

DIFFERENCES IN PERSISTENCE AND GRADUATION RATES OF BLACK
STUDENTS IN TEXAS COMMUNITY COLLEGES: A MULTIYEAR, 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

Sheldon Moss

May, 2017

DIFFERENCES IN PERSISTENCE AND GRADUATION RATES OF BLACK
STUDENTS IN TEXAS COMMUNITY COLLEGES: A MULTIYEAR, STATEWIDE
STUDY

by

Sheldon Moss

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 want to begin by thanking God for blessing me and impacting my life. None of this is possible without the never ending grace that he provides to us. I am thankful for Jesus granting me life and using me as a vessel to make a positive difference in the lives of others. I want to dedicate this dissertation to my wife Shawnica for always supporting and encouraging me when I did not believe in myself. The completion of this dissertation is not possible without her. I love her and thank her for her unwavering support. This dissertation is also dedicated to my daughter Shelby who was born several weeks before I began the doctoral program at Sam Houston State University. She allowed me to pursue my dream while taking precious time and attention away from her. Without her love, support, inspiration, and sacrifice, I would not have completed my coursework or dissertation.

This dissertation is also dedicated to my mother who made many sacrifices raising me and my brother as a single mom. We had some rough times and it wasn't easy, but we continued to persevere and never gave up. Her effort paved the way for us to make it in life and achieve more. Zachary, hopefully I did a good job as his big brother, father figure, and friend. I am inspired by him in ways he can never imagine. I want to thank my uncles, aunts, cousins and all family members who supported and believed in me. Special thanks to Uncle Burnie and Aunt Joan for keeping the family together. I appreciate my father-in-law and mother-in-law for accepting me as their own. I am also appreciative of my childhood friends who truly understand what this journey mean to me. We have come a very long way from Gerttown. I thank my fraternity brothers of Omega

Psi Phi who supported me along the way. They understand the true meaning of scholarship.

Lastly, I dedicate my dissertation to Me Me and Pa Pa, the best grandparents I could ever wish for who helped mold me into who I am today. Their voices resonated in my mind throughout this process, and encouraged me to push on and never give up. I am the man I am today because of their positive influence. I love them so much and they will never be forgotten. They are the greatest and I miss them very much. I hope I made them proud!!

ABSTRACT

Moss, Sheldon, *Differences in persistence and graduation rates of Black students in Texas community colleges: A multiyear, 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 and 2-year persistence rates of Black students in Texas community colleges for the 2007-2008 through the 2014-2015 academic years. Specifically, the relationship of the 1-year and 2-year persistence rates for Black students as a function of their institutional status (i.e., staying or transferring) was analyzed. In addition, the graduation rates of Black and White students in Texas community colleges for the 2007-2008 through the 2015-2016 academic years were examined. The multiple academic years analyzed permitted a determination to the extent to which trends were present in 1-year persistence rates and 2-year persistence rates of Black students, and graduation rates of Black and White students in Texas community colleges.

Method

A causal-comparative research design was used for this study. Archival data from the Texas Higher Education Board Interactive Accountability System were downloaded and analyzed in each of the three empirical studies in this journal-ready dissertation. Specifically, archival data were obtained for the 2007-2008 through the 2014-2015 academic years for the 1-year persistence rates and for the 2007-2008 through the 2013-2014 academic years for the 2-year persistence rates of Black students in Texas community colleges. Graduation rate data for both Black and White students in Texas

community colleges were obtained for the 2007-2008 through the 2015-2016 academic years.

Findings

Statistically significant differences were present in 4 of the 8 academic years for Black students' 1-year persistence rates. Black students who stayed at the same community college had higher 1-year persistence rates than Black students who transferred to a different Texas community college. No statistically significant differences were present for Black students' 2-year persistence rates. The 2-year persistence rates were very low for both Black students who stayed and for Black students who transferred to a different community college. Statistically significant differences were revealed in all 9 academic years between the graduation rates of Black and White students. White students had higher graduation rates than Black students in all 9 academic years. Implications for policy and recommendations for research were provided.

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

ACKNOWLEDGEMENTS

I am extremely grateful for receiving an opportunity to participate in the Educational Leadership Program at Sam Houston State University. Sam Houston believed in me by accepting me into the program and allowing me to further my growth and development as a higher education practitioner and scholar. I owe everything to my dissertation chair Dr. John R. Slate. Words cannot express how much Dr. Slate influenced my life. I learned so much from him and because of his guidance grew from a brand new doctoral student to completing two published journal articles. To put it simple, Dr. Slate is my hero and I'm honored to have him as my dissertation chair and mentor. I would like to also thank Dr. Anthony J. Harris and Dr. Frederick C. Lunenburg for serving on my committee and providing awesome feedback to help improve my study. I appreciate them very much!!

Next, I want to thank all of all of my faculty members who contributed to my evolution as a scholar: Dr. John R. Slate, Dr. Julie Combs, Dr. Rebecca Bustamante, Dr. Ricardo Montelongo, Dr. Anthony Onwuegbuzie, Dr. Peggy Holzweiss, Dr. Matthew Fuller, Carlos Hernandez, and Dr. George W. Moore. I will always hold on to the amazing memories that was created while taking their courses. They are the best faculty ever and I am extremely blessed and grateful to learn from the best. I am also thankful for getting a chance to represent Sam Houston State University as a Jackson Scholar. My experience as a Jackson Scholar provided me with an opportunity to meet and network with scholars and doctoral students from across the nation. This experience confirmed that the faculty at Sam Houston State University fully prepared us for higher education leadership and life in the academy.

I am blessed to have a wonderful network of individuals who helped me along this path. I want to thank Leslie LaPres who gave me my first opportunity in higher education. I want to thank Dr. Benny Lambert for taking me under his wing and teaching me about the higher education business. Thanks to Dr. Chantel Hines for inspiring and believing in me. Thanks to Penny Westerfeld for teaching me so much and recognizing my talent. I would like to thank Dr. Hilton LaSalle for not only building the bridge, but helping me cross over it. Thanks to my entire Lone Star College System family who supported me. There are many other individuals that I have not named but are very appreciative of. I am referencing all the unsung heroes that have made a difference in my life.

Lastly, I want to acknowledge my band of brothers and sisters from cohort 31. My doctoral classmates are special to me and I am thankful to have them in my life. My doctoral journey with Danielle, Dorothy, Jeff, Juan (adopted), Kelly, Kim, Rene, and Scott will never be forgotten. It was an extreme honor to share every Tuesday night with you for the last three years. I look forward to the day when we all call each other doctor.

TABLE OF CONTENTS

	Page
DEDICATION.....	iii
ABSTRACT.....	v
ACKNOWLEDGEMENTS.....	vii
TABLE OF CONTENTS.....	ix
LIST OF TABLES.....	xi
LIST OF FIGURES	xv
CHAPTER I: INTRODUCTION/REVIEW OF THE LITERATURE	1
Statement of the Problem.....	6
Purpose of the Study	8
Significance of the Study	9
Definition of Terms.....	10
Literature Review Search Procedures.....	15
Delimitations.....	18
Limitations	18
Assumptions.....	18
Organization of the Study	19
CHAPTER II: DIFFERENCES IN THE 1-YEAR PERSISTENCE RATES BY STUDENT INSTITUTIONAL STATUS FOR BLACK STUDENTS AT TEXAS COMMUNITY COLLEGES: A STATEWIDE, MULTIYEAR INVESTIGATION.....	21
Method	32
Results.....	33

Discussion	38
Conclusion	42
References.....	44
CHAPTER III: DIFFERENCES IN THE 2-YEAR PERSISTENCE RATES BY STUDENT INSTITUTIONAL STATUS FOR BLACK STUDENTS AT TEXAS COMMUNITY COLLEGES: A STATEWIDE, MULTIYEAR INVESTIGATION.....	61
Method	72
Results.....	74
Discussion.....	78
Conclusion	82
References.....	84
CHAPTER IV: DIFFERENCES IN GRADUATION RATES AT TEXAS COMMUNITY COLLEGES BETWEEN BLACK AND WHITE STUDENTS: A MULTIYEAR, STATEWIDE EXAMINATION.....	102
Method	113
Results.....	114
Discussion.....	119
Conclusion	122
References.....	123
CHAPTER V: DISCUSSION.....	141
REFERENCES	152
APPENDIX.....	169
VITA.....	170

LIST OF TABLES

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

2.8 Descriptive Statistics for the 1-Year Persistence Rates by Institutional Status for Black Community College Students in Texas in the 2013-2014 Academic Year.....	57
2.9 Descriptive Statistics for the 1-Year Persistence Rates by Institutional Status for Black Community College Students in Texas in the 2014-2015 Academic Year.....	58
2.10 Results for the 1-Year Persistence Rates by Institutional Status for Black Community College Students in Texas in the 2007-2008 Academic Year Through the 2014-2015 Academic Year.....	59
3.1 Summary of Studies on Differences in 2-Year Persistence Rates of Black Students.....	92
3.2 Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Black Community College Students in Texas in the 2007-2008 Academic Year.....	93
3.3 Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Black Community College Students in Texas in the 2008-2009 Academic Year.....	94
3.4 Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Black Community College Students in Texas in the 2009-2010 Academic Year.....	95
3.5 Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Black Community College Students in Texas in the 2010-2011 Academic Year.....	96

3.6 Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Black Community College Students in Texas in the 2011-2012 Academic Year.....	97
3.7 Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Black Community College Students in Texas in the 2012-2013 Academic Year.....	98
3.8 Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Black Community College Students in Texas in the 2013-2014 Academic Year.....	99
3.9 Results for the 2-Year Persistence Rates by Institutional Status for Black Community College Students in Texas in the 2007-2008 Academic Year Through the 2013-2014 Academic Year.....	100
4.1 Summary of Studies on Differences in Graduation Rates Between Black and White Students	129
4.2 Descriptive Statistics for Graduation Rates of Black and White Texas Community College Students in the 2007-2008 Academic Year.....	130
4.3 Descriptive Statistics for Graduation Rates of Black and White Texas Community College Students in the 2008-2009 Academic Year.....	131
4.4 Descriptive Statistics for Graduation Rates of Black and White Texas Community College Students in the 2009-2010 Academic Year.....	132
4.5 Descriptive Statistics for Graduation Rates of Black and White Texas Community College Students in the 2010-2011 Academic Year.....	133

4.6 Descriptive Statistics for Graduation Rates of Black and White Texas	
Community College Students in the 2011-2012 Academic Year.....	134
4.7 Descriptive Statistics for Graduation Rates of Black and White Texas	
Community College Students in the 2012-2013 Academic Year.....	135
4.8 Descriptive Statistics for Graduation Rates of Black and White Texas	
Community College Students in the 2013-2014 Academic Year.....	136
4.9 Descriptive Statistics for Graduation Rates of Black and White Texas	
Community College Students in the 2014-2015 Academic Year.....	137
4.10 Descriptive Statistics for Graduation Rates of Black and White Texas	
Community College Students in the 2015-2016 Academic Year.....	138
4.11 Results for the Graduation Rates for Black and White Community College	
Students in the 2007-2008 Academic Year Through the 2015-2016 Academic	
Year.....	139
5.1 Summary of Results for the 1-Year Persistence Rates by Institutional Status	
for Black Community College Students in Texas.....	143
5.2 Summary of Results for the 2-Year Persistence Rates by Institutional Status	
for Black Community College Students in Texas.....	144
5.3 Summary of Results for the Graduation Rates for Black and White Community	
College Students in Texas.....	145

LIST OF FIGURES

FIGURE	Page
1.1 Literature Review Search Process	17
2.1 Trends in the 1-year persistence rates of Black students who stayed or transferred to a different Texas community college in the 2007-2008 through the 2014-2015 academic years	60
3.1 Trends in the 2-year persistence rates of Black students who stayed or transferred to a different Texas community college in the 2007-2008 through the 2013-2014 academic years	101
4.1 Trends in the graduation rates of Black and White students at Texas community colleges in the 2007-2008 through the 2015-2016 academic years	140

CHAPTER I

INTRODUCTION/REVIEW OF THE LITERATURE

The United States has long been the envy of the world in regard to higher education, student access, and the superior academic quality of its programs (Duncan, 2010). Unfortunately, the global dominance of the United States with respect to college enrollment and degree attainment has diminished (Strayhorn & Johnson, 2014). The United States currently ranks 12th among developed nations in the percentage of degrees awarded, however, the United States had the highest graduation rate in the world just a generation ago. Soon after taking office, former President Obama declared that the United States must have the best educated, most competitive workforce to lead the 21st century and in order to do so needed to have the highest quantity of college graduates in the world by 2020 (Duncan, 2010). To reach the President's goal, the entire higher education sector must work together to increase the number of students graduating from college each year. Community colleges will play an integral role because enrollments continue to climb each year and college programs with shorter durations can help make up ground in areas where the United States has fallen behind other countries (Martin, Galentino, & Townsend, 2014; PR Newswire, 2009; Strayhorn & Johnson, 2014).

The open door policy of community colleges grants access to individuals interested in pursuing a postsecondary education. People who want to achieve a higher education have the opportunity to pursue their dream (Nevez & Wood, 2010). In fall 2012, 45% of all undergraduate students in the United States attended community colleges. Community college enrollment is steadily increasing across the nation with 13 million students attending 1,132 institutions. These students represent diverse

populations coming from low socioeconomic areas across the country (American Association of Community Colleges, 2014b). Many of the students enrolled in community colleges are students of color, nontraditional students, veterans, special needs students, and part-time students (Nevez & Wood, 2010).

For the United States to remain globally competitive, it will depend on a large percentage of its population obtaining skills from community colleges (Martin et al., 2014). The future success of this country is dependent on creating lively and engaged citizens. Therefore, it is essential to educate this large diverse population by providing the tools to succeed in the glocal economy (Colby, Ehrlich, Beaumont, & Stephens, 2003). Community colleges are popular choices because they are affordable and accessible. Community colleges, however, face tremendous challenges in helping Black, Hispanic, and low-income students transfer to 4-year institutions (Rainey, 2010). Although open access is an important part of the community college mission, success is measured by student persistence, transfer, and graduation rates (Everett, 2015).

According to Strayhorn (2011), 75% of all White students who graduate from high school immediately enroll in college, whereas only 35% to 50% of Black students immediately enroll in college after high school. Although Black students have greater access to higher education by attending community colleges compared to 4-year institutions, only one out of four Black students transfer to 4-year institutions and just 16% of Black students who are enrolled in community colleges persist to graduation (Provitera-McGlynn, 2005; U. S. Department of Education, 2006). As such, community colleges play an integral role in not only helping Black students obtain associate degrees but, more importantly, as a pathway for Black students to earn bachelor degrees

(Strayhorn, 2011; Wood, 2012). Moreover, community colleges serve as an open door for Black and Hispanic students to pursue a higher education (Nevarez & Wood, 2010).

The success rates of Black students will need to improve for the United States to take the lead in the number of college graduates and meet former President Obama's 2020 challenge (Price & Tovar, 2014). Black college students face many obstacles on their road to obtaining a college degree. Many Black students are first-generation college students who experience difficulty adjusting to college life. Black students often need additional help learning college culture and becoming familiar with all of the resources available to help them succeed and persist through college (Barnett, 2010; Museus & Quaye, 2009; Strayhorn, 2011). According to the College Board (2010), "Many minority groups, including traditionally disadvantaged groups, are participating in school and college in record numbers. However, the fastest growing populations in the United States are those minority groups with the lowest level of educational attainment" (p. 18).

Community colleges need to engage in collaborative efforts to increase student success among students of color because Black and Hispanic students comprise a large percentage of the community college student population in the United States (Museus & Quaye, 2009; Provitera-McGlynn, 2005; Spangler & Slate, 2015). Student persistence is a major concern of 4-year institutions and community colleges across the country. Several authors (e.g., McKinney & Burrige, 2015; Strayhorn, 2011; Tinto, 1993; Wood, 2012) have established that the percentage of students who actually remain in college and complete their degrees is much smaller than the percentage of students who initially enroll in college. Current attrition rates are almost 30% for students who enter 4-year institutions and over 50% for students who enter community colleges. Consequently,

many of these students will leave within their first year of enrollment (Berger & Braxton, 1998).

Substantial progress has been made over the past four decades in enrolling traditionally underrepresented groups in universities and community colleges in the United States (Kinzie, Gonyea, Shoup, & Kuh, 2008). During this timeframe, total college enrollment grew by approximately 40%, whereas the enrollment of Black and Hispanic students increased by almost 150% (Li, 2007). Even though college enrollment is increasing each year, persistence rates continue to be a problem for Black students. All students of color, but especially Black students, graduate at substantially lower rates than do White students (Roach, 2013).

The low persistence and completion rates of Black students and the increasing racial gap in graduation rates suggest that far too many Black students are not acquiring the needed skills, knowledge, and resources to succeed in college (Price & Tovar, 2014). Lunenburg (2015) noted that the academic achievement gap between groups of different socioeconomic status is related to parents' education level, financial resources, preschool readiness, and the quality of education received at the pre-secondary and secondary level. In fact, students from more affluent backgrounds are more likely to have better resources, parents with higher education attainment, and attended higher quality schools prior to college (Lunenburg, 2015).

Higher education leaders and policymakers need a better understanding of factors that contribute to Black college student success (Hussar & Bailey, 2006). According to Stewart, Doo Hun, and JoHyun (2015), college students who were more prepared to take college level courses were more likely to persist past the first year than students who

were not prepared to take college level courses. Therefore, it is essential that Black students receive assistance to help them adjust to college in the first year. Resources such as academic advising, tutoring, and counseling programs may help underprepared Black students succeed in college (Stewart et al., 2015).

In a recent quantitative study, Spangler and Slate (2015) analyzed the persistence and graduation rates of Texas community college students by ethnicity/race (i.e., White, Black, Hispanic, and Asian students) for the 2000 through the 2010 academic years. They documented that graduation and persistence rates increased over the 11-year span for White, Black, Hispanic, and Asian students. In the 2010 academic year, Black students had the lowest persistence and graduation rates, whereas Asian students had the highest persistence and graduation rates in 2010. Spangler and Slate (2015) concluded that educational leaders and policymakers need to develop and to implement policies to improve community college graduation and persistence rates.

Pascarella and Terenzini (2005) provided evidence that first-year experience programs increase college persistence from the first to second year in college. Students who participated in the first year seminar were more likely to graduate within four years than those students who did not participate. The authors concluded that persistence rates increased for students participating in first-year experience programs regardless of ethnicity, age, and gender. Positive outcomes were delivered in reference to student-faculty collaboration, extracurricular activity, and an increase in academic fulfillment (Pascarella & Terenzini, 2005).

In a very recent investigation, Moss and Slate (2016) analyzed the 1-year persistence rates of Black and White students enrolled in Texas community colleges

between the 2000 and 2013 academic years. Specifically, a comparison was made between Black and White students who stayed at the same Texas community college and Black and White students who transferred to a different Texas community college. Moss and Slate (2016) documented that persistence rates were statistically significantly higher when Black and White students stayed at the same community college than when they transferred to a different community college. Of note in their study was the much lower persistence rates of Black students in comparison to White students when they stayed or transferred to a different community college.

In a similar analysis, but at the 4-year university level, Fauria and Slate (2014) examined the 1-year persistence rates of students in Texas 4-year public universities between the 2000 and 2011 academic years. Data were obtained from the Texas Higher Education Coordinating Board Interactive Accountability System on Black, White, Hispanic, and Asian students. Persistence rates for students who stayed at the same university were statistically significantly higher in the 2000 and 2011 academic years in comparison to students who transferred to a different institution. Furthermore, students who transferred to a different university after the first year had very low persistence rates. Students, regardless of race, are more likely to persist if they remain at the same 4-year institution (Fauria & Slate, 2014) or at the same 2-year institution (Moss & Slate, 2016) than if they transfer to a different institution.

Statement of the Problem

In 1990 the United States ranked first in the world in 4-year degree completion among 25-34 year olds. By 2016, however, the United States is not in the top 10 of countries in the world (The White House, 2016). A consequence of this decrease in

college graduates is that income equality has grown rapidly because the current number of college graduates are not keeping pace with the demand for new college graduates. To address income inequality and achieve economic efficiency, the United States must increase the number of postsecondary educated workers (Carnevale, Rose, & Georgetown University, 2011). As result, former President Obama challenged the nation to produce 8 million more graduates by the year 2020. To achieve this ambitious goal, community colleges will have to increase the number of associate degrees and certificates they award students by 5 million (Templin, 2011).

Community colleges can help increase the number of college graduates in the United States, however, persistence rates have to be improved dramatically for this goal to be accomplished (Sutherland, 2011). The open door policy of community colleges provides access for students by offering affordable tuition, convenient locations, and resources to support minority and at-risk students (Bailey et al., 2004). However, access by itself is not enough for Black students because many Black students drop out of community colleges without earning a degree or certificate, especially during the first year (Dougherty, 1992).

In spite of increases in college enrollment, substantial gaps exist between Black and White students in terms of enrollment (Strayhorn, 2011). Furthermore, only 25% of students in poverty complete college (The White House, 2016). Although community colleges provide greater access to higher education for Black students, persistence rates continue to be a problem (U. S. Department of Education, 2006).

According to the National Collegiate Retention and Persistence to Degree Rates Report, the 1-year national persistence rate is 55% at community colleges (American

College Testing, 2011). In terms of Black students at community colleges, only 16% persist to graduation (U. S. Department of Education, 2011). Complete College America (2012) reported that only 7.5% of Black students over the age of 25 complete an associate degree within three years. Even lower is the persistence to graduation rates, 2.6%, for Black students who are enrolled part-time (Complete College America, 2012). In recent news, the seven regional accrediting agencies announced that they would engage in collaborative efforts to examine closely low graduation rates at community colleges and universities. Community colleges with graduation rates under 15% over four years and 4-year institutions with graduation rates under 25% over six years will have to report on how they plan to improve or risk losing accreditation (Kreighbaum, 2016).

Despite the demand for more college degrees, the United States is presently on track to be 5 million workers short to fill positions needing postsecondary credentials by 2018 (Center for American Progress, 2012). Community colleges can help fill this void by providing a means to a stable career and economic security for many students. Many students, after completing an associate's degree, transfer to a 4-year institution to continue their education. Of the students enrolled in community colleges, between 25% and 39% eventually transfer to a 4-year institution (American Association of Community Colleges, 2012).

Purpose of the Study

The purpose of this journal-ready dissertation was to examine the 1-year and 2-year persistence rates of Black students in Texas community colleges for the 2007-2008 through the 2014-2015 academic years. Specifically, the relationship of the 1-year and 2-year persistence rates for Black students as a function of their institutional status (i.e.,

staying of transferring) was analyzed. In addition, the graduation rates of Black and White students in Texas community colleges from the 2007-2008 through the 2015-2016 academic years was examined. Each of these empirical studies included archival data from the Texas Higher Education Board Interactive Accountability System. The academic years analyzed permitted a determination to what extent trends were present in the persistence and graduation rates of Black students in Texas community colleges

Significance of the Study

Persistence rates continue to be a concern for Black students in higher education across the United States (U. S. Department of Education, 2006). In the State of Texas, Black students are graduating at a substantially lower rate than White students in community colleges despite increased access. It is imperative that community colleges help Black students address the academic, financial, and social issues they face as college students (Moss & Slate, 2015). Texas community colleges must implement strategies to remove barriers that are preventing Black students from succeeding in college. Black students face educational issues at a very early age that first emerge in elementary school and expand all the way to higher education. When Black students underperform, they are not prepared for life after college and potentially face high unemployment rates and illiteracy. The repercussions of this cycle can leave devastating effects on the national economy of the United States (Palmer, Davis, Moore, & Hilton, 2010).

