

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

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DEDICATION

I would like to dedicate this dissertation to God, my family, friends, co-workers, and supervisors. I never could have made it without them. As I hold back the tears while writing this dedication, I want them all to know I could have not accomplished this goal without their love and support over the years. I thank God for being there for me by listening and answering my prayers during times of distress and disbelief. God knew I could accomplish this goal even when I questioned if I could continue in this doctoral program.

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ABSTRACT

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Purpose

The purposes of this journal-ready dissertation were to examine the Total 1-year persistence rates and the Total 2-year persistence rates of Black students at Texas community colleges. Another purpose involved a comparison of the graduation rates of Black community college students with the graduation rates of Asian, White, and Hispanic community college students. Specifically investigated was the extent to which differences were present in the Total 1-year and Total 2-year persistence rates of Black community college students between the 1999-2000 academic year and the 2006-2007 academic year; between the 2006-2007 academic year and the 2013-2014 academic years; and between the 1999-2000 academic year and the 2013-2014 academic year. With respect to graduation rates, the extent to which graduation rates of the four major ethnic/racial groups in Texas differed for the 2007-2008 through the 2015-2016 academic years were examined. By examining multiple years of data, the extent to which trends were present in graduation rates was determined.

Method

For this study, a non-experimental causal-comparative research design was utilized. Archival data were obtained from the Texas Higher Education Board Interactive Accountability System on all Texas community colleges for the 1999-2000 through the 2006-2007 academic years. Specifically downloaded were the Total 1-year, Total 2-year persistence rates, and graduation rates of Black Texas community college students.

Findings

Inferential statistical procedures revealed that the Total 1-year persistence rates of Black students at Texas community colleges had not changed over 15 years. Also revealed was that the Total 2-year persistence rates of Black students at Texas community colleges also remained changed over 15 years. Statistically significant differences were yielded in graduation rates between Black and Asian students, between Black and White students, and between Black and Hispanic students. In all analyses, Black students had statistically significantly lower graduation rates at Texas community colleges than their ethnic/racial peers. Also identified were the Texas community colleges that had the highest and lowest Total 1-year persistence rates, the highest and lowest Total 2-year persistence rates, and the best and lowest graduation rates of their Black students. Implications of these findings and suggestions for future research were discussed.

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

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CHAPTER I

INTRODUCTION

In Texas community colleges, the percentage of Black students who persist to graduation is lower than any other ethnic/racial group (Rankin, Scott, & Kim, 2015) in the United States. In comparison with White and Hispanic students, Black students require more remediation in both reading and mathematics (Complete College America, 2016). As a result, Black students do not graduate on time because of a lack of college-readiness. Being required to enroll in a number of remedial or developmental education courses can easily become discouraging to Black students, which can cause them to drop out of college.

Millions of college students who enroll in colleges and universities in the United States did not persist to complete their intended degrees between 2014 and 2016 (US Department of Education, 2015). Black students at community colleges have more barriers to overcome than do other ethnic/racial groups of students (Moss, 2017). Most Black students at community colleges do not have adequate support systems in place while they are attempting to obtain their certificates or degrees. Because of financial difficulties, childcare issues, or family problems, many Black students may have financial difficulties, childcare issues, or family problems, and they may have limited knowledge about resources to address their situations and, consequently, may not persist to college completion (Barnett, 2010; Museus & Quaye, 2009; Strayhorn, 2011). If students struggle to have basic resources for surviving, the probability of them dropping out increases.

According to the National Center for Higher Education Management Systems (2018), positive relationships are present between degree attainment and economic prosperity. When individuals obtain a postsecondary degree, they have the opportunity to earn more income. Once citizens earn more money while employed in the workforce, the economy of the United States improves. Unfortunately, the United States is falling behind by 16 million degrees as compared to other nations for fulfilling workforce demands. As a result, the Obama Administration along with other large philanthropic organizations such as the Bill and Melinda Gates Foundation and the Lumina Foundation have designated funding to increase postsecondary graduation completion rates (National Center for Higher Education Management Systems, 2018). Specifically, the Lumina Foundation (2015) set a targeted goal to increase the college completion rate to 60% by 2025, despite persistence being a tremendous issue in postsecondary education (Baber, 2018).

Even though postsecondary initiatives are generating to increase degree attainment, the United States currently ranks sixth among peer nations, with only 45.7% of employed adults who have attained postsecondary credentials (Organisation for Economic Cooperation and Development, 2017). In comparison to other nations that have increased their postsecondary attainment rates by 9%, the United States has increased its degree attainment rate by only 5%. At this rate, the United States will continue to lag globally as compared to other nations and not meet their goals set for postsecondary credential completion (Baber, 2018). The global dominance of the United States as a leader in postsecondary degree completion has continued to deteriorate (Strayhorn & Johnson, 2014).

Review of the Literature on the 1-year Persistence Rates of Black Students

More than one-half, 56%, of all students leave college before their sophomore year (Tinto, 2001). With respect to community college enrollment, almost 25% of students at community colleges are placed on academic probation at some point during their academic career. Unfortunately, 50% of students placed on academic probation eventually drop out of college (Damashek, 2003). Of the 3 million Black students who enrolled in postsecondary settings in the United States, 13% were enrolled in community colleges (Morris, 2014). Particularly in Texas, Black students have enrolled in postsecondary settings in record numbers, but they are not persisting to graduation.

Persistence rates are important because students who continue to enroll consistently are likely to persist to complete a certificate or to obtain a college degree in a timely fashion. According to the National Center for Education Statistics (2014), 57% of students who enrolled in community colleges during the 2011-2012 academic year persisted toward attaining a degree or certificate. Of note is that Black students who enrolled in community colleges had a lower persistence rate, 48%, than community college students in other ethnic/racial groups: (a) White students at 58%, Hispanic students at 59%, and Asian students at 65% (National Center for Education Statistics, 2018).

Of the major ethnic/racial groups in the United States, high percentages of Black and Hispanic males do not complete their degrees at community colleges (Wood, 2012b; Wood & Turner, 2010). Black students who enter community colleges and who are required to take developmental education courses do not persist to graduation in a timely fashion. Of the community college students who are required to enroll in developmental

education courses, 42% of Black students must take these courses, in comparison to only 31% of White students (Morris, 2014). In Texas, the state of interest in this article, Black students are overrepresented in developmental education courses, a situation that relates to not persisting to graduation.

In the most comprehensive analysis of the persistence rates of Black students in Texas to date, Moss and Slate (2016) examined the 1-year persistence rates of Black students who stayed at the same Texas community college or who transferred to a different Texas community college from the 1999-2000 academic year through the 2009-2010 academic year. Moss and Slate (2017) determined that the 1-year persistence rates for Black students who stayed at the same community college were statistically significantly consistently higher than the 1-year persistence rates of Black students who transferred to a different community college. Moss and Slate (2017) documented that the 1-year persistence rates of Black students who stayed at the same community college were 36% higher than for Black students who transferred to a different community college in the 1999-2000 academic year. In the 2011-2012 academic year, the 1-year persistence rates of Black students who stayed at the same community college were 27% higher than for Black students who transferred to a different Texas community college (Moss & Slate, 2016). Of note in their study was that 1-year persistence rates of Black students who stayed at the same community college remained stagnant over the eight years of data they analyzed. For Black students who transferred to a different Texas community college, their 1-year persistence rates decreased by 5% (Moss & Slate, 2017).

