well as recommendations for future research.

Keywords: Hispanic students, Texas community colleges, 2-year persistence rates, stayed, transferred

DIFFERENCES IN 2-YEAR PERSISTENCE RATES BY INSTITUTIONAL STATUS
FOR HISPANIC COMMUNITY COLLEGE STUDENTS IN TEXAS

In recent years, the college enrollment rate for Hispanics in the United States has increased (Pew Research Center, 2015). From 1976 to 2013, the percentage of Hispanic students who enrolled in postsecondary settings increased from 4% to 16% (National Center for Education Statistics, 2016). Throughout the United States, numerous open access institutions are available to Hispanics; however, access to higher education institutions is not the issue (Contreras & Contreras, 2015).

As recent trends show an increase in the number of jobs that require postsecondary education, Hispanics are negatively influenced by their lack of academic success (Arbelo-Marrero & Milacci, 2016). Although higher educational attainment among Hispanics has increased, Hispanics continue to trail other groups in earning a Bachelor's degree (Arbelo-Marrero & Milacci, 2016; Contreras & Contreras, 2015; Pew Research Center, 2015). A contributing factor to the lack of Hispanics earning a Bachelor's degree is that 46% of Hispanics enroll in a 2-year college (Pew Research Center, 2015).

The majority of Hispanics in higher education in the United States are likely to enroll in 2-year colleges (Contreras & Contreras, 2015; National Center for Education Statistics, 2006). Although Hispanics are becoming the largest minority group seeking college degrees, beyond going to college, Hispanics are not persisting to degree attainment (Contreras & Contreras, 2015). Contreras and Contreras (2015) documented several reasons that Hispanics are not succeeding in college. One reason Hispanic students are not persisting is that compared to their peers, Hispanics are not graduating

from high school college-ready. Another reason Hispanics are not graduating from college is the fact that Hispanics are more likely to enroll in college as part-time students (Contreras & Contreras, 2015).

The national percentage of Hispanics earning an associate's degree increased by 118% from the 1999-2000 to the 2009-2010 academic years (National Center for Education Statistics, 2012). During 2009-2010, Hispanics earned 13% of all associate's degrees awarded (National Center for Education Statistics, 2012). Although national averages of the postsecondary educational status of Hispanics are useful, major differences exist across states (Perna, Li, Walsh, & Raible, 2010).

In the state of interest for this article, Texas, Cox, Joyner, and Slate (2010) analyzed the number and percentage of associates degrees awarded to Hispanic students between the 2000 and 2008 academic year. Using data from the Texas Higher Education Coordinating Board Interactive Accountability System website, data on 76 community colleges were obtained. Cox et al. (2011) documented that the number of associates degrees awarded from 2000 to 2007 increased every year; the number decreased from 2007 to 2008. They concluded that even though the actual numbers of associates degrees awarded to Hispanic students increased, the percentage of total degrees awarded to Hispanic students did not increase. Cox et al. (2011) established that the percentage of Hispanics receiving an associate's degree did not statistically significantly change from 2000 to 2008, indicating Hispanics received degrees below the state projected target. Moreover, Cox et al. (2011) argued that the Texas initiative to close the achievement gap did not appear to have a meaningful impact.

In a similar study, Hernandez, Slate, and Joyner (2015) analyzed the number and percentages of Hispanic college students enrolled in Texas 2-year colleges and the number of Hispanic students who obtained associate degrees for the 2000 through the 2011 academic year. Hernandez et al. (2015) documented the presence of an increase from the 2000 to the 2011 academic years in Hispanic enrollment and educational attainment. In fact, Hernandez et al. (2015) established that the average number of Hispanic students enrolled in Texas 2-year colleges in 2011 more than doubled the number of students enrolled in the 2000 academic year. As such, they suggested that 2-year Hispanic-serving institutions prioritize Hispanic student college participation to secure federal funding. Also recommended was that future research be directed on the transfer outcomes of Hispanic students attending community colleges in Texas.

Hispanic Serving Institutions

Hispanic-serving institutions are federally recognized 2-year or 4-year institutions that possess a minimum of 25% of Hispanic students enrolled full-time (Contreras & Contreras, 2015; Núñez, Crisp, & Elizondo, 2016). Hispanic-serving institutions are eligible to apply for federal finding programs if the institution also serves students who are economically disadvantaged (Contreras & Contreras, 2015; Núñez et al., 2016). The majority of Hispanic-serving institutions are located in cities across the nation to reach target populations (Contreras & Contreras, 2015). Contreras and Contreras (2015) illustrated the potential of Hispanic-serving institutions in raising college access and completion rates for Hispanic students in states with a large percentage of Hispanics.

Transfer Students

It is becoming more common for students to attend several higher education institutions in pursuit of a college degree (Fauria & Fuller, 2015). In fact, during the 21st century, nearly 60% of students attended several institutions, transferred, and/or co-enrolled in various institutions prior to graduating. Fauria and Fuller (2015) documented several reasons these mobility patterns are reflected in higher education. Included reasons were the increase in college tuition is prompting more students to take core classes at community colleges and students view community colleges as a “buffer” between high school and college (Fauria & Fuller, 2015, p. 39). Fauria and Fuller (2015) also noted that President Obama’s challenge to community colleges to produce an additional five million completers by 2020 (Boggs, 2011), contributing to an increase in transfers.

Fauria and Fuller (2015) described several types of transfers currently occurring: (a) reverse transfers; (b) double-dipping; and (c) stepping/stopping out. Reverse transfers refer to students who transfer from a 4-year institution to a 2-year institution (Fauria & Fuller, 2015). As the name implied, double-dipping is when a student is enrolled in more than one institution at the same time. Lastly, stepping/stopping out is when students take temporary or permanent breaks (Fauria & Fuller, 2015). In addition, Bahr (2012) addressed the increasing pattern for students to attend multiple institutions at the same level (i.e., attending two or more community colleges). Bahr (2012) described lateral transfers as students who transfer between community colleges. Bahr (2012) claimed that the lateral transfer is a very common event in the course of today’s college student’s educational journey.

The term “swirling” is used in current research to describe the mobility patterns of today’s college students (Bahr, 2012; Fauria & Fuller, 2015, p. 39). Swirling is more common among students who begin their college education at a community college than it is for students who begin at a 4-year institution (Bahr, 2012). Bahr (2012) revealed that the majority of researchers on transfers and community college students have focused on upward transfers (i.e., transferring from a 2-year institution to a 4-year institution). Yet, the path to degree attainment for the typical transfer student will dramatically change over the next 10 to 15 years due to population and demographic shifts (Lester, 2006).

Fauria and Fuller (2015) argued that transfer students are less apt to attain their baccalaureate degree within six years than students who did not transfer. To determine the relationship between persistence rates of students who stayed at the same institution compared to the persistence rates of students who transferred to other institutions, Fauria and Slate (2014) analyzed data from thirty eight 4-year public institutions in Texas over an 11-year period. In their analysis, Fauria and Slate (2014) established that transfer students were four times less likely to persist after one year than were students who did not transfer. Fauria and Slate (2014) expressed the need for additional research to explore “discrepancies in persistence rates between racial groups” (p. 9).

In a recent study in the state of interest for this investigation, Moss and Slate (2015) conducted a quantitative study of the 2-year persistence rates of Black students. Using archival data, the persistence rates for Black students enrolled at all Texas community colleges were analyzed by institutional status, whether the student stayed or transferred to a different institution for the 2000 and 2012 academic year. In their analysis of the 2-year persistence rates, a statistically significant difference was not

present. Of importance regarding the 2-year persistence rate was that less than 20% of Black students persisted upon transferring to a different institution. Moss and Slate (2015) recognized the need for the persistence rates of Black and Hispanic students to increase. Recommendations for further research included additional research regarding persistence at the community college level (Moss & Slate, 2015).

Statement of the Problem

At present, many students in postsecondary settings transfer from one institution to another institution (Fauria & Fuller, 2015; Grites, 2013). Grites (2013) argued that institutions receiving transfer students often fail to recognize that transfer students need a sustained and positive transitional experience. For Hispanic students, access to higher education is not as simple as enrolling in college. In addition to access, Hispanic college students also contend with retention, transition, and transfer issues (Page, 2013). The persistence rates of Hispanic community college students who transfer to a different community college need to be determined, as well as the persistence rates of Hispanic community college students who remain at the same institution. Information about Hispanic community college persistence rates by student institutional status is essential for improvements to be made.

Purpose of the Study

The purpose of this study was to examine the extent to which differences were present in the 2-year persistence rates for Hispanic students enrolled at Texas community colleges in the 2006-2007 through the 2012-2013 academic years. Specifically addressed was the degree to which the 2-year persistence rates differed between Hispanic students who stayed at the same Texas 2-year community college and Hispanic students who

transferred to a different Texas 2-year community college. The final purpose was to ascertain the extent to which the 2-year persistence rates of Hispanic students changed over the five academic years of data analyzed.

Significance of the Study

Several researchers (e.g., Fauria & Slate, 2014; Moss & Slate, 2015) have recently documented the presence of relationships between ethnicity/race and persistence rates. However, few researchers have exclusively focused their attention on the relationship between 2-year persistence rates and Hispanic community college students. Fauria and Slate (2014) noted the need for additional research to explore discrepancies in persistence rates between ethnic/racial groups. Moreover, by evaluating the 2-year persistence rates of Hispanic community college students, the effect of remaining at the same campus versus transferring to other institutions will be explored. If the results from this study are indicative that the 2-year persistence rates differ between staying or transferring, community college administrators could use these data to implement policies designed to encourage students to avoid transferring to another community college.

Research Questions

The following research questions were addressed in this study: (a) What is the difference in the 2-year persistence rates by institutional status (i.e., stayed or transferred) for Hispanic students who were enrolled in Texas community colleges? and (b) To what extent are trends present in the 2-year persistence rates by student institutional status (i.e., stayed or transferred) for Hispanic students who were enrolled in Texas community colleges? The first research question was repeated for the 2006-2007, 2007-2008, 2008-

2009, 2009-2010, 2010-2011, 2011-2012, and 2012-2013 academic years. The second research question involved the results of all 7 academic years.