Community colleges serve as a critical pathway for Black students to earn an associate and ultimately bachelor degree. However, persistence rates for Black students need to improve before graduation rates can increase. This student attainment dilemma not only affects the State of Texas, but can have long term consequences for the entire

nation. Accordingly, a proposal was made by the Texas Higher Education Coordinating Board to increase the number of individuals receiving a degree or certificate between the ages of 25 and 34 by 60% by 2030 (Texas Higher Education Coordinating Board, 2016e). Improvements are being made to achieve these goals, however, Black and White students are still facing issues with degree attainment. Policies such as the one proposed by the Texas Higher Education Coordinating Board and former President Obama's 2020 American Graduation Initiative Plan are important in addressing critical issues facing higher education. As such, the information provided by this study is critical to assess the progress made in the state of Texas in terms of persistence rates for Black students and the graduation rates for Black and White students in community colleges. The results of this study can help policymakers in Texas implement sound strategies to increase the number of college graduates in United States.

Definition of Terms

The following key terms, identified in this study, are defined to provide the reader with a clear understanding of the concepts in this journal-ready dissertation.

Black or African American

This term refers to any individual having ancestry to any of the Black ethnic groups of Africa (Texas Higher Education Coordinating Board, 2016c).

Community College

Cohen and Brawer (2008) defines community colleges (sometimes referred to as junior colleges) as 2-year schools that provide affordable postsecondary education as a pathway to a 4-year degree. Approximately 1,167 community colleges are in the United

States and enroll more than 12.4 million students. Currently, almost half of all undergraduate students in the United States are enrolled in community colleges.

Completer

This term refers to a student who has completed a Coordinating Board-approved core curriculum or field of study curriculum. The term is also used to refer to a student who has completed a Coordinating Board-approved degree or certificate (Texas Higher Education Coordinating Board, 2016c).

Economically Disadvantaged

Colleges may use one or more of the following standards to determine whether an individual is economically disadvantaged: (a) annual income at or below the federal poverty line, (b) eligibility for Aid to Families with Dependent Children or other public assistance programs (includes WIC program participants), (c) receipt of a Pell Grant or comparable state program of need-based financial assistance, (d) participation or eligible for JTPA programs included under Title II, and (e) eligible for benefits under the Food Stamp Act of 1977 or the Health and Humans Services (HHS) Poverty Guidelines, 403.114, page 36721 of final Rules and Regulations. Students should not continue to be reported as economically disadvantaged if their circumstances change and they no longer meet the definition of economically disadvantaged (Texas Higher Education Coordinating Board, 2016c).

First-Generation College Student

This term refers to a student who is the first member of his or her immediate family to attend a college or university; neither of his or her biological or adoptive

parents have ever attended a college or university (Texas Higher Education Coordinating Board, 2016c).

Graduation Rate

This term refers to the percentage of a given college-entering cohort of degree-seeking students who graduate in a specific period of time, normally six years. For purposes of the “Baccalaureate Graduation Rates – First-Time-Entering Undergraduates” and “Baccalaureate Graduation Rates – First-Time-Entering Freshmen,” the cohort consists of fall first-time, full-time undergraduates (or freshmen) plus summer first-time students who continue in the fall and are full-time in the fall. The summer students need not be full time in the summer. They are evaluated for full-time status based on their fall enrollment. For 2-year institutions, it is the students who graduate with an associate degree or certificate within three years. For 4-year institutions, it is the students who graduate with a baccalaureate degree within six years (Texas Higher Education Coordinating Board, 2016c).

Interactive Accountability System

The Texas Higher Education Coordinating Board Interactive Accountability System is used to track performance on critical measures that exemplify higher education institutions’ missions. The System is modeled on the state’s higher education plan, Closing the Gaps by 2015. Its major focus is on the four Closing the Gaps target areas of participation, success, excellence, and research (Texas Higher Education Coordinating Board, 2016b).

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 still enrolled at the same or another institution the following fall. All public and independent institutions are included in the persistence rate (Texas Higher Education Coordinating Board, 2016c).

Persistence Rate

This term refers to the rate at which students continue in higher education, often as measured by the percentage of students who persist in higher education from one year to the succeeding year. This term is supplanting the term retention rate which is used in the public education sector as a reference to students who are held back and not promoted to the next grade (Texas Higher Education Coordinating Board, 2016c).

Retention Rate

In higher education discussions, the rate at which students are retained or graduate, and thereby persist, in higher education, as often measured by the percentage of students who continue in higher education from one year to the succeeding year. The cohort generally consists of students who started in a fall term or in the previous summer term and who continued in the fall term. This term is supplanting the term retention rate which is used in the public education sector as a reference to students who are held back and not promoted to the next grade (Texas Higher Education Coordinating Board, 2016c).

Six-Year Graduation Rates

This term refers to community college students who are first-time, full-time, credential seeking undergraduates by gender and ethnicity who have graduated with an associate degree or certificate within a 6-year period (Texas Higher Education Coordinating Board, 2016d).

Staying

This term refers to students enrolled at the same community college from one year to the next year and two years to the next year.

Students Who Are At-risk

This term refers to undergraduate students meeting one of the following attributes: (a) score on the Scholastic Assessment Test (SAT) or the American College Test (ACT) is less than the national mean score of students' scores on that test; (b) has been awarded a grant under the federal Pell Grant program; (c) was 20 years of age or older on the date the student initially enrolled in the institution; (d) enrolled as a part-time student; and (e) did not receive a high school diploma but received a high school equivalency certificate within the last six years (Texas Higher Education Coordinating Board, 2016c).

Texas Higher Education Coordinating Board

This agency works closely with educators and government officials in Texas to cultivate and fulfill higher education initiatives. Their goal is to increase the number of college graduates while keeping cost down to help make college more affordable in Texas. Another objective of the board is to align higher education outcomes with the

present and future needs of the workforce (Texas Higher Education Coordinating Board, 2012b).

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, but reenroll the second 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, 2016c).

Transferring

This term refers to students who enroll at a different community college at the end of their first or second year.

White

This term refers to any individual having origins in any of the original peoples of Europe, the Middle East or North Africa (Texas Higher Education Coordinating Board, 2016c).

Literature Review Search Procedures

For the purpose of this journal-ready dissertation, the literature regarding persistence and graduation rate variables for Black and White students in Texas community colleges was examined. Phrases that were used in the search for relevant literature were: *Black students, White students, community college, persistence rates, retention rates, completion rates, and graduation rates*. All searches were conducted

through the EBSCO Host database for academic journals that contained scholarly peer reviewed articles.

Key word searches for “persistence rates” yielded 48,615 results and when Black community college students were added, the number of results reduced to 201. When the range was narrowed from 2000 to 2016, the search yielded fewer results, only 114. A key word search for “retention rates” yielded 346,617 results and when Black community college students were added, the number of results was reduced to 395. When the range was narrowed from 2000 to 2016, a total of 216 results was obtained. A key word search for “graduation rates” yielded 336,329 results and when Black community college students were added, 630 results were present. When the range was narrowed from 2000 to 2016, the number of results was reduced to 448. When White community college students were added, the search yielded 374 results and when the range was narrowed from 2000 to 2016, the number of results was reduced to 303. A key word search for “completion rates” yielded 238,973 results and when Black community college students were added, the number of results reduced to 437. When the range was narrowed from 2000 to 2016, the number of results was reduced to 276. When White community college students were added, the search yielded 244 results and when the range was narrowed from 2000 to 2016, the number of results was reduced to 188. Relevant articles were reviewed pertaining to persistence and graduation rates of Black and White community college students.

The literature review process involved a detailed collection of data, assessment, and data review. The Newton Gresham Library database at Sam Houston State University was used for the preliminary searches. Subsequent searches were performed

to locate the research articles. Key word search terms, databases, and the number of relevant articles are depicted in Figure 1.

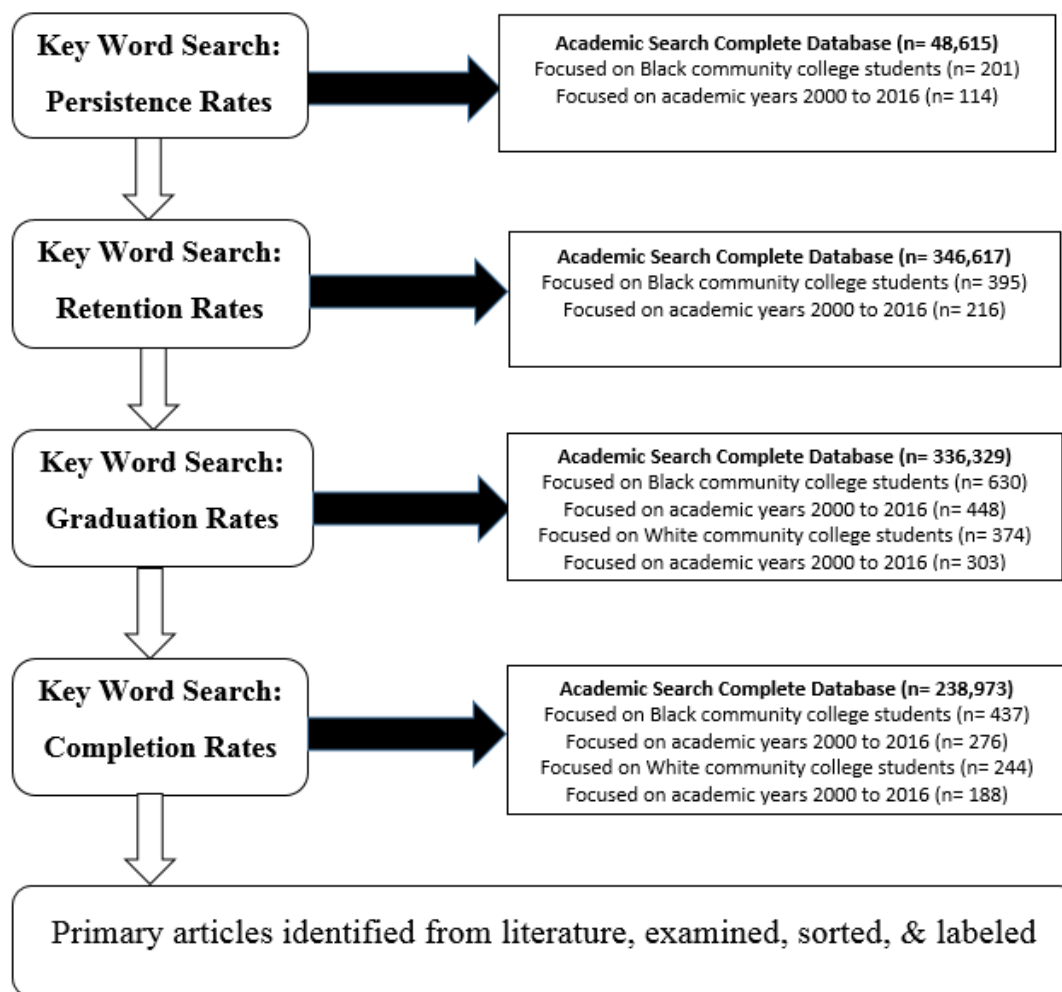


Figure 1.1. Literature Review Search Process

Delimitations

In this journal-ready dissertation, the three studies were delimited to data from only community colleges in the state of Texas. Data on 4-year institutions and private universities were not used for this journal-ready dissertation. The data that were analyzed in this journal-ready dissertation were 1-year and 2-year persistence rates of Black students, and the graduation rates of Black and White students. Data from only the 2007-2008 through the 2015-2016 academic years were analyzed. Only data available through the Texas Higher Education Coordinating Board Interactive Accountability System were used.

Limitations

In this journal-ready dissertation, the 1-year and 2-year persistence rates of Black students, along with the graduation rates of Black and White students were analyzed. As such, only quantitative data were used as measures of 1-year and 2-year persistence rates and the graduation rates of Black and White students in Texas community colleges. Texas community colleges report these data to the Texas Higher Education Coordinating Board.

Assumptions

A basic assumption in this study was that the 1-year and 2-year persistence rate data on Black students in Texas community colleges made available by the Texas Higher Education Coordinating Board Interactive Accountability System were accurate. This same assumption was made for the graduation rate data of Black and White students. The data that were obtained and analyzed were believed to be free of error due to the

extensive auditing conducted by the Texas Higher Education Coordinating Board (Texas Higher Education Coordinating Board, 2016a).

Organization of the Study

Three research investigations are present within this journal-ready dissertation. In the first journal-ready dissertation article, the research questions that were addressed were on the 1-year persistence rates by institutional status for Black students at Texas community colleges for the 2007 through the 2015 academic years. In the second journal-ready dissertation article, the research questions that were addressed involved the 2-year persistence rates by institutional status for Black students at Texas community colleges for the 2007 through the 2014 academic years. In the last journal-ready dissertation article, the research questions that were addressed involved graduation rates at Texas community colleges between Black and White students for the 2007 through the 2016 academic years.

Three different manuscripts will be produced from the five chapters composing this journal-ready dissertation. Chapter I includes the background of the study, statement of the problem, purpose of the study, significance of the study, definition of terms, theoretical framework, delimitations, limitations, assumptions and outline of the journal-ready dissertation. In Chapter II, the differences in 1-year persistence rates of Black students at Texas community colleges will be provided. In Chapter III, differences in 2-year persistence rates of Black students at Texas community colleges will be discussed. In Chapter IV, the third journal-ready research investigation on differences in the graduation rates of Black and White students at Texas community colleges will be provided. Finally, in Chapter V, the results from each of the three research articles

conducted in this journal-ready dissertation will be summarized and connected with the extant research literature. In addition, implications for policy and for practice along with recommendations for future research will be provided.

CHAPTER II

DIFFERENCES IN THE 1-YEAR PERSISTENCE RATES BY STUDENT
INSTITUTIONAL STATUS FOR BLACK STUDENTS AT TEXAS COMMUNITY
COLLEGES: A STATEWIDE, MULTIYEAR INVESTIGATION

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

Abstract

In this investigation, the 1-year persistence rates of Black students in Texas community colleges were analyzed for the 2007-2008 through the 2014-2015 academic years. Of particular interest was whether the 1-year persistence rates of Black 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 Black students in Texas community colleges by institutional status in the 2008-2009, 2009-2010, 2010-2011, and 2013-2014 academic years. The 1-year persistence rates were higher for Black students when they stayed at the same community college than when they transferred to a different community college in the 2007-2008 through the 2014-2015 academic years. Implications and recommendations for future research were discussed.

Keywords: Black students, community college, 1-year persistence rates, stayed, transferred

DIFFERENCES IN THE 1-YEAR PERSISTENCE RATES BY STUDENT
INSTITUTIONAL STATUS FOR BLACK STUDENTS AT TEXAS COMMUNITY
COLLEGES: A STATEWIDE, MULTIYEAR INVESTIGATION

The United States has long been the envy of the world in regard to higher education, student access, and the superior academic quality of its programs (Duncan, 2010). Unfortunately, the global dominance of the United States with respect to college enrollment and degree attainment has diminished (Strayhorn & Johnson, 2014). The United States currently ranks 12th among developed nations in the percentage of degrees awarded, however, the United States had the highest graduation rate in the world just a generation ago. Soon after taking office, former President Obama declared that the United States must have the best educated, most competitive workforce to lead the 21st century and in order to do so needed to have the highest quantity of college graduates in the world by 2020 (Duncan, 2010). To reach the President's goal, the entire higher education sector must work together to increase the number of students graduating from college each year. Community colleges will play an integral role because enrollments continue to climb each year and college programs with shorter durations can help make up ground in areas where the United States has fallen behind other countries (Martin, Galentino, & Townsend, 2014; PR Newswire, 2009; Strayhorn & Johnson, 2014).

The open door policy of community colleges grants access to individuals interested in pursuing a postsecondary education. People who want to achieve a higher education have the opportunity to pursue their dream (Neverez & Wood, 2010). In fall 2012, 45% of all undergraduate students in the United States attended community colleges. Community college enrollment is steadily increasing across the nation with 13

million students attending 1,132 institutions. These students represent diverse populations coming from low socioeconomic areas across the country (American Association of Community Colleges, 2014b). Many of the students enrolled in community colleges are students of color, nontraditional students, veterans, special needs students, and part-time students (Nevez & Wood, 2010).

For the United States to remain globally competitive, it will depend on a large percentage of its population obtaining skills from community colleges (Martin et al., 2014). The future success of this country is dependent on creating lively and engaged citizens. Therefore, it is essential to educate this large diverse population by providing the tools to succeed in the global economy (Colby, Ehrlich, Beaumont, & Stephens, 2003). Community colleges are popular choices because they are affordable and accessible, however they face tremendous challenges in helping Black, Hispanic, and low-income students transfer to 4-year institutions (Rainey, 2010). Although open access is an important part of the community college mission, success is measured by student persistence, transfer, and graduation rates (Everett, 2015).

According to Strayhorn (2011), 75% of all White students graduating from high school will immediately enroll in college, whereas only 35-50% of Black students will immediately enroll in college after high school. Although Black students have greater access to higher education by attending community colleges compared to 4-year institutions, only one out of four students transfer to 4-year institutions and just 16% of Black students who are enrolled in community colleges persist to graduation (Proviterra-McGlynn, 2005; U. S. Department of Education, 2006). As such, community colleges play an integral role in not only helping Black students obtain associate degrees but, more

importantly, as a pathway for Black students to earn bachelor degrees (Strayhorn, 2011; Wood, 2012). Moreover, community colleges serve as an open door for Black and Hispanic students wishing to pursue a higher education (Nevarez & Wood, 2010).

The success rates of Black students will need to improve for the United States to take the lead in the number of college graduates and meet former President Obama's 2020 challenge (Price & Tovar, 2014). Black college students face many obstacles on their road to obtaining a college degree. Many Black students are first-generation college students who experience difficulty adjusting to college life. Black students often need additional help learning college culture and becoming familiar with all of the resources available to help them succeed and persist through college (Barnett, 2010; Museus & Quaye, 2009; Strayhorn, 2011). According to the College Board (2010), "Many minority groups, including traditionally disadvantaged groups, are participating in school and college in record numbers. However, the fastest growing populations in the United States are those minority groups with the lowest level of educational attainment" (p. 18).

Community colleges need to engage in collaborative efforts to increase student success among students of color because Black and Hispanic students comprise a large percentage of the community college student population in the United States (Museus & Quaye, 2009; Provitera-McGlynn, 2005; Spangler & Slate, 2015). Student persistence is a major concern of 4-year institutions and community colleges across the country. Several authors (e.g., McKinney & Burrige, 2015; Strayhorn, 2011; Tinto, 1993; Wood, 2012) have established that the percentage of students who actually remain in college and complete their degrees is much smaller than the percentage of students who initially enroll in college. Current attrition rates are almost 30% for students who enter 4-year

institutions and over 50% for students who enter community colleges. Consequently, many of these students will leave within their first year of enrollment (Berger & Braxton, 1998).

Substantial progress has been made over the past four decades in enrolling traditionally underrepresented groups in universities and community colleges in the United States (Kinzie, Gonyea, Shoup, & Kuh, 2008). During this timeframe, total college enrollment grew by approximately 40%, whereas the enrollment of Black and Hispanic students increased by almost 150% (Li, 2007). Even though college enrollment is increasing each year, persistence rates continue to be a problem for Black students. All students of color, but especially Black students, graduate at a substantially lower rate than White students (Roach, 2013).

The low persistence and completion rates of Black students and the increasing racial gap in graduation rates suggest that far too many Black students are not acquiring the needed skills, knowledge, and resources to succeed in college (Price & Tovar, 2014). Lunenburg (2015) noted that the academic achievement gap between groups of different socioeconomic statuses is related to parents' education level, financial resources, preschool readiness, and the quality of education received at the pre-secondary and secondary level. In fact, students from more affluent backgrounds are more likely to have better resources, parents with higher education attainment, and attended higher quality schools prior to college (Lunenburg, 2015).

Higher education leaders and policymakers need a better understanding of factors contributing to Black college student success (Hussar & Bailey, 2006). According to Stewart, Doo Hun, and JoHyun (2015), college students who were more prepared to take

college level courses were more likely to persist past the first year than students who were not prepared to take college level courses. Therefore, it is essential that Black students receive assistance to help them adjust to college in the first year. Resources such as academic advising, tutoring, and counseling programs may assist underprepared Black students to succeed in college (Stewart et al., 2015).

In a recent quantitative study, Spangler and Slate (2015) analyzed the persistence and graduation rates of Texas community college students by ethnicity/race (i.e., White, Black, Hispanic, and Asian students) for the 2000 through the 2010 academic years. They documented that graduation and persistence rates increased over the 10-year span for White, Black, Hispanic, and Asian students. In the 2010 academic year, Black students had the lowest persistence and graduation rates, whereas Asian students had the highest persistence and graduation rates in 2010. Spangler and Slate (2015) concluded that educational leaders and policymakers need to develop and to implement policies to improve community college graduation and persistence rates.

Pascarella and Terenzini (2005) provided evidence that first-year experience programs increase college persistence from the first to second year in college. Students who participated in the first year seminar were more likely to graduate within four years than those students who did not participate. The authors concluded that persistence rates increased for students participating in first-year experience programs regardless of ethnicity, age, and gender. Positive outcomes were delivered in reference to student-faculty collaboration, extracurricular activity, and an increase in academic fulfillment (Pascarella & Terenzini, 2005).

In a very recent 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. Specifically, a comparison was made between Black and White students who stayed at the same Texas community college and Black and White students who transferred to a different Texas community college. Moss and Slate (2016) documented that persistence rates were statistically significantly higher when Black and White students stayed at the same community college than when they transferred to a different community college. Of note in their study was the much lower persistence rates of Black students in comparison to White students when they stayed or transferred to a different community college.

In a similar analysis, but at the 4-year university level, Fauria and Slate (2014) examined the 1-year persistence rates of students in Texas 4-year public universities for the 2000 and 2011 academic years. Data were obtained from the Texas Higher Education Coordinating Board Interactive Accountability System on Black, White, Hispanic, and Asian students. Persistence rates for students who stayed at the same university were statistically significantly higher in the 2000 and 2011 academic years in comparison to students who transferred to a different institution. Furthermore, students who transferred to a different university after the first year had very low persistence rates. Students, regardless of race, are more likely to persist if they remain at the same 4-year institution (Fauria & Slate, 2014) or at the same 2-year institution (Moss & Slate, 2016) than if they transfer to a different institution. Table 2.1 contains a summary of studies on differences in 1-year persistence rates of Black students

Insert Table 2.1 about here

Statement of the Problem

In 1990 the United States ranked first in the world in 4-year degree completion among 25-34 year olds, but now has fallen out of the top 10 (The White House, 2016). A consequence of this demise is that income equality has grown rapidly because the current number of college graduates are not keeping pace with the demand for new college graduates. To address income inequality and achieve economic efficiency, the United States must increase the number of postsecondary educated workers to make up ground on other developed nations (Carnevale, Rose, & Georgetown University, 2011). As result, former President Obama challenged the nation to produce 8 million more graduates by the year 2020. To achieve this ambitious goal, community colleges will have to increase the number of associate degrees and certificates they award students by 5 million (Templin, 2011).

Community colleges are very important to the American higher education system because these institutions academically prepare students to receive a 2-year degree or higher and provide workforce training (Cohen & Brawer, 2008). The mission of community colleges is to be accessible to all students by having an open door policy for admission (Bissett, 1995; Pusser & Levin, 2009). Because community colleges serve a diverse student population with economic, social, and academic needs, they serve a larger percentage of students needing financial assistance, and an increased number of students requiring remedial or developmental courses (Kolajo, 2004).

College enrollment have increased steadily over the last 30 years, even though more graduates are needed to complete former President Obama's 2020 plan. In spite of enrollment increases, substantial gaps exist between Black and White students in terms of enrollment (Strayhorn, 2011). Furthermore, only 25% of students in poverty complete college (The White House, 2016). Although community colleges provide greater access to higher education for Black students, persistence rates continue to be a problem (U. S. Department of Education, 2006).