In a second investigation, also conducted in Texas, Moss and Slate (2017) compared the 1-year persistence rates of Black students across the 2008-2009, 2009-

2010, 2013-2014, and 2014-2015 academic years. In their study, they established that the 1-year persistence rates of Black students who stayed at the same community college were 15% higher than the 1-year persistence rates of Black students who transferred to a different Texas community college in the 2008-2009 academic year. With respect to the 2009-2010 academic year, the 1-year persistence rates were almost 10% higher for Black students who stayed at the same community college than for Black students who transferred to a different community college. In the 2013-2014 academic year, the 1-year persistence rates for Black students who stayed at the same community college was 15% higher than the 1-year persistence rates of Black students who transferred to a different community college. Finally, for the 2014-2015 academic year, 1-year persistence rates were almost 15% higher for Black students who stayed at the same community college than the 1-year persistence rates of Black students who transferred to a different community college (Moss & Slate, 2017).

Moss (2017) documented that the 1-year persistence rates of Black students who stayed at the same Texas community college ranged from 38% to 46%. The 1-year persistence rates of Black students who transferred to a different Texas community college ranged from only 27% to 37%. In another investigation on the graduation and persistence rates of Texas community college students by their ethnicity/race (i.e., White, Black, Hispanic, and Asian), Spangler and Slate (2015) documented the presence of a gradual increase in graduation and persistence rates of all four ethnic/racial groups from the 1999-2000 to the 2009-2010 academic years. With respect to Black students, their graduation and persistence rates increased by only 8.27% over this 11-year time period as

compared to increases for Asian, Hispanic and White students at 11.60%, 9.78% and 8.45%.

In an analysis of data on 4-year university students, Payne, Slate, and Barnes (2015) examined the 6-year persistence rates of Texas 4-year public university students by their ethnicity/race between the 1999-2000 and 2009-2010 academic years. For White students, the 6-year persistence rates at Texas 4-year public universities were 63.23% and 68.14%, respectively in these two academic years. The 6-year persistence rates of Black students at Texas 4-year public universities were 61.55% and 59.53%, respectively. Payne et al. (2015) determined the persistence rates only increased less than 1% over this 11-year period.

In a recent investigation directly related to this article, Ingram and Slate (2017) examined the total 1-year persistence rates of Black students at Texas community colleges for three periods: between the 1999-2000 and the 2006-2007 academic years; between the 2006-2007 and the 2013-2014 academic years; and between the 1999-2000 and the 2013-2014 academic years. Between the 1999-2000 academic year and 2006-2007 academic year, a statistically significant decrease of 2.02% revealed in the total 1-year persistence rates of Black students. With respect to the 2006-2007 and the 2013-2014 academic years, the total 1-year persistence rates were unchanged. For the 1999-2000 and 2013-2014 academic year comparison, a statistically significant higher total 1-year persistence rate for the 1999-2000 academic year was present. After comparing these academic years, the 1-year persistence rates for Black students at Texas community colleges have remained stagnant across a 14-year time period (Ingram & Slate, 2017).

Ballinger and Slate (2018) who examined the 1-year persistence rates of students who enrolled at 38 Texas 4-year universities conducted another recent study on 1-year persistence rates. The researchers conducted an analysis of the institutional status (i.e., staying or transferring) of four ethnic/racial groups of students. They established that the one-year persistence rates were 34% higher for White students, 27% higher for Black students, 44% higher for Hispanic students and 31% higher for Asian students who stayed at the same 4-year university than for their counterparts who transferred to a different Texas 4-year university.

Fauria and Slate (2014) determined that students who stayed at the same 4-year institution persisted at higher rates than students who transferred to a different 4-year institution. For each ethnic/racial group (i.e., Black, Hispanic, White, and Asian), 1-year persistence rates were statistically significantly higher for students who stayed than for their peers who transferred to a different institution. The results of both the Ballinger and Slate (2017) article and the Fauria and Slate article (2014) were commensurate in that the 1-year persistence rates of students who stayed at the same 4-year university were higher than for their counterparts who transferred to a different 4-year university.

Review of the Literature on the 2-year Persistence Rates of Black Students

Because of adapting a performance-based funding model, the State of Texas is forced to analyze enrollment shortages at community colleges (McKinney & Hagedorn, 2016). In Texas, 52% of students enrolled in postsecondary education attend community colleges (Texas Association of Community Colleges, 2014). This student population is composed of a number of low-income students with diverse backgrounds. Because Texas community colleges educate large populations of underrepresented students, low

persistence rates are needed to be addressed, considering that, half of the students who enroll do not return for the second year (McKinney & Hagedorn, 2016).

According to the Texas Higher Education Coordinating Board (2014), only one of every three community college students obtains a postsecondary credential after 6 years of initial enrollment. Because Texas community colleges serve a large number of students who are disadvantaged (e.g., Black, Hispanic, nontraditional, low-income, and academically underprepared), funding is limited to assist them to persist to graduation (Morrice, 2011; Stuart, Rios-Aguilar, & Deil-Amen, 2014). Currently, the performance funding system for Texas community colleges rewards community college systems that have increased enrollment rates but not for increases in academic progression (i.e., persistence) to graduation. As a result, modifications will be necessary for the current performance funding system for Texas community colleges (Natale & Jones, 2017). More degrees obtained from community colleges are essential to fulfill the needs of the 21st century workforce. Having educated workers is a national priority (Lumina Foundation, 2015). As such, the State of Texas should encourage institutions through monetary incentives to improve their number of graduates (Natale & Jones, 2017).

More Black and Hispanic students will need to persist to graduation to increase the number of students with degrees in Texas. For both ethnic/racial groups, community colleges are essential for them to obtain the necessary training, at an affordable cost, to for employment in the workforce. By addressing and implementing ways to increase the persistence rates of Black and Hispanic students at Texas community colleges, the number of future graduates in these two underserved groups of students should increase.

Almost two decades ago, the Texas Higher Education Coordinating Board approved the Closing the Gaps by 2015 initiative in 2000 to address ways to improve the enrollment, retention, and graduation rates of Black, White, and Hispanic students. Addressing deficiencies in the student success of Texas community students was one of the first initiatives of this program. The outcomes of this Closing the Gaps by 2015 initiative was evaluated by Rankin, Scott, and JoHyun (2015). In their evaluation, Rankin et al. (2015) documented that the graduation rates of Black students at Texas community colleges decreased by 6.9%. This figure was in stark contrast to the 8% increase in the graduation rates of Hispanic students and a slight decrease of 0.09% in the graduation rates of White students. In contrast to the graduation rates of community college students in a nearby state, Oklahoma, Black, Hispanic, and White students in Oklahoma graduated at higher rates than Black, Hispanic, and White Texas community college students (Rankin et al., 2015).