Method

Research Design

A nonexperimental, causal comparative research design (Johnson & Christensen, 2012) was used to address the research questions present in this study. In a causal comparative research design, the relationship between “one or more categorical independent variables and one or more quantitative dependent variables” (Johnson & Christensen, 2012, p. 43) can be determined. The independent variable in this study was student institutional status, that is, whether the student stayed at the same Texas community college or transferred to a different Texas community college. The dependent variables in this study were the 2-year persistence rates for each academic year. The variables in this study could not be manipulated because the archival data that were obtained reflected events that had already transpired.

Participants

Data analyzed in this research investigation were downloaded from the Texas Higher Education Coordinating Board Interactive Accountability System database. The data were then grouped by ethnicity (i.e., Hispanic) and academic year. In this investigation, the focus was placed on Hispanic students during the 2006-2007, 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2011-2012, and 2012-2013 academic years who were enrolled in a Texas 2-year public community college.

Instrumentation and Procedures

Data were downloaded from the Texas Higher Education Coordinating Board Interactive Accountability System. In this system, data on all 2-year community colleges

in the State of Texas are represented. Community colleges in Texas comprised the participants for this study. During the 2006-2007 academic year, the Texas Higher Education Coordinating Board Interactive Accountability System dataset indicated that 70 community colleges were present. In the 2012-2013 academic year, 72 community colleges provided data that were analyzed. The data for student ethnicity/race and 1-year persistence rates were downloaded from the Texas Higher Education Coordinating Board Interactive Accountability database in an Excel format and then converted into a SPSS dataset.

Results

Prior to conducting inferential statistics to determine whether statistically significant differences were present in the 2-year persistence rates between Hispanic students who stayed at the same community college and Hispanic students who transferred to another community college, checks were conducted to determine the extent to which the data were normally distributed. The standardized skewness coefficients (i.e., the skewness value divided by its standard error) and the standardized kurtosis coefficients (i.e., the kurtosis value divided by its standard error) were calculated (Onwuegbuzie & Daniel, 2002). Although some of the 2-year persistence rate data were not normally distributed, a decision was made to use parametric dependent samples *t*-tests to answer the research questions. Statistical results will now be presented by academic year.

Concerning the 2006-2007 academic year, the parametric dependent samples *t*-test revealed a statistically significant difference in the 2-year persistence rates, $t(69) = -4.72, p < .001$, between Hispanic students who stayed at the same Texas community

college and Hispanic students who transferred to a different Texas community college after one year. This difference represented a large effect size (Cohen's d) of 0.84 (Cohen, 1988). The 2-year persistence rates of Hispanic students who stayed at the same Texas community college were 13% higher than the 2-year persistence rates of Hispanic students who transferred to a different Texas community college. Readers are directed to Table 3.1 for the descriptive statistics for this analysis.

Insert Table 3.1 about here

For the 2007-2008 academic year, the parametric dependent samples t -test revealed a statistically significant difference in the 2-year persistence rates, $t(69) = -7.18$, $p < .001$, between Hispanic students who stayed at the same Texas community college and Hispanic students who transferred to a different Texas community college after one year. This difference represented a large effect size (Cohen's d) of 1.07 (Cohen, 1988). The 2-year persistence rates of Hispanic students who stayed at the same Texas community college were almost 17% higher than the 2-year persistence rates of Hispanic students who transferred to a different Texas community college. Presented in Table 3.2 are the descriptive statistics for this analysis.

Insert Table 3.2 about here

With respect to the 2008-2009 academic year, the parametric dependent samples t -test revealed a statistically significant difference in the 2-year persistence rates, $t(70) = -$

4.10, $p < .001$, between Hispanic students who stayed at the same Texas community college and Hispanic students who transferred to a different Texas community college after one year. This difference represented a moderate effect size (Cohen's d) of 0.71 (Cohen, 1988). The 2-year persistence rates of Hispanic students who stayed at the same Texas community college were 11% higher than the 2-year persistence rates of Hispanic students who transferred to a different Texas community college. Revealed in Table 3.3 are the descriptive statistics for this analysis.

 Insert Table 3.3 about here

For the 2009-2010 academic year, the parametric dependent samples t -test revealed a statistically significant difference in the 2-year persistence rates, $t(70) = -6.93$, $p < .001$, between Hispanic students who stayed at the same Texas community college and Hispanic students who transferred to a different Texas community college after one year. This difference represented a large effect size (Cohen's d) of 1.06 (Cohen, 1988). The 2-year persistence rates of Hispanic students who stayed at the same Texas community college were nearly 16% higher than the 2-year persistence rates of Hispanic students who transferred to a different Texas community college. Readers are directed to Table 3.4 for the descriptive statistics for this analysis.

 Insert Table 3.4 about here

Concerning the 2010-2011 academic year, the parametric dependent samples t -test revealed a statistically significant difference in the 2-year persistence rates, $t(70) = 3.99, p < .001$, between Hispanic students who stayed at the same Texas community college and Hispanic students who transferred to a different Texas community college after one year. This difference represented a moderate effect size (Cohen's d) of 0.66 (Cohen, 1988). The 2-year persistence rates of Hispanic students who stayed at the same Texas community college were 10% higher than the 2-year persistence rates of Hispanic students who transferred to a different Texas community college. Presented in Table 3.5 are the descriptive statistics for this analysis.

Insert Table 3.5 about here

With respect to the 2011-2012 academic year, the parametric dependent samples t -test revealed a statistically significant difference in the 2-year persistence rates, $t(69) = 7.30, p < .001$, between Hispanic students who stayed at the same Texas community college and Hispanic students who transferred to a different Texas community college after one year. This difference represented a large effect size (Cohen's d) of 1.06 (Cohen, 1988). The 2-year persistence rates of Hispanic students who stayed at the same Texas community college were 15% higher than the 2-year persistence rates of Hispanic students who transferred to a different Texas community college. Table 3.6 contains the descriptive statistics for this analysis.

Insert Table 3.6 about here

For the 2012-2013 academic year, the parametric dependent samples *t*-test revealed a statistically significant difference in the 2-year persistence rates, $t(69) = -4.78$, $p < .001$, between Hispanic students who stayed at the same Texas community college and Hispanic students who transferred to a different Texas community college after one year. This difference represented a moderate effect size (Cohen's *d*) of 0.73 (Cohen, 1988). The 2-year persistence rates of Hispanic students who stayed at the same Texas community college were almost 11% higher than the 2-year persistence rates of Hispanic students who transferred to a different Texas community college. Revealed in Table 3.7 are the descriptive statistics for this analysis.

Insert Table 3.7 about here

Discussion

In this investigation, the degree to which differences were present in the 2-year persistence rates by institutional status (i.e., stayed or transferred) was addressed for Hispanic students in Texas community colleges. Archival data from the Texas Higher Education Coordinating Board Interactive Accountability System were obtained and examined to determine whether the 2-year persistence rates of Hispanic students in Texas community colleges differed by student institutional status for the seven academic years of data examined in this study. In the 2006-2007 through the 2007-2008 academic year,

a total of 70 Texas community colleges provided data. For the 2008-2009 through the 2010-2011 academic year, a total of 71 Texas community colleges provided data. Lastly, during the 2011-2012 through the 2012-2013 academic years, data were available from 72 Texas community colleges.

For the seven years of academic data that were analyzed, statistically significant differences were present in all seven academic years. The 2-year persistence rates of Hispanic students who stayed at the same Texas community college ranged from a low of 34% to a high of 39%. In comparison, the 2-year persistence rates of Hispanic students who transferred to a different Texas community college ranged from a low of 18% to a high of 25%. Presented in Table 3.8 is a summary of the results for the 2-year persistence rates of Hispanic students by their institutional status (i.e., stayed or transferred) in Texas community colleges across all seven academic years.

Insert Table 3.8 about here

Connections with Existing Literature

In a previous investigation, Moss and Slate (2015) examined the 2-year persistence rates of Black students enrolled in Texas community colleges in the 2000 and 2012 academic year. Moss and Slate (2015) established that the 2-year persistence rates of Black students were similar, regardless of whether they stayed or transferred to a different community college. Moss and Slate (2015) documented that the 2-year persistence rate for Black students who stayed at the same Texas community college was 22% in the 2000 academic year and 20% in the 2013 academic year. In contrast, the 2-

year persistence rate for Black students who transferred to a different Texas community college was 20% in the 2000 academic year and 17% in the 2013 academic year (Moss & Slate, 2015).

In contrast to the Moss and Slate (2015) investigation, the 2-year persistence rates for Hispanic students were statistically significantly higher when Hispanic students stayed at the same community college than when they transferred to a different community college. In the 1999-2000 academic year, Moss and Slate (2015) noted a 2% difference in the 2-year persistence rate for Black students who stayed at the same community college compared to Black students who transferred to a different community college. In the 2012-2013 academic year, Moss and Slate (2015) noted a 5% difference in the 2-year persistence rate for Black students who stayed at the same community college compared to Black students who transferred to a different community college. In this investigation, in the 2006-2007 academic year, the 2-year persistence rates for Hispanic students who stayed at the same community college were 13% higher than the 2-year persistence rates for Hispanic students who transferred to a different Texas community college. Similarly, in the 2012-2013 academic year, the 2-year persistence rates for Hispanic students who stayed at the same Texas community college were almost 11% higher than the 2-year persistence rates of Hispanic students who transferred to a different Texas community college. Moreover, in each of the seven years included in this investigation, the 2-year persistence rates for Hispanic students who stayed at the same Texas community college were significantly higher than the 2-year persistence rates for Hispanic students who transferred to a different Texas community college.

Implications for Policy and Practice

In this investigation, the 2-year persistence rates of Hispanic students in Texas community colleges were lower when Hispanic community college students transferred to a different community college after their second year than when they stayed at the same community college. As documented in this study, Hispanic community college students are less likely to persist when they transfer to a different community college than when they remain at the same community college. As such, community college leaders are encouraged to implement measures to audit the 2-year persistence rates of their Hispanic students. Through an examination of their 2-year persistence rates for Hispanic students, community colleges can then determine the degree to which existing programs are meeting the needs of Hispanic students.

Community college administrators can assist Hispanic community college students and transfer students through efforts designed to improve student success and informing students of the consequences of transferring from one 2-year institution to another. Community colleges leaders are also encouraged to extend their evaluations to other student groups such as Black students and students in poverty. Community colleges with high 2-year persistence rates are encouraged to share their efforts and program models with other community colleges in an effort to increase persistence among Hispanic community college students. In contrast, community colleges with low 2-year persistence rates need to make changes to their current programs and implement new initiatives to assist Hispanic students in succeeding. Community colleges in Texas that enroll transfer students need to develop programs designed to identify the needs of this growing population.