According to the National Collegiate Retention and Persistence to Degree Rates Report, the 1-year national persistence rate is 55% at community colleges (American College Testing, 2011). In terms of Black students at community colleges, only 16% persist to graduation (U. S. Department of Education, 2006). Complete College America (2012) reported that only 7.5% of Black students over the age of 25 complete an associate degree within three years. Even lower is the persistence to graduation rates, 2.6%, for Black students who are enrolled part-time (Complete College America, 2012). In recent news, the seven regional accrediting agencies announced that they would engage in collaborative efforts to examine closely low graduation rates at community colleges and universities. Community colleges with graduation rates under 15% over four years and 4-year institutions with graduation rates under 25% over six years will have to report on how they plan to improve or risk losing accreditation (Kreighbaum, 2016).

Purpose of the Study

The purpose of this study was to examine the 1-year persistence rates of Black students in Texas community colleges for the 2007-2008 through the 2014-2015 academic years. Specifically addressed were the 1-year persistence rates by student

institutional status (i.e., stayed or transferred) for Black students in Texas community colleges. As such, the extent to which differences were present in the 1-year persistence rates of Black students who either stayed at the same Texas community college or transferred to a different Texas community college was ascertained. Through the analysis of 8 years of Texas statewide data, any trends that might be present were identified.

Significance of the Study

Persistence rates continue to be a concern for Black students in higher education across the United States (U. S. Department of Education, 2006). In the State of Texas, Black students are graduating at a substantially lower rate than White students in community colleges despite increased access. It is imperative that community colleges help Black students address the academic, financial, and social issues they face as college students (Moss & Slate, 2015). Texas community colleges must implement strategies that remove barriers that are preventing Black students from succeeding in college. Results that will be obtained may provide important information on 1-year persistence rates of Black students in Texas community colleges. The results of this study may assist higher education administrators and leaders with respect to their decision-making regarding policies to help improve the persistence rates of Black students in Texas community colleges.

Research Questions

In this study, the following research questions were addressed: (a) What is the difference in the 1-year persistence rates by student institutional status (i.e., stayed or transferred) for Black 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 Black 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, 2013-2014, and 2014-2015 academic years. The second research question involved results from all 8 academic years.

Method

Research Design

In this study a non-experimental causal-comparative research design was used (Creswell, 2009; Johnson & Christensen, 2012). The independent variable cannot be manipulated in non-experimental, causal comparative research. The archival data that were used herein represented events that had already occurred (Johnson & Christensen, 2012). The independent variable that was analyzed was the institutional status of Black students in each of the academic years of data analyzed herein. As noted previously, institutional status was whether a student stayed at the same Texas community college for one year or whether a student transferred to a different Texas community college after one year. The dependent variables that were present in this investigation were the 1-year persistence rates of Black students. A total of 8 years of Texas statewide data were available for analysis.

Participants and Instrumentation

Archival data on all Texas community colleges were obtained for the 2007-2008 through the 2014-2015 academic years from the Texas Higher Education Coordinating Board Interactive Accountability system. Within the Texas Higher Education

Coordinating Board dataset, 68 institutions are labeled as community colleges, and nine institutions are labeled as community college districts. Each of these community colleges and community college districts are required by the Texas Higher Education Coordinating Board to report the 1-year persistence rates, along with other data, of students by ethnicity/race. These data are then aggregated by the Texas Higher Education Coordinating Board and made publicly available at the Texas Higher Education Coordinating Board Interactive Accountability System.

The instrument used for this study was the Texas Higher Education Coordinating Board Interactive Accountability database. The Texas Higher Education Coordinating Board maintains a vast database comprising statistical data in a wide range of areas for every community college in Texas. Included in these data are persistence rates of Black students. Every Texas public community college, with the inclusion of descriptive statistical data, is represented in this comprehensive database.

Results

Prior to conducting inferential statistics to determine whether differences were present in the 1-year persistence rates by institutional status of Black students enrolled in Texas community colleges, checks were conducted to determine the extent to which these data were normally distributed (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 years.

For the 2007-2008 academic year, the parametric dependent samples *t*-test did not reveal a statistically significant difference in the 1-year persistence rates, $t(69) = 1.62, p =$

.11, between Black students who stayed at the same Texas community college and Black students who transferred to a different Texas community college after one year. The 1-year persistence rates were similar for Black students who stayed at the same Texas community college and for Black students who transferred to a different Texas community college. Readers are directed to Table 2.2 for the descriptive statistics for this analysis.

Insert Table 2.2 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, $t(69) = 5.41, p < .001$, between Black students who stayed at the same Texas community college and Black students who transferred to a different Texas community college after one year. This difference represented a large effect size (Cohen's d) of 0.91 (Cohen, 1988). The 1-year persistence rates of Black students who stayed at the same Texas community college were almost 15% higher than the 1-year persistence rates of Black 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

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, $t(70) =$

2.81, $p < .001$, between Black students who stayed at the same Texas community college and Black students who transferred to a different Texas community college after one year. This difference represented a small effect size (Cohen's d) of 0.44 (Cohen, 1988). The 1-year persistence rates of Black students who stayed at the same Texas community college percentage rates were almost 10% higher than the 1-year persistence rates of Black students who transferred to a different Texas community college. Revealed in Table 2.4 are the descriptive statistics for this analysis.

Insert Table 2.4 about here

For the 2010-2011 academic year, the parametric dependent samples t -test revealed a statistically significant difference in the 1-year persistence rates, $t(70) = 3.00$, $p < .001$, between Black students who stayed at the same Texas community college and Black students who transferred to a different Texas community college after one year. This difference represented a medium effect size (Cohen's d) of 0.50 (Cohen, 1988). The 1-year persistence rates of Black students who stayed at the same Texas community college percentage rates were 10% higher than the 1-year persistence rates of Black students who transferred to a different Texas community college. Readers are directed to Table 2.5 for the descriptive statistics for this analysis.

Insert Table 2.5 about here

Concerning the 2011-2012 academic year, the parametric dependent samples t -test did not reveal a statistically significant difference in the 1-year persistence rates, $t(70) = 0.88, p = .38$, between Black students who stayed at the same Texas community college and Black students who transferred to a different Texas community college after one year. The 1-year persistence rates were similar for Black students regardless of their institutional status. Table 2.6 contains the descriptive statistics for this analysis.

Insert Table 2.6 about here

With respect to the 2012-2013 academic year, the parametric dependent samples t -test did not reveal a statistically significant difference in the 1-year persistence rates, $t(71) = 1.31, p = .19$, between Black students who stayed at the same Texas community college and Black students who transferred to a different Texas community college after one year. Similar 1-year persistence rates were present for Black students regardless of their institutional status. Revealed in Table 2.7 are the descriptive statistics for this analysis.

Insert Table 2.7 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, $t(71) = 3.47, p = .001$, between Black students who stayed at the same Texas community college and Black students who transferred to a different Texas community college after one year.

This difference represented a medium effect size (Cohen's d) of 0.55 (Cohen, 1988). The 1-year persistence rates of Black students who stayed at the same Texas community college were almost 15% higher than the 1-year persistence rates of Black students who transferred to a different Texas community college. Delineated in Table 2.8 are the descriptive statistics for this analysis.

Insert Table 2.8 about here

Concerning the 2014-2015 academic year, the parametric dependent samples t -test revealed a statistically significant difference in the 1-year persistence rates, $t(71) = 3.00$, $p = .003$, between Black students who stayed at the same Texas community college and Black students who transferred to a different Texas community college after one year. This difference represented a medium effect size (Cohen's d) of 0.52 (Cohen, 1988). The 1-year persistence rates of Black students who stayed at the same Texas community college were almost 15% higher than the 1-year persistence rates of Black students who transferred to a different Texas community college. Table 2.9 contains the descriptive statistics for this analysis.

Insert Table 2.9 about here

The final research question regarding an analysis of all eight years of data for Black students who stayed at the same community college and for Black students who transferred to a different community college will now be addressed. As revealed in

Figure 2.1, trends were present in the 1-year persistence rates by student institutional status (i.e., stayed or transferred) for Black students who were enrolled in Texas community colleges. The 1-year persistence rates of Black students who stayed at the same Texas community college were consistently higher than the 1-year persistence rates of Black students who transferred to a different Texas community college. Over an 8-year period, the 1-year persistence rates of Black students who stayed at the same Texas community college varied somewhat, but over the 8-year time period, increased by only 1%. During the same 8-year period, the 1-year persistence rates of Black students who transferred to a different Texas community fluctuated, however, readers should note that the 1-year persistence rates for Black students who transferred decreased by 5%.

Insert Figure 2.1 about here

Discussion

Presented in this investigation was the extent to which differences existed in the 1-year persistence rates by student institutional status (i.e., stayed or transferred) of Black students in Texas community colleges. Eight years of archival data from the Texas Higher Education Coordinating Board Interactive Accountability System were obtained and analyzed to determine whether the 1-year persistence rates of Black students in Texas community colleges differed by student institutional status. In this study, 70 Texas community colleges provided data that were analyzed in the 2007-2008 through the 2008-2009 academic years and 71 Texas community colleges provided data that were analyzed in the 2009-2010 through the 2011-2012 academic years. Finally, 72 Texas

community colleges provided data that were analyzed in the 2012-2013 through the 2014-2015 academic years.

For the eight academic years of data that were analyzed, statistically significant differences were present in the 2008-2009, 2009-2010, 2010-2011, and 2013-2014 academic years. Even when the results were not statistically significant, the 1-year persistence rates of Black students who stayed at the same community college in Texas were higher than the 1-year persistence rates of Black students who transferred to a different Texas community college. In this investigation, the 1-year persistence rates of Black students who stayed at the same Texas community college ranged from a low of 38% to a high of 46%. In contrast, the 1-year persistence rates of Black students who transferred to a different Texas community college ranged from a low of 27% to a high of 37%. Readers are referred to Table 2.10 for a summary of results for the 1-year persistence rates of Black students by their institutional status in Texas community colleges across all eight academic years.

Insert Table 2.10 about here

Connections with Existing Literature

Researchers (Fauria & Slate, 2014; Moss & Slate, 2016; Pascarella & Terenzini, 2005; Spangler & Slate, 2015; Stewart et al., 2015) have previously analyzed the persistence rates of Black students. In this multiyear, statewide investigation, the 1-year persistence rates of Black students in Texas community college were higher when they stayed at the same Texas community college than when they transferred to a different

Texas community college. These results were consistent with Moss and Slate (2016) wherein persistence rates were statistically significant higher when Black students stayed at the same Texas community college than when they transferred to a different Texas community college. Similarly, Fauria and Slate (2014) documented that Black students were more likely to persist in the first year if they stayed at the same Texas 4-year university than if they transferred to a different 4-year university.

Implication for Policy and Practice

In this analysis, the 1-year persistence rates of Black students in Texas community colleges were lower when they transferred to a different community college after the first year than when they stayed at the same community college. Although community colleges have measures in place to contribute to student success, persistence rates continue to be low (Mangan, 2014). Even though access to community colleges is not an issue, Black students persisting to graduation is a major concern (Esters & Mosby, 2007). Community colleges need to be proactive and are encouraged to conduct an audit of the 1-year persistence rates of their Black students. Community colleges with low 1-year persistence rates need to examine their programs to determine what changes need to be made. Community colleges with high 1-year persistence rates need to examine their programs to determine what components are effective, and then to share their efforts with other community colleges.

Based upon these program evaluation efforts, higher education leaders will have to make a concentrated effort to provide resources to help these students succeed inside and outside the classroom (Price & Tovar, 2014). Academic advisors at community colleges need to communicate with Black students and ascertain how they can keep them

enrolled. Black students often face adversity dealing with life hardships that cause them to drop out seek a full-time job while going to school. In addition, they are often unprepared for college and struggle to get out of developmental courses because their high school curriculum did not prepare them adequately for the rigor of college courses (Barnes & Slate, 2011). Community colleges that have transfer students need to develop programs to address their transfer student needs. Based on the results of this empirical investigation, Spangler and Slate's (2015) recommendation that policies to improve the persistence rates of Black students at Texas community colleges need to be developed is supported.

Recommendations for Future Research

In this multiyear, statewide investigation, differences in the 1-year persistence rates by student institutional status for Black students at Texas community colleges were examined. Given the low 1-year persistence rates of Black students revealed in this study, researchers should consider extending this study to other underrepresented student groups such as Hispanic students to determine the degree to which results from this investigation are generalizable to other ethnic/racial groups. In addition, the 1-year persistence rates of Asian, White, and international students should be investigated to determine the degree to which these two ethnic/racial groups persist in community colleges. Another recommendation is to replicate this investigation in other states to ascertain whether the results of Black students' 1-year persistence rates discussed previously are generalizable to other states. Because the data analyzed herein were from all Texas community colleges, researchers are encouraged to examine each community college results to identify Texas community colleges that have high 1-year persistence

rates for Black students who stay and for Black students who transfer. Then qualitative and or mixed-methods research studies could be conducted to ascertain the reasons why these community colleges are successful. Similar investigations could be conducted into the Texas community colleges with the lowest 1-year persistence rates of Black students. For this study, quantitative data were used. Accordingly, researchers should consider conducting qualitative studies to gain insight from Black students, faculty, staff, and educational leaders into reasons why Black students transfer to different institutions. Moreover, the reasons why 1-year persistence rates are low for Black students who transfer merit examination.

Conclusion

The purpose of this research study was to determine the extent to which differences were present in the 1-year persistence rates of Black students in Texas community colleges by institutional status. Data were analyzed for the 2007-2008 through the 2014-2015 academic years. Statistically significant differences were present in the 2008-2009, 2009-2010, 2010-2011, and 2013-2014 academic years. The 1-year persistence rates were higher for Black students who stayed at the same Texas community college and much lower for Black students who transferred to a different Texas community college in the 2007-2008 through the 2014-2015 academic years. Consistent with previous researchers (Fauria & Slate, 2014; Moss & Slate, 2016), Black students performed better when they stayed at the same community college than when they transferred to a different community college.

Educators face a tremendous challenge to help increase the persistence rates of Black students. Former President Obama challenged the entire nation to help improve

the college graduation rates within the United States. To achieve this goal, community colleges need to do better job of helping students achieve success. By improving the persistence and success rates of Black students in community colleges, the nation will be one step closer to reaching former President Obama's goal.

References

- American Association of Community Colleges. (2014b). *Fast facts*. Retrieved from <http://www.aacc.nche.edu.ezproxy.Shsu.edu/AboutCCc/Documents/Facrs14%5Fdata%5FR2.pdf>
- American College Testing. (2011). *National collegiate retention and persistence to degree rates*. Retrieved from <http://www.act.org/research/policymakers/reports/graduation.html>
- Barnes, W., & Slate, J. R. (2011). Ethnic differences in college-readiness rates: A multi-year, statewide study. *Education and Urban Society*, 20(10), 1-29.
doi:10.1177/0013124511423775
- Barnett, E. A. (2010). Validation experiences and persistence among community college students. *Review of Higher Education*, 34(2), 193-230.
- Berger, J., & Braxton, J. (1998). Revising Tinto's interactionist theory of student departure through theory elaboration: Examining the role of organizational attributes in the persistence process. *Research in Higher Education*, 39, 103-119.
- Bissett, H. G. (1995). Selective admissions in community college nursing programs: Ethical considerations. *Community College Review*, 22, 35-46.
- Carnevale, A. P., Rose, S. J., & Georgetown University, C. W. (2011). The Undereducated American. *Georgetown University Center on Education and the Workforce*. Retrieved from <http://eric.ed.gov/?id=ED524302>
- Cohen, A. M., & Brawer, F. B. (2008). *The American community college* (5th ed.). San Francisco, CA: Jossey-Bass.

- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Colby, A., Ehrlich, T., Beaumont, E., & Stephens, J. (2003). *Educating citizens: Preparing America's undergraduates for lives of moral and civic responsibility*. San Francisco, CA: Jossey-Bass.
- College Board. (2010). *The educational crisis facing young men of color: Reflections on four of dialogue on the educational challenges of minority males*. Retrieved from <http://www.Advocacy.collegeboard.org/sites/default/files/educational-crisis-facing-young-men-of-color.pdf>
- Complete College America. (2012, April). *Remediation: Higher education's bridge to nowhere*. Retrieved from <http://www.completecollege.org/docs/CCA-Remediation-final.pdf>
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. (3rd ed.). Thousand Oaks, CA: Sage.
- Duncan, A. (2010). Obama's goal for higher education. *Forbes*. Retrieved from <http://www.forbes.com/2010/08/01/america-education-reform-opinions-best-colleges-10-duncan.html>
- Esters, L. L., & Mosby, D. C. (2007). Disappearing acts: The vanishing Black male on community college campuses. *Diverse Issues in Higher Education*, 24(14), 45.
- Everett, J. E. (2015). Public community colleges: Creating access and opportunities for first-generation college students. *Delta Kappa Gamma Bulletin*, 81(3), 52-58.

- 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.
- Hussar, W., & Bailey, T. M. (2006). *Projections of education statistics to 2015 (NCES 2006-084)*. Washington, DC: National Center for Education Statistics.
- Johnson, R. B., & Christensen, L. (2012). *Educational research: Quantitative, qualitative, and mixed approaches* (4th ed.). Los Angeles, CA: Sage.
- Kinzie, J., Gonyea, R., Shoup, R., & Kuh, G. D. (2008). Promoting persistence and success of underrepresented students: Lessons for teaching and learning. *New Directions for Teaching & Learning*, 2008(115), 21-38.
- Kolajo, E. (2004). From developmental education to graduation: A community college experience. *Community College Journal of Research and Practice*, 28, 365-371.
- Kreighbaum, A. (2016). Tougher scrutiny for colleges with low graduation rates. *Inside Higher Ed*. Retrieved from <https://www.insidehighered.com/news/2016/09/21/regional-accreditors-refocus-institutions-low-grad-rates#.V-Lm0F4cWQ8.mailto>
- Li, X. (2007). *Characteristics of minority-serving institutions and minority undergraduates enrolled in these institutions*. Washington, DC: National Center for Education Statistics.
- Lunenburg, F. C. (2015). A free public education for all: Rediscovering the promise. In Sage Publications Inc. (Eds.), *The Sage guide to educational leadership and management* (pp. 273-286). Thousand Oaks, CA: Sage.

- Mangan, K. (2014, September). Community colleges test ways to clear students' path to success. *Chronicle of Higher Education*, 61(4), A10-A11.
- Martin, 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
- McKinney, L., & Burrige, A. B. (2015). Helping or hindering? The effects of loans on community college student persistence. *Research in Higher Education*, 56, 299-324.
- Moss, S., & Slate, J. R. (2015). Differences in Black students' persistence rates in Texas community colleges by institutional status. *International Journal of University Teaching and Faculty Development*, 5(3), 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. Retrieved from <http://www.ikpress.org/issue/653>
- Museus, S. D., & Quaye, S. J. (2009). Toward an intercultural perspective of racial and ethnic minority college student perspective. *Review of Higher Education*, 33, 67-94.
- Nevarez, C., & Wood, J. L. (2010). *Community college leadership and administration: Theory, practice, and change*. New York, NY: Peter Lang.
- Onwuegbuzie, A. J., & Daniel, L. G. (2002). Uses and misuses of the correlation coefficient. *Research in the Schools*, 9(1), 73-90.

Pascarella, E. T., & Terenzini, P. T. (2005). *A third decade of research. Vol. 2 of how college affects students*. San Francisco, CA: Jossey-Bass.

Price, V., & Tovar, E. (2014). Student engagement and institutional graduation rates: Identifying high-impact educational practices for community colleges. *Community College Journal of Research and Practice*, 38, 766-782.
doi:10.1080/10668926.2012.719481

PR Newswire. (2009, July). *Meeting the Obama challenge: Bring all higher ed assets to bear*. Retrieved from <http://www.prnewswire.com/news-releases/meeting-the-obama-challenge--bring-all-higher-ed-assets-to-bear-62217962.html>

Provitera-McGlynn, A. (2005). Report examines 2 year/4-year disconnect: Proposes ways to strengthen transition. *The Hispanic Outlook in Higher Education*, 15, 34-35.

Pusser, B., & Levin, J. (2009). *Re-imagining community colleges in the 21st century: A student-centered approach to higher education*. Washington, DC: Center for American Progress.

Rainey, M. (2010). Community colleges face challenge in helping minority students succeed. *Insight into Diversity*, 6-8.