In a recent study of the 2-year persistence rates of Texas community college students, Moss and Slate (2014) examined the 2-year persistence rates of Black students who enrolled in Texas community colleges for the 1999-2000 and 2011-2012 academic years. For Black students who stayed at the same Texas community college, their average 2-year persistence rate was approximately 22% in the 1999-2000 academic year. In comparison, the 2-year persistence rate of Black students who transferred to a different Texas community college was only 21% in the 1999-2000 academic year. During the 2011-2012 academic year, the 2-year persistence rates of Black students who stayed at the same community college was about 20%, compared to 17% for Black students who transferred to a different Texas community college. Moss and Slate (2014) concluded

that 2-year persistence rates were not statistically significantly different between Black students who stayed at the same Texas community college and Black students who transferred to a different Texas community college. Regardless of their institutional status, the 2-year persistence rates of Black community college students in Texas were low.

In another Texas study, Moss (2017) investigated the 2-year persistence rates of Black students at community colleges based on their institutional status (i.e., stayed or transferred). The analysis of archival data for the 2006-2007 through the 2013-2014 academic years occurred. For all academic years, the 2-year persistence rates of Black Texas community college students ranged from 22% to 28%. The 2-year persistence rates for Black students who stayed at the same community college changed by less than 1% whereas the 2-year persistence rates of Black students who transferred to a different Texas community college changed by less than 2%. Moss (2017) documented that the 2-year persistence rates of Black students by their institutional status (i.e., stayed or transferred) were quite similar and low.

Regarding the 2-year persistence rates of Hispanic Texas community college students, Stagg and Slate (2017) analyzed statewide data for the 2006-2007 academic year through the 2012-2013 academic year. Similar to Moss (2017), Stagg and Slate (2017) examined the 2-year persistence rates of Hispanic students by their institutional status (i.e., stayed at the same community college or transferred to a different community college). Statistically significant differences existed during all seven academic years. For those Hispanic students who stayed at the same Texas community college, the 2-year persistence rates ranged from 34% to 39%. In contrast, the 2-year persistence rates of

Hispanic students who transferred to a different community college ranged from 18% to 25%. Stagg and Slate (2017) determined through their statistical analysis that the 2-year persistence rates for Hispanic students who stayed at the same Texas community college were statistically significantly higher than the 2-year persistence rates of Hispanic students who transferred to a different community college.

Another analysis of 2-year persistence rates of Hispanic students at community college completed by Stagg (2017) documented that the 2-year persistence rates of Hispanic students who stayed at their initial Texas community college were statistically significantly higher than the 2-year persistence rates of Hispanic students who transferred to a different Texas community college. The 2-year persistence rates were 13% higher for Hispanic students who stayed at the same Texas community college than the 2-year persistence rates of Hispanic students who transferred to a different Texas community college.

According to Complete College America (2018), only 3% of Black students in Texas graduated with an associate's degrees, compared to 6% for Asian students, 4% for Hispanic students, and 5% for White students. The low percentage of graduates at Texas community colleges so indicated that many barriers to student success at community colleges exist. These barriers include students not enrolling full-time due to working, inadequately designed remedial classes that delay students from being on college-level, and too many unclear choices for the types of classes that are necessary to complete degrees. With a rate of only 5% of students who complete an associate's degree within two years, it is clear that community colleges are not meeting the needs of the students. (Complete College America, 2018). As a result, employers in the state of Texas will

experience a shortage of qualified graduates who can enter the workforce as skilled workers.

Review of the Literature on Graduation Rates by the Ethnicity/Race of Texas Community College Students

Community colleges provide students across the United States with a feasible way to obtain relevant and affordable training to ensure they can obtain employment in the 21st century. According to the American Association of Community Colleges (2018), community colleges served 41% of all United States undergraduates in the Fall of 2015. Most community colleges serve a large population of students who are low-income and underrepresented. The education provided at these institutions is essential for these types of students to allow them the opportunity for upward economic success (Levesque, 2018). However, less than 40% of community college students earned a certificate or degree within six years (Bailey, Jaggars & Jenkins, 2015).

Community college creates a pathway to becoming middle-class citizens for low-income and underrepresented individuals through community colleges (Scrivener et al., 2015). The completion of an associate's degree or certificate compared to simply earning a high school diploma supports higher earnings. Continuing low completion rates at community colleges; however, intensify the prevailing economic inequalities present in the United States (Levesque, 2018). Continuing to address low completion rates, especially for underrepresented individuals, will allow the United States to remain competitive globally (Baber, 2018).

According the United States National Census Report (2015), even though educational attainment has increased for all ethnic/racial groups, a higher percentage of

Asian students obtained a bachelor's degree, 38%, compared to a rate of 21% for White students, 11% for Black students, and 10% for Hispanic students. Asian and White students are more likely to complete a bachelor's degree than are Black and Hispanic students. As such, programs should be developed and implemented to ensure that underrepresented groups, such as Hispanic and Black students, are prepared to earn their bachelor's degrees (Community College Research Center, 2013).

Community colleges have a diverse student body, with an average of 6% Asians, 13% Blacks, 24% Hispanics, and 47% Whites enrolled (American Association of Community Colleges, 2018). Accordingly, community colleges are leaders in educating students from varied backgrounds (Cox, Joyner, & Slate, 2011). Because most community colleges have open enrollment admissions policies, meeting graduation performance outcomes may be difficult for some students, given their lack of college-readiness (Moosai, Walker, & Floyd, 2011).

Though college access has increased, graduation rates have remained low. In Texas, only one in three students who initially enrolled at a Texas community college completed a postsecondary credential after enrolling over a 6-year period (Texas Higher Education Coordinating Board, 2014). Because future funding is based on success points achieved by meeting certain performance measures, Texas community colleges must reform services by improving their student outcomes (e.g., graduation rates) immediately to ensure proper funding (McKinney & Hagedorn, 2017).

Spangler and Slate (2015) examined the graduation rates of Texas community college students by their ethnicity/race. They analyzed Texas community college statewide data for the 1999-2000 through the 2009-2010 academic years. Spangler and

Slate (2015) established that the graduation rates of Asian, Black, Hispanic, and White Texas community college students increased over this 10-year period. Asian students had the highest graduation rates, followed by White students, Hispanic students, and finally by Black students. Black students had the lowest persistence and graduation rates of the four ethnic/racial groups of Texas community college students. Spangler and Slate (2015) revealed that over a 10-year period, the graduation rates of White and Hispanic students increased by 9%. For Black students, graduation rates increased by 8% over the same 10-year period. For graduation rates to increase further, Spangler and Slate (2015) contended that policymakers should implement policies and procedures to improve graduation rates at community colleges.

In a recent study, Moss (2017) conducted an analysis of the graduation rates of Black and White Texas community students for the 2007-2008 through the 2015-2016 academic years. Through an inferential statistical analysis using nine years of Texas statewide data, the presence of statistically significant differences in graduation rates between Black and White students were revealed. White students had statistically significantly higher graduation rates, almost 15% higher, than the graduation rates of Black students at Texas community colleges.