Recommendations for Future Research

In this multiyear, empirical investigation, the 2-year persistence rates of Hispanic community college students were analyzed as a function of student institutional status (i.e., stayed or transferred). In future investigations, researchers should examine the 1-year persistence rates of Hispanic community college students. Given the findings of this study, researchers should consider extending this study to other underrepresented student groups to determine the extent to which results from this investigation are generalizable to other ethnic/racial groups. Researchers should also consider extending this study to 4-year institutions in Texas and other states. Another recommendation is to replicate this investigation in other states to determine whether the results are generalizable to Hispanic students outside of Texas. In future studies, researchers should focus on the 2-year persistence rates of Hispanic community college students attending Hispanic-serving institutions. Moreover, researchers interested in a qualitative study should investigate the underlying reasons students transferred to different institutions.

Conclusion

In this investigation, the degree to which the 2-year persistence rates of Hispanic students in Texas community colleges differed by student institutional status (i.e., stayed or transferred) was examined for the 2006-2007 through the 2012-2013 academic years. Statistically significant differences were present in all seven academic years. In each year analyzed, the 2-year persistence rates were higher for Hispanic students who stayed at the same Texas community college than for Hispanic students who transferred to a different Texas community college.

References

- Arebelo-Marrero, F., & Milacci, F. (2016). A phenomenological investigation of the academic persistence of undergraduate Hispanic nontraditional students at Hispanic serving institutions. *Journal of Hispanic Higher Education, 15*, 22-40. doi:10.1177/1538192715584192
- Bahr, P. R. (2012). Student flow between community colleges: Investigating lateral transfer. *Research in Higher Education, 53*, 94-121. doi:10.1007/s11162-011-9224-5
- Boggs, G. R. (2011). Community colleges in the spotlight and under the microscope. *New Directions for Community Colleges, 156*, 3-22. doi:10.1002/cc.462
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Contreras, F., & Contreras, G. J. (2015). Raising the bar for Hispanic Serving Institutions: An analysis of college completion and success rates. *Journal of Hispanic Higher Education, 14*, 151-170. doi:10.1177/1538192715572892
- Cox, S., Joyner, S. A., & Slate, J. R. (2011) Differences in Hispanic graduation rates at Texas community colleges over time. *Community College Enterprise, 17*, 62-76.
- Fauria, R. M., & Fuller, M. B. (2015). Transfer student success: Educationally purposeful activities predictive of undergraduate GPA. *Research and Practice in Assessment, 10*, 39-52.
- Fauria, R. M., & Slate, J. R. (2014). Persistence rate differences of university students by race: A within groups comparison. *International Journal of University Teaching and Faculty Development, 4*(1), 1-10.

- Grites, T. J. (2013). Successful transitions from two-year to four-year institutions. *New Directions for Higher Education*, 162, 61-68.
- Hernandez, J., Slate, J. R., & Joyner, S. A. (2015). Demographic changes of Hispanic populations and Hispanic student enrollment in Texas community colleges: A literature review. *NCPEA Educational Leadership Review of Doctoral Research*, 2, 57-69.
- Johnson, B., & Christensen, L. (2012). *Educational research: Quantitative, qualitative, and mixed approaches* (4th ed.). Thousand Oaks, CA: Sage
- Lester, J. (2006). Who will serve in the Future? The new student in transition. *New Directions for Student Services*, 114, 47-61. doi:10.1002/ss.206
- Moss, S., & Slate, J. R. (2015). Difference in Black students' persistence rates in Texas community colleges by institutional status. *International Journal of University Teaching and Faculty Development*, 5, 1-10.
- National Center for Education Statistics. (2006). *Profile of undergraduates in U.S. postsecondary education institutions: 2003-04*. Washington, DC: U.S. Department of Education.
- National Center for Education Statistics. (2012). *The condition of education 2012*. Washington, DC: U.S. Department of Education.
- National Center for Education Statistics. (2016). *Digest of Education Statistics, 2014*. Washington, DC: U.S. Department of Education.
- Núñez, A. M., Crisp, G. & Elizondo, D. (2016). Mapping Hispanic-serving institutions: A typology of institutional diversity. *The Journal of Higher Education*, 87, 51-81.

- Onwuegbuzie, A. J., & Daniel, L. G. (2002). Uses and misuses of the correlation coefficient. *Research in the Schools, 9*(1), 73-90.
- Page, J. (2013). Hispanics: A diverse population of students to influence the landscape of higher education. *Journal of Hispanic Higher Education, 12*, 37-48.
doi:10.1177/1538192712454133
- Perna, L. L., Chunyan, L., Walsh, E., & Raible, S. (2010). The status of equity for Hispanics in public higher education in Florida and Texas. *Journal of Hispanic Higher Education, 9*, 145-166. doi:10.1177/1538192709331973
- Pew Research Center. (2015). *Facts about Latinos and education*. Retrieved from <http://www.pewresearch.org/fact-tank/2015/05/26/5-facts-about-latinos-and-education/>

Table 3.1

Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2006-2007 Academic Year

Institutional Status	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
Stayed	70	37.83	11.29
Transferred	70	24.42	19.45

Table 3.2

Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2007-2008 Academic Year

Institutional Status	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
Stayed	70	39.19	10.95
Transferred	70	22.22	19.54

Table 3.3

Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2008-2009 Academic Year

Institutional Status	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
Stayed	70	37.14	10.23
Transferred	70	25.74	20.39

Table 3.4

Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2009-2010 Academic Year

Institutional Status	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
Stayed	71	35.65	10.65
Transferred	71	19.71	18.42

Table 3.5

Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2010-2011 Academic Year

Institutional Status	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
Stayed	71	34.56	11.45
Transferred	71	24.50	18.45

Table 3.6

Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2011-2012 Academic Year

Institutional Status	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
Stayed	72	34.59	10.67
Transferred	72	18.72	18.29

Table 3.7

Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2012-2013 Academic Year

Institutional Status	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
Stayed	72	35.26	9.00
Transferred	72	24.29	19.26

Table 3.8

Summary of Results for the 2-Year Persistence Rates by Institutional Status for Hispanic Community College Students in Texas in the 2006-2007 Academic Year Through the 2012-2013 Academic Year

Academic Year	Effect Size	Higher Persistence Rate
2006-2007	Large	Stayed
2007-2008	Large	Stayed
2008-2009	Moderate	Stayed
2009-2010	Large	Stayed
2010-2011	Moderate	Stayed
2011-2012	Large	Stayed
2012-2013	Moderate	Stayed

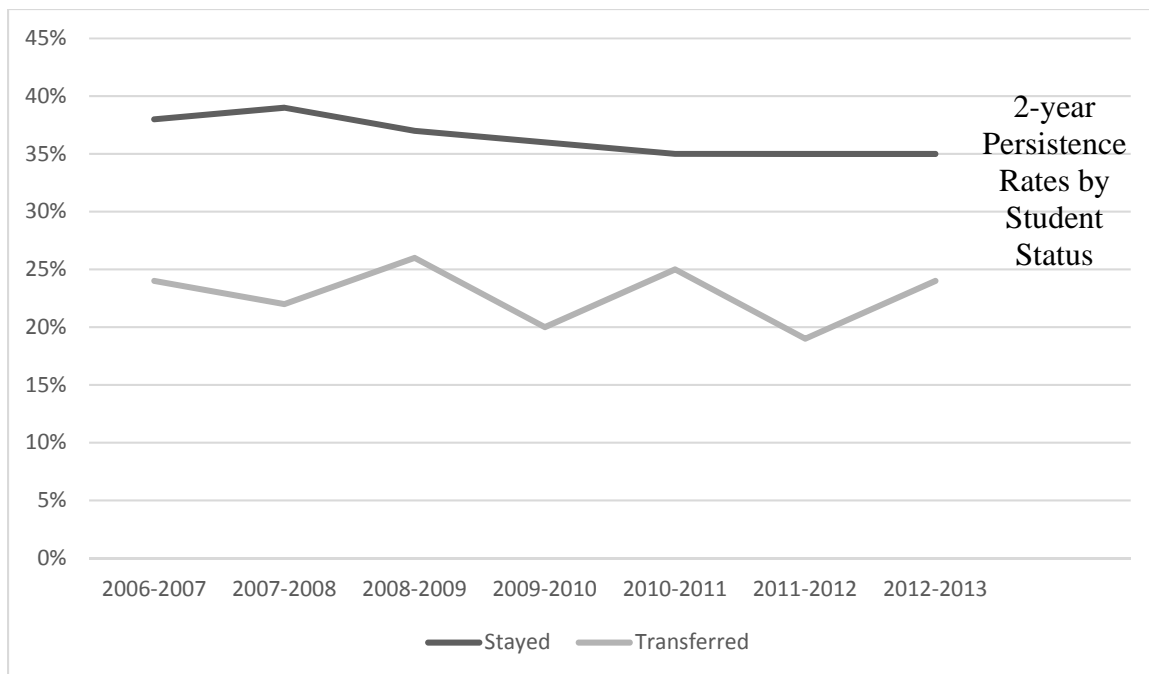


Figure 3.1. Trends in the 2-year persistence rates of Hispanic students who stayed or transferred to a different Texas community college in the 2006-2007 through the 2012-2013 academic years.

CHAPTER IV**DIFFERENCES IN GRADUATION RATES BETWEEN HISPANIC AND WHITE
STUDENTS ENROLLED IN TEXAS COMMUNITY COLLEGES**

This dissertation follows the style and format of *Research in the Schools (RITS)*.

Abstract

In this multiyear, statewide investigation, the graduation rates of Hispanic students and White students in Texas community colleges were analyzed for the 2008-2009 through the 2014-2015 academic years. Of particular interest was whether graduation rates differed for Hispanic and White students in these academic years. Inferential statistical analyses revealed statistically significant differences in the 2008-2009, 2009-2010, 2010-2011, 2011-2012, and the 2012-2013 academic years. The average graduation rates of Hispanic students were lower than the average graduation rates of White students. Of note, however, is that both Hispanic and White students had low graduation rates from Texas community colleges. Implications for practice and recommendations for future research were provided.