Roach, R. (2013). Steady college enrollment growth for underrepresented minorities, college completion rates increasing more slowly. *Diverse Issues in Higher Education*. Retrieved from <http://diverseeducation.com/article/54837/#>

Spangler, M. J., & 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

- Strayhorn, T. L. (2011). Traits, commitments, and college satisfaction among Black American community college students. *Community College Journal of Research & Practice*, 35, 437-453. doi:10.1080/10668920801901282
- Strayhorn, T. L., & Johnson, R. M. (2014). Black female community college students' satisfaction: A national regression analysis. *Community College Journal of Research and Practice*, 38, 534-550.
- Stewart, S., Doo Hun, L., & JoHyun, K. (2015). Factors influencing college persistence for first-time students. *Journal of Developmental Education*, 38(3), 12-20.
- Templin, R. G. (2011). *America's community colleges: The key to the college completion challenge?* Retrieved from <http://www.acenet.edu/the-presidency/columns-and-features/Pages/America%E2%80%99s-Community-Colleges-The-Key-to-the-College-Completion-Challenge.aspx>
- The White House. (2016). *Education knowledge and skills for the future*. Retrieved from <https://www.whitehouse.gov/issues/education/higher-education>
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago, IL: University of Chicago Press.
- U. S. Department of Education. (2006). *The condition of education 2006*. Washington, DC: U. S. Government Printing Office.
- Wood, J. L. (2012). Leaving the 2-year college: Predictors of Black male collegian departure. *Journal of Black Studies*, 43(3), 303-326.
doi:10.1177/0021934711424490

Table 2.1

Summary of Studies on Differences in 1-Year Persistence Rates of Black Students

Author(s)	Year	Topic	Outcome
Moss & Slate	2016	1-year persistence rates of Black and White students in Texas community colleges in 2000 and 2013	Persistence rates were statistically significantly higher when Black and White students stayed at the same community college than when they transferred
Spangler & Slate	2015	Persistence and graduation rates of Texas community college students by ethnicity/race	Policies to improve community college graduation and persistence rates need to be developed.
Fauria & Slate	2014	1-year persistence rates of students in Texas 4-year public universities for 2000 and 2011	Students, regardless of race are more likely to persist if they remain at the same 4-year institution
Pascarella & Terenzini	2005	First-year experience programs increase college persistence	Persistence rates increased for students in first-year experience programs regardless of ethnicity, age, and gender

Table 2.2

Descriptive Statistics for the 1-Year Persistence Rates by Institutional Status for Black 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	42.94	12.75
Transferred	70	36.63	32.28

Table 2.3

Descriptive Statistics for the 1-Year Persistence Rates by Institutional Status for Black 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	45.78	13.19
Transferred	70	26.50	26.86

Table 2.4

Descriptive Statistics for the 1-Year Persistence Rates by Institutional Status for Black 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	42.47	12.72
Transferred	71	32.12	30.87

Table 2.5

Descriptive Statistics for the 1-Year Persistence Rates by Institutional Status for Black 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	43.66	13.30
Transferred	71	31.90	30.28

Table 2.6

Descriptive Statistics for the 1-Year Persistence Rates by Institutional Status for Black 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	71	40.16	12.31
Transferred	71	36.88	32.42

Table 2.7

Descriptive Statistics for the 1-Year Persistence Rates by Institutional Status for Black 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	38.14	13.42
Transferred	72	33.46	30.25

Table 2.8

Descriptive Statistics for the 1-Year Persistence Rates by Institutional Status for Black 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	42.29	13.62
Transferred	72	29.49	29.78

Table 2.9

Descriptive Statistics for the 1-Year Persistence Rates by Institutional Status for Black Community College Students in Texas in the 2014-2015 Academic Year

Institutional Status	<i>n</i> of community colleges	<i>M</i>	<i>SD</i>
Stayed	72	44.30	15.07
Transferred	72	31.89	30.27

Table 2.10

Results for the 1-Year Persistence Rates by Institutional Status for Black Community College Students in Texas in the 2007-2008 Academic Year Through the 2014-2015 Academic Year

Academic Year	Effect Size	Higher Persistence Rate
2007-2008	N/A	Stayed
2008-2009	Large	Stayed
2009-2010	Small	Stayed
2010-2011	Medium	Stayed
2011-2012	N/A	Stayed
2012-2013	N/A	Stayed
2013-2014	Medium	Stayed
2014-2015	N/A	Stayed

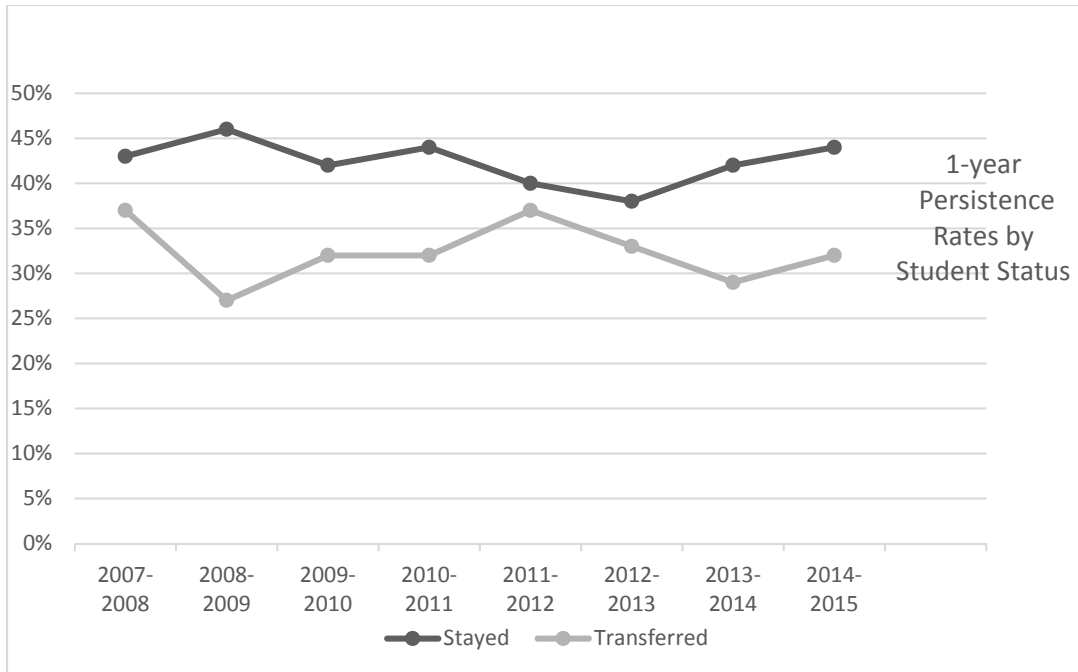


Figure 2.1. Trends in the 1-year persistence rates of Black students who stayed or transferred to a different Texas community college in the 2007-2008 through the 2014-2015 academic years.

CHAPTER III

DIFFERENCES IN 2-YEAR PERSISTENCE RATES BY STUDENT
INSTITUTIONAL STATUS FOR BLACK STUDENTS AT TEXAS COMMUNITY
COLLEGES: A STATEWIDE MULTIYEAR INVESTIGATION

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

Abstract

In this investigation, the 2-year persistence rates of Black students in Texas community colleges were analyzed for the 2007-2008 through the 2013-2014 academic years. Of particular interest was whether 2-year persistence rates were higher for Black students who stayed at the same community college or for Black students who transferred to a different community college. Inferential statistical analyses did not reveal the presence of any statistically significant differences in the 2-year persistence rates of Black students in the 2007-2008 through the 2013-2014 academic years. The 2-year persistence rates for Black students who stayed at the same community college and for Black students who transferred to a different community college were consistently low, in the 20% range, in all 8 academic years. Implications of results and recommendations for research were provided.

Keywords: Black students, Texas, community college, 2-year persistence rates, stayed, transferred

DIFFERENCES IN 2-YEAR PERSISTENCE RATES BY STUDENT
INSTITUTIONAL STATUS FOR BLACK STUDENTS AT TEXAS COMMUNITY
COLLEGES: A STATEWIDE MULTIYEAR INVESTIGATION

Student enrollment at 4-year institutions increased by 65% between 1992 and 2012. During the same time span, community college enrollment increased by almost 80% (National Center for Education Statistics, 2013). The latest enrollment surge of community colleges was stimulated by the recent economic recession (Mullin & Phillippe, 2009). Community colleges are essential to the postsecondary education system because they provide open access to higher education, workforce development, and prepares students to transfer to 4-year institutions (American Association of Community Colleges, 2016). Furthermore, community colleges play a vital role in educating minority, low-income, and underprepared students (Morrice, 2011; Stuart, Rios-Aguilar, & Deil-Amen, 2014). These institutions serve as access points for many underrepresented Black students who are first-generation college students (Cohen & Brawer, 2008).

College enrollment of Black students has increased substantially over the past 20 years because of successful federal, state, and institutional policies that were implemented to help increase enrollment (Bontrager & Hossler, 2014; Sandoval-Lucero, 2014; Wilson, 2014). In 1990, only 25.4% of Black students between the ages of 18 and 24 were enrolled in college. This figure increased to 30.5% in 2000 and to 38.4% in 2010 (National Center for Education Statistics, 2012). In terms of community colleges, more than 50% Black students are currently enrolled, equaling nearly one million

students. In fact, roughly one-third of all degrees obtained by Black students are from community colleges (Morrice, 2011).

Even though the college enrollment numbers of Black students have increased, persistence rates are still low for Black students (Fauria & Slate, 2014; Moss & Slate, 2015). Black students, as well as well as Hispanic students, graduate at a much lower rate than White students (Roach, 2013). To meet former President Obama's higher education goal, community colleges and universities must improve at educating an increasingly diverse student population (Carey, 2009). Former President Obama (The White House, 2009) stated the following at his first address to a joint session of Congress:

It is our responsibility as lawmakers and educators to make this system work. But it is the responsibility of every citizen to participate in it. And so tonight, I ask every American to commit to at least one year or more of higher education or career training. This can be community college or a four-year school; vocational training or an apprenticeship. But whatever the training may be, every American will need to get more than a high school diploma. And dropping out of high school is no longer an option. It's not just quitting on yourself, it's quitting on your country—and this country needs and values the talents of every American. That is why we will provide the support necessary for you to complete college and meet a new goal: by 2020, America will once again have the highest proportion of college graduates in the world. (para. 66)

The persistence and graduation rates of Black students must drastically increase for America to take the lead in the global economy. New initiatives were implemented by

former President Obama to help community colleges in generating five million additional graduates by 2020 (Brandon, 2009).

Other organizations across the country have joined former President Obama by launching their own initiatives in support of college persistence and completion. The 2013-2016 strategic plan of the Lumina Foundation is to increase the percentage of American students with quality degrees to 60% by 2025 (Bontrager & Hossler, 2014). The goal of the Bill and Melinda Gates Foundation is to help low income students by increasing the numbers enrolled in postsecondary education by the age of 26 (Bill and Melinda Gates Foundation, 2009). Third, the goal of the College Board is to raise the number of college educated adults from 39% to 55% by 2025 (Lee, Edwards, Menson, & Rawls, 2011).

Although many initiatives are currently in place to enhance student success, low persistence rates continue to be a problem at community colleges. Nearly one half of the students enrolled in community colleges leave before the end of the first year (Braxton, Hirschy, & McClendon, 2004). Student success in college necessitates resilience, grit, and persistence to graduation. Advancement from the first year to the second year is essential for students on their journey of earning a college degree (Braxton et al., 2014). The College Board (2012) reported that 1-year to 2-year persistence rates ranged from 59.9% for first-time degree or certificate seeking students at community colleges but was substantially lower for part time students in the 2010 academic year. In 2011, the 3-year persistence rate at 2-year community colleges was only 23.9% (ACT, 2011). Kirst (2008) stated,

Fewer than one-fourth of community college students who begin college between the ages of 17 to 20 transfer or attain an associate's degree or vocational certificate. Only half of the students in 4-year broad access colleges obtain a degree within nine years. (p. 111)

In a recent investigation, Hongwei (2015) analyzed factors that contributed to student persistence at community colleges. Data were obtained from the Integrated Postsecondary Education System and the Beginning Postsecondary Students Longitudinal Study, using data on 1,950 students from 50 community colleges in the 2003 and 2004 academic years. Honwei (2015) determined that larger community colleges were more likely to have students drop out due to family obligations and child care responsibility than smaller community college campuses.

In another recent study, Davidson and Petrosko (2015) examined relationships among academics, demographics, work, and family with persistence rates to the next semester for students enrolled at a 2-year community college in Kentucky. In their study, data were used from students enrolled in six cohorts of Basic Algebra from the fall 2006 to spring 2009 semesters. Davidson and Petrosko (2015) documented that students were more likely to persist in face to face courses that had an online component than in courses that just met face to face. Increased online courses, particularly in developmental courses, may have a positive effect on student persistence.

In another investigation into student persistence, Shinde (2010) examined the connection between persistence from one fall semester to the next fall semester and types of student engagement at a southeastern public university. Records of first time freshmen who completed the National Survey of Student Engagement were analyzed to measure

student engagement. Social engagement and overall satisfaction was revealed in the study as the top predictors of freshmen persistence. Shinde (2010) suggested student engagement has a positive effect on persistence rates and grades during the first and second year for all student groups.

In a qualitative examination, Escobedo (2007) evaluated persistence and retention of community college developmental students in a 3-year pilot study. Qualitative data were collected and examined for three fall cohorts from the 2001 academic year to the 2003 academic year. Escobedo (2007) concluded that the first year was critical in linking students to college resources and faculty and staff members who could help them succeed in college. Student persistence rates increased when institutions implemented early alert systems, and students completed education plans.

In a recent quantitative study, Moss and Slate (2015) examined the 2-year persistence rates of Black students enrolled in Texas community colleges during the 2000 and 2012 academic years. In particular, data on Black students who either stayed at the same community college or who transferred to a different community college in Texas were analyzed. The 2-year persistence rate of Black students who stayed at the same community college was 22% during the 2000 academic year and dropped slightly to 21% for Black students who transferred to different community college. In terms of the 2012 academic year, the 2-year persistence rate dropped to 20% for Black students who stayed at the same community college and dropped to 17% for Black students who transferred to a different community college. Moss and Slate (2015) documented that the 2-year persistence rates of Black students were not statistically significantly different when they stayed at the same institution than when they transferred to a different institution. In both

situations, the 2-year persistence rates of Black students were abysmally low. Table 3.1 contains a summary of studies on differences in 2-year persistence rates of Black students.

Insert Table 3.1 about here

Student persistence is a major issue in higher education that must be solved (Bailey, Jenkins, & Leinbach, 2007; Esters & Mosby, 2007; Liao, Edlin, & Ferdenzi, 2014; Mertes & Hoover, 2014; Tinto, 1993). According to Tinto (1993), 40% of first-time college students drop out before they reach their second year. McIntosh and Rouse (2009) established that almost three-fourths of first-time in college students at 4-year universities persist to the second year, however, with respect to community colleges only 50% of students persist to the second year. In reference to Black student enrollment in community college, high levels of attrition adversely affect persistence rates and ultimately degree attainment (Strayhorn, 2012).

The community college experience of Black students is very different from the experience of students who attend 4-year universities (McIntosh & Rouse, 2009; Wilson, 2014). Black students are often the first individual in their family to attend college, and they are more likely to come from a single parent family (Strayhorn, 2006). In fact, many Black students graduate from high school without completing a curriculum that properly prepares them to be successful in college (Polite & Davis, 1999). As a result, a large percentage of Black students enroll in community colleges and struggle to persist to graduation (Thelin, 2004).

Theoretical Framework

Over the last four decades many theoretical frameworks have been offered to explain why student attrition happens at the community college and university level (Bean & Eaton, 2000; Nora, Barlow, & Crisp, 2005; Swail, Redd, & Pena, 2003; Tinto, 1993). One of the most popular frameworks is Tinto's (1993) model of student departure in which a focus is placed on student integration into college. According to this model, students should separate from their former communities to make an effective transition to college. The key focus is on the academic and social experiences of the student to help increase persistence and retention rates (Tinto, 1993). Tinto's model has been criticized for shifting the majority of the burden on the student and not the institutions that should be more responsible (Bensimone, 2007). Moreover, Tinto's model might not be the best indicator for Black student departure because it does not appropriately depict the experience of historically underrepresented groups such as students attending community college and ethnic minorities (Bensimone, 2007; Cejda & Hoover, 2010).

A number of researchers (e.g., Bailey, Leinbach, & Jenkins, 2005; Braxton et al., 2004; Pascarella, Smart, & Ethington, 1986) have examined student persistence and determined that social integration was a less important factor at community colleges. Community colleges should focus on tangible programs to help students with their academic needs (Stuart et al., 2014). Targeted initiatives such as learning communities, could help Black students become more involved in the classroom while providing courses at convenient times (Braxton et al., 2004). Academic advising, internships, and applied pedagogies are other aspects that could help improve Black student persistence at community colleges (Bailey & Alfonso, 2005).

Statement of the Problem

Throughout his term as President, Barack Obama placed strong emphasis on increasing the number of college graduates in the United States (Chen, 2015). In 2009 former President Obama introduced the American Graduation Initiative to increase the number of postsecondary degrees and certificates awarded by universities and community colleges by an extra five million by the year 2020 (Kotamraju & Blackmon, 2011). Community colleges in particular were highlighted because less than one out of five community college students graduate in three years or less (Chen, 2015). To meet the 2020 American Graduation Initiative goal, community colleges will have increase graduation levels by adding approximately 250,000 more degrees per year (Kotamraju & Blackmon, 2011).

Community colleges can help former President Obama increase the number of college graduates in the United States but persistence rates must improve considerably in order to accomplish this goal (Sutherland, 2011). The open door policy of community colleges provides access for students by offering affordable tuition, convenient locations, and resources to support minority and at-risk students (Bailey et al., 2004). However, access by itself is not enough for Black students because many drop out of community colleges without earning a degree or certificate, especially during the first year (Dougherty, 1992).

Student persistence continue to be an issue for community colleges across the nation in spite of sophisticated efforts to help improve student success (Mangan, (2014). Unfortunately, persistence rates, and degree attainment are not keeping pace with enrollment for Black students (Mortenson Research Seminar, 2001). It is imperative that

community colleges improve their student service resources such as academic advising, financial supports, and counseling for at-risk students (Price & Tovar, 2014).

Purpose of the Study

The purpose of this study was to examine the 2-year persistence rates of Black students in Texas community colleges from the 2007-2008 through the 2013-2014 academic years. In particular, the 2-year persistence rates of Black students in Texas community colleges were examined as a function of their student institutional status (i.e., stayed at the same Texas community college or transferred to a different Texas community college) to determine the degree to which differences might be present. By analyzing data over this 7-year time period, any trends that might be present in the 2-year persistence rates of Black students by their institutional status (i.e., stayed or transferred) were identified.

Significance of the Study

Substantial gains have been made in terms of college access, but attainment gaps still exist across racial ethnic groups. Black students face educational issues at a very early age that first emerge in elementary school and expand all the way to higher education. When Black students underperform, they are not prepared for life after college and potentially face high unemployment rates and illiteracy. The repercussions of this cycle can leave devastating effects on the national economy of the United States (Palmer, Davis, Moore, & Hilton, 2010). Community colleges serve as a critical pathway for Black students to earn an associate and ultimately bachelor degree. However, persistence rates for Black students need to improve before graduation rates can increase. Information regarding the 2-year persistence rates for Black students in Texas community

colleges was provided in this study. The results of this study may be used to help policymakers and higher education administrators improve persistence rates for Black students in Texas community colleges.

Research Questions

In this study, the following research questions were addressed: (a) What is the difference in the 2-year persistence rates by student institutional status (i.e., stayed or transferred) for Black 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 Black 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

In this study a non-experimental causal-comparative research design was used (Creswell, 2009; Johnson & Christensen, 2012). The independent variable cannot be manipulated in non-experimental, causal comparative research. The archival data that were analyzed signify events that had already transpired (Johnson & Christensen, 2012). The independent variable that was analyzed was the institutional status of Black students in each of the academic years of data analyzed herein. As noted previously, institutional status was whether a student stayed at the same Texas community college for two years or whether a student transferred to a different Texas community college after two years.

The dependent variables that were present in this investigation were the 2-year persistence rates of Black students. A total of 7 years of data were available for analysis.

Participants and Instrumentation

The Texas Higher Education Coordinating Board Interactive Accountability System was used to obtain archival data for the 2006-2007 through the 2013-2014 academic years on Texas community colleges. In Texas, 68 institutions are labeled as community colleges and nine institutions are labeled as community college districts within the Texas higher education dataset. Each of these community colleges and community college districts are required by the Texas Higher Education Coordinating Board to report the 2-year persistence rates, along with other data, of their students by ethnicity/race. These data are then aggregated by the Texas Higher Education Coordinating Board and made publicly available at the Texas Higher Education Coordinating Board Interactive Accountability System.

The Texas Higher Education Coordinating Board Interactive Accountability database was the source from which data was downloaded for this investigation. Although student persistence rate data are reported for multiple student characteristics, only the 2-year persistence rates for Black students were downloaded from this database. Every community college in Texas has statistical data in a database maintained by the Texas Higher Education Coordinating Board. Every Texas public community college, with the inclusion of descriptive statistical data, is represented in this comprehensive database.

Results

Prior to conducting inferential statistics to determine whether differences were present in the 2-year persistence rates of Black students enrolled in Texas community colleges, checks were conducted to determine the extent to which these data were normally distributed (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.

For the 2007-2008 academic year, the parametric dependent samples *t*-test did not reveal a statistically significant difference in the 2-year persistence rates, $t(69) = -0.46$, $p = .65$, between Black students who stayed at the same Texas community college and Black students who transferred to a different Texas community college after one year. The 2-year persistence rates were similar, 24% to 25%, for Black students who stayed at the same Texas community college and for Black students who transferred to a different Texas community college. Readers are directed to Table 3.2 for the descriptive statistics for this analysis.

Insert Table 3.2 about here

Concerning the 2008-2009 academic year, the parametric dependent samples *t*-test did not reveal a statistically significant difference in the 2-year persistence rates, $t(69) = -0.08$, $p = .94$, between Black students who stayed at the same Texas community college and Black students who transferred to a different Texas community college after

one year. The 2-year persistence rates were nearly identical, around 27%, for Black students who stayed at the same Texas community college and for Black students who transferred to a different Texas community college. Table 3.3 contains the descriptive statistics for this analysis.

Insert Table 3.3 about here

With respect to the 2009-2010 academic year, a statistically significant difference was not present in the 2-year persistence rates, $t(70) = 1.39, p = .17$, between Black students who stayed at the same Texas community college and Black students who transferred to a different Texas community college after one year. Similar 2-year persistence rates, 23% to 20%, were present for Black students regardless of their institutional status. Revealed in Table 3.4 are the descriptive statistics for this analysis.

Insert Table 3.4 about here

For the 2010-2011 academic year, a statistically significant difference was not revealed in the 2-year persistence rates, $t(70) = -1.62, p = .11$, between Black students who stayed at the same Texas community college and Black students who transferred to a different Texas community college after one year. Congruent with the previous three academic years, the 2-year persistence rates were similar, 23% to 28%, for Black students, regardless of their institutional status. Delineated in Table 3.5 are the descriptive statistics for this analysis.

Insert Table 3.5 about here

Concerning the 2011-2012 academic year, a statistically significant difference was not yielded in the 2-year persistence rates, $t(70) = -1.05$, $p = .30$, between Black students who stayed at the same Texas community college and Black students who transferred to a different Texas community college after one year. The 2-year persistence rates were similar, 23% to 26%, for Black students who stayed at the same Texas community college and for Black 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

With respect to the 2012-2013 academic year, a statistically significant difference was not revealed in the 2-year persistence rates, $t(71) = -1.42$, $p = .16$, between Black students who stayed at the same Texas community college and Black students who transferred to a different Texas community college after one year. The 2-year persistence rates were similar, 22% to 26%, for Black students, regardless of their institutional status. Revealed in Table 3.7 are the descriptive statistics for this analysis.

Insert Table 3.7 about here

For the 2013-2014 academic year, a statistically significant difference was not present in the 2-year persistence rates, $t(71) = -0.04$, $p = .97$, between Black students who stayed at the same Texas community college and Black students who transferred to a different Texas community college after one year. The 2-year persistence rates were similar, around 26%, for Black students regardless of their institutional status. Table 3.8 contains the descriptive statistics for this analysis.

Insert Table 3.8 about here

The final research question involving the degree to which trends were present in the 2-year persistence rates by Black student institutional status will now be addressed. As revealed in Figure 3.1, trends were present in the 2-year persistence rates by student institutional status (i.e., stayed or transferred) for Black students who were enrolled in Texas community colleges. The 2-year persistence rates of Black students who stayed at the same Texas community college and the 2-year persistence rates of Black students who transferred to a different Texas community college were congruent across the seven academic years of data analyzed herein. Over this 7-year time period, the 2-year persistence rates for Black students who stayed increased by 1% and the 2-year persistence rates for Black students who transferred increased by 2%. In both cases, the 2-year persistence rates of Black students were low.

Insert Figure 3.1 about here

Discussion

In this investigation, the degree to which differences were present in the 2-year persistence rates of Black students in Texas community colleges by student institutional status (i.e., stayed or transferred) was addressed. Seven years of archival data from the Texas Higher Education Coordinating Board Interactive Accountability System were obtained and analyzed. In this examination, 70 Texas community colleges provided data that were analyzed in the 2007-2008 through the 2008-2009 academic years and 71 Texas community colleges provided data that were analyzed in the 2009-2010 through the 2011-2012 academic years. For the 2012-2013 through the 2013-2014 academic years, 72 Texas community colleges provided data that were analyzed.

Of the seven academic years of data that were analyzed, statistically significant differences were not present in the 2-year persistence rates of Black students by their institutional status in any academic year. The 2-year persistence rates for Black students, regardless of whether they stayed or transferred, were consistently in the 20s in the seven academic years analyzed. Clearly, based upon the results of this investigation, the 2-year persistence rates reflect that too few Black students persist through the second year in community colleges in Texas regardless of their institutional status. Table 3.9 contains a summary of the results for the 2-year persistence rates by institutional status for Black community college students in Texas in the 2007-2008 through the 2014-2015 academic years.

Insert Table 3.9 about here

Connections with Existing Literature

In a previous investigation, Moss and Slate (2015) analyzed the 2-year persistence rates of Black students enrolled in Texas community colleges in the 2000 and 2012 academic years. They determined that the 2-year persistence rates of Black students were not statistically significantly different when they stayed at the same institution than when transferred. In this multiyear, statewide investigation, results were congruent with Moss and Slate (2015) that 2-year persistence rates were similar for Black students who stayed at the same community college or who transferred to a different community college. Community colleges continue to suffer low persistence rates despite the student success initiatives that are currently in place (Braxton et al., 2004). As a result, almost one half of students leave before completing the first year.