In her dissertation, Stagg (2017) compared the graduation rates of Hispanic and White students at Texas community colleges for the 2008-2009 academic year through the 2014-2015 academic year. Inferential statistical analyses revealed the presence of statistically significant differences between Hispanic and White students in all seven years of academic statewide data. White students had statistically significantly higher graduation rates that ranged from 43% to 46% than the graduation rates of Hispanic

students that ranged from 41% to 43%. The difference represented a near-large effect size (Cohen's d of 0.79 (Cohen, 1988). Readers should note, however, that the graduation rates of both groups of students were less than 50%.

Price and Tovar (2014) conducted another examination of graduation rates at community colleges in relation to student engagement. After analyzing data from the Community College Survey of Student Engagement Survey and the Integrated Postsecondary Education Data System, Price and Tovar (2014) documented the presence of relationships between positive student engagement and graduation rates. Price and Tovar (2014) contended that by addressing institution-wide policies and practices at community colleges, to include support for students, enhanced student engagement can lead to improvement in student success (e.g., graduation and completion rates).

In an empirical comparison of the graduation rates of Texas and Oklahoma community college students, Rankin et al. (2015) examined the graduation rates of Black, Hispanic, and White students. Documented in that investigation was the presence of a decline in 3-year graduation rates for students in both states between the 2002 and the 2012 academic years. Despite the fact that both states had adopted policies to increase graduation rates, a decline in graduation rates occurred. With respect to the State of Texas, the Closing the Gaps by 2015 program was created to improve graduation rates of Black, Hispanic, and White students. Even after the adoption of this program, fewer Black and White students graduated from Texas community colleges. On the positive side, the graduation rates of Hispanic students increased.

Statement of the Problem

For community college students approximately 35% of them earn a degree (Radford, Berkner, Wheeless, & Shephard, 2010). According to the National Student Clearinghouse Research Center Persistence and Retention Report (2018), Black students who entered a 2-year public college in fall 2016 had the lowest persistence rates at 56%, compared to Asian students with the highest persistence rate at 74.1%, White students at 67.6%, and Hispanic students at 62.7%. For Black students at Texas community colleges, persistence rates have declined despite of the implementation of various programs to close the gaps (Rankin et al., 2015).

The highest percentage of students of color in the country are being educated at community colleges. Consequently, in many states more Black students are enrolled in community colleges than are enrolled at 4-year universities. The question that needs to be answered by community college administrators is: Are the needs of all students of color, especially Black students, being met? (Cohen & Brawer, 2009). Currently, the focus of community colleges has been enrolling and retaining students. Nevertheless, the persistence and retention rates of community college students is 67% lower than the persistence and retention rates of 4-year university students (Garcia, 2010).

A disconnect still exists in Texas between enrollment and retention rates considering enrollment increased but the number of degrees attained did not (Spangler & Slate, 2015). Because of open admissions policies for community colleges, the unique challenges of serving all students from various socioeconomic backgrounds is not being considered when persistence and retention quotas are derived by policymakers. In Texas, the Texas Higher Education Coordinating Board formulates unattainable policies

concerning community colleges when it pertains to meeting persistence and retention goals (Spangler & Slate, 2015).

Purpose of the Study

The purposes of this journal-ready dissertation were to examine the Total 1-year persistence rates and the Total 2-year persistence rates of Black students at Texas community colleges. Another purpose involved a comparison of the graduation rates of Black community college students with the graduation rates of Asian, White, and Hispanic community college students. Specifically investigated was the extent to which differences were present in the Total 1-year and Total 2-year persistence rates of Black community college students between the 1999-2000 academic year and the 2006-2007 academic year; between the 2006-2007 academic year and the 2013-2014 academic years; and between the 1999-2000 academic year and the 2013-2014 academic year. With respect to graduation rates, the extent to which graduation rates of the four major ethnic/racial groups in Texas differed for the 2007-2008 through the 2015-2016 academic years were examined. By examining multiple years of data, the extent to which trends were present in graduation rates was determined.

Significance of the Study

The high rates of Black students who do not persist to graduation has been and continues to be a problem in postsecondary settings in the United States. Of the four major ethnic/racial groups of students in the United States, the persistence rates of Black students continue to lag behind the persistence rates of other ethnic/racial groups. By conducting a study on the persistence rates of Black students, educational leaders, and policymakers will be informed about their current status. Such information could serve

as a program evaluation of the current efforts of community colleges to improve the persistence rates of Black students. With information obtained from this study, policymakers and legislators could make informed decisions about new programs or strategies to address the issue of persistence rates of Black community college students.

Non-completers of degrees and certificates at community colleges lead to long-term detrimental financial costs. In many cases, students who received financial benefits and did not graduate owe the federal government thousands of dollars for education they did not complete. This issue causes an economic and civic loss to the individual and the U.S. society. The diminishing number of citizens who could potentially contribute to addressing workforce demands will linger if young adults continue to enter the workforce underprepared (Lumina Foundation, 2018). A well-educated populace is beneficial to the civic and economic well-being of the United States. (Bowman & Denson, 2013).

In Texas community colleges, Black students are not persisting and graduating causing them to fall behind all other ethnic groups (Rankin et al., 2015). The overrepresentation of Black students in developmental education courses may indicate that the education system is not working for them as they lag other ethnic/racial groups (Complete College America, 2016). For over 14 years, total 1-year persistence rates have remained stagnant for Black students at Texas community colleges (Ingram & Slate, 2017). Of the Texas community college population, only 3% of students complete a degree or certificate (Complete College, 2016). Making sure students persist to graduation should be a top priority for legislators, administrators, faculty, and staff because without more college graduates with specialized skills, employers will lack qualified applicants for jobs (Carnevale & Rose, 2011). Furthermore, by 2020 two thirds

of the jobs in the workforce across the United States will require some type of postsecondary education (Lumina Foundation, 2018).

Definition of Terms

To provide the reader a better understanding of the concepts in this journal-ready dissertation, the following key terms are identified and defined:

Asian

This term refers to a person who has lineage roots to the Far East, China, Southeast Asia, or the subcontinent of India (Texas Higher Education Coordinating Board, 2017c).

Black or African American

This term refers to a person who has lineage roots to Africa (Texas Higher Education Coordinating Board, 2016c).

Community College

Derived from the Texas Junior College Law passed in Texas in 1929, a community college is a public postsecondary local institution that provides education and vocational training to students (Matthews, 2018). Associate degrees and certificates are awarded by this educational entity. The focus of learning is on training students to meet workforce demands or provide general education classes for transferring to a university at an affordable price.

Completer

This term refers to a student who has completed core classes from a core curriculum approved by the coordinating board. This term can also apply to those

students who have completed Coordinating Board-approved certificates and associate's degrees (Texas Higher Education Coordinating Board, 2017c).

Economically Disadvantaged

According to the Texas Higher Education Coordinating Board (2017c) economically disadvantaged can be defined as the following:

if a student is deemed economically disadvantaged, they must meet one or more of the set standards: (a) annual income is at or below the federal poverty line, (b) eligibility for Aid to Families with Dependent Children or other public assistance program (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. Once a student no longer meets these criteria for being economically disadvantaged, they should no longer report themselves as being in this category. (p. 27)

First-Generation College Student

This term describes a student who is the first person in the immediate family to attend college. The student's neither biological nor adoptive parents have attended college (Texas Higher Education Coordinating Board, 2017c).