Keywords: Hispanic students, White students, graduation rates, Texas community colleges

DIFFERENCES IN GRADUATION RATES BETWEEN HISPANIC AND WHITE STUDENTS ENROLLED IN TEXAS COMMUNITY COLLEGES

A college education is an important education attainment (Arredondo & Castillo, 2011; Carpenter & Ramirez, 2012; Fauria & Slate, 2014). Receiving a postsecondary degree is often viewed as leading to better paying jobs and enhancing the quality of a person's life (Arredondo & Castillo, 2011; Fauria & Slate, 2014). In 2009, President Obama outlined a plan for strengthening education and increasing student success (Wolniak, Mayhew, & Engberg, 2012). At the core of President Obama's plan is to promote postsecondary access and opportunity, along with improving persistence and completion rates (Wolniak et al., 2012).

Although a focus on college and career readiness is present, all citizens are not receiving a quality education, as indicated by the current college completion rates (Mansfield & Thachik, 2016). In Texas, the rate of college completion within six years is 51.7%, similar to the national trend (The Chronicle of Higher Education, 2015). Although these statistics have improved over the last decade, a concern remains on the shortage of college graduates needed to fill jobs in the new economy (Mansfield & Thachik, 2016).

Differences in Enrollment by Ethnicity/Race

Community colleges currently enroll over one-half of all beginning higher education students (Cox, Joyner, & Slate, 2011; Schuetz, 2008; Scoggin & Styron, 2006). Moreover, a large percentage of Black and Hispanic students receive an education at community colleges (Spangler & Slate, 2015), as community colleges enroll larger percentages of non-White students (Martin, Galentino, & Townsend, 2014).

Over the past 30 years, efforts have been made to increase the number of Hispanic students attending college (Kezar & Eckel, 2007). When it comes to enrolling in college, Hispanics are making big improvements. Since 1993, the number of Hispanics ages 18 to 24 enrolled in a 2- or 4-year college have more than tripled (Pew Research Center, 2015). In 1993, 728,000 Hispanics were enrolled in college. In 2013, 2.2 million Hispanics were enrolled, more than a 200% increase (Pew Research Center, 2015). In the same time period, college enrollment for White students increased by 14% and the enrollment rate for Black students increased 78% (Pew Research Center, 2015). College enrollment rates for Hispanics are relatively low when compared to the enrollment rates for White and Black students (McCallister, Evans, & Illich, 2010). Similarly, Ryu (2010) documented that although college enrollment rates for Hispanics between the ages of 18-24 experienced an increase, Hispanics trailed behind at 28%, versus Asians with 63%, Whites with 45%, and Blacks with 34%.

Differences in Graduation Rates by Ethnicity/Race

Although the enrollment rate for Hispanics has increased, Hispanics continue to fall behind White students in obtaining a 4-year degree. In 2013, only 15% of Hispanics between the ages of 25-29 had a bachelor's degree or higher (Pew Research Center, 2015). In comparison, among people between the ages of 25-29, 40% of Whites, 20% of Blacks, and 60% of Asians had a bachelor's degree or higher (Pew Research Center, 2015). One reason that Hispanics are falling behind in obtaining a bachelor's degree is that of all racial/ethnic groups, Hispanics are more likely (50%) to attend a 2-year school (Pew Research Center, 2015). By comparison, 30% of Whites, 32% of Asians, and 34% of Blacks enroll in a 2-year college (Pew Research Center, 2015). Cejda and Short

(2008) recommended developing programs and assistance to Hispanic families in applying to, paying for, and graduating from college.

In a recent study, Hernandez, Slate, and Joyner (2015), analyzed the numbers and percentages of Hispanic college students who obtained associate degrees for the 2000 through the 2011 academic year. Hernandez et al. (2015) revealed an increase from 2000 to 2011 in the number of Hispanic students obtaining associate degrees at community colleges in Texas. In fact, they documented that the number of Hispanic community college students in Texas who obtained associates degrees almost tripled in the 2011 academic year as in the 2000 academic year. Furthermore, they demonstrated the presence of statistically significant increases in the number of Hispanic community college students who obtained associates degrees and the percentage of Hispanic students obtaining associate degrees from 2000 to 2011. Hernandez et al. (2015) recommended that research studies be conducted on the transfer outcomes of Hispanic students attending community colleges in Texas.

In a similar study, Cox et al. (2011) reviewed the number and percentage of associate degrees awarded to Hispanic students by Texas community colleges in the 2000 through the 2008 academic years. Cox et al. (2011) also investigated the increase of the Hispanic adult population that received associate degrees from 2000 to 2008. Cox et al. (2011) noted that the number of associates degrees awarded from 2000 to 2007 increased every year; however, the number decreased from 2007 to 2008. Cox et al. (2011) concluded that even though the actual numbers of associates degrees awarded to Hispanics increased, the percentage of total degrees awarded did not increase. Moreover, they documented that the percentage of Hispanics receiving an associate's degree was not

statistically significant between the 2000 and the 2008 academic years, indicating Hispanics received degrees below the projected target of the initiative to close the achievement gap in Texas. Moreover, Cox et al. (2011) argued that the Texas initiative to close the achievement gap did not appear to have a meaningful impact.

Similarly, Spangler and Slate (2015) investigated the graduation and persistence rates of community college students as a function of ethnicity (i.e., White, Black, Hispanic, and Asian) for the 2000 through 2010 academic years. They analyzed data from all community colleges in the state of Texas. Spangler and Slate (2015) documented an increase in the graduation and persistence rates for each ethnic/racial group between the 2000 and 2010 academic years. Over the 10-year period, the persistence and graduation rates for Hispanic students increased from 31.52% to 41.30% (Spangler & Slate, 2015).

Statement of the Problem

The relationship between a quality education and a growing economy has been emphasized by the United States government (Mansfield & Thachik, 2016). With respect to Texas, as noted by Hernandez et al. (2015) it is estimated that from 2008 to 2018, of the four million newly created jobs in Texas, 56% will require postsecondary education. Hernandez et al. (2015) suggested that due to the low college enrollment rate and degree attainment, employment opportunities may be limited for Hispanics. Community colleges can assist Hispanic students in acquiring a stable career by increasing the graduation rates for Hispanic students. Additionally, by completing an associate's degree at a community college, Hispanic students will be more likely to transfer to a 4-year institution and receive a bachelor's degree.

Purpose of the Study

The purpose of this study was to examine the extent to which differences were present in graduation rates between Hispanic and White students enrolled at Texas community colleges in the 2008-2009 through the 2014-2015 academic years. Specifically addressed was the degree to which the graduation rates differed between Hispanic and White enrolled in Texas community colleges. The final purpose was to ascertain the extent to which the graduation rates of Hispanic and White students changed over the seven academic years of data analyzed.

Significance of the Study

Several researchers (e.g., Cox et al., 2011; Hernandez et al., 2015; Spangler & Slate, 2015) have previously documented that student ethnicity/race is related to their graduation rates from community colleges. However, few researchers have exclusively focused their attention on the difference in the graduation rates between Hispanic and White community college students. By evaluating the graduation rates of Hispanic and White community college students, the connection between ethnicity/race and graduation rates at Texas community colleges was explored. The findings of this study may have practical application for community college administrators in increasing the graduation rates for all students, regardless of ethnic/racial group.

Research Questions

The following research questions were addressed in this study: (a) What is the difference in the graduation rates between Hispanic and White students enrolled in Texas community colleges for the 2008-2009 academic year?; and (b) To what extent are trends present in the graduation rates between Hispanic and White students enrolled in Texas

community colleges for the 2008-2009 through the 2014-2015 academic years? The first research question was repeated for the 2009-2010 through the 2014-2015 academic years whereas the second research question involved the results of all seven academic years.

Method

Research Design

A nonexperimental, causal comparative research design (Johnson & Christensen, 2012) was used to address the research questions present in this study. A causal comparative research design allows researchers to examine the relationship between “one or more categorical independent variables and one or more quantitative dependent variables” (Johnson & Christensen, 2012, p. 43). The independent variable in this study was the ethnicity (i.e., Hispanic, White) of the student. The dependent variables in the study were the graduation rates for each academic year. Archival data were acquired and examined in this investigation. Accordingly, neither the independent variable nor the dependent variables could be manipulated.

Participants

The data that were analyzed in this multiyear, statewide investigation were downloaded from the Texas Higher Education Coordinating Board Interactive Accountability System database. Data were grouped by ethnicity (i.e., Hispanic, White) and academic year. Data on Hispanic and White students from all Texas 2-year public community colleges who attended college in the 2008-2009, 2009-2010, 2010-2011, 2011-2012, 2012-2013, 2013-2014, and 2014-2015 academic years were used in this investigation.

Instrumentation and Procedures

Data were downloaded from the Texas Higher Education Coordinating Board Interactive Accountability System. In this system, data on all 2-year community colleges in the State of Texas were represented. Community colleges in Texas comprised the participants for this study. During the time period of this investigation, data were obtained from approximately 70 Texas community colleges. The data for student ethnicity/race and graduation rates were downloaded from the Texas Higher Education Coordinating Board Interactive Accountability database in an Excel format.

Results

Prior to conducting inferential statistics to determine whether statistically significant differences were present in graduation rates between Hispanic and White students who were enrolled in a Texas community college, checks were conducted to determine the extent to which the data were normally distributed. The standardized skewness coefficients (i.e., the skewness value divided by its standard error) and the standardized kurtosis coefficients (i.e., the kurtosis value divided by its standard error) were calculated (Onwuegbuzie & Daniel, 2002). Although some of the graduation rate data were not normally distributed, a decision was made to use parametric dependent samples *t*-tests to answer the research questions. Statistical results will now be presented by academic year.

Concerning the 2008-2009 academic year, the parametric dependent samples *t*-test revealed a statistically significant difference in graduation rates, $t(68) = -1.92, p < .001$, between Hispanic and White students at Texas community colleges. This difference represented a small effect size (Cohen's *d*) of 0.30 (Cohen, 1988). The

graduation rates of Hispanic students were lower, 2.4% lower, than the graduation rates of White students at Texas community colleges. Readers are directed to Table 4.1 for the descriptive statistics for this analysis.

Insert Table 4.1 about here

For the 2009-2010 academic year, the parametric dependent samples *t*-test revealed a statistically significant difference in graduation rates, $t(68) = -4.04, p < .001$, between Hispanic and White students at Texas community colleges. This difference represented a moderate effect size (Cohen's *d*) of 0.55 (Cohen, 1988). The graduation rates of Hispanic students were 3% lower than the graduation rates of White students at Texas community colleges. Table 4.2 contains the descriptive statistics for this analysis.