Connection to Theoretical Framework

In this article, the model of student departure (Tinto, 1993) was used as the theoretical framework. Tinto (1993) contended that students needed to separate from their former communities to make an effective transition to college. Student retention and persistence rates were higher when students were engaged in the academic and social experiences of college than when they were not engaged in these experiences. However, some researchers (e.g., Bailey, Leinbach, & Jenkins, 2005; Braxton et al., 2004; Pascarella, Smart, & Ethington, 1986) determined that social integration was not as important at community colleges as 4-year institutions.

Stuart et al. (2014) noted that community colleges should be intentional in developing programs to help students achieve academic success. The results of this study are commensurate with the findings of these authors. Black community college students

face many obstacles that impede their educational progress. By incorporating effective student success measures, community colleges can increase the persistence rates of Black students.

Implications for Policy and Practice

Implications for policy and practice may be derived from the results of this study. First, based upon the low 2-year persistence rates of Black students in this multiyear analysis, programs and initiatives to support Black students at Texas community colleges are clearly needed. In this analysis, the 2-year persistence rates of Black students in Texas community colleges were similar when they stayed at the same community college or when they transferred to a different community college. Community colleges need to implement measures to audit the 2-year persistence rates of their Black students. According to Mangan (2014), persistence rates are still low at community colleges despite student success measures in place. Community colleges with low 2-year persistence rates should assess their programs to determine what changes need to be made. Academic advisors need to communicate with Black students to determine the best strategies to help them stay enrolled and achieve success. In addition, community colleges need to focus on programs designed to help students transfer.

Community colleges with low 2-year persistence rates need to make changes to their programs and implement new initiatives to help Black students succeed. Educational leaders must find solutions to help Black students persist past the second year. Many Black students face financial hardships while enrolled in school and, as a result, are unable to focus on their studies to be successful. Another factor in the low 2-year persistence rates at community colleges is that some Black students transfer to a 4-

year institution after the first year or semester without ever making it to the second year. Community colleges must improve existing college readiness and retention programs for Black students. Retention of Black students in community colleges is a huge challenge for the entire nation. In the age of scarce and dwindling resources, this task is even greater. Community colleges should maximize the resources on hand by collaborating with local businesses, school districts, and community members to find viable solutions to help Black students stay in school and persist to graduation.

Recommendations for Future Research

For this study, differences in the 2-year persistence rates by student institutional status for Black students at Texas community colleges were examined. Given the low 2-year persistence rates of Black students revealed in this study, researchers should consider extending this study to other underrepresented student groups such as Hispanic students to determine the degree to which results from this investigation are generalizable to other ethnic/racial groups. In addition, the 2-year persistence rates of Asian, White, and international students should be investigated to determine the degree to which these two ethnic/racial groups persist in community colleges. Another recommendation is to replicate this investigation in other states to determine whether the results for Black students discussed previously are generalizable to other states. Because the data analyzed herein were from all the Texas community colleges, researchers are encouraged to examine each community college results to identify Texas community colleges that have higher 2-year persistence rates for Black students who stay and for Black students who transfer. Then qualitative and or mixed-methods research studies could be conducted to ascertain the reasons why these community colleges are successful. Researchers can gain

insight from Black students, faculty, staff, and educational leaders on how Black students can improve persistence rates. Similar investigations could be conducted into the Texas community colleges with the lowest 2-year persistence rates of Black students. Lastly, more research is needed to understand the underlying reasons for the low 2-year persistence rates regardless of whether Black students stayed or transferred to a different community college.

Conclusion

In this multiyear analysis, the 2-year persistence rates of Black students in Texas community colleges were analyzed as a function of whether they stayed at the same community college or transferred to a different community college. Over the seven academic years of data analyzed, the 2-year persistence rates were low both for Black students who stayed and for Black students who transferred to a different community college. As such, efforts are needed on the behalf of community colleges to address these low persistence rates.

Tinto's model of student departure (Tinto, 1993) illustrates the need for college students to become socially connected on their campus by fostering new relationships with faculty, staff, and classmates so that they may assimilate into their new higher education environment. The majority of new students at 4-year institutions are living away from home for the first time as they transition into a new era of independence. Tinto (1993) contended that students who were actively engaged and who cultivated new relationships on campus were more likely to have higher persistence and retention rates than students who remained to themselves. Although this model might work at the university level, it is not as effective for community college students. Most community

college students return to their ecological systems of family, friends, neighborhoods, and jobs when they leave their community college campus each day. Many of these students are from low socioeconomic backgrounds and struggle daily to survive and provide for themselves and their families. The relationships, resources, and comfort provided by the community college is a welcome oasis for students who must return to the grim reality offered to them in their community and neighborhood. Community college leaders and stakeholders must continue to discuss these issues to help increase the student success of community college students. Life factors must be considered when examining the persistence rates of community college students.

References

- ACT, Inc. (2011). *National collegiate retention and persistence to degree rates*. Retrieved from https://www.noellevitz.com/documents/shared/Papers_and_Research/ACT_Data/2011%20ACT%20Retention%20tables-web.pdf
- American Association of Community Colleges. (2016). *Community colleges trends and statistics*. Retrieved from <http://www.aacc.nche.edu/AboutCC/Trends/Pages/default.aspx>
- Bailey, T. R., & Alfonso, M. (2005). Paths to persistence: An analysis of research on program effectiveness at community colleges. *Lumina Foundation for Education's New Agenda Series*, 6(1), 1-44.
- Bailey, T., Jenkins, D., & Leinbach, D. T. (2007). The effect of student goals on community college performance measures. *Community Research Center Brief*, 33, 1-4.
- Bailey, T., Leinbach, T., & Jenkins, D. (2005). *Graduation rates, student goals, and measuring community college effectiveness* (CCRC Brief No 28). New York, NY: Community College Research Center, Teachers College, Columbia University.
- Bailey, T., Alfonso, M., Calcagno, J. C., Jenkins, D., Kienzl, G., & Leinbach, T. (2004). *Improving student attainment in community colleges: Institutional characteristics and policies*. New York, NY: Community College Research Center, Teachers College, Columbia University.

- Bean, J. P., & Eaton, S. B. (2000). A psychological model of college student retention. In J. M. Braxton (Ed.), *Reworking the student departure puzzle* (pp. 48-61). Nashville, TN: Vanderbilt University Press.
- Bensimon, E. M. (2007). The underestimated significance of practitioner knowledge in the scholarship on student success. *The Review of Higher Education, 30*, 441-469.
- Bill and Melinda Gates Foundation. (2009). *Postsecondary success: Strategy overview*. Retrieved from <http://www.gatesfoundation.org/postsecondaryeducation>
- Bontrager, B., & Hossler, D. (2014). *Handbook of strategic enrollment management*. San Francisco, CA: Jossey-Bass.
- Brandon, K. (2009). *Investing in education: The American graduate initiative*. Washington, DC: The White House.
- Braxton, J., Doyle, W., Hartley, H., Hirschy, A., Jones, W., & McClendon, M. (2014). *Rethinking college student retention*. San Francisco, CA: Jossey-Bass.
- Braxton, J. M., Hirschy, A. S., & McClendon, S. A. (2004). *Understanding and reducing college student departure: ASHE-ERIC higher education report (Volume 30, No.3)*. San Francisco, CA: Jossey-Bass.
- Carey, K. (2009). Achieving President's Obama's completion goal. *Diverse Issues in Higher Education, 26*(9), 52-53.
- Cejda, B. D., & Hoover, R. E. (2010). Strategies for faculty-student engagement: How community college faculty engage Latino students. *Journal of College Student Retention: Research, Theory and Practice, 12*(2), 135-153.

- Chen, G (2015). *The catch-22 of community college graduation rates*. Retrieved from <http://www.comunitucollegereview.com/blog/the-catch-22-of-community-college-graduation-rates>
- Cohen, A. M., & Brawer, F. B. (2008). *The American community college* (5th ed.). San Francisco, CA: Jossey-Bass.
- College Board. (2012). *Recommendation nine: Dramatically increase college completion rates*. Retrieved from <http://completionagenda.collegeboard.org/recommendations/nine?qt-recommendation=1&indicator=37>
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. (3rd ed.). Thousand Oaks, CA: Sage.
- Davidson, J. C., & Petrosko, J. M. (2015). Predictors of persistence for developmental math students in a community and technical college system. *Community College Journal of Research and Practice*, 39(2), 163-178.
- Dougherty, K. J. (1992). Community colleges and baccalaureate attainment. *Journal of Higher Education*, 63, 188-213.
- Escobedo, G. (2007). A retention/persistence intervention model: Improving success across cultures. *Journal of Developmental Education*, 31(1), 12-37.
- Esters, L. L., & Mosby, D. C. (2007). Disappearing acts: The vanishing Black male on community college campuses. *Diverse Issues in Higher Education*, 24(14), 45.
- 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.

- Hongwei, Y. (2015). Student retention at two-year community colleges: A structural equation modeling approach. *International Journal of Continuing Education & Lifelong Learning*, 8(1), 85-101.
- Johnson, R. B., & Christensen, L. (2012). *Educational research: Quantitative, qualitative, and mixed approaches* (4th ed.). Los Angeles, CA: Sage.
- Kirst, M. W. (2008). Secondary schools and colleges must work together. *Thought and Action*, 24(1), 111-122.
- Kotamraju, P., & Blackmon, O. (2011). Meeting the 2020 American Graduation Initiative (AGI) goal of increasing postsecondary graduation rates and completions: A macro perspective of community college student educational attainment. *Community College Journal of Research & Practice*, 35(3), 202-219.
doi:10.1080/10668926.2010.526045
- Lee, Jr., J. M., Edwards, K., Menson, R., & Rawls, A. (2011). *The College Completion Agenda: 2011 Progress Report*. New York, NY: College Board Advocacy and Policy Center.
- Liao, H. I., Edlin, M., & Ferdenzi, A. C. (2014). Persistence at an urban community college: The implications of self-efficacy and motivation. *Community College Journal of Research & Practice*, 38, 595-611.
doi:10.1080/10668926.2012.676499
- Mangan, K. (2014). Community colleges test ways to clear students' path to success. *Chronicle of Higher Education*, 61(4), A10-A11.

- McIntosh, M. F., & Rouse, C. E. (2009). *The other college: Retention and completion rates among two-year college students*. Washington, DC: Center for American Progress.
- Mertes, S. J., & Hoover, R. E. (2014). Predictors of first-year retention in a community college. *Community College Journal of Research and Practice*, 38, 651-660.
doi:10.1080/10668926.2012.711143
- Morrice, P. I. (2011). *"It's the perfect baby step": African American students' community college choice and transfer to four-year colleges and universities* (Unpublished doctoral dissertation). University of Michigan, Ann Arbor, MI.
- Mortenson Research Seminar on Public Policy Analysis of Opportunity for Postsecondary Education. (2001). College participation by gender, age 18 to 24, 1967 to 2000. *Postsecondary Education Opportunity*, 109, 1-16.
- Moss, S., & Slate, J. R. (2015). Differences in Black students' persistence rates in Texas community colleges by institutional status. *International Journal of University Teaching and Faculty Development*, 5(3), 1-10.
- Mullin, C., & Phillippe, K. (2009). *Community college enrollment surge: AACC policy brief series*. Washington, DC: American Association of Community Colleges.
- National Center for Education Statistics. (2012). *Digest of education statistics*. Retrieved from http://nces.ed.gov/programs/jigest/2012menu_tables.asp
- National Center for Education Statistics. (2013). *Digest of education statistics*. Retrieved from <http://nces.edgov/programs/digest/d13/tables/dt13%5F303.25.asp>

- Nora, A., Barlow, E., & Crisp, G. (2005). Student persistence and degree attainment beyond the first year in college. In A. Seidman (Ed.), *College student retention: Formula for student success* (pp. 129-153). Westport, CT: Praeger.
- Onwuegbuzie, A. J., & Daniel, L. G. (2002). Uses and misuses of the correlation coefficient. *Research in the Schools, 9*(1), 73-90.
- Palmer, R. T., Davis, R. J., Moore, I., & Hilton, A. (2010). A nation at risk: Increasing college participation and persistence among African American males to stimulate U.S. global competitiveness. *Journal of African American Males in Education, 1*, 105-124.
- Pascarella, E. T., Smart, J. C., & Ethington, C. A. (1986). Long-term persistence of two-year college students. *Research in Higher Education, 24*, 47-71.
- Polite, V. C., & Davis, J. E. (1999). *African American males in school and society*. New York, NY: Teachers College Press.
- Price, V., & Tovar, E. (2014). Student engagement and institutional graduation rates: Identifying high-impact educational practices for community colleges. *Community College Journal of Research and Practice, 38*, 766-782.
doi:10.1080/10668926.2012.719481
- Roach, R. (2013). Steady college enrollment growth for underrepresented minorities, college completion rates increasing more slowly. *Diverse Issues in Higher Education*. Retrieved from <http://diverseeducation.com/article/54837/#>
- Sandoval-Lucero, E. L. (2014). African American and Latina(o) community college students' social capital and student success. *College Student Journal, 48*, 522-533.

- Shinde, G. S. (2010). The relationship between students' responses on the national survey of student engagement (NSSE) and retention. *Review of Higher Education & Self-Learning, 3*(7), 54-67.
- Strayhorn, T. L. (2006). Factors influencing the academic achievement of first-generation college students. *NASPA Journal, 43*(4), 82-111.
- Strayhorn, T. L. (2012). Satisfaction and retention among African American men at two-year community colleges. *Community College Journal of Research and Practice, 36*, 358-375.
- Stuart, G. R., Rios-Aguilar, C., & Deil-Amen, R. (2014). "How much economic value does my credential have?" Reformulating Tinto's model to study students' persistence in community colleges. *Community College Review, 42*, 327-341.
doi:10.1177/0091552114532519
- Sutherland, J. A. (2011). Building an academic nation through social networks: Black immigrant men in community colleges. *Community College Journal of Research and Practice, 35*, 267-279.
- Swail, W. S., Redd, K., & Perna, L. (2003). *Retaining minority students in higher education: A framework for success* (ASHE-ERIC Higher Education Report). San Francisco, CA: Jossey-Bass.
- Thelin, J. R. (2004). *A history of American higher education*. Baltimore, MD: Johns Hopkins University Press.
- The White House. (2009). *Remarks of President Barack Obama: Address to joint session of congress*. Retrieved from <https://www.whitehouse.gov/the-press-office/remarks-president-barack-obama-address-joint-session-congress>

Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition.*

Chicago, IL: University of Chicago Press.

Wilson, D. (2014). Follow me to the baccalaureate: Reflections and advice from African

American community college transfer student journeys. *Community College*

Enterprise, 20(2), 72-84.

*Table 3.1**Summary of Studies on Differences in 2-Year Persistence Rates of Black Students*

Author(s)	Year	Topic	Outcome
Hongwei	2015	Student persistence at community colleges	Students were more likely to drop out at larger community colleges than smaller ones
Davidson & Petrosko	2015	Relationships among academics, demographics, work and family with persistence rates	Students are more likely to persist in face to face courses with an online component
Moss & Slate	2015	2-year persistence rates of Black students enrolled in Texas community colleges during 2000 and 2012	2-year persistence rates of Black students were not significantly different when they stayed at the same institution than when they transferred
Shinde	2010	Connection between persistence from one fall semester to the next fall semester	Student engagement has a positive effect on persistence rates and grades during the first and second year
Escobedo	2007	Persistence and retention of community college developmental students	The first year is critical in linking students to college resources and faculty and staff members who can help them succeed

Table 3.2

Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Black 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	23.83	13.69
Transferred	70	25.17	20.26

Table 3.3

Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Black 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	26.69	15.32
Transferred	70	26.93	19.43

Table 3.4

Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Black 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	23.24	11.55
Transferred	70	20.27	12.97

Table 3.5

Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Black 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	23.14	10.48
Transferred	71	28.21	25.54

Table 3.6

Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Black 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	71	22.94	15.58
Transferred	71	26.29	22.80

Table 3.7

Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Black 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	21.92	13.08
Transferred	72	25.77	21.98

Table 3.8

Descriptive Statistics for the 2-Year Persistence Rates by Institutional Status for Black 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	26.28	19.51
Transferred	72	26.17	22.31

Table 3.9

Results for the 2-Year Persistence Rates by Institutional Status for Black 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	N/A	Transferred
2008-2009	N/A	Transferred
2009-2010	N/A	Stayed
2010-2011	N/A	Transferred
2011-2012	N/A	Transferred
2012-2013	N/A	Transferred
2013-2014	N/A	Stayed

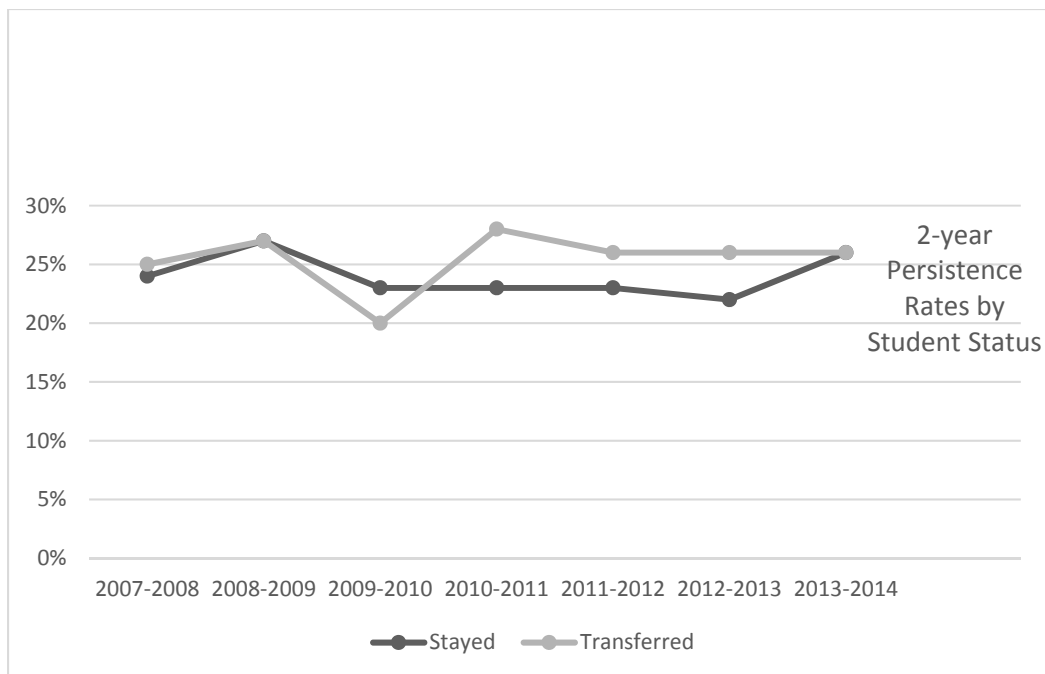


Figure 3.1. Trends in the 2-year persistence rates of Black students who stayed or transferred to a different Texas community college in the 2007-2008 through the 2013-2014 academic years.

CHAPTER IV
DIFFERENCES IN GRADUATION RATES AT TEXAS COMMUNITY COLLEGES
BETWEEN BLACK AND WHITE STUDENTS: A MULTIYEAR, STATEWIDE
EXAMINATION

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

Abstract

In this multiyear, statewide investigation, the graduation rates of Black students and White students in Texas community colleges were analyzed for the 2007-2008 through the 2015-2016 academic years. Of particular interest was whether graduation rates at community colleges in Texas differed between Black and White students in these academic years. Inferential statistical analyses revealed statistically significant differences, with large effect sizes, in graduation rates between Black and White students in Texas community colleges in the 2007-2008 through the 2015-2016 academic years. The average graduation rates of White students were almost 15% higher than the average graduation rates of Black students. Implications for practice and recommendations for future research were provided.

Keywords: Black students, White students, Texas, community college, graduation rates

DIFFERENCES IN GRADUATION RATES AT TEXAS COMMUNITY COLLEGES
BETWEEN BLACK AND WHITE STUDENTS: A MULTIYEAR, STATEWIDE
EXAMINATION

From its inception, the long standing mission of community college, as open door institutions, has been to provide a wide range of students with college access (Bailey, Calcagno, Jenkins, Leinbach, & Kienzl, 2006; Cohen & Brawer, 2008; Wood, 2012). Community colleges also provide students with the opportunity for specialized workforce and education training (Freeman, 2007). The community college pathway offers a practical road to the workforce as a more reasonable higher education option than 4-year institutions (Cohen & Brawer, 2008; Freeman, 2007). Most important, community colleges provide low-income individuals with a pathway to the middle class (Scrivener et al., 2015).

Because of its open door policy, community colleges tend to have a more diverse make-up than institutions granting baccalaureate degrees (Freeman, 2007). “Nationally, 50% of Hispanic students start at a community college, along with 31% of African American students. In comparison, 28% of White students begin at community colleges” (National Center for Public Policy and Higher Education, 2011, p. 3). Over 1,200 American community colleges enroll over half of all minority students in higher education (American Association of Community Colleges, 2014a; Saenz, 2002). Thus, community colleges are leaders in educating students from various backgrounds (Cox, Joyner, & Slate, 2011). Traditionally, community colleges have focused on student access but now they must turn their attention toward improving student success while preserving access (Goldrick-Rab, 2007). Community colleges close educational gaps and

link ethnicities by providing all students with a chance of earning a higher education regardless of family upbringing and past academic performance (Morest, 2013).

Although community college access has increased, graduation rates remain substantially low; particularly for students needing developmental courses to improve their proficiency in reading, writing, and mathematics (Scrivener et al., 2015).

Community colleges continue to struggle with low completion rates because nearly half of all students enrolled drop out before completing the first year (Braxton, Hirschy, & McClendon, 2004). Of all the students enrolled in community college credit courses, only a small fraction will receive a degree (Linderman & Kolenovic, 2013). According to the College Board (2012b), nearly 50% of community college students across the nation will not graduate within 6 years. Schneider and Yin (2012) reported that the graduation rates of 36% of community colleges in the United States were less than 15% (Schneider & Yin, 2012).

The disproportionate production of community college degrees comes at a time when the demand for highly skilled workers is increasing. To keep up with the workforce demands, the United States must produce 25% more associate degrees and 20% more bachelor degrees by 2025 (Reindl, 2007). Over the last 10 years, more attention has been placed on student outcomes after they enroll in community colleges, with a special emphasis placed on graduation rates (Freeman, 2007). According to the United States Department of Education (2010), less than 23% of all students enrolled in community colleges complete an associate degree within three years. Community college students are often unprepared for college-level courses with over 40% in developmental classes (Snyder & Dillow, 2011). Lee and Ransom (2011) explained,

As of 2008, only 42% of 25 to 34 year olds in the United States has attained an associate degree or higher. Only 30% of African Americans and 20% of Latinos aged 25 to 34 has attained an associate degree of higher in the United States, compared to 49% for White Americans and 71% for Asian Americans. (p. 9)

In 2008 former President Barack Obama established an ambitious goal of the United States leading the world in in the number of college graduates by 2020. To meet this goal, the president acknowledged that graduation rates would need to improve across higher education (Wyner, 2012). Community colleges will have to produce five million more graduates by 2020 to meet the president's challenge of leading the world in the number of college graduates (Adams, 2011). Given this agenda, community colleges across the country have received more attention. Community colleges enroll about 40% of all undergraduates and graduate almost 25% full-time students nationally (Wyner, 2012). Due to the rising cost of 4-year institutions, community colleges are the nations's best hope for providing a higher education to low-income students. For the United States to remain competitive, a larger percentage of low-income students will need to graduate from college with the skills to navigate a new economy (Padron, 2013).