Graduation Rate

According to the Texas Higher Education Coordinating Board (2016c) graduation rate can be defined as the following:

The percentage of a given college-entering cohort of degree-seeking students who graduate in a specific period, normally six years. For purposes of the Baccalaureate Graduation Rates—First--Time-Entering Undergraduates” and “Baccalaureate Graduation Rates—First-Time Entering Freshman, the cohort consists of fall first-time, full-time undergraduates (or freshman) 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 two-year institutions, it is the students who graduate with an associate degree or certificate with three years. For four-year institutions, it is the students who graduate with a baccalaureate degree within six years. (p. 36)

Hispanic

The term refers to a person who has lineage roots to a Cuba, Mexico, Puerto Rico, Central America, or Spain (Texas Higher Education Coordinating Board, 2017c).

Interactive Accountability System

According to the Texas Higher Education Coordinating Board (2016b) the interactive accountability system can be defined as the following:

The Higher Education 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. (p. 36)

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, 2012c).

Persistence Rate

This term refers to how students persist from one year to another in higher education. It is often measured by the percentage of students who continue in higher education. For clarification, this term replaced the term “retention rate” which has been utilized in the past by the public education area. It referred to students who were not promoted to the next grade but held back a grade (Texas Higher Education Coordinating Board, 2016c).

Retention Rate

According to the Texas Higher Education Coordinating Board (2017c) the retention rate can be defined as the following:

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. More recently, the term "persistence rate" is used more commonly to avoid confusion

with the use of retention rates in the public education sector, where it refers to students who are held back and not promoted to the next grade. (p. 53)

Six-Year Graduation Rates

This term refers to when a community college student who has graduated with an associate degree or certificate within a 6-year period. The student is a first-time, full-time student (Texas Higher Education Coordinating Board, 2016d).

Stayed

This term refers to when a student continues to enroll at a community college with from one fall semester to the next fall semester (Moss, 2017).

Students Who Are At-risk

According to the Texas Higher Education Coordinating Board (2017c) students who are at-risk can be defined as the following:

An undergraduate student who has 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 with the last six years. (p. 6)

Texas Higher Education Coordinating Board

The Texas Higher Education Coordinating Board was created by the Texas Legislature in 1965 to represent the highest authority in the state in matters of public

higher education. Nine members serve on the Board which meets quarterly in Austin, Texas (Texas Higher Education Coordinating Board, 2018)

Total Persistence Rates

This term refers to the first and second year fall semester continued enrollment of a student at a particular postsecondary institution (National Student Clearing House Research Center, 2015).

Two-Year Persistence Rate

According to the Texas Higher Education Coordinating Board (2012c), the two-year persistence rate can be defined as the following:

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. (p. 6)

Transferred

This term refers to when a student enrolls in a different community college one fall semester after being enrolled in a different community college the previous fall semester (Moss, 2017).

White

This term refers to a race of people who have origins from Europe, the Middle East, or North Africa (Texas Higher Education Coordinating Board, 2017c).

Theoretical Framework

For many years, two prevalent frameworks have guided persistence research. The first framework is Tinto's (1975) model of student departure, which is the most popular framework for traditional students. Tinto's (1975) model of departure, however, does not align with nontraditional student outcomes. The second framework is Bean and Metzner's (1985) persistence framework, which is more applicable to nontraditional students. According to Bean and Metzner (1985), environmental factors that affect nontraditional students at community colleges causes them to become unfocused on collegiate responsibilities. Specifically, nontraditional community college students are distracted by external environmental factors, such as work, family obligations, and financial responsibilities. These environmental factors have a direct effect on persistence along with having an indirect effect on persistence through psychological variables (e.g., a sense of belonging, satisfaction with the college experience, and commitment to achieving academic goals) that could exist for some students (Wood & Williams, 2013).

Literature Review Search Procedures

Literature reviewed for the purpose of this journal-ready dissertation, included persistence and graduation rate variables for Asian, Black, Hispanic, and White students in Texas community colleges. Some of the phrases that were utilized in the search for significant literature were: *Asian students, Black students, Hispanic students, White students, community college, persistence rates, retention rates, completion rates, and graduation rates*. The searches for the literature review were conducted through the EBSCO Host database for academic journals. In particular, scholarly peer-reviewed articles were retrieved and used for this study.

The key word searches for “persistence rates” yielded 36,385 results and when Black community college students were added a reduced amount of results of 100 were yielded. After narrowing down the range from 2001 to 2017 only 28 results were yielded. A key word search for “retention rates” yielded 180,126 results and after adding Black community college students the yield was reduced to 176. After narrowing down the range from 2001 to 2017 only 28 results were yielded. For “graduation rates,” a key word search yielded 68,960 results and when Asian, Black, Hispanic, and White community college students were added, 101, 281, 434, and 209 results were available, respectively. After narrowing the range from 2001 to 2017 for Asian, Black, Hispanic, and White community college students, 28, 245, 384, 185, results were yielded, respectively. For “completion rates,” the key word search yielded 140,162 results and when Asian, Black, Hispanic, and White community college students were added the yield was reduced to 26, 225, 309, 158 results, respectively. After narrowing down the range from 2001 to 2017 for Asian, Black, Hispanic, and White community college students only 23, 183, 269, 144 results were yielded, respectively. Articles pertaining to the persistence and graduation rates of Asian, Black, Hispanic, and White community colleges were reviewed for applicability. For the literature review, detailed data were searched, collected, assessed, and reviewed using the Newton Gresham Library database at Sam Houston State University. Detailed searches for research articles with the utilization of key word search terms were performed.

Delimitations

In this journal-ready dissertation, the three studies were delimited to only Texas public community colleges. Data on 4-year institutions and private universities were not

utilized for the journal-ready dissertation. The data that were analyzed in this journal-ready dissertation were the Total 1-year persistence rates and the Total 2-year persistence rates of Black students and the graduation rates of Asian, Black, Hispanic, and White students at Texas community colleges. Data from the 1999-2000 to 2013-2014 academic years and 2007-2008 to 2015-2016 academic years were analyzed. Specifically, data available through the Texas Higher Education Coordinating Board Interactive Accountability System (2016) were used.

Limitations

In this journal-ready dissertation, the Total 1-year persistence rates and the Total 2-year persistence rates of Black students, along with the graduation rates of Asian, Black, Hispanic, and White students, were analyzed. Only quantitative data were used as measures of the Total 1-year and 2-year total persistence rates and graduation rates of Asian, Black, Hispanic, and White students in Texas community colleges. Data for Texas community colleges are reported to Texas Higher Education Coordinating Board.

Assumptions

One assumption is that data analyzed in this study on the Total 1-year and 2-year persistence rates for Black students, along with graduation rates of Asian, Black, Hispanic, and White students in Texas community colleges, which were made available by the Texas Higher Education Coordinating Board Interactive Accountability System, were accurate. Data obtained and analyzed were assumed to be error free due to extensive auditing conducted by the Texas Higher Education Coordinating Board (2016).