Insert Table 4.2 about here

With respect to the 2010-2011 academic year, the parametric dependent samples *t*-test revealed a statistically significant difference in graduation rates, $t(68) = -3.97, p < .001$, between Hispanic and White students at Texas community colleges. This difference represented a moderate effect size (Cohen's *d*) of 0.54 (Cohen, 1988). The graduation rates of Hispanic students were 4% lower than the graduation rates of White students at Texas community colleges. Delineated in Table 4.3 are the descriptive statistics for this analysis.

Insert Table 4.3 about here

Concerning the 2011-2012 academic year, the parametric dependent samples t -test revealed a statistically significant difference in graduation rates, $t(68) = -3.29, p < .001$, between Hispanic and White students at Texas community colleges. This difference represented a small effect size (Cohen's d) of 0.40 (Cohen, 1988). The graduation rates of Hispanic students were 2.7% lower than the graduation rates of White students at Texas community colleges. Table 4.4 contains the descriptive statistics for this analysis.

Insert Table 4.4 about here

For the 2012-2013 academic year, the parametric dependent samples t -test revealed a statistically significant difference in graduation rates, $t(69) = -2.94, p < .001$, between Hispanic and White students at Texas community colleges. This difference represented a small effect size (Cohen's d) of 0.40 (Cohen, 1988). The graduation rates of Hispanic students were 3% lower than the graduation rates of White students at Texas community colleges. Revealed in Table 4.5 are the descriptive statistics for this analysis.

Insert Table 4.5 about here

With respect to the 2013-2014 academic year, the parametric dependent samples t -test did not reveal a statistically significant difference in graduation rates, $t(69) = -1.64$,

$p = .10$, between Hispanic and White students at Texas community colleges. In the 2013-2014 academic year, the graduation rate for White and for Hispanic students were within 2%. Delineated in Table 4.6 are the descriptive statistics for this analysis.

Insert Table 4.6 about here

Concerning the 2014-2015 academic year, the parametric dependent samples t -test did not reveal a statistically significant difference in graduation rates, $t(70) = -1.00$, $p = .32$, between Hispanic and White students at Texas community colleges. In this academic year, the graduation rate for White students and for Hispanic students was 43% and 42%, respectively. Readers are directed to Table 4.7 for the descriptive statistics for this analysis.

Insert Table 4.7 about here

Discussion

In this investigation, the degree to which differences were present in the graduation rates by student ethnicity (i.e., Hispanic or White) was addressed for students in Texas community colleges. Seven years of archival data from the Texas Higher Education Coordinating Board Interactive Accountability System were obtained and examined. In this investigation, 69 Texas community colleges provided data that were analyzed in the 2008-2009 through the 2011-2012 academic year and 70 Texas community colleges provided data that were analyzed in the 2012-2013 through the

2013-2014 academic year. Lastly, for the 2014-2015 academic year, 71 Texas community colleges provided data that were analyzed.

For the seven years of academic data that were analyzed, statistically significant differences were present in the 2008-2009, 2009-2010, 2010-2011, 2011-2012, and the 2012-2013 academic year. Only in the 2013-2014 and the 2014-2015 academic years was a statistically significant difference not present in the graduation rates between Hispanic and White students at Texas community colleges. Although a statistically significant difference was not present in the 2013-2014 through the 2014-2015 academic years, the graduation rates of Hispanic students were consistently lower than the graduation rates of White students. The graduation rates of Hispanic students at Texas community colleges ranged from a low of 41% to a high of 43%. In comparison. The graduation rates of White students at Texas community colleges ranged from a low of 43% to a high of 46%. Presented in Table 4.8 is a summary of the results for the graduation rates of Hispanic and White students in Texas community colleges across all seven academic years.

Insert Table 4.8 about here

Connections with Existing Literature

In a previous Texas investigation, Spangler and Slate (2015) analyzed the graduation rates of community college students by ethnicity/race. Spangler and Slate (2015) established that the graduation rate for each ethnic/racial group (i.e., Blacks, Hispanic, Whites, and Asians) increased between the 2000 and 2010 academic years.

Spangler and Slate (2015) noted an increase from 36.30% to 44.75% for White students between the 2000 and 2010 academic years. During the same 10-year period, the graduation rates for Hispanic students increased from 31.52% to 41.30%. In comparison to Spangler and Slate (2015), the graduation rates for Hispanic students were lower than the graduation rates for White students for all seven years of data analyzed in this study.

Implications for Policy and Practice

Spangler and Slate (2015) contended that success measures need to be developed in which the concerns of community colleges are addressed. In this empirical multiyear investigation, the graduation rates of Hispanic and White students at Texas community colleges was less than 50%. Moreover, the graduation rates for Hispanic students was lower than the graduation rates for White students. To improve graduation rates, community college leaders need to examine the programs they have in place designed to help students persist and graduate. They are encouraged to audit the graduation rates of all of their students and to examine these rates separately by student demographic characteristic. After determining their students' graduation rates, community colleges with low graduation rates may consider adopting practices and programs from community colleges with high graduation rates. Community colleges with high graduation rates should share successful programs and initiatives with other community college leaders. It is impertinent for community college counselors and academic advisors to ensure that students are on the right program track and understand what courses are needed to complete their degree. As noted by Spangler and Slate (2015), Texas legislators should continue to examine higher education policies and propose new programs to assist community college students in graduating.

Recommendations for Future Research

In this multiyear, statewide investigation, the graduation rates of only Hispanic and White students at Texas community colleges were examined. As such, researchers are encouraged to extend this study to the graduation rates of other ethnic/racial groups of students, as well as to analyze the graduation rates by student gender. Given that this study was restricted to Texas students, researchers are encouraged to replicate this investigation in other states. The degree to which the results delineated herein generalize to Hispanic and White community college students in other states is not known. Research should also be conducted into the graduation rates of students at 4-year universities. Are the graduation rates of students at 4-year universities similar to the graduation rates of students at community colleges? Research is warranted into identifying Texas community colleges that have the highest graduation rates for their students, as well as those Texas community colleges with the lowest graduation rates for their students. Efforts to identify specific programs and measures related to success, as well as non-success, are encouraged. Finally, qualitative and/or mixed method research studies into the reasons why students graduate and why students fail to graduate from community colleges need to be conducted.

Conclusion

In this investigation, the graduation rates of Hispanic and White community college students in Texas were compared. Texas statewide data were analyzed for the 2008-2009 through the 2014-2015 academic years. Statistically significant differences were present in five of the seven years analyzed. In each year analyzed, graduation rates were higher for White students than for Hispanic students at Texas community colleges.

Readers should note, however, that the graduation rates for both White and Hispanic community college students were less than 50%. As such, concerns are warranted regarding community college graduation rates.

References

- Arredondo, P., & Castillo, L. G. (2011). Latina/o student achievement: A collaborative mission of professional associations of higher education. *Journal of Hispanic Higher Education, 10*, 6-17. doi:10.1177/1538192710391907
- Carpenter, D. M., & Ramirez, A. (2012). Exploring the underachievement gap. *Christian Higher Education, 11*(2), 115-130. doi:10.1080/15363759.2012.624458
- Cejda, B. D., & Short, M. (2008). Influencing the college attendance rates of Hispanics in Texas. *Community College Journal of Research and Practice, 32*, 347-361.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Cox, S., Joyner, S. A., & Slate, J. R. (2011). Differences in Hispanic graduation rates at Texas community colleges over time. *Community College Enterprise, 17*, 62-76.
- Fauria, R. M., & Slate, J. R. (2014). Persistence rate differences of university students by race: A within groups comparison. *International Journal of University Teaching and Faculty Development, 4*(1), 1-10.
- Hernandez, J., Slate, J. R., & Joyner, S. A. (2015). Demographic changes of Hispanic populations and Hispanic student enrollment in Texas community colleges: A literature review. *NCPEA Educational Leadership Review of Doctoral Research, 2*, 57-69.
- Johnson, B., & Christensen, L. (2012). *Educational research: Quantitative, qualitative, and mixed approaches* (4th ed.). Thousand Oaks, CA: Sage

- Kezar, A., & Eckel, P. (2007). Learning to ensure the success of students of color: A systemic approach to effecting change. *Change*, 39(4), 18-24.
doi:10.3200/CHNG.39.4.18-25
- Mansfield, K. C., & Thachik, S. L. (2016). A critical analysis of Texas' closing the gaps 2015. *Education Policy Analysis Archives*, 24, 1-29.
- Martin, K. K., Galentino, R., & Townsend, L. (2014). Community college student success: The role of motivation and self-empowerment. *Community College Review*, 42, 221-241. doi:10.1177/0091552114528972
- McCallister, L., Evans, J., & Illich, P. (2010). Perceptions about higher education among parents of Hispanic students in middle school: Implications for community colleges. *Community College Journal of Research and Practice*, 34, 784-796.
doi:10.1080/10668920802605254
- Pew Research Center. (2015). *Facts about Latinos and education*. Retrieved from <http://www.pewresearch.org/fact-tank/2015/05/26/5-facts-about-latinos-and-education/>
- Onwuegbuzie, A. J., & Daniel, L. G. (2002). Uses and misuses of the correlation coefficient. *Research in the Schools*, 9(1), 73-90.
- Ryu, M. (2010). *Minorities in higher education: Twenty-fourth status report*. Washington, DC: American Council on Education.
- Schuetz, P. (2008). Developing a theory-driven model of community college student engagement. *New Directions for Community Colleges*, 144, 17-28.
doi:10.1002/cc.342

- Scoggin, D., & Styron, R. A. (2006). Factors associated with student withdrawal from community college. *Community College Enterprise*, 12(1), 111-124.
- Spangler, J. M., & Slate, J. R. (2015). Texas community college graduation and persistence rates as a function of student ethnicity. *Community College Journal of Research and Practice*, 39, 741-753. doi:10.1080/10668926.2013.878261
- The Chronicle of Higher Education. (2015). *College completion: Texas public colleges (4-year)*. Retrieved from http://collegecompletion.chronicle.com/state/#state=TX§or=public_four
- Wolniak, G. C., Mayhew, M. J., & Engberg, M. E. (2012). Learning's weak link to persistence. *The Journal of Higher Education*, 83, 795-823.