Community college leaders know that completion and graduation rates of students enrolled in community college are affected by the challenges they face in life. Many of these students can only attend part time because they are managing school, jobs, and families (Linderman & Kolenovic, 2013; Whissemore, 2011). In terms of part-time students, less than 8% graduate with a 2-year associate degree within four years (Whissemore, 2011). Developmental education courses are another challenge because students in remediation are less likely to graduate (Whissemore, 2011) than are students

who do not have to take developmental education courses. Consequently, nearly 45% of all community college students report taking at least one developmental course (Attewell, Heil, & Reisel, 2011).

Improving graduation rates of low-income and marginalized students is a major challenge for community colleges. According to American College Testing, the national three- year persistence to graduation rate was 25.4% for community colleges (21st-Century Commission on the Future of Community Colleges, 2012). Lee and Ransom (2011) stated,

As of 2008, only 42% of 25- to 34 year-olds in the United States had attained an associate degree as of 2008, only 42% of 25- to 34 year-olds in the United States had attained an associate degree or higher. Only 30% of African Americans and 20 % of Latinos ages 25 to 34 had attained an associate degree or higher in the United States, compared to 49% for White Americans 71% for Asian Americans.
(p. 9)

For the United States to remain economically competitive, it is imperative that the completion and graduation rates of Black students increase to close the gap between the completion and graduation rates of Black students and White students. In fact, Black and Hispanic students made the least progress from 1990 to 2000 in terms of completion and graduation rates, causing the gap between Black students and White students to expand (Kelly, 2005). To deal with this educational attainment gap, the United States will have to increase the number of degrees and certificates awarded to Black, Hispanic, first-generation, and low-income students to deal with this degree gap (National Center for Higher Education Management Systems and Jobs for the Future, 2007).

Graduation rates have increased for community colleges and universities but they are not decreasing the gap between underrepresented Black students and White students. In a recent study by the Education Trust, graduation rates increased at public 4-year college and universities between 2003 and 2013, which bodes well for former President Obama's goal of increasing the number of college graduates by 2020. Unfortunately, the graduation gap between Black students and White students only decreased by 1% during the same time (Camera, 2015).

Black students are are falling behind White students in every stage of the educational process. They are less likely to complete high school and and to enroll in college, and more unlikely to graduate from college. In 2013 only 20% of Blacks between the ages of 25 and 29 had a bachelor's degree or higher, in comparison to 40% of Whites who had a bachelor's degree or higher (Casselman, 2014). Complete College America (2011) reported that students are less likely to earn a degree if it takes them longer to progress through college. Students are less likely to receive a bachelor degree and advance through college when they start in developmental courses, only take courses part-time, or start at a community college. One of the greatest challenges of community colleges is meeting the needs of students who do not have the proper financial, academic, or family support needed to be successful. Community colleges must be willing to take a serious examination at every facet of the student experience ranging from the application process to degree attainment (Linderman & Kolenovic, 2013).

In a recent analysis, Spangler and Slate (2015) investigated the graduation rates of Texas community college students by ethnicity for the 2000 through the 2010 academic years. They reported that the graduation rates of Asian, White, Black, and Hispanic

students increased over a 10-year period. In 2010, Asian students had the highest graduation and persistence rate whereas Black students had the lowest graduation and rates. The graduation rate of Asian students increased 12% over a 10-year period to 49% in 2010. The graduation rate of White and Hispanic students increased 9% over a 10-year period to 45% and 41% respectively. The graduation rate of Black students increased 8% over a 10-year period to 31%. Spangler and Slate (2015) posited that policymakers must implement policies and strategies to improve graduation and persistence rates of community colleges. Moreover, community colleges need success measures in place that align to the goals of the institution (Spangler & Slate, 2015).

In another recent quantitative study, Rankin, Scott, and JoHyun (2015) analyzed graduation rates in Oklahoma and Texas community colleges by measuring Oklahoma's Brain Gain and Texas' Closing the Gaps policies to increase degree attainment. Rankin et al. (2015) documented that the 3-year graduation rates in both Texas and Oklahoma declined from the 2002 to the 2012 academic years. Although both states adopted policies to increase their community college graduation rates, fewer Black and White students were graduating from Texas and Oklahoma community colleges.

Also focusing on graduation rates, Price and Tovar (2014) examined the relationship between graduation rates and student engagement in community colleges in 2009. In this study, data were used from the Community College Survey of Student Engagement survey and the institutional graduation rates reported to the Integrated Postsecondary Education Data System. Price and Tovar (2014) established that student engagement positively affected college completion and graduation rates. Campus student

support services and active collaborative learning practices enhances student engagement and improves completion and graduation rates.

Davidson (2015) evaluated the likelihood of students graduating from a Kentucky community college and transferring to a 4-year university. Student odds of graduating were 289% higher when they earned 30 credit hours by the end of the first year. Accordingly, community colleges need to invest more resources in advising and counseling to make sure that students are taking the correct courses to acquire a degree in a realistic amount of time. Davidson (2015) indicated practices such as the first-year experience, frequent academic advising contact, face to face orientation, and development of a college and career plan create academic momentum to help increase student persistence and graduation rates. Table 4.1 contains a summary of studies on differences in graduation rates between Black and White students.

Insert Table 4.1 about here

Statement of the Problem

Postsecondary degrees are now becoming a requirement for the emergent jobs in our new economy. Jobs requiring more than a high school diploma are growing more rapidly than jobs only needing a high school diploma (The White House, 2016). From 2008 to 2018 the economy of the United States is predicted to grow by 14.4 million jobs, with 63% of all professions needing a postsecondary degree (Carnevale, Smith, & Strohl, 2010). Furthermore, earning a college degree is the the quickest route to the middle class

because the earnings of college graduates are twice as high as the earnings of high school graduates (The White House, 2016).

Despite the demand for more college degrees, the United States is presently on track to be 5 million workers short to fill positions needing postsecondary credentials by 2018 (Center for American Progress, 2012). Community colleges can help fill this void by providing a means to a stable career and economic security for many students. Many students, after completing an associate's degree, transfer to a 4-year institution to continue their education. Of the students enrolled in community colleges, between 25% and 39% eventually transfer to a 4-year institution (American Association of Community Colleges, 2012).

Purpose of the Study

The purpose of this study was to examine the graduation rates of Black and White students in Texas community colleges from the 2007-2008 through the 2015-2016 academic years. Specifically, the degree to which differences might be present in graduation rates between Black and White students in Texas community colleges were addressed. Through analyzing multiple years of data, any trends that might be present in the graduation rates of Black and White students at Texas community colleges were determined.

Significance of the Study

Important information regarding graduation rates of Black and White students at Texas community colleges will be provided by this study. Texas is a microcosm of the United States in terms of student degree attainment. Both Texas and the United States face tremendous challenges with educational attainment gaps and the need to increase the

number of students earning a degree. This student attainment dilemma not only affects the State of Texas, but can have long term consequences for the entire nation.

Accordingly, a proposal was made by the Texas Higher Education Coordinating Board to increase the number of individuals receiving a degree or certificate between the ages of 25 and 34 by 60% by 2030 (Texas Higher Education Coordinating Board, 2016e).

Improvements are being made to achieve these goals, however, Black and White students are still facing issues with degree attainment. Policies such as the one proposed by the Texas Higher Education Coordinating Board and former President Obama's 2020 American Graduation Initiative Plan are importance in addressing critical issues facing higher education. As such, the information provided by this study is critical to assess the progress made in the state of Texas in terms of graduation rates for Black and White students in community colleges. The results of this study can help policymakers in Texas implement sound strategies to increase the number of college graduates in United States.

Research Questions

In this study, the following research questions were addressed: (a) What is the difference in the graduation rates between Black and White students enrolled in Texas community colleges? and (b) To what extent are trends present in the graduation rates between Black and White students 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, 2013-2014, 2014-2015, and 2015-2016 academic years. The second research question involved results from all 9 academic years.

Method

Research Design

A non-experimental causal-comparative research design was used for this study (Creswell, 2009; Johnson & Christensen, 2012). In causal comparative research the independent variable cannot be manipulated in any way. The independent variable cannot be manipulated in non-experimental, causal comparative research. The archival data were examined significant events that have previously occurred (Johnson & Christensen, 2012). The independent variable that was analyzed was the ethnicity/race (i.e., White, Black) of students. The dependent variables that were present in this investigation were the graduation rates of Black and White students. A total of 9 years of data was available for analysis.

Participants and Instrumentation

Archival data were obtained for the 2007-2008 through the 2015-2016 academic years from Texas community colleges using the Texas Higher Education Coordinating Board Interactive Accountability System. In the state of Texas, 68 institutions are categorized as community colleges and nine institutions are categorized as community college districts within the Texas higher education dataset. Each of these community colleges and community college districts are required by the Texas Higher Education Coordinating Board to report the graduation rates, along with other data, of their students by ethnicity/race. These data are then aggregated by the Texas Higher Education Coordinating Board and made available to the public at the Texas Higher Education Coordinating Board Interactive Accountability System.

In this investigation, data were downloaded from the Texas Higher Education Coordinating Board Interactive Accountability database. Only the graduation rates of Black and White students from Texas community colleges were downloaded from this database. The Texas Higher Education Coordinating Board maintains statistical data on every community college in Texas. In this comprehensive database, every Texas public community college, with the inclusion of descriptive statistical data, is represented.

Results

Prior to conducting inferential statistics to determine whether differences were present in graduation rates between Black and White students enrolled in Texas community colleges, checks were conducted to determine the extent to which these data were normally distributed (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.

For the 2007-2008 academic year, the parametric dependent samples *t*-test revealed a statistically significant difference in graduation rates, $t(68) = 7.35, p < .001$, between Black and White students at Texas community colleges. This difference represented a large effect size (Cohen's *d*) of 1.13 (Cohen, 1988). The graduation rates of Black students were substantially lower, 13% lower, than the graduation rates of White students at Texas community colleges. Readers are directed to Table 4.2 for the descriptive statistics for this analysis.

Insert Table 4.2 about here

For the 2008-2009 academic year, the parametric dependent samples *t*-test revealed a statistically significant difference in graduation rates, $t(68) = 6.80, p < .001$, between Black and White students at Texas community colleges. This difference represented a large effect size (Cohen's *d*) of 1.07 (Cohen, 1988). The graduation rates of Black students were considerably lower, 12% lower, than the graduation rates of White students at Texas community colleges. Table 4.3 contains the descriptive statistics for this analysis.

Insert Table 4.3 about here

For the 2009-2010 academic year, the parametric dependent samples *t*-test revealed a statistically significant difference in graduation rates, $t(68) = 11.02, p < .001$, between Black and White students at Texas community colleges. This difference represented a large effect size (Cohen's *d*) of 1.56 (Cohen, 1988). The graduation rates of Black students were 16% lower than the graduation rates of White students at Texas community colleges. Revealed in Table 4.4 are the descriptive statistics for this analysis.

Insert Table 4.4 about here

For the 2010-2011 academic year, a statistically significant difference was revealed in graduation rates, $t(68) = 7.93, p < .001$, between Black and White students at Texas community colleges. This difference represented a large effect size (Cohen's d) of 1.35 (Cohen, 1988). The graduation rates of Black students were 13% lower than the graduation rates of White students at Texas community colleges. Delineated in Table 4.5 are the descriptive statistics for this analysis.

Insert Table 4.5 about here

Concerning the 2011-2012 academic year, a statistically significant difference was yielded in graduation rates, $t(68) = 7.44, p < .001$, between Black and White students at Texas community colleges. This difference represented a large effect size (Cohen's d) of 1.21 (Cohen, 1988). Black students had a graduation rate that was 13% lower than the graduation rates of White students at Texas community colleges. Readers are directed to Table 4.6 for the descriptive statistics for this analysis.

Insert Table 4.6 about here

For the 2012-2013 academic year, a statistically significant difference was present in graduation rates, $t(68) = 8.09, p < .001$, between Black and White students at Texas community colleges. This difference represented a large effect size (Cohen's d) of 1.38 (Cohen, 1988). The graduation rates of Black students were substantially lower, 12%

lower, than the graduation rates of White students at Texas community colleges. Table 4.7 contains the descriptive statistics for this analysis.

Insert Table 4.7 about here

Concerning the 2013-2014 academic year, a statistically significant difference was revealed in graduation rates, $t(70) = 10.36, p < .001$, between Black and White students at Texas community colleges. This difference represented a large effect size (Cohen's d) of 1.36 (Cohen, 1988). The graduation rates of Black students were 13% lower than the graduation rates of White students at Texas community colleges. Revealed in Table 4.8 are the descriptive statistics for this analysis.

Insert Table 4.8 about here

With respect to the 2014-2015 academic year, a statistically significant difference was yielded in graduation rates, $t(70) = 7.55, p < .001$, between Black and White students at Texas community colleges. This difference represented a large effect size (Cohen's d) of 1.06 (Cohen, 1988). The graduation rates of Black students were 11% lower than the graduation rates of White students at Texas community colleges. Presented in Table 4.9 are the descriptive statistics for this analysis.

Insert Table 4.9 about here

For the 2015-2016 academic year, a statistically significant difference was present in graduation rates, $t(70) = 10.48, p < .001$, between Black and White students at Texas community colleges. This difference represented a large effect size (Cohen's d) of 1.36 (Cohen, 1988). The graduation rates of Black students were 12% lower than the graduation rates of White students at Texas community colleges. Delineated in Table 4.10 are the descriptive statistics for this analysis.

Insert Table 4.10 about here

In this empirical multiyear study, the graduation rates of Black students were almost 15% lower than the graduation rates of White students at Texas community colleges. The graduation rate average for the nine academic years analyzed was 32% for Black students and 45% for White students. Table 4.11 contains a summary of the results for the graduation rates of Black and White community college students in Texas across the 9 academic years of data that were analyzed.

Insert Table 4.11 about here

As revealed in Figure 4.1, trends were present in the graduation rates of Black and White students who were enrolled in Texas community colleges. The percentage rates of Black students were at least 10% less than the graduation rates of White students in the 2007-2008 through the 2015-2016 academic years. The 2009-2010 academic year had

the greatest average difference in graduation rates between Black and White students at 16%.

Insert Figure 4.1 about here

Discussion

In this investigation, the degree to which differences were present in graduation rates between Black and White students in Texas community colleges was addressed. Nine years of archival data from the Texas Higher Education Coordinating Board Interactive Accountability System were obtained and analyzed. In this examination, 69 Texas community colleges provided data that were analyzed in the 2007-2008 through the 2012-2013 academic years and 70 Texas community colleges provided data that were analyzed in the 2013-2014 through the 2014-2015 academic years. For the 2015-2016 academic year, 71 Texas community colleges provided data that were analyzed.

Of the nine academic years analyzed, statistically significant differences were present in graduation rates between Black and White students at Texas community colleges in all nine academic years. The graduation rate of Black students was 31% in the 2007-2008 academic year and remained the same in the 2015-2016 academic year. The graduation rate of Black students peaked in the 2014-2015 academic year at 34% and dipped in the 2009-2010 academic year to 29%. In comparison, the graduation rate of White students was 44% in the 2007-2008 academic year and was similar, 43%, in the 2015-2016 academic year. The graduation rate of White students was the highest in the 2013-2014 academic year at 46% and lowest in the 2015-2016 academic year at 43%.

Connections with Existing Literature

Spangler and Slate (2015) analyzed the persistence and graduation rates of Texas community college students by ethnicity/race. They established the presence of statistically significant differences in the persistence and graduation rates among the four ethnic/racial groups (i.e., Asian, White, Hispanic, Black) between the 2000 and 2010 academic years. In particular, Black students had substantially lower persistence and graduation rates than Asian and White students in each year examined. Accordingly, Spangler and Slate (2015) suggested that community colleges need to develop success measures in place that align to the goals of the institution. Results of this multiyear statewide analysis are congruent with the results of Moss and Slate (2016) who documented that the difference in the 1-year persistence rates between Black and White students were statistically significant at Texas community colleges.

Implications for Policy and Practice

In this multiyear statewide analysis of graduation rates of Black and White students in Texas community colleges, White students fared much better than Black students. As stated by Casselman (2014), White students are ahead of Black students in every stage of the education process. White students are more likely to graduate from college than are Black students. Community colleges face a tremendous challenge to increase graduation rates while helping meet the needs of Black students who do not have the family, academic, or financial support to persist and graduate from college (Linderman & Kolenovic, 2013).

First, community college leaders need to examine the current programs and initiatives they have in place to help their students complete college. If their campuses

lack successful programs, they may consider the practices of community colleges with the highest graduation rates. The existing programs of community colleges that graduate the highest percentage of Black students can be closely examined to determine what practices on their campus are linked with graduation rates. Academic advisors need to ensure that Black students are on the right degree plans toward graduation and understand what classes are needed to complete their degree. Financial aid advisors need to make sure Black students understand the policies and procedures of financial aid to ensure they do not lose their financial aid eligibility. Texas legislators should continue to examine state higher education policy and propose new programs to assist Black community college students. Community college leaders and government officials need to work together to find practical solutions to help increase the graduation rates of community colleges in Texas.

Recommendations for Future Research

In this multiyear, statewide investigation, differences in graduation rates between Black and White students at Texas community colleges were examined. Considering the gap in graduation rates between Black and White students at Texas community colleges, researchers are encouraged to analyze the graduation rates of community college students in other states. Such studies would be helpful in determining the degree to which the results delineated herein are generalizable to other states. Researchers should also examine the graduation rate data of Black students enrolled in public 4-year institutions, private universities, for-profit, and not-for-profit institutions. In addition, the graduation rates of Hispanic, Asian, and international students should be analyzed in Texas and in other community colleges across the nation. Another recommendation is for researchers

to identify Texas community colleges that have the highest graduation rates for Black students to see what best practices are in place contributing to the success of their students. Researchers should also conduct qualitative studies to gain a better understanding of the reasons why Black students are not graduating from Texas community colleges. Furthermore, researchers should investigate student engagement factors and how they influence the graduation rates of Black students.

Conclusion

The purpose of this research study was to determine the extent to which differences were present in graduation rates between Black and White students in Texas community colleges. Data were analyzed for the 2007-2008 through the 2015-2016 academic years. Statistically significant differences, with large effect sizes, were present in all the academic years of data that were analyzed. Graduation rates for Black students were much lower than the graduation rates of White students at Texas community colleges. Community college leaders realize that improving the graduation rates of Black students is a huge challenge. The graduation rates of Black students must improve (Kelly, 2005). For the 2020 goal previously discussed to be reached, the United States will have to increase the number of college degrees awarded to Black students.

References

- 21st-Century Commission on the Future of Community Colleges. (2012). *Reclaiming the American dream: Community colleges and the nation's future*. Washington, DC: American Association of Community Colleges. Retrieved from <http://aacc.wpengine.com/wp-content/uploads/2014/03/21stCenturyReport>.
- Adams, C. (2011). New popularity challenges nation's community colleges. *Education Week*, 30(34), 14.
- American Association of Community Colleges. (2012). *Reclaiming the American dream: Community colleges and the nation's future*. Retrieved from http://www.aacc.nche.edu/aboutcc/21stcenturyreport_old/index.html
- American Association of Community Colleges. (2014a). *2014 Fact Sheet*. Retrieved from http://www.aacc.nche.edu/AboutCC/Documents/Facts14_Data_R2.pdf
- Attewell, P., Heil, S., & Reisel, L. (2011). Competing explanations of undergraduate noncompletion. *American Educational Research Journal*, 48(3), 536-559.
- Bailey, T., Calcagno, J. C., Jenkins, D., Leinbach, T., & Kienzl, G. (2006). Is student-right-to-know all you should know? An analysis of community college graduation rates. *Research in Higher Education*, 47, 491-519.
- Braxton, J. M., Hirschy, A. S., & McClendon, S. A. (2004). *Understanding and reducing college student departure: ASHE-ERIC higher education report (Volume 30, No.3)*. San Francisco, CA: Jossey-Bass.
- Camera, L. (2015, December 2). Despite progress, graduation gaps between Whites and minorities persist. *U. S. News & World Report*. Retrieved from

<http://www.usnews.com/news/blogs/data-mine/2015/12/02/college-graduation-gaps-between-white-and-minority-students-persist>

Carnevale, A. P., Smith, N., & Strohl, J. (2010). *Help wanted: Projections of jobs and education requirements through 2018*. Washington, DC: Center on Education and the Workforce. Retrieved from: <https://cew.georgetown.edu/wp-content/uploads/2014/12/fullreport.pdf>

Casselman, B. (2014, April 30) Race gap narrows in college enrollment, but not in graduation. *FiveThirtyEight*. Retrieved from <http://fivethirtyeight.com/features/race-gap-narrows-in-college-enrollment-but-not-in-graduation/>

Center for American Progress. (2012). *Building a technically skilled workforce: Partnerships are key*. Retrieved from <http://www.americanprogress.org/issues/technology/report/2012/01/19/10986/building-a-technically-skilled-workforce/>

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.

Cohen, A. M., & Brawer, F. B. (2008). *The American community college* (5th ed.). San Francisco, CA: Jossey-Bass.

College Board. (2012b). *The completion arch*. Retrieved from <http://completionarch.collegeboard.org/completion/persistence-without-degree-after-six-years/six-year-persistencerates-us>

Complete College America. (2011, September). *Time is the enemy*. Retrieved from http://completecollege.org/docs/Time_Is_the_Enemy.pdf

- Cox, S., Joyner, S. A., & Slate, J. R. (2011). Differences in Hispanic graduation rates at Texas community colleges over time. *Community College Interprise*, 17(2), 62-76.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. (3rd ed.). Thousand Oaks, CA: Sage.
- Davidson, J. C. (2015). Precollege factors and leading indicators: Increasing transfer and degree completion in a community and technical college system. *Community College Journal of Research and Practice*, 39(11), 1007-1021.
doi:10.1080/10668926.2014.919619
- Freeman, J. P. (2007). Community colleges in higher education. The role of community colleges in serving the underserved student. *Planning for Higher Education*, 35, 56-62.
- Goldrick-Rab, S. (2007). *Promoting academic momentum at community colleges: Challenges and opportunities* (CCRC working paper No. 5). New York, NY: Community College Research Center, Teachers College, Columbia University.
Retrieved from <http://ccrc.tc.columbia.edu/media/k2/attachments/academic-momentum-community-colleges.pdf>
- Johnson, B., & Christensen, L. (2012). *Educational research: Quantitative, qualitative, and mixed approaches* (4th ed.). Los Angeles, CA: Sage.
- Kelly, P. (2005). *As America becomes more diverse: The impact of state higher education inequality*. Boulder, CO: National Center for Higher Education Mangement Systems.