Organization of the Study

Three research investigations were conducted to complete this journal-ready dissertation. For the first journal-ready dissertation article, the research questions addressed were on the degree to which differences were present in the Total 1-year persistence rates of Black students at Texas community colleges for the 1999-2000 academic year through the 2013-2014 academic year. In the second journal-ready dissertation article, the research questions that were addressed were on the extent to which differences existed in the Total 2-year persistence rates of Black students at Texas community colleges for the 1999-2000 academic year through the 2013-2014 academic year. Research questions in the third journal-ready dissertation article involved the degree to which differences were present in the graduation rates of Asian, Black, Hispanic, and White Texas community college students for the 2007-2008 academic year through the 2015-2016 academic year.

The journal-ready dissertation is composed of three different manuscripts derived from five chapters. Chapter I comprises 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 an outline of the proposed journal-ready dissertation. In Chapter II, the framework for the first journal-ready dissertation investigation on differences in Total 1-year persistence rates of Black students at Texas community colleges was discussed. In Chapter III, the framework for the second journal-ready research investigation on differences in Total 2-year persistence rates of Black students at Texas community colleges was reviewed. In Chapter IV, the third journal-ready research investigation on the graduation rates of Asian, Black,

Hispanic, and White students at Texas community colleges was reviewed. In Chapter V, results from each of the three research articles conducted in this journal-ready dissertation were summarized and linked with the existing research literature. Furthermore, recommendations for future research along with implications for policies and practice were provided.

CHAPTER II

DIFFERENCES IN THE TOTAL 1-YEAR PERSISTENCE RATES OF BLACK STUDENTS OVER TIME AT TEXAS COMMUNITY COLLEGES: A STATEWIDE, MULTIYEAR INVESTIGATION

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

Abstract

In this multiyear, statewide investigation, the degree to which Total 1-year persistence rates of Black student enrolled in Texas community colleges differed from the 1999-2000 academic year to the 2013-2014 academic year was determined. Inferential statistical procedures did not reveal the presence of statistically significant differences in Total 1-year persistence rates of Black students enrolled in Texas community colleges from the beginning point to the midpoint (i.e., 1999-2000 academic year compared to the 2006-2007 academic year), from the midpoint to the endpoint (i.e., 2006-2007 academic year to the 2013-2014 academic year), and from the beginning point to the endpoint (i.e., 1999-2000 academic year to the 2013-2014 academic year). For all 15 academic years, the Total 1-year persistence rates for Black students enrolled in Texas community colleges remained consistently around 53%. Implications of these findings and recommendations for future research were discussed.

Keywords: Black students, Total 1-year persistence rates, Texas community colleges

DIFFERENCES IN THE TOTAL 1-YEAR PERSISTENCE RATES OF BLACK STUDENTS OVER TIME AT TEXAS COMMUNITY COLLEGES: A STATEWIDE, MULTIYEAR INVESTIGATION

More than one half, 56%, of all students leave college before their sophomore year (Tinto, 2001). With respect to community college enrollment, almost 25% of students at community colleges will be placed on academic probation at some point during their academic career. Unfortunately, 50% of students on academic probation eventually drop out of college (Damashek, 2003). Of the 3 million Black students who were enrolled in postsecondary settings in the United States, 13% were enrolled in community colleges (Morris, 2014). Particularly in Texas, Black students have enrolled in postsecondary settings in record numbers, but they are not persisting to graduation.

Persistence rates are important because students who continue to enroll consistently are likely to complete a certificate or to obtain a college degree in a timely fashion. According to the National Center for Education Statistics (2014), 57% of students who started community colleges during the 2011-2012 academic year persisted toward attaining a degree or certificate. Of note is that Black students who enrolled in community colleges had a lower persistence rate, 48%, than their White, 58%, Hispanic, 59%, and Asian, 65%, peers (National Center for Education Statistics, 2018).

Of the major ethnic/racial groups in the United States, high percentages of Black and Hispanic males do not complete their degrees at community colleges (Wood, 2012; Wood & Turner, 2010). Black students who enter community colleges and who are required to take developmental education courses do not persist to graduation in a timely fashion. Of the community college students who are required to enroll in developmental

education courses, 42% of Black students must take these courses, in comparison to only 31% of White students (Morris, 2014). In Texas, the state of interest in this article, Black students are overrepresented in developmental education courses; a situation that is related to not persisting to graduation.

In the most comprehensive analysis of the persistence rates of Black students in Texas to date, Moss and Slate (2016) examined the 1-year persistence rates of Black students who stayed at the same Texas community college or who transferred to a different Texas community college from the 1999-2000 academic year through the 2009-2010 academic year. Moss and Slate (2017) determined that the 1-year persistence rates for Black students who stayed at the same community college were consistently statistically significantly higher than the 1-year persistence rates of Black students who transferred to a different community college. They documented in their investigation that the 1-year persistence rates of Black students, when they stayed at the same community college, were 36% higher than for Black students who transferred to a different community college in the 1999-2000 academic year. In the 2011-2012 academic year, the 1-year persistence rates of Black students who stayed at the same community college were 27% higher than for Black students who transferred to a different Texas community college (Moss & Slate, 2016). Of note in their study was that the 1-year persistence rates of Black students who stayed at the same community college remained stagnant over the eight years of data they analyzed. For Black students who transferred to a different Texas community college, their 1-year persistence rates decreased by 5% (Moss & Slate, 2017).

In a second investigation, also conducted in Texas, Moss and Slate (2017) compared the 1-year persistence rates of Black students across the 2008-2009, 2009-

2010, 2013-2014, and 2014-2015 academic years. They established that the 1-year persistence rates of Black students who stayed at the same community college were 15% higher than the 1-year persistence rates of Black students who transferred to a different Texas community college in the 2008-2009 academic year. With respect to the 2009-2010 academic year, the 1-year persistence rates were almost 10% higher for Black students who stayed at the same community college than for Black students who transferred to a different community college. For the 2013-2014 and 2014-2015 academic years, the 1-year persistence rates for Black students who stayed at the same community college were 15% higher than the 1-year persistence rates of Black students who transferred to a different community college. Finally, for the 2014-2015 academic year, 1-year persistence rates were almost 15% higher for Black students who stayed at the same community college than the 1-year persistence rates of Black students who transferred to a different community college (Moss & Slate, 2017).

Moss (2017) documented that the 1-year persistence rates of Black students who stayed at the same Texas community college ranged from 38% to 46%. The 1-year persistence rates of Black students who transferred to a different Texas community college ranged from only 27% to 37%. In another investigation on the persistence and graduation rates of Texas community college students by their ethnicity/race (i.e., White, Black, Hispanic, and Asian), Spangler and Slate (2015) documented the presence of a gradual increase in graduation and persistence rates of all four ethnic/racial groups from the 1999-2000 to the 2009-2010 academic years. With respect to Black students, their graduation and persistence rates increased by only 8.27% over this 11-year period.