Table 4.1

Descriptive Statistics for Graduation Rates of Hispanic and White Texas Community

College Students in the 2008-2009 Academic Year

Ethnicity	<i>n</i> of community colleges	<i>M%</i>	<i>SD%</i>
Hispanic	69	42.68	8.37
White	69	45.02	6.87

Table 4.2

*Descriptive Statistics for Graduation Rates of Hispanic and White Texas Community**College Students in the 2009-2010 Academic Year*

Ethnicity	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
Hispanic	69	41.13	6.83
White	69	44.82	6.41

Table 4.3

Descriptive Statistics for Graduation Rates of Hispanic and White Texas Community

College Students in the 2010-2011 Academic Year

Ethnicity	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
Hispanic	69	40.78	7.49
White	69	44.83	7.47

Table 4.4

Descriptive Statistics for Graduation Rates of Hispanic and White Texas Community

College Students in the 2011-2012 Academic Year

Ethnicity	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
Hispanic	69	42.53	7.30
White	69	45.30	6.40

Table 4.5

Descriptive Statistics for Graduation Rates of Hispanic and White Texas Community

College Students in the 2012-2013 Academic Year

Ethnicity	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
Hispanic	70	42.94	8.33
White	70	46.00	6.91

Table 4.6

Descriptive Statistics for Graduation Rates of Hispanic and White Texas Community

College Students in the 2013-2014 Academic Year

Ethnicity	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
Hispanic	70	43.14	7.57
White	70	44.89	8.45

Table 4.7

Descriptive Statistics for Graduation Rates of Hispanic and White Texas Community

College Students in the 2014-2015 Academic Year

Ethnicity	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
Hispanic	71	42.38	7.31
White	71	43.32	7.35

Table 4.8

Summary of the Results for Graduation Rates of Hispanic and White Texas Community College Students in the 2008-2009 Academic Year Through the 2014-2015 Academic Year

Academic Year	Effect Size	Higher Graduation Rate
2008-2009	Small	White Students
2009-2010	Moderate	White Students
2010-2011	Moderate	White Students
2011-2012	Small	White Students
2012-2013	Small	White Students
2013-2014	N/A	White Students
2014-2015	N/A	White Students

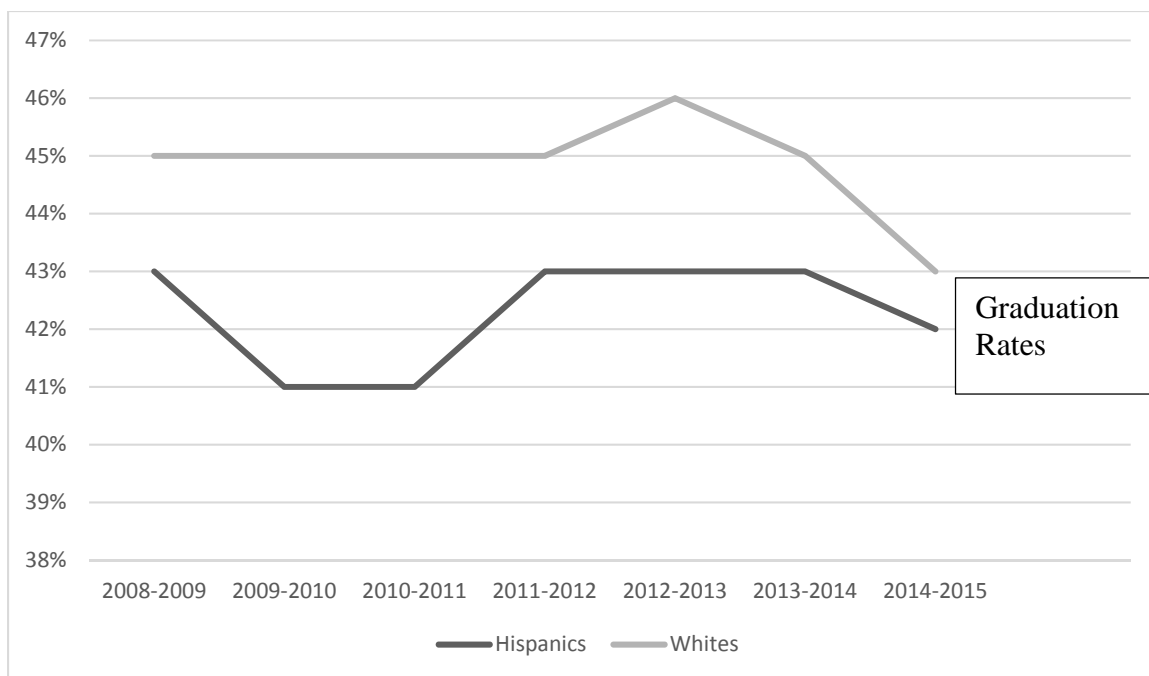


Figure 4.1. Trends in the graduation rates of Hispanic and White students at Texas community colleges in the 2008-2009 through the 2014-2015 academic years.

CHAPTER V

Discussion

The purpose of this journal-ready dissertation was to examine the persistence rates and graduation rates of Hispanic community college students in Texas. Specifically, the 1-year and 2-year persistence rates of Hispanic students were examined by student institutional status (i.e., stayed at the same community college or transferred to a different community college). Graduation rates were compared between Hispanic and White community college students.

In the first journal article, the 1-year persistence rates of Hispanic students in Texas community colleges were analyzed by institutional status (i.e., stayed or transferred) for the 2007-2008 through the 2013-2014 academic years. In the second study, the 2-year persistence rates of Hispanic community college students in Texas community college were examined by institutional status (i.e., stayed or transferred) for the 2006-2007 through the 2012-2013 academic years. Lastly, in the third investigation, the degree to which graduation rates differed between Hispanic and White students in the 2008-2009 through the 2014-2015 academic years was addressed. Each of the three investigations included seven years of statewide Texas community college data. Provided in this chapter is a brief summary of each of the articles and a discussion of the results. Implications for policy and practice and recommendations for future investigations are also provided.

Study One Results

In the first study, the extent to which differences were present in the 1-year persistence rates of Hispanic community college students in Texas by institutional status (i.e., stayed or transferred) was examined. Seven years of archival data from the Texas Higher Education Coordinating board were obtained and analyzed for the 2007-2008 through the 2013-2014 academic years. Statistically significant differences were present in the 2007-2008, 2008-2009, 2009-2010, 2011-2012, 2012-2013, and the 2013-2014 academic years. In these six academic years, Hispanic students who stayed at the same Texas community college had statistically significantly higher 1-year persistence rates than Hispanic students who transferred to a different community college in Texas. Although not statistically significant, in the 2010-2011 academic year, the 1-year persistence rates of Hispanic students who stayed at the same community college in Texas were higher than the 1-year persistence rates of Hispanic students who transferred to a different Texas community college. The average 1-year persistence rate for Hispanic students who stayed at the same Texas community college was 57% whereas the average 1-year persistence rate for Hispanic students who transferred to a different community college was 48%. Table 5.1 contains a summary of the results for the 1-year persistence rates of Hispanic students by their institutional status (i.e., stayed or transferred) in Texas community colleges across all seven academic years analyzed in this study.

Table 5.1

*Summary of Results for the 1-Year Persistence Rates by Hispanic Community College**Student Institutional Status in Texas*

Academic Year	Statistically Significant	Effect Size	Higher Persistence Rate
2007-2008	Yes	Moderate	Stayed
2008-2009	Yes	Small	Stayed
2009-2010	Yes	Small	Stayed
2010-2011	No	N/A	Stayed
2011-2012	Yes	Moderate	Stayed
2012-2013	Yes	Small	Stayed
2013-2014	Yes	Small	Stayed

Study Two Results

Examined in the second study was the degree to which differences were present in the 2-year persistence rates of Hispanic community college students in Texas by institutional status (i.e., stayed or transferred). Seven years of archival data from the Texas Higher Education Coordinating board were obtained and analyzed for the 2006-2007 through the 2012-2013 academic years. In all seven academic years, statistically significant differences were present by student institutional status. The average 2-year persistence rate for Hispanic students who stayed at the same Texas community college was 36% whereas the average 2-year persistence rate for Hispanic students who

transferred to a different community college was 23%. Delineated in Table 5.2 is a summary of the results for the 2-year persistence rates of Hispanic students by their institutional status (i.e., stayed or transferred) in Texas community colleges across all seven academic years analyzed in this study.

Table 5.2

Summary of Results for the 2-Year Persistence Rates by Hispanic Community College Student Institutional Status in Texas

Academic Year	Statistically Significant	Effect Size	Higher Persistence Rate
2006-2007	Yes	Large	Stayed
2007-2008	Yes	Large	Stayed
2008-2009	Yes	Moderate	Stayed
2009-2010	Yes	Large	Stayed
2010-2011	Yes	Moderate	Stayed
2011-2012	Yes	Large	Stayed
2012-2013	Yes	Moderate	Stayed

Study Three Results

Graduation rates for Hispanic and White students in Texas community colleges were compared in the third investigation. Seven years of archival data from the Texas Higher Education Coordinating Board were obtained and analyzed for the 2008-2009 through the 2014-2015 academic years. For the seven years analyzed, statistically

significant differences were present in the 2008-2009, 2009-2010, 2010-2011, 2011-2012, and the 2012-2013 academic year. Although a statistically significant difference was not present in the 2013-2014 and the 2014-2015 academic years, the graduation rates of Hispanic students were consistently lower than the graduation rates of White students. The graduation rates of Hispanic students at Texas community colleges averaged at 42%, compared to an average of 45% for White students. Presented in Table 5.3 is a summary of the results for the graduation rates of Hispanic and White students in Texas community colleges across all seven academic years.

Table 5.3

Summary of Results for the Graduation Rates for Hispanic and White Community

College Students in Texas

Academic Year	Statistically Significant	Effect Size	Higher Graduation Rate
2008-2009	Yes	Small	White Students
2009-2010	Yes	Moderate	White Students
2010-2011	Yes	Moderate	White Students
2011-2012	Yes	Small	White Students
2012-2013	Yes	Small	White Students
2013-2014	No	N/A	White Students
2014-2015	No	N/A	White Students

Summary of Results

Across the three investigations conducted in this journal-ready dissertation, statistically significant results were present in 85% of the analyses in the first article; in 100% of the analyses in the second article; and in 70% of the analyses in the third article. The 1-year persistence rates for Hispanic students who stayed at the same Texas community colleges were highest in the 2013-2014 academic year at 60% and lowest in the 2010-2011 academic year at 54%. In comparison, the 1-year persistence rates for Hispanic students who transferred to a different Texas community college were also highest in the 2013-2014 academic year at 51% and lowest in the 2011-2012 academic year at 45%.