- Lee, J. M., & Ransom, T. (2011). *The educational experience of young men of color: A review of research, pathways and progress*. College Board Advocacy & Policy Center. Retrieved from <http://youngmenofcolor.collegeboard.org/sites/default/files/downloads/EEYMC-ResearchReport.pdf>
- Linderman, D., & Kolenovic, Z. (2013). Moving the completion needle at community colleges: CUNY's accelerated study in associate programs (ASAP). *Change: The Magazine of Higher Learning*, 45(5), 43-50.
- Morest, V. S. (2013). From access to opportunity: The evolving social roles of community colleges. *American Sociologist*, 44(4), 319-328. doi:10.1007/s12108
- 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. Retrieved from <http://www.ikpress.org/issue/653>
- National Center for Higher Education Management Systems and Jobs for the Future. (2007). *Adding it up: State challenges for increasing college access and success*. Indianapolis, IN: Lumina Foundation for Education. Retrieved from <http://www.eric.ed.gov/ERICWebPortal/recordDetail?accno=ED499087013-9194-5>
- National Center for Public Policy and Higher Education. (2011). *Affordability and transfer: Critical to increasing baccalaureate degree completion*. Retrieved from http://www.highereducation.org/reports/pa_at/PolicyAlert_06-2011.pdf

- Onwuegbuzie, A. J., & Daniel, L. G. (2002). Uses and misuses of the correlation coefficient. *Research in the Schools, 9*(1), 73-90.
- Padron, E. J. (2013). Increasing the relevance of curricular and student services in the urban community college. *New Directions for Community Colleges, 2013*(162), 63-73.
- Price, V., & Tovar, E. (2014). Student engagement and institutional graduation rates: Identifying high-impact educational practices for community colleges. *Community College Journal of Research and Practice, 38*(9), 766-782.
doi:10.1080/10668926.2012.719481
- Rankin, D. A., Scott, J. A., & JoHyun, K. (2015). Oklahoma and Texas completion policies for community colleges. *Journal of Education Policy, 1-12*.
- Reindl, T. (2007). *Hitting home: Quality cost, and access challenges confronting higher education today*. Retrieved from
<http://www.jff.org/publicatons/education/hittinghome-quality-cost-and-acesch/251>
- Saenz, V. B. (2002). *Hispanic students and community college: A critical point for intervention* (ERIC ED477908). Retrieved from <http://eric.ed.gov/>
- Schneider, M., & Yin, L. M. (2012). *Completion matters: The high cost of low community college graduation rates*. Washington, DC: American Enterprise Institute for Public Policy Research.
- Scrivener, S., Weiss, M. J., Ratledge, A., Rudd, T., Sommo, C., & Fescues, H. (2015). *Doubling graduation rates: Three-year effects of CUNY's Accelerated Study in*

- Associate Programs (ASAP) for developmental education students*. Retrieved from <http://www.mdrc.org/publication/doubling-graduation-rates>
- Snyder, T. D., & Dillow, S. A. (2011). *Digest of education statistics (NCES 2011-015)*. Washington, DC: National Center for Education Statistics.
- Spangler, M. J., & 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(8), 741-753. doi:10.1080/10668926.2013.878261
- Texas Higher Education Coordinating Board. (2016e). *2015 higher education almanac*. Retrieved from <http://www.thecb.state.tx.us/index.cfm?objectid=A44B548A-E50C-8417-E09BF83FC11EA1EF>
- The White House. (2016). *Education knowledge and skills for the future*. Retrieved from <https://www.whitehouse.gov/issues/education/higher-education>
- U. S. Department of Education. (2010). *The condition of education 2010*. Washington, DC: U. S. Government Printing Office.
- Whissemore, T. (2011). Where completion is concerned, 'Time is the enemy'. *Community College Journal*, 82(3), 14.
- Wood, J. L. (2012). Leaving the 2-year college: Predictors of Black male collegian departure. *Journal of Black Studies*, 43(3), 303-326. doi:10.1177/0021934711424490
- Wyner, J. (2012). What is community college excellence? Lessons from the Aspen Prize. *Change*, 44(3), 14-20.

Table 4.1

*Summary of Studies on Differences in Graduation Rates Between Black and White**Students*

Author(s)	Year	Topic	Outcome
Davidson	2015	Likelihood of students graduating from a Kentucky community college and transferring to a 4-year university	First-year experience, frequent academic advising contact, face to face orientation, and development of a college and career plan help increase student persistence and graduation rates
Rankin, Scott, & JoHyun	2015	Graduation rates in Oklahoma and Texas community colleges	Graduation rates in both Oklahoma and Texas declined from 2002 and 2012
Spangler & Slate	2015	Persistence and graduation rates of Texas community college students by ethnicity/race	Community colleges need success measures in place that align to the goals of the institution
Price & Tovar	2014	Relationship between graduation rates and student engagement in community colleges in 2009	Student engagement positively affected college completion and graduation rates

Table 4.2

Descriptive Statistics for Graduation Rates of Black and White Texas Community College Students in the 2007-2008 Academic Year

Ethnicity	<i>n</i> of community colleges	<i>M</i>	<i>SD</i>
Black	69	31.04	13.10
White	69	44.06	9.51

Table 4.3

Descriptive Statistics for Graduation Rates of Black 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>
Black	69	31.66	14.71
White	69	43.85	6.48

Table 4.4

Descriptive Statistics for Graduation Rates of Black 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>
Black	69	28.78	13.07
White	69	45.02	6.87

Table 4.5

Descriptive Statistics for Graduation Rates of Black 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>
Black	69	31.55	12.27
White	69	44.83	6.41

Table 4.6

Descriptive Statistics for Graduation Rates of Black 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>
Black	69	31.55	13.45
White	69	44.83	7.47

Table 4.7

Descriptive Statistics for Graduation Rates of Black 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>
Black	69	32.75	11.19
White	69	45.30	6.39

Table 4.8

Descriptive Statistics for Graduation Rates of Black 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>
Black	70	32.83	11.83
White	70	46.00	6.91

Table 4.9

Descriptive Statistics for Graduation Rates of Black 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>
Black	70	33.57	12.48
White	70	44.88	8.45

Table 4.10

Descriptive Statistics for Graduation Rates of Black and White Texas Community College Students in the 2015-2016 Academic Year

Ethnicity	<i>n</i> of community colleges	<i>M</i>	<i>SD</i>
Black	71	30.86	10.63
White	71	43.32	7.35

Table 4.11

Results for the Graduation Rates for Black and White Texas Community College Students in the 2007-2008 Academic Year Through the 2015-2016 Academic Year

Academic Year	Effect Size	Lowest Graduation Rate
2007-2008	Large	Black Students
2008-2009	Large	Black Students
2009-2010	Large	Black Students
2010-2011	Large	Black Students
2011-2012	Large	Black Students
2012-2013	Large	Black Students
2013-2014	Large	Black Students
2014-2015	Large	Black Students
2015-2016	Large	Black Students

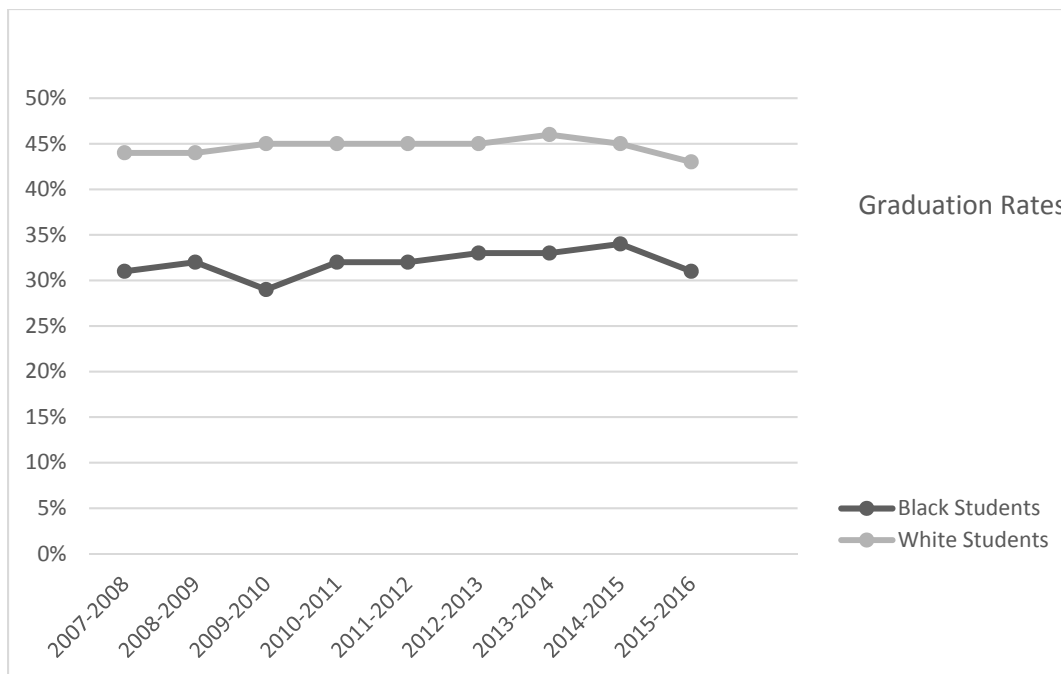


Figure 4.1. Trends in the graduation rates of Black and White students at Texas community college in the 2007-2008 through the 2015-2016 academic years.

CHAPTER V

DISCUSSION

The purpose of this journal-ready dissertation was to examine the persistence and graduation rates of Black students at Texas community colleges. Specifically, the 1-year and 2-year persistence rates of Black students and the graduation rates of Black and White students were examined. Specifically analyzed in these three investigations were persistence rate differences by institutional status (i.e., stayed at the same community college or transferred to a different community college) and graduation rate differences between Black and White students at Texas community colleges.

In the first journal article, the 1-year persistence rates of Black students in Texas community colleges were analyzed as a function of student institutional status for the 2007-2008 through the 2014-2015 academic years. In the second study, the 2-year persistence rates of Black students in Texas community colleges were examined as a function of student institutional status for the 2006-2007 through the 2013-2014 academic years. Finally, in the third empirical investigation, differences between the graduation rates of Black and White students were addressed for the 2007-2008 through the 2015-2016 academic years. Each of these investigations included at least seven years of statewide Texas community college data analyzed. In this chapter, a synopsis of each of the articles is provided and the results of each investigation are discussed. Implications for policy and practice are discussed and recommendations for future research are provided.

Study One Results

In the first investigation, the extent to which differences were present in the 1-year persistence rates of Black students enrolled in Texas community colleges by institutional status (i.e., stayed at the same community college or transferred to a different community college) was examined. Eight years of archival data from the Texas Higher Education Coordinating Board were obtained and analyzed for the 2007-2008 through the 2014-2015 academic years. With respect to 1-year persistence rates, statistically significant differences were present in the 2008-2009, 2009-2010, 2010-2011, and 2013-2014 academic years. In these four academic years, Black students who stayed at the same community college in Texas had statistically significantly higher 1-year persistence rates than Black students who transferred to a different community college. Although not statistically significant, Black students who stayed at the same community college had higher average 1-year persistence rates in the other four academic years than did Black students who transferred to a different community college. The average 1-year persistence rate for Black students who stayed at the same community college was 42% whereas the average 1-year persistence rate for Black students who transferred to a different community college was 32%. Table 5.1 contains a summary of the results for the 1-year persistence rates of Black students at Texas community colleges for all eight academic years.

Table 5.1

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

Academic Year	Statistically Significant	Effect Size	Lowest Performing Group
2007-2008	No	None	Transferred
2008-2009	Yes	Large	Transferred
2009-2010	Yes	Small	Transferred
2010-2011	Yes	Medium	Transferred
2011-2012	No	None	Transferred
2012-2013	No	None	Transferred
2013-2014	Yes	Medium	Transferred
2014-2015	Yes	Medium	Transferred

Study Two Results

Examined in the second investigation was the degree to which differences were present in the 2-year persistence rates of Black students enrolled in Texas community colleges by institutional status (i.e., stayed at the same community college or transferred to a different community college). 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. With respect to the academic years examined, no statistically significant differences were revealed in the 2-year persistence rates of Black students by their institutional status. In all seven years, the 2-year persistence rates were low, in the 20s, for Black students who stayed at the same Texas community and for Black students who transferred to a different community college. Delineated in Table 5.2 is a summary

of results for the 2-year persistence rates of Black students at Texas community colleges for all seven academic years.

Table 5.2

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

Academic Year	Statistically Significant	Effect Size	Lowest Performing Group
2007-2008	No	None	Stayed
2008-2009	No	None	Stayed
2009-2010	No	None	Transferred
2010-2011	No	None	Stayed
2011-2012	No	None	Stayed
2012-2013	No	None	Stayed
2013-2014	No	None	Transferred

Study Three Results

Analyzed in the third investigation were the graduation rates of Black and White students in Texas community colleges. Nine years of archival data from the Texas Higher Education Coordinating Board Interactive Accountability System were obtained and analyzed for the 2007-2008 through the 2015-2016 academic years. For the nine academic years analyzed, statistically significant differences, with large effect sizes, were present in every academic year. White students had higher graduation rates at Texas community colleges than did Black students in all nine academic years. The graduation rate average for White students remained in the mid-40s, whereas the graduation rate average for Black students was in the low 30s, a difference of almost 15%. Depicted in

Table 5.3 are the summary of results for the graduation rates of Black and White students at Texas community colleges for all nine academic years.

Table 5.3

Summary of Results for the Graduation Rates for Black and White Community College Students in Texas

Academic Year	Statistically Significant	Effect Size	Lowest Performing Group
2007-2008	Yes	Large	Black Students
2008-2009	Yes	Large	Black Students
2009-2010	Yes	Large	Black Students
2010-2011	Yes	Large	Black Students
2011-2012	Yes	Large	Black Students
2012-2013	Yes	Large	Black Students
2013-2014	Yes	Large	Black Students
2014-2015	Yes	Large	Black Students
2015-2016	Yes	Large	Black Students

Summary of Results

Across the three empirical statewide investigations conducted in this journal-ready dissertation, statistically significant results were present in 50% of the analyses in the first article; in none of the analyses in the second article; and in 100% of the analyses in the third article. In regard to the 1-year persistence rates of Black students, the rates were highest in the 2008-2009 academic year at 46% and lowest in the 2012-2013 academic year at 38% for Black students who stayed at the same community college. For Black students who transferred to a different community college, 1-year persistence rates

were highest in the 2007-2008 and 2011-2012 academic years at 37% and 1-year persistence rates were lowest in the 2009-2009 academic year at 27%. In regard to the seven academic years analyzed for the 2-year persistence rates of Black students by institutional status, the 2-year persistence rates of Black students who stayed or transferred to a different Texas community college were not statistically significantly different. The rates were the highest in the 2008-2009 academic year at 27% and lowest in the 2012-2013 academic year at 22% for Black students who stayed at the same community college. For Black students who transferred to a different community college, 2-year persistence rates were highest in the 2010-2011 academic years at 28% and lowest in the 2009-2010 academic year at 20%. Regardless of their institutional status, 2-year persistence rates were very low for Black students at Texas community colleges.

In respect to the graduation rates of Black and White students at Texas community colleges, results from each of the academic years analyzed were statistically significant with large effect sizes present. In all of the academic years of data analyzed, Black students had statistically significantly lower graduation rates at Texas community colleges than did White students. The graduation rate was highest for Black students in the 2014-2015 academic year at 34% and lowest in the 2009-2010 academic year at 29%. For White students, the graduation rate was highest in the 2013-2014 academic year at 46% and lowest in the 2015-2016 academic year at 43%.

Implications for Policy and Practice

In the three studies in this journal-ready dissertation, the 1-year persistence rates of Black students in Texas community colleges were higher when they stayed at the same

community college than when they transferred to a different community college. With respect to the 2-year persistence rates, regardless of institutional status, 2-year persistence rates were very low for Black students in Texas community colleges. Finally, graduation rates of Black students were statistically significantly lower than the graduation rates of White students at Texas community colleges. Findings from these three, multiyear statewide studies have important implications for policy and practice at community colleges.

First, community colleges need to improve the 1-year persistence rates and the 2-year persistence rates of their Black students. One way to do so may be by conducting an evaluation of their existing programs to determine their efficacy. Each community college needs to determine what is their specific 1-year and 2-year persistence rates of their Black students. Following this determination, community colleges that have high 1-year and 2-year persistence rates are encouraged to disseminate their programs that are determined to be effective with other community colleges. Community colleges that have low 1-year and 2-year persistence rates need to make changes in their existing programs or develop new programs. Although the two studies in this journal-ready dissertation on persistence rates were specific to Black students, community colleges are encouraged to evaluate the persistence rates of other ethnic/racial groups as well. A second implication is that academic advisors at community colleges should actively connect with Black students to determine the necessary resources they need to stay in school and achieve success. Lunenburg (2015) noted that students from more affluent backgrounds were more likely to have attended higher quality high schools and to have better resources than students from less affluent neighborhoods. Community colleges

must implement student success programs and additional initiatives to help Black students persist. Transfer programs must be in place to assist Black students transfer to 4-year institutions.

Next, Texas community colleges need to evaluate the programs they have in place to help Black students graduate. They should examine the best practices of community colleges with the highest graduation rates for Black students to see how their initiatives are helping increase the graduation rate. Academic advisors need to make sure Black students are on the appropriate degree plan so they are not wasting time or money taking courses that are not needed. Financial aid advisors need to make sure Black students understand the policies and procedures of financial aid to ensure they do not lose their financial aid eligibility. Texas legislators should continue to examine state higher education policy and propose new programs to assist Black community college students. Community college leaders and government officials need to work together to find practical solutions to help increase the graduation rates of community colleges in Texas.

Educational leaders must work together to come up with viable solutions to solve this persistence and graduation issues. According to Kreighbaum (2016), community colleges risk losing accreditation if their graduation rates are below 15% over four years. Community colleges will need the assistance of government officials, school districts, local businesses, and community members working together to help improve the persistence and graduation rate concerns of Black students in Texas community colleges..

Recommendations for Future Research

Based on the results of the three empirical studies conducted in this journal-ready dissertation, opportunities for future research are present. First, researchers are

encouraged to extend the studies in this journal-ready dissertation to Hispanic, Asian, and White students to determine the extent to which the results delineated herein are generalizable to those ethnic/racial groups. Secondly, because this journal-ready dissertation was conducted on only students enrolled in Texas, researchers are encouraged to analyze data on students in other states. The degree, again, to which the findings discussed previously are generalizable to students outside of Texas is not known. Such studies could assist in extending the practices of Texas community colleges that have the highest and lowest 1-year and 2-year persistence rates warrant examination. The practices of community colleges with high 1-year and 2-year persistence rates need to be disseminated so that community colleges with low persistence rates can make needed changes in their existing programs. Another suggestion is for researchers to conduct qualitative studies to obtain the perspectives of students, faculty, staff, and higher education leaders on ways to improve the 1-year and 2-year persistence rates of their students. A particular study that is recommended would be to ascertain the underlying factors involved in students staying or transferring to a different Texas community college.

In regard to the graduation rates of Black students in Texas community colleges, further research is needed to examine other states to determine if similarities exist in the graduation rate gap between Black and White students. Furthermore, the graduation rates of Hispanic, Asian, and international students should be analyzed in Texas community colleges and community colleges in other states. Researchers should examine the best practices of community colleges with the best graduation rates. Another suggestion for future research would be for researchers to analyze the graduation rate data of Black

students attending public 4-year institutions, private institutions, historically Black colleges, for profit institutions, and not-for-profit- institutions. Additionally, extending this research to qualitative studies might help education leaders better understand why the graduation rates of Black students are lowest among all racial/ethnic groups. Finally, researchers need to investigate the relationship of student engagement with graduation rates.

Conclusion

The purpose of this journal-ready dissertation was to examine the extent to which differences were present in the persistence rates of Black students at Texas community colleges as a function of institutional status (i.e., stayed or transferred). Additionally, the graduation rates of Black and White students were examined. Specifically analyzed were 1-year and 2-year persistence rates of Black students and the differences in graduation rates of Black and White students at Texas community colleges. Statistically significant differences were revealed in four academic years for the 1-year persistence rates of Black students. With respect to the 2-year persistence rates of Black students, no statistically significant differences were present by student institutional status. Regarding the graduation rates of Black and White students, Black students had statistically significantly lower graduation rates in all nine academic years of Texas statewide data. For each study and for every year examined, the persistence rates and graduation rates of Black students were disproportionately low.

Regarding persistence and retention rates of college students, Tinto (1993) contended that social integration was an important factor. He argued that students who effectively disengaged from their former communities made better adjustments to their

new collegiate environment and had better persistence and retention rates because of their involvement in social and academic experiences. Community college students, however, have a much different experience. Community college students typically return home each day to the pressure and stressors of their environment. The realities of family responsibility, working full time, peer pressure, and financial burden, are just a few of the many distractions experienced daily by community college students. Social integration to the community college environment is still important, however, the unique dynamics of community colleges render Tinto's model less effective at the community college level than at the 4-year university level. Community college leaders must continue to develop strategies to engage their students but must not forget to align initiatives to the unambiguous realities of their community college students.

REFERENCES

- 21st-Century Commission on the Future of Community Colleges. (2012). *Reclaiming the American dream: Community colleges and the nation's future*. Washington, DC: American Association of Community Colleges. Retrieved from <http://aacc.wpengine.com/wp-content/uploads/2014/03/21stCenturyReport>
- ACT. (2011). *National collegiate retention and persistence to degree rates*. Retrieved from https://www.noellewitz.com/documents/shared/Papers_and_Research/ACT_Data/2011%20ACT%20Retention%20tables-web.pdf
- Adams, C. (2011). New popularity challenges nation's community colleges. *Education Week*, 30(34), 14.
- American Association of Community Colleges. (2012). *Reclaiming the American dream: Community colleges and the nation's future*. Retrieved from http://www.aacc.nche.edu/aboutcc/21stcenturyreport_old/index.html
- American Association of Community Colleges. (2014a). *2014 Fact Sheet*. Retrieved from http://www.aacc.nche.edu/AboutCC/Documents/Facts14_Data_R2.pdf
- American Association of Community Colleges. (2014b). *Fast Facts*. Retrieved from <http://www.aacc.nche.edu.ezproxy.Shsu.edu/AboutCCc/Documents/Facrs14%5Fdata%5FR2.pdf>
- American Association of Community Colleges. (2016). *Community colleges trends and statistics*. Retrieved from <http://www.aacc.nche.edu/AboutCC/Trends/Pages/default.aspx>

- American College Testing. (2011). *National collegiate retention and persistence to degree rates*. Retrieved from <http://www.act.org/research/policymakers/reports/graduation.html>
- Attewell, P., Heil, S., & Reisel, L. (2011). Competing explanations of undergraduate noncompletion. *American Educational Research Journal*, 48, 536-559.
- Bailey, T. R., & Alfonso, M. (2005). Paths to persistence: An analysis of research on program effectiveness at community colleges. *Lumina Foundation for Education's New Agenda Series*, 6(1), 1-44.
- Bailey, T., Jenkins, D., & Leinbach, D. T. (2007). The effect of student goals on community college performance measures. *Community Research Center Brief*, 33, 1-4.
- Bailey, T., Leinbach, T., & Jenkins, D. (2005). *Graduation rates, student goals, and measuring community college effectiveness* (CCRC Brief No 28). New York, NY: Community College Research Center, Teachers College, Columbia University
- Bailey, T., Calcagno, J. C., Jenkins, D., Leinbach, T., & Kienzl, G. (2006). Is student-right-to-know all you should know? An analysis of community college graduation rates. *Research in Higher Education*, 47, 491-519.
- Bailey, T., Alfonso, M., Calcagno, J. C., Jenkins, D., Kienzl, G., & Leinbach, T. (2004). *Improving student attainment in community colleges: Institutional characteristics and policies*. New York, NY: Community College Research Center, Teachers College, Columbia University.

- Barnes, W., & Slate, J. R. (2011). Ethnic differences in college-readiness rates: A multi-year, statewide study. *Education and Urban Society, 20*(10), 1-29.
doi:10.1177/0013124511423775
- Barnett, E. A. (2010). Validation experiences and persistence among community college students. *Review of Higher Education, 34*, 193-230.
- Bean, J. P., & Eaton, S. B. (2000). A psychological model of college student retention. In J. M. Braxton (Ed.), *Reworking the student departure puzzle* (pp. 48-61). Nashville, TN: Vanderbilt University Press.
- Bensimon, E. M. (2007). The underestimated significance of practitioner knowledge in the scholarship on student success. *The Review of Higher Education, 30*, 441-469.
- Berger, J., & Braxton, J. (1998). Revising Tinto's interactionalist theory of student departure through theory elaboration: Examining the role of organizational attributes in the persistence process. *Research in Higher Education, 39*, 103-119.
- Bill and Melinda Gates Foundation. (2009). *Postsecondary success: Strategy overview*. Retrieved from <http://www.gatesfoundation.org/postsecondaryeducation>
- Bissett, H. G. (1995). Selective admissions in community college nursing programs: Ethical considerations. *Community College Review, 22*, 35-46.
- Bontrager, B., & Hossler, D. (2014). *Handbook of strategic enrollment management*. San Francisco, CA: Jossey-Bass.
- Brandon, K. (2009). *Investing in education: The American graduate initiative*. Washington, DC: The White House.
- Braxton, J., Doyle, W., Hartley, H., Hirschy, A., Jones, W., & McClendon, M. (2014). *Rethinking college student retention*. San Francisco CA: Jossey-Bass.