In an analysis of data on 4-year university students, Payne, Slate, and Barnes (2015) examined the 6-year persistence rates of Texas 4-year public university students by their ethnicity/race between the 1999-2000 and 2009-2010 academic years. For White students, the 6-year persistence rates at Texas 4-year public universities were 63.23% and 68.14%, respectively, in these two academic years. The 6-year persistence rates of Black students at Texas 4-year public universities were 61.55% and 59.53%, respectively. Payne et al. (2015) determined the persistence rates increased less than 1% over this 11-year period.

In a recent investigation directly related to this article, Ingram and Slate (2017) examined the total 1-year persistence rates of Black students at Texas community colleges for three time periods: between the 1999-2000 and the 2006-2007 academic years; between the 2006-2007 and the 2013-2014 academic years; and between the 1999-2000 and the 2013-2014 academic years. Between the 1999-2000 academic year and 2006-2007 academic year, a statistically significant decrease of 2.02% was revealed in the total 1-year persistence rates of Black students. With respect to the 2006-2007 and the 2013-2014 academic years, the total 1-year persistence rates were unchanged. For the 1999-2000 and 2013-2014 academic year comparison, a statistically significant higher total 1-year persistence rate for the 1999-2000 academic year was present. After comparing these academic years, the 1-year persistence rates for Black students at Texas community colleges have remained stagnant across a 14-year period (Ingram & Slate, 2017).

Ballinger and Slate (2017) who examined the 1-year persistence rates of students who had been enrolled at 38 Texas 4-year universities conducted another recent study on

1-year persistence rates. The institutional status (i.e., staying or transferring) of four ethnic/racial groups of students was analyzed. They established that the one-year persistence rates were 34% higher for White students, 27% higher for Black students, 44% higher for Hispanic students and 31% higher for Asian students who stayed at the same 4-year university than for their counterparts who transferred to a different Texas 4-year university.

Fauria and Slate (2014), documented that students who stayed at the same 4-year institution persisted at higher rates than students who transferred to a different 4-year institution. For each ethnic/racial group (i.e., Black, Hispanic, White, and Asian), 1-year persistence rates were statistically significantly higher for students who stayed at the same 4-year institution than for their peers who transferred to a different institution. The results of the Ballinger and Slate (2017) study and the Fauria and Slate study (2014) were commensurate in that the 1-year persistence rates of students who stayed at the same 4-year university were higher than for their counterparts who transferred to a different 4-year university. A summary of the articles discussed in this review of the literature is presented in Table 2.1.

 Insert Table 2.1 about here

Theoretical Framework

For many years, two prevalent frameworks have guided persistence research. The first theoretical framework is Tinto's (1975) model of student departure, which is the most popular framework for traditional students. However, Tinto's (1975) model of

departure does not align with nontraditional student outcomes. The second theoretical framework is Bean and Metzner's (1985) persistence framework, which is more applicable to nontraditional students. According to Bean and Metzner (1985), environmental factors that affect nontraditional students at community colleges causes them to become unfocused on collegiate responsibilities. Specifically, nontraditional community college students can be distracted by external environmental factors such as work, family obligations, and financial responsibilities. These environmental factors have a direct effect on persistence along with having an indirect effect on persistence through psychological variables (e.g., a sense of belonging, satisfaction with the college experience, and commitment to achieving academic goals) that could exist for some students (Wood & Williams, 2013).

Statement of the Problem

In the 21st Century, institutions of higher learning are being held more accountable by students and taxpayers than in previous years (White House, 2018). As a result of being held to higher levels of accountability, legislators in states, such as Texas, have mandated performance based-funding in an effort to increase student success (Texas Higher Education Coordinating Board, 2016a, p. i). Performance based funding was adopted in 2013 by the 83rd Texas Legislature to improve the performance of 50 community colleges within the State of Texas. Set performance measures based on student achievement must be met for Texas community colleges to obtain adequate funding for operating expenses. If set unachievable performance measures developed by the Texas Higher Education Coordinating Board are not met, state funding for Texas

community colleges could be cut, causing a possible financial struggle (McKinney & Hagedorn, 2016).

For Texas and the United States to prosper, Americans must be educated to meet workforce demands. With more than 5.9 million jobs not filled, more skilled workers are needed, especially in manufacturing (White House, 2018). Clear benefits exist when unemployment rates are reduced, and income potentials increase after students earn associate degrees (Baum, Ma, & Payea, 2013). Community colleges provide training that is convenient, relevant, and affordable to underserved students who are mainly low-income, veterans, nontraditional, first-generation, and students of color (Mamiseishvili & Deggs, 2013). However, community college leaders have been challenged to increase graduation rates (Moosai, Walker, & Floyd, 2011). Unfortunately, much work is needed at community colleges to assist Black students who are not persisting to graduation.

Purpose of the Study

The purposes of this article were five-fold. The first purpose was to determine the extent to which differences were present in the Total 1-year persistence rates of Black community college students between the 1999-2000 academic year and the 2006-2007 academic year. A second purpose was to ascertain the degree to which the Total 1-year persistence rates of Black community students differed between the 2006-2007 academic year and the 2013-2014 academic years. The third purpose was to determine the extent to which differences existed in the Total 1-year persistence rates of Black community college students between the 1999-2000 academic year and the 2013-2014 academic year. A fourth purpose was to identify the top 10 Texas community colleges with respect to the highest Total 1-year persistence rates of their Black students for the last two

academic years of available data. The fifth purpose of this investigation was to identify the 10 Texas community colleges with the lowest Total 1-year persistence rates of their Black students in the last two academic years of available data.

Significance of the Study

The high rate of Black students who do not persist to graduation has been and continues to be a problem in postsecondary settings in the United States. Of the four major ethnic/racial groups of students in the United States, the persistence rates of Black students continue to lag behind the persistence rates of other ethnic/racial groups, especially in the State of Texas. By conducting a study on the persistence rates of Black students, educational leaders and policymakers will be informed about the current status. Such information could serve as a program evaluation of the current efforts of community college leaders to improve the persistence rates of Black students. With information obtained from this study, policymakers, legislators, and community college administrators could make informed decisions about new programs or strategies to address the issue of low persistence rates of Black community college students.

Research Questions

In this study, six research questions were addressed: (a) What are the Total 1-year persistence rates of Black community college students in the 1999-2000 academic year through the 2013-2014 academic year?; (b) What is the difference in the Total 1-year persistence rates of Black community college students between the 1999-2000 academic year (i.e., the beginning point) and the 2006-2007 academic year (i.e., the midpoint)?; (c) What is the difference in the Total 1-year persistence rates of Black community college students between the 2006-2007 academic year (i.e., the midpoint) and the 2013-2014

academic year (i.e., the endpoint)?; (d) What is the difference in the Total 1-year persistence rates of Black community college students between the 1999-2000 academic year (i.e., the beginning point) and the 2013-2014 academic year (i.e., the endpoint)?; (e) What are the Texas community colleges that have the highest Total 1-year persistence rates of Black students in the 2012-2013 and the 2013-2014 academic year?; and (f) What are the Texas community colleges that have the lowest Total 1-year persistence rates of Black students in the 2012-2013 and the 2013-2014 academic year?