In regard to the 2-year persistence rates of Hispanic students, results from each of the academic years were statistically significant. In each year, Hispanic students who stayed at the same community college had a statistically significantly lower 2-year persistence rate than did Hispanic students who transferred to a different community college. The 2-year persistence rates for Hispanic students who stayed at the same Texas community colleges were highest in the 2007-2008 academic year at 39% and lowest in the 2010-2011 and the 2011-2012 academic year at 35%. In comparison, the 2-year persistence rates for Hispanic students who transferred to a different Texas community college were highest in the 2008-2009 academic year at 26% and lowest in the 2011-2012 academic year at 18%. Regardless of whether Hispanic students stayed at the same Texas community college or transferred to a different Texas community college, the 2-year persistence rates were less than 40%.

In respect to the graduation rates of Hispanic and White students at Texas community colleges, results from five of the seven years were statistically significant. In each of the academic years of data analyzed, Hispanic students had lower graduation rates at Texas community colleges than White students. Hispanic students had the highest graduation rate in the 2013-2014 academic year at 43% and the lowest graduation rate in the 2010-2011 academic year at 40%. For White students, the graduation rate was highest in the 2012-2013 academic year at 46% and lowest in the 2014-2015 academic year at 43%. Regardless of their ethnicity (i.e., Hispanic, White) the graduation rates for Texas community college students was less than 50%.

Implications for Policy and for Practice

In this investigation, the 1-year persistence rates for Hispanic students in Texas community colleges were higher when Hispanic students stayed at the same community college than when Hispanic students transferred to a different community college. In regard to the 2-year persistence rates, the 2-year persistence rates, although low regardless of institutional status, were higher when Hispanic students stayed at the same community college than when Hispanic students transferred to a different community college. Finally, the graduation rates for Hispanic students were lower than the graduation rates of White students at Texas community colleges. Findings from the three studies have important policy and practice implications for community colleges.

First, to improve the 1-year and 2-year persistence rates, community college leaders are encouraged to conduct an audit of the 1-year and 2-year persistence rates of their Hispanic students. By examining their 1-year and 2-year persistence rates, community colleges can then determine the degree to which their existing programs are

meeting the needs of their Hispanic students with regard to persistence. Their audit could also provide directions for creating new or modifying their existing programs to meet the needs of their Hispanic students better. Although the focus of the first two studies in this journal-ready dissertation was on Hispanic students, community college leaders are encouraged to also evaluate the 1-year and 2-year persistence rates of other ethnic/racial groups and students in poverty. Academic advisors/counselors at community colleges need to communicate with Hispanic students the importance of remaining at the same community college. Academic advisors/counselors should actively communicate with Hispanic students to ensure they are provided with the necessary resources to persist and achieve academic success.

Another policy implication is for community colleges with high 1-year and 2-year persistence rates to examine their programs to determine which components are effective in increasing the 1-year and 2-year persistence rates for Hispanic students. Moreover, community colleges with high 1-year and 2-year persistence rates should share their efforts with other community colleges, so that educational leaders can engage in collaborative efforts to formulate best practices designed to increase student success. In addition, community colleges that enroll transfer students need to develop programs designed to identify the needs of this growing population.

To improve graduation rates, community college leaders need to examine the programs they have in place designed to help students persist and graduate. Community college leaders are also encouraged to audit the graduation rates of all of their students and to examine these rates separately by student demographic characteristic. After determining their students' graduation rates, community colleges with low graduation

rates may consider adopting practices and programs from community colleges with high graduation rates. Community colleges with high graduation rates should share successful programs and initiatives with other community college leaders. It is imperative for community college counselors and academic advisors to ensure that students are on the right program track and understand what courses are needed to complete their degree. Texas legislators should continue to examine higher education policies and propose new programs to assist community college students in graduating (Spangler & Slate, 2015).

Recommendations for Future Research

Based on the results of the three studies conducted in this journal-ready dissertation, several recommendations for future research are present. Differences in the 1-year persistence rates by institutional status for Hispanic students at Texas community colleges were established. As such, findings from this investigation are supportive of Hernandez et al.'s (2015) recommendation that future research be directed toward the transfer outcomes of Hispanic students attending Texas community colleges. Although the transfer outcomes of Hispanic students were examined in this investigation, researchers should consider extending this study to the 1-year persistence rates of other ethnic/racial groups. Another recommendation is to replicate this investigation in other states to determine the extent to which the results of Hispanic students' 1-year persistence rates might be generalizable to other states, especially in states with a large Hispanic population. Researchers are also encouraged to examine each community college in Texas to identify those colleges with high 1-year persistence rates for Black students who stay at the same campus and for Hispanic students who transfer to a different campus. Similarly, future investigations could also be conducted on Texas community colleges

with the lowest 1-year persistence rates of Hispanic students. Researchers interested in a qualitative study should consider obtaining insights from Hispanic students, faculty, staff, and administrators into reasons Hispanic students transfer to different institutions at the same level. In addition, qualitative studies to identify reasons transfer students' 1-year persistence rates are lower than the 1-year persistence rates of students who stayed at the same institution might be useful.

In this multiyear, empirical investigation, the 2-year persistence rates of Hispanic community college students were also analyzed as a function of student institutional status (i.e., stayed or transferred). Given the findings of this study, researchers should consider extending this study to other underrepresented student groups to determine the extent to which results from this investigation are generalizable to other ethnic/racial groups. Researchers should also consider extending this study to 4-year institutions in Texas and other states. Another recommendation is to replicate this investigation in other states to determine whether the results are generalizable to Hispanic students outside of Texas. In future studies, researchers should focus on the 2-year persistence rates of Hispanic community college students attending Hispanic-serving institutions. Moreover, researchers interested in a qualitative study should investigate the underlying reasons students transferred to different institutions.

In this multiyear, statewide investigation, the graduation rates of only Hispanic and White students at Texas community colleges were examined. As such, researchers are encouraged to extend this study to the graduation rates of other ethnic/racial groups of students, as well as to analyze the graduation rates by student gender. Given that this study was restricted to Texas students, researchers are encouraged to replicate this

investigation in other states. The degree to which the results delineated herein generalize to Hispanic and White community college students in other states is not known.

Research should also be conducted into the graduation rates of students at 4-year universities. Are the graduation rates of students at 4-year universities similar to the graduation rates of students at community colleges? Research is warranted into identifying Texas community colleges that have the highest graduation rates for their students, as well as those Texas community colleges with the lowest graduation rates for their students. Efforts to identify specific programs and measures related to success, as well as non-success, are encouraged. Finally, qualitative and/or mixed method research studies into the reasons why students graduate and why students fail to graduate from community colleges need to be conducted.

Conclusion

The purpose of this journal-ready dissertation was to examine the extent to which differences were present in the persistence rates of Hispanic students at Texas community colleges as a function of institutional status (i.e., stayed or transferred). Specifically analyzed were the 1-year and 2-year persistence rates of Hispanic students. Also examined in this journal-ready dissertation were the graduation rates of Hispanic and White community college students. Statistically significant differences were revealed in six academic years for the 1-year persistence rates of Hispanic community college students in Texas. In regard to the 2-year persistence rates, statistically significant differences were present in seven years. With respect to the graduation rates of Hispanic and White students, Hispanic students had statistically significantly lower graduation rates in five of the seven years of data examined. For each of the three studies and in

each year examined, the persistence rates and graduation rates for Hispanic students were low. American educator and activist, Benjamin E. Mays once said, “he who starts behind in the great race of life must forever remain behind or run faster than the man in front” (Voices of the Past Speak to the Present, 2001, p. 104). Hispanic and other minority community college students are not persisting and graduating at the same rate as White community college students. Community college faculty members, administrators, and leaders must provide Hispanic students with the necessary education and tools to propel them to success.

REFERENCES

- American Psychological Association. (2012). *Publication manual* (6th ed.). Washington, DC: Author.
- Arebelo-Marrero, F., & Milacci, F. (2016). A phenomenological investigation of the academic persistence of undergraduate Hispanic nontraditional students at Hispanic serving institutions. *Journal of Hispanic Higher Education, 15*, 22-40. doi:10.1177/1538192715584192
- Arredondo, P., & Castillo, L. G. (2011). Latina/o student achievement: A collaborative mission of professional associations of higher education. *Journal of Hispanic Higher Education, 10*, 6-17. doi:10.1177/1538192710391907
- Bagnato, K. (2005). The clock is ticking. *Diverse Issues in Higher Education, 22*(16), 22-24.
- Bahr, P. R. (2012). Student flow between community colleges: Investigating lateral transfer. *Research in Higher Education, 53*, 94-121. doi:10.1007/s11162-011-9224-5
- Boggs, G. R. (2011). Community colleges in the spotlight and under the microscope. *New Directions for Community Colleges, 156*, 3-22. doi:10.1002/cc.462
- Bush, E. C., & Bush, L. (2005). Black male achievement and the community college. *Black Issues in Higher Education, 22*(2), 44.
- Carpenter, D. M., & Ramirez, A. (2012). Exploring the underachievement gap. *Christian Higher Education, 11*(2), 115-130. doi:10.1080/15363759.2012.624458
- Cejda, B. D., & Short, M. (2008). Influencing the college attendance rates of Hispanics in Texas. *Community College Journal of Research and Practice, 32*, 347-361.

- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Contreras, F., & Contreras, G. J. (2015). Raising the bar for Hispanic Serving Institutions: An analysis of college completion and success rates. *Journal of Hispanic Higher Education, 14*, 151-170. doi:10.1177/1538192715572892
- Cox, S., Joyner, S. A., & Slate, J. R. (2011) Differences in Hispanic graduation rates at Texas community colleges over time. *Community College Enterprise, 17*, 62-76.
- Crisp, G., & Nora, A. (2010). Hispanic student success: Factors influencing the persistence and transfer decisions of Latino community college students enrolled in developmental education. *Research in Higher Education, 51*(2), 175-194. doi:10.1007/s11162-009-9151-
- Fauria, R. M., & Fuller, M. B. (2015). Transfer student success: Educationally purposeful activities predictive of undergraduate GPA. *Research and Practice in Assessment, 10*, 39-52.
- Fauria, R. M., & Slate, J. R. (2014). Persistence rate differences of university students by race: A within groups comparison. *International Journal of University Teaching and Faculty Development, 4*(1), 1-10.
- Fry, R. (2011). *Hispanic college enrollment spikes, narrowing gaps with other groups*. Retrieved from Pew Hispanic Center website: <http://www.pewhispanic.org/2011/08/25/hispanic-college-enrollment-spikes-narrowing-gaps-with-other-groups/>
- Greene, T. G., Marti, C. N., & McClenney, K. (2008). The effort-outcome gap: Differences for African American and Hispanic community college students in

- student engagement and academic achievement. *Journal of Higher Education*, 79, 513-539. doi:10.1353/jhe.0.0018
- Grites, T. J. (2013). Successful transitions from two-year to four-year institutions. *New Directions for Higher Education*, 162, 61-68.
- Hernandez, J., Slate, J. R., & Joyner, S. A. (2015). Demographic changes of Hispanic populations and Hispanic student enrollment in Texas community colleges: A literature review. *NCPEA Educational Leadership Review of Doctoral Research*, 2, 57-69.
- Hu, S., McCormick, A., & Gonyea, R. (2012). Examining the relationship between student learning and persistence. *Innovative Higher Education*, 37, 387-395. doi:10.1007/s10755-011-9209-5
- Hu, S., & St. John, E. P. (2001). Student persistence in a public higher education system: Understanding racial and ethnic differences. *Journal of Higher Education*, 72, 265-286. doi:10.2307/2649332
- Jenkins, D. (2007). Institutional effectiveness and student success: A study of high-and low-impact community colleges. *Community College Journal of Research & Practice*, 31, 945-962. doi:10.1080/03601270701632057
- Johnson, B., & Christensen, L. (2012). *Educational research: Quantitative, qualitative, and mixed approaches* (4th ed.). Thousand Oaks, CA: Sage
- Kezar, A., & Eckel, P. (2007). Learning to ensure the success of students of color: A systemic approach to effecting change. *Change*, 39(4), 18-24. doi:10.3200/CHNG.39.4.18-25

- Lester, J. (2006). Who will serve in the future? The new student in transition. *New Directions for Student Services, 114*, 47-61. doi:10.1002/ss.206
- Mansfield, K. C., & Thachik, S. L. (2016). A critical analysis of Texas' closing the gaps 2015. *Education Policy Analysis Archives, 24*, 1-29.
- Martin, K. K., Galentino, R., & Townsend, L. (2014). Community college student success: The role of motivation and self-empowerment. *Community College Review, 42*, 221-241. doi:10.1177/0091552114528972
- McCallister, L., Evans, J., & Illich, P. (2010). Perceptions about higher education among parents of Hispanic students in middle school: Implications for community colleges. *Community College Journal of Research and Practice, 34*, 784-796. doi:10.1080/10668920802605254
- McGlynn, A. P. (2009). Proven pathways to success for minority students. *Education Digest, 74*(9), 42-45.
- Moss, S., & Slate, J. R. (2015). Difference in Black students' persistence rates in Texas community colleges by institutional status. *International Journal of University Teaching and Faculty Development, 5*, 1-10.
- Moss, S., & Slate, J. R. (2016). Differences in Black and White students' persistence rates in Texas community colleges by institutional status. *Journal of Basic and Applied Research International, 13*, 206-213.
- Murdock, S. H. (2011). *Population change in Texas: Implications for the labor force, education, and economic development*. Symposium conducted for the Texas Workforce Commission, Houston, TX. Retrieved from <http://hobbycenter.rice.edu/Content.aspx?id=2147484115>

- National Center for Education Statistics. (2006). *Profile of undergraduates in U.S. postsecondary education institutions: 2003-04*. Washington, DC: U.S. Department of Education.
- National Center for Education Statistics. (2012). *The condition of education 2012*. Washington, DC: U.S. Department of Education.
- National Center for Education Statistics. (2016). *Digest of Education Statistics, 2014*. Washington, DC: U.S. Department of Education.
- Núñez, A. M., Crisp, G., & Elizondo, D. (2016). Mapping Hispanic-serving institutions: A typology of institutional diversity. *The Journal of Higher Education, 87*, 51-81.
- Onwuegbuzie, A. J., & Daniel, L. G. (2002). Uses and misuses of the correlation coefficient. *Research in the Schools, 9*(1), 73-90.
- Page, J. (2013). Hispanics: A diverse population of students to influence the landscape of higher education. *Journal of Hispanic Higher Education, 12*, 37-48.
doi:10.1177/1538192712454133
- Perna, L. L., Chunyan, L., Walsh, E., & Raible, S. (2010). The status of equity for Hispanics in public higher education in Florida and Texas. *Journal of Hispanic Higher Education, 9*, 145-166. doi:10.1177/1538192709331973
- Pew Research Center. (2015). *Facts about Latinos and education*. Retrieved from <http://www.pewresearch.org/fact-tank/2015/05/26/5-facts-about-latinos-and-education/>
- Reid, M. J., & Moore, J. L., III. (2008). College readiness and academic preparation for postsecondary education: Oral histories of first-generation urban college students. *Urban Education, 43*, 240-261. doi:10.1177/0042085907312346

- Rodríguez, B. A. (2014). The threat of living up to expectations: Analyzing the performance of Hispanic students on standardized exams. *Journal of Hispanic Higher Education, 13*, 191-205. doi:10.1177/1538192714531292
- Ryu, M. (2010). *Minorities in higher education: Twenty-fourth status report*. Washington, DC: American Council on Education.
- Samuel, K. R., & Scott, J. A. (2014). Promoting Hispanic student retention in two Texas community colleges. *Research in Higher Education, 25*, 1-12.
- Schuetz, P. (2008). Developing a theory-driven model of community college student engagement. *New Directions for Community Colleges, 144*, 17-28.
doi:10.1002/cc.342
- Scoggin, D., & Styron, R. A. (2006). Factors associated with student withdrawal from community college. *Community College Enterprise, 12*(1), 111-124.
- Spangler, J. M., & Slate, J. R. (2015). Texas community college graduation and persistence rates as a function of student ethnicity. *Community College Journal of Research and Practice, 39*, 741-753. doi:10.1080/10668926.2013.878261
- Texas Higher Education Coordinating Board. (2012). *Glossary of terms*. Retrieved from <http://www.thecb.state.tx.us/Reports/PDF/1316.PDF>
- The Chronicle of Higher Education. (2015). *College completion: Texas public colleges (4-year)*. Retrieved from http://collegecompletion.chronicle.com/state/#state=TX§or=public_four
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago, IL: University of Chicago Press.

- U.S. Census Bureau. (2009). *Current population survey, annual social and economic supplement, 2008*. Retrieved from <http://www.census.gov/population/www/socdemo/hispanic/cps2008.html>
- Van Dermerwe, C. (2011). Mapping a retention index across the student continuum. *Journal of Institutional Research, 16*(2), 52-68.
- Voices of the past speak to the present. (2001). *Ebony, 56*(4), 104.
- Voorhees, R. (2001). Financing community colleges for a new century. In M. B. Paulsen & J. C. Smart (Eds.), *The finance of higher education: Theory, research, policy, and practice* (pp. 39-52). New York, NY: Agathon.
- Wolniak, G. C., Mayhew, M. J., & Engberg, M. E. (2012). Learning's weak link to persistence. *The Journal of Higher Education, 83*, 795-823.
- Zarate, E., & Burciaga, R. (2010). Latinos and college access: Trends and future directions. *Journal of College Admission, 209*, 24-29.

APPENDIX



<p>Institutional Review Board Office of Research and Sponsored Programs 903 Bowers Blvd, Huntsville, TX 77341-2448 Phone: 936.294.4875 Fax: 936.294.3622 irb@shsu.edu www.shsu.edu/~rgs_www/irb/</p>
--

DATE: October 26, 2016

TO: Danielle Stagg [Faculty Sponsor: Dr. John Slate]

FROM: Sam Houston State University (SHSU) IRB

PROJECT TITLE: *Persistence and Graduation Rates of Texas Community College Students As a Function of Ethnicity/Race: A Texas Statewide Study [T/D]*

PROTOCOL #: 2016-10-32484

SUBMISSION TYPE: INITIAL REVIEW

ACTION: DETERMINATION OF EXEMPT STATUS

DECISION DATE: October 26, 2016

REVIEW CATEGORY: Category 4—research involving existing, publicly available data usually has little, if any, associated risk, particularly if subject identifiers are removed from the data or specimens.

Thank you for your submission of Initial Review materials for this project. The Sam Houston State University (SHSU) IRB has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations.

We will retain a copy of this correspondence within our records.

*** What should investigators do when considering changes to an exempt study that could make it nonexempt?**

It is the PI's responsibility to consult with the IRB whenever questions arise about whether planned changes to an exempt study might make that study nonexempt human subjects research. In this case, please make available sufficient information to the IRB so it can make a correct determination.

VITA**Danielle R. Stagg*****Educational History***

Doctorate of Education – Educational Leadership, May 2017

Sam Houston State University, Huntsville, TX

Dissertation: Differences in Persistence and Graduation Rates of Hispanic Students in Texas Community Colleges: A Texas Statewide Study

Master of Arts – Public Relations, May 2006

University of Houston, Houston, TX

Thesis: Risk on the Rise: Cooperative Roles of Public Relations and Human Resources in Managing Romantic Relationships in the Workplace”

Bachelor of Science – Speech Communication, May 2002

Stephen F. Austin State University, Nacogdoches, Texas

Professional Experience

Professor, Houston Community College, Houston, TX, 2010-Present

Assistant Chair of Speech, Houston Community College, Houston, TX 2011-2015

Assistant Director of Human Resources and Public Relations, Change Happens, Houston, TX, 2002-2010

Recognitions

Houston Community College Faculty Senate Teacher of the Year, 2014-2015

Scholarly Research Presentations

Coping strategies: Stress among Community College Leaders in Higher Education Leadership. Southwest Educational Research Association Conference, San Antonio, Texas, February 3-5, 2015.

Professional Affiliations

Alpha Chi National Honor Scholarship Society

National Society of Collegiate Scholars

National Order of Omega

Alpha Kappa Alpha Sorority, Inc.