- Braxton, J. M., Hirschy, A. S., & McClendon, S. A. (2004). *Understanding and reducing college student departure: ASHE-ERIC higher education report (Volume 30, No.3)*. San Francisco, CA: Jossey-Bass.
- Camera, L. (2015, December 2). Despite progress, graduation gaps between Whites and minorities persist. *U. S. News & World Report*. Retrieved from <http://www.usnews.com/news/blogs/data-mine/2015/12/02/college-graduation-gaps-between-white-and-minority-students-persist>
- Carey, K. (2009). Achieving President's Obama's college completion goal. *Diverse Issues in Higher Education*, 26(9), 52-53.
- Carnevale, A. P., Rose, S. J., & Georgetown University, C. W. (2011). The Undereducated American. *Georgetown University Center on Education and the Workforce*. Retrieved from <http://eric.ed.gov/?id=ED524302>
- Carnevale, A. P., Smith, N., & Strohl, J. (2010). *Help wanted: Projections of jobs and education requirements through 2018*. Washington, DC: Center on Education and the Workforce. Retrieved from: <https://cew.georgetown.edu/wp-content/uploads/2014/12/fullreport.pdf>
- Casselmann, B. (2014, April 30) Race gap narrows in college enrollment, but not in graduation. *FiveThirtyEight*. Retrieved from <http://fivethirtyeight.com/features/race-gap-narrows-in-college-enrollment-but-not-in-graduation/>
- Cejda, B. D., & Hoover, R. E. (2010). Strategies for faculty-student engagement: How community college faculty engage Latino students. *Journal of College Student Retention: Research, Theory and Practice*, 12, 135-153. doi:10.2190/CS.12.2.b

- Center for American Progress. (2012). *Building a technically skilled workforce: Partnerships are key*. Retrieved from <http://www.americanprogress.org/issues/technology/report/2012/01/19/10986/building-a-technically-skilled-workforce/>
- Chen, G. (2015). *The catch-22 of community college graduation rates*. Retrieved from <http://www.comunitucollegereview.com/blog/the-catch-22-of-community-college-graduation-rates>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Cohen, A. M., & Brawer, F. B. (2008). *The American community college* (5th ed.). San Francisco, CA: Jossey-Bass.
- Colby, A., Ehrlich, T., Beaumont, E., & Stephens, J. (2003). *Educating citizens: Preparing America's undergraduates for lives of moral and civic responsibility*. San Francisco, CA: Jossey-Bass.
- College Board. (2010). *The educational crisis facing young men of color: Reflections on four of dialogue on the educational challenges of minority males*. Retrieved from <http://www.Advocacy.collegeboard.org/sites/default/files/educational-crisis-facing-young-men-of-color.pdf>
- College Board. (2012a). *Recommendation nine: Dramatically increase college completion rates*. Retrieved from <http://completionagenda.collegeboard.org/recommendations/nine?qt-recommendation=1&indicator=37>

- College Board. (2012b). *The completion arch*. Retrieved from <http://completionarch.collegeboard.org/completion/persistence-without-degree-after-six-years/six-year-persistencerates->
- Complete College America. (2011, September). *Time is the enemy*. Retrieved from http://completecollege.org/docs/Time_Is_the_Enemy.pdf
- Complete College America. (2012, April). *Remediation: Higher education's bridge to nowhere*. Retrieved from <http://www.completecollege.org/docs/CCA-Remediation-final.pdf>
- Cox, S., Joyner, S. A., & Slate, J. R. (2011). Differences in Hispanic graduation rates at Texas community colleges over time. *Community College Enterprise*, 17(2), 62-76.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage.
- Davidson, J. C. (2015). Precollege factors and leading indicators: Increasing transfer and degree completion in a community and technical college system. *Community College Journal of Research and Practice*, 39, 1007-1021.
doi:10.1080/10668926.2014.919619
- Davidson, J. C., & Petrosko, J. M. (2015). Predictors of persistence for developmental math students in a community and technical college system. *Community College Journal of Research and Practice*, 39, 163-178.
doi:10.1080/10668926.2013.782831
- Dougherty, K. J. (1992). Community colleges and baccalaureate attainment. *Journal of Higher Education*, 63, 188-213.

- Duncan, A. (2010). Obama's goal for higher education. *Forbes*. Retrieved from <http://www.forbes.com/2010/08/01/america-education-reform-opinions-best-colleges-10-duncan.html>
- Escobedo, G. (2007). A retention/persistence intervention model: Improving success across cultures. *Journal of Developmental Education*, 31(1), 12-37.
- Esters, L. L., & Mosby, D. C. (2007). Disappearing acts: The vanishing Black male on community college campuses. *Diverse Issues in Higher Education*, 24(14), 45.
- Everett, J. E. (2015). Public community colleges: Creating access and opportunities for first-generation college students. *Delta Kappa Gamma Bulletin*, 81(3), 52-58.
- 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.
- Freeman, J. P. (2007). Community colleges in higher education. The role of community colleges in serving the underserved student. *Planning for Higher Education*, 35, 56-62.
- Goldrick-Rab, S. (2007). *Promoting academic momentum at community colleges: Challenges and opportunities* (CCRC working paper No. 5). New York, NY: Community College Research Center, Teachers College, Columbia University. Retrieved from <http://ccrc.tc.columbia.edu/media/k2/attachments/academic-momentum-community-colleges.pdf>
- Hongwei, Y. (2015). Student retention at two-year community colleges: A structural equation modeling approach. *International Journal of Continuing Education & Lifelong Learning*, 8(1), 85-101.

- Hussar, W., & Bailey, T. M. (2006). *Projections of education statistics to 2015 (NCES 2006-084)*. Washington, DC: National Center for Education Statistics.
- Johnson, R. B., & Christensen, L. (2012). *Educational research: Quantitative, qualitative, and mixed approaches* (4th ed.). Los Angeles, CA: Sage.
- Kelly, P. (2005). *As America becomes more diverse: The impact of state higher education inequality*. Boulder, CO: National Center for Higher Education Management Systems.
- Kinzie, J., Gonyea, R., Shoup, R., & Kuh, G. D. (2008). Promoting persistence and success of underrepresented students: Lessons for teaching and learning. *New Directions for Teaching & Learning*, 2008(115), 21-38.
- Kirst, M. W. (2008). Secondary schools and colleges must work together. *Thought and Action*, 24(1), 111-122.
- Kolajo, E. (2004). From developmental education to graduation: A community college experience. *Community College Journal of Research and Practice*, 28, 365-371.
doi:10.1080/10668920490424078
- Kotamraju, P., & Blackmon, O. (2011). Meeting the 2020 American Graduation Initiative (AGI) goal of increasing postsecondary graduation rates and completions: A macro perspective of community college student educational attainment. *Community College Journal of Research & Practice*, 35, 202-219.
doi.10.1080/10668926.2010.526045
- Kreighbaum, A. (2016). Tougher scrutiny for colleges with low graduation rates. *Inside Higher Ed*. Retrieved from

<https://www.insidehighered.com/news/2016/09/21/regional-accreditors-refocus-institutions-low-grad-rates#.V-Lm0F4cWQ8.mailto>

Lee, J. M., & Ransom, T. (2011). *The educational experience of young men of color: A review of research, pathways and progress*. College Board Advocacy & Policy Center. Retrieved from [http://](http://youngmenofcolor.collegeboard.org/sites/default/files/downloads/EEYMC-ResearchReport.pdf)

youngmenofcolor.collegeboard.org/sites/default/files/downloads/EEYMC-ResearchReport.pdf

Lee, Jr., J. M., Edwards, K., Menson, R., & Rawls, A. (2011). *The College Completion Agenda: 2011 Progress Report*. New York, NY: College Board Advocacy and Policy Center.

Li, X. (2007). *Characteristics of minority-serving institutions and minority undergraduates enrolled in these institutions*. Washington, DC: National Center for Education Statistics.

Liao, H. I., Edlin, M., & Ferdenzi, A. C. (2014). Persistence at an urban community college: The implications of self-efficacy and motivation. *Community College Journal of Research & Practice*, 38, 595-611.
doi:10.1080/10668926.2012.676499

Linderman, D., & Kolenovic, Z. (2013). Moving the completion needle at community colleges: CUNY's accelerated study in associate programs (ASAP). *Change*, 45(5), 43-50. doi:10.1080/00091383.2013.824350

Lunenburg, F. C. (2015). A free public education for all: Rediscovering the promise. In Sage Publications Inc. (Eds.), *The Sage guide to educational leadership and management* (pp. 273-286). Thousand Oaks, CA: Sage.

Mangan, K. (2014, September). Community colleges test ways to clear students' path to success. *Chronicle of Higher Education*, 61(4), A10-A11.

Martin, 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

McIntosh, M. F., & Rouse, C. E. (2009). *The other college: Retention and completion rates among two-year college students*. Washington, DC: Center for American Progress.

McKinney, L., & Burrige, A. B. (2015). Helping or hindering? The effects of loans on community college student persistence. *Research in Higher Education*, 56, 299-324. doi:10.1007/s11162-014-9349-4.

Mertes, S. J., & Hoover, R. E. (2014). Predictors of first-year retention in a community college. *Community College Journal of Research and Practice*, 38, 651-660. doi:10.1080/10668926.2012.711143

Morest, V. S. (2013). From access to opportunity: The evolving social roles of community colleges. *American Sociologist*, 44(4), 319-328. doi:10.1007/s12108

Morrice, P. I. (2011). *"It's the perfect baby step": African American students' community college choice and transfer to four-year colleges and universities* (Unpublished doctoral dissertation). University of Michigan, Ann Arbor, MI.

Mortenson Research Seminar on Public Policy Analysis of Opportunity for Postsecondary Education. (2001). College participation by gender, age 18 to 24, 1967 to 2000. *Postsecondary Education Opportunity*, 109, 1-16.

- Moss, S., & Slate, J. R. (2015). Differences in Black students' persistence rates in Texas community colleges by institutional status. *International Journal of University Teaching and Faculty Development*, 5(3), 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. Retrieved from <http://www.ikpress.org/issue/653>
- Mullin, C., & Phillippe, K. (2009). *Community college enrollment surge: AACC policy brief series*. Washington, DC: American Association of Community Colleges.
- Museus, S. D., & Quaye, S. J. (2009). Toward an intercultural perspective of racial and ethnic minority college student perspective. *Review of Higher Education*, 33, 67-94. doi:10.1353/rhe.0.0107
- National Center for Education Statistics. (2012). *Digest of education statistics*. Retrieved from http://nces.ed.gov/programs/jigest/2012menu_tables.asp
- National Center for Education Statistics. (2013). *Digest of education statistics*. Retrieved from <http://nces.ed.gov/programs/digest/d13/tables/dt13%5F303.25.asp>
- National Center for Higher Education Management Systems and Jobs for the Future. (2007). *Adding it up: State challenges for increasing college access and success*. Indianapolis, IN: Lumina Foundation for Education. Retrieved from <http://www.eric.ed.gov/ERICWebPortal/recordDetail?accno=ED499087013-9194-5>

- National Center for Public Policy and Higher Education. (2011). *Affordability and transfer: Critical to increasing baccalaureate degree completion*. Retrieved from http://www.highereducation.org/reports/pa_at/PolicyAlert_06-2011.pdf
- Nevarez, C., & Wood, J. L. (2010). *Community college leadership and administration: Theory, practice, and change*. New York, NY: Peter Lang.
- Nora, A., Barlow, E., & Crisp, G. (2005). Student persistence and degree attainment beyond the first year in college. In A. Seidman (Ed.), *College student retention: Formula for student success* (pp. 129-153). Westport, CT: Praeger.
- Onwuegbuzie, A. J., & Daniel, L. G. (2002). Uses and misuses of the correlation coefficient. *Research in the Schools, 9*(1), 73-90.
- Padron, E. J. (2013). Increasing the relevance of curricular and student services in the urban community college. *New Directions for Community Colleges, 2013*(162), 63-73.
- Palmer, R. T., Davis, R. J., Moore, I., & Hilton, A. (2010). A nation at risk: Increasing college participation and persistence among African American males to stimulate U.S. global competitiveness. *Journal of African American Males in Education, 1*, 105-124.
- Pascarella, E. T., Smart, J. C., & Ethington, C. A. (1986). Long-term persistence of two-year college students. *Research in Higher Education, 24*, 47-71.
- Pascarella, E. T., & Terenzini, P. T. (2005). *A third decade of research. Vol. 2 of how college affects students*. San Francisco, CA: Jossey-Bass.
- Polite, V. C., & Davis, J. E. (1999). *African American males in school and society*. New York, NY: Teachers College Press.

- Price, V., & Tovar, E. (2014). Student engagement and institutional graduation rates: Identifying high-impact educational practices for community colleges. *Community College Journal of Research and Practice*, 38, 766-782.
doi:10.1080/10668926.2012.719481
- PR Newswire. (2009, July). *Meeting the Obama challenge: Bring all higher ed assets to bear*. Retrieved from <http://www.prnewswire.com/news-releases/meeting-the-obama-challenge--bring-all-higher-ed-assets-to-bear-62217962.html>
- Provitera-McGlynn, A. (2005). Report examines 2 year/4-year disconnect: Proposes ways to strengthen transition. *The Hispanic Outlook in Higher Education*, 15, 34-35.
- Pusser, B., & Levin, J. (2009). *Re-imagining community colleges in the 21st century: A student-centered approach to higher education*. Washington, DC: Center for American Progress.
- Rainey, M. (2010). Community colleges face challenge in helping minority students succeed. *Insight into Diversity*, 6-8.
- Rankin, D. A., Scott, J. A., & JoHyun, K. (2015). Oklahoma and Texas completion policies for community colleges. *Journal of Education Policy*, 1-12.
- Reindl, T. (2007). *Hitting home: Quality cost, and access challenges confronting higher education today*. Retrieved from <http://www.jff.org/publicatons/education/hittinghome-quality-cost-and-access-ch/251>
- Roach, R. (2013). Steady college enrollment growth for underrepresented minorities, college completion rates increasing more slowly. *Diverse Issues in Higher Education*. Retrieved from <http://diverseeducation.com/article/54837/#>

- Saenz, V. B. (2002). *Hispanic students and community college: A critical point for intervention* (ERIC ED477908). Retrieved from <http://eric.ed.gov/>
- Sandoval-Lucero, E. L. (2014). African American and Latina(o) community college students' social capital and student success. *College Student Journal, 48*, 522-533.
- Schneider, M., & Yin, L. M. (2012). *Completion matters: The high cost of low community college graduation rates*. Washington DC: American Enterprise Institute for Public Policy Research.
- Scrivener, S., Weiss, M. J., Ratledge, A., Rudd, T., Sommo, C., & Fresques, H. (2015). *Doubling graduation rates: Three-year effects of CUNY's Accelerated Study in Associate Programs (ASAP) for developmental education students*. Retrieved from <http://www.mdrc.org/publication/doubling-graduation-rates>
- Shinde, G. S. (2010). The relationship between students' responses on the National Survey of Student Engagement (NSSE) and retention. *Review of Higher Education & Self-Learning, 3*(7), 54-67.
- Snyder, T. D., & Dillow, S. A. (2011). *Digest of education statistics (NCES 2011-015)*. Washington, DC: National Center for Education Statistics.
- Spangler, M. J., & 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
- Strayhorn, T. L. (2006). Factors influencing the academic achievement of first-generation college students. *NASPA Journal, 43*(4), 82-111.

- Strayhorn, T. L. (2011). Traits, commitments, and college satisfaction among Black American community college students. *Community College Journal of Research & Practice, 35*, 437-453. doi:10.1080/10668920801901282
- Strayhorn, T. L. (2012). Satisfaction and retention among African American men at two-year community colleges. *Community College Journal of Research and Practice, 36*, 358-375.
- Strayhorn, T. L., & Johnson, R. M. (2014). Black female community college students' satisfaction: A national regression analysis. *Community College Journal of Research and Practice, 38*, 534-550.
- Stewart, S., Doo Hun, L., & JoHyun, K. (2015). Factors influencing college persistence for first-time students. *Journal of Developmental Education, 38*(3), 12-20.
- Stuart, G. R., Rios-Aguilar, C., & Deil-Amen, R. (2014). "How much economic value does my credential have?" Reformulating Tinto's model to study students' persistence in community colleges. *Community College Review, 42*, 327-341. doi:10.1177/0091552114532519
- Sutherland, J. A. (2011). Building an academic nation through social networks: Black immigrant men in community colleges. *Community College Journal of Research and Practice, 35*, 267-279.
- Swail, W. S., Redd, K., & Perna, L. (2003). *Retaining minority students in higher education: A framework for success* (ASHE-ERIC Higher Education Report). San Francisco, CA: Jossey-Bass.
- Templin, R. G. (2011). *America's community colleges: The key to the college completion challenge?* Retrieved from <http://www.acenet.edu/the-presidency/columns-and->

features/Pages/America%E2%80%99s-Community-Colleges-The-Key-to-the-College-Completion-Challenge.aspx

Texas Higher Education Coordinating Board. (2016a). *Accountability section*. Retrieved from <http://www.txhighereddata.org/Interactive/Accountability>

Texas Higher Education Coordinating Board. (2016b). *Agency Information*. Retrieved from <http://www.thecb.state.tx.us/index.cfm?objectid=1549605A-CCD8-6338-049B9BDED023088E>

Texas Higher Education Coordinating Board. (2016c). *Glossary of terms*. Retrieved from http://cbgm41.thecb.state.tx.us/search?site=WWW&client=wwwnew_frontend&proxystylesheet=wwwnew_frontend&proxyreload=1&output=xml_no_dtd&q=glossary&btnG.x=0&btnG.y=0

Texas Higher Education Coordinating Board. (2016d). *Guidelines for the action plan*. Retrieved from http://cbgm41.thecb.state.tx.us/search?q=6-year+graduation+rate&btnG=Search&entqr=0&output=xml_no_dtd&sort=date%3AD%3AL%3Ad1&btnG.y=0&client=wwwnew_frontend&btnG.x=0&ud=1&oe=UTF-8&ie=UTF-8&proxystylesheet=wwwnew_frontend&proxyreload=1&site=WWW

Texas Higher Education Coordinating Board. (2016e). *2015 higher education almanac*. Retrieved from <http://www.thecb.state.tx.us/index.cfm?objectid=A44B548A-E50C-8417-E09BF83FC11EA1EF>

Thelin, J. R. (2004). *A history of American higher education*. Baltimore, MD: Johns Hopkins University Press.

- The White House. (2009). *Remarks of President Barack Obama: Address to joint session of Congress*. Retrieved from <https://www.whitehouse.gov/the-press-office/remarks-president-barack-obama-address-joint-session-congress>
- The White House. (2016). *Education knowledge and skills for the future*. Retrieved from <https://www.whitehouse.gov/issues/education/higher-education>
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago, IL: University of Chicago Press.
- U.S. Department of Education. (2006). *The condition of education 2006*. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Education. (2010). *The condition of education 2010*. Washington, DC: U.S. Government Printing Office.
- U. S. Department of Education. (2011). *Community college student outcomes: 1994-2009*. Washington, DC: U. S. Government Printing Office.
- Whissemore, T. (2011). Where completion is concerned, 'Time is the enemy'. *Community College Journal*, 82(3), 14.
- Wilson, D. (2014). Follow me to the baccalaureate: Reflections and advice from African American community college transfer student journeys. *Community College Enterprise*, 20(2), 72-84.
- Wood, J. L. (2012). Leaving the 2-year college: Predictors of Black male collegian departure. *Journal of Black Studies*, 43, 303-326. doi:10.1177/0021934711424490
- Wyner, J. (2012). What is community college excellence? Lessons from the Aspen Prize. *Change*, 44(3), 14-20.

Appendix



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/

DATE: September 28, 2016

TO: Sheldon Moss [Faculty Sponsor: Dr. John Slate]

FROM: Sam Houston State University (SHSU) IRB

PROJECT TITLE: *Differences in Persistence and Graduation Rates in Texas Community Colleges: A Multyear Statewide Study [T/D]*

PROTOCOL #: 2016-08-31363

SUBMISSION TYPE: INITIAL REVIEW

ACTION: DETERMINATION OF EXEMPT STATUS

DECISION DATE: September 28, 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.

If you have any questions, please contact the IRB Office at 936-294-4875 or irb@shsu.edu. Please include your project title and protocol number in all correspondence with this committee.

Sincerely,

Donna Desforges
 IRB Chair, PHSC
 PHSC-IRB

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Sam Houston State University IRB's records.

VITA

Sheldon Moss

Educational History

Doctorate of Education – Educational Leadership, May 2017

Sam Houston State University, Huntsville, TX

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

Master of Business Administration – Management, August 2013

Our Lady of the Lake University, San Antonio, TX

Bachelor of Science – Business Administration, May 1996

Southern University at New Orleans, New Orleans, LA

Professional Experience

Education –

Assistant Dean, Lone Star College Greenspoint Center, Houston TX, 2016-Present

Interim Vice President, Lone Star College North Harris Centers, Houston TX, 2015-2016

Assistant Dean, Lone Star College Victory Center, Houston TX, 2012-2015

Adjunct Professor, Lone Star College North Harris, Houston TX, 2012-Present

Program Manager Recruitment, Lone Star College North Harris, Houston TX, 2010-2012

Program Coordinator, Lone Star College North Harris, Houston TX, 2009-2010

Recruiter, Lone Star College North Harris, Houston TX, 2007-2009

Recognitions

Sam Houston State University Jackson Scholar, 2014-2016

LSCS Employee Doctoral Scholarship, 2014-2016

Delta Mu Delta, Business Honor Society, 2013

Lone Star College North Harris New Leadership Program, 2012-2013

Lone Star College System Leadership Academy, 2011-2012

Houston Police Department Humanitarian Award, 2012

LSC North Harris STARS Service Excellence Award, 2008

LSC North Harris Outstanding Student Organization Advisor Award, 2010

LSC North Harris Service Learning Award, 2008

Omega Psi Phi Fraternity Incorporated, Omega Man of the Year, 2002

Scholarly Research Activity

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.

Moss, S., & Slate, J. R. (2015). Differences in Black students' persistence rates in Texas community colleges by institutional status. *International Journal of University Teaching and Faculty Development*, 5(3), 1-10.

Presentations

Moss, S. (2017). *An intrinsic case study examining the stressors and coping mechanisms of a first-year doctoral student*. Paper presented at the annual conference of the Southeastern Research Association (SERA), San Antonio, TX.

Moss, S. (2015). *African American male students in higher education: Using the first year experience to improve outcomes in Texas*. Paper presented at the annual conference of the Southeastern Research Association (SERA), San Antonio, TX.

Moss, S. (2015). *Differences in Black students' persistence rates in Texas community colleges by institutional status*. Paper presented at the annual conference of the University Council for Educational Administration (UCEA), San Diego, CA.

Roberts, J., Jacobs, K. O., Godley, S., Moss, S., & Enriquez, R. A. (2015). *Perceived self-efficacy of research skills of select higher education doctoral students*. Paper presented at the annual conference of the Southeastern Research Association (SERA), San Antonio, TX.

Professional Affiliations

Southwest Educational Research Association 2014-2017

American Educational Research Association, 2015-2016

University Council for Educational Administration Association, 2014-2016

University of Texas Male Student Leadership Summit, 2014

Delta Mu Delta, Business Honor Society, 2013