Method

Research Design

For this study, a non-experimental causal-comparative research design was present (Creswell, 2009; Johnson & Christensen, 2012). With this research design, the independent variable and the dependent variables cannot be manipulated or altered. In this study, archival data from the Texas Higher Education Coordinating Board Interactive Accountability System were analyzed. The independent variable in this investigation was the academic year in which data were reported. The dependent variables were the Total 1-year persistence rates of Black students at Texas community colleges.

Participants and Instrumentation

Archival data were downloaded from the Texas Higher Education Coordinating Board Interactive Accountability System database on all Texas community colleges for the 1999-2000 through the 2013-2014 academic years. These data are publicly available at the Texas Higher Education Coordination Board Interactive Accountability System. The Texas Higher Education Coordinating Board Interactive Accountability database contains information about every Texas community college. This database includes

detailed information about the state of higher education in Texas. Also, the performance of community colleges on specific measures that sustain the mission of higher education institutions is tracked in this database (Texas Higher Education Coordinating Board, 2018). Of interest to this study were data on the Total 1-year persistence rates on Black students at Texas community colleges.

For the 15 academic years, 70 Texas community colleges provided data that were analyzed for the 1999-2000 academic year and the 2006-2007 academic years, 71 Texas community colleges provided data that were analyzed for the 2006-2007 academic year and 2013-2014 academic years. Finally, 70 Texas community colleges provided data that were analyzed for the 1999-2000 academic year and the 2013-2014 academic years.

Results

Because the Texas Higher Education Coordinating Board links the 1-year persistence rates of Black students with the academic year and with the student demographic characteristic, paired samples *t*-tests were used in this study. Because the majority of the underlying assumptions of this inferential statistical procedure were met, parametric paired samples *t*-tests were deemed to be appropriate (Slate & Rojas-LeBouef, 2011). Results will now be reported by research question.

Results for Research Question One

To answer the first research question, “What are the Total 1-year persistence rates of Black community college students in the 1999-2000 academic year through the 2013-2014 academic year?” descriptive statistics were calculated. As revealed in Table 2.2, the Total 1-year persistence rates over this 15-year period were quite consistent. The Total 1-year persistence rates of Texas Black community college students ranged from a low of

49.17% in the 2011-2012 academic year to a high of 58.66% in the 2002-2003 academic year. As such, the Total 1-year persistence rates of Texas Black community college students varied by only 9.49 percentage points in 15-year period.

 Insert Table 2.2 about here

Results for Research Question Two

To answer the second research question, “What is the difference in the Total 1-year persistence rates of Black community college students between the 1999-2000 academic year (i.e., beginning point) and the 2006-2007 academic year (i.e., midpoint)?”, a paired samples *t*-test was calculated. This analysis did not reveal a statistically significant difference in the Total 1-year persistence rates, $t(70) = 1.64, p = .57$. Texas Black community college students had similar Total 1-year persistence rates in the 1999-2000 academic year, 56.21%, and in the 2006-2007 academic year, 54.11%. Table 2.3 contains the descriptive statistics for this analysis.

 Insert Table 2.3 about here

Results for Research Question Three

In reference to the third research question, “What is the difference in the Total 1-year persistence rates of Black community college students between the midpoint 2006-2007 academic year and the endpoint 2013-2014 academic year?”, a statistically significant difference was not present, $t(69) = 0.93, p = .54$. Texas Black community

college students had similar Total 1-year persistence rates in the 2006-2007 academic year, 54.76%, and in the 2013-2014 academic year, 55.91%. Readers are directed to Table 2.4 for the descriptive statistics for this analysis.

Insert Table 2.4 about here

Results for Research Question Four

Concerning the fourth research question, “What is the difference in the Total 1-year persistence rates of Black community college students between the beginning point and endpoint?”, another paired samples *t*-test was conducted. A statistically significant difference was not yielded in the Total 1-year persistence rates of Black community college students, $t(70) = 1.64, p = .56$. Texas Black community college students had similar Total 1-year persistence rates in the 1999-2000 academic year, 56.21%, and in the 2013-2014 academic year, 55.60%. Delineated in Table 2.5 are the descriptive statistics for this analysis.

Insert Table 2.5 about here

Results for Research Question Five

To answer the fifth research question, “What are the Texas community colleges that have the highest Total 1-year persistence rates of Black students in the 2012-2013 and 2013-2014 academic years?”, descriptive statistics were calculated. As revealed in Table 2.6, Alamo Community College—Palo Alto had the best Total 1-year persistence

rates of their Black students, followed by Clarendon College, Del Mar College, and Western Texas College. The Total 1-year persistence rates of Black students ranged from 100% to 65% for the top 10 Texas community colleges in the 2012-2013 academic year.

 Insert Table 2.6 about here

With respect to the 2013-2014 academic year, Laredo College had the best Total 1-year persistence rates of their Black students, followed by Brazosport College, South Texas College, and Alamo Community College-Northeast Lakeview. The Total 1-year persistence rates of Black student ranged from 100% to 69% for the top 10 Texas community college in the 2013-2014 school year. Table 2.7 contains the descriptive statistics for this analysis.

 Insert Table 2.7 about here

Results for Research Question Six

To answer the next research question, “What are the Texas community colleges with the lowest Total 1-year persistence rates of Black students in the 2012-2013 and the 2013-2014 academic years? descriptive statistics were calculated. As revealed in Table 2.8, Texas Southmost College had the lowest Total 1-year persistence rates for Black students, followed by Southwest Texas Junior College, Laredo College, and El Paso Community College District. The Total 1-year persistence rates of Black students at the

lowest 10 Texas community colleges ranged from 0% at Texas Southmost College to 43% at Lone Star College-North Harris for the 2012-2013 academic year.

Insert Table 2.8 about here

Concerning the 2013-2014 academic year, Cisco College had the poorest Total 1-year persistence rates for Black students, 0%, followed by Galveston College, Weatherford College, and Del Mar College. The lowest Total 1-year persistence rates of Black students ranged from 0% to 43% at Central Texas College for the 2013-2014 academic year. Table 2.9 contains the descriptive statistics for this analysis.

Insert Table 2.9 about here

Discussion

In this multiyear statewide study, the Total 1-year persistence rates of Black students who were enrolled in Texas community colleges in 15 academic years (i.e., 1999-2000 through 2013-2014) were examined. For 15 academic years, the Total 1-year persistence rates of Black students were quite similar. Their Total 1-year persistence rates ranged from a low of 49.17% in the 2011-2012 academic year to a high of 58.66% in the 2002-2003 academic year. As such, the Total 1-year persistence rates of Black students varied by only 9.49% across this 15-year period. The Total 1-year persistence rates of Black students enrolled in Texas community colleges remained stagnant over a 15-year time period. With respect to the inferential analyses regarding changes over

time, no statistically significant differences were revealed. The Total 1-year persistence rates of Black students at Texas community colleges did not improve over the 15 academic years of data that were analyzed here. Over 15-year academic years, the Total 1-year persistence rates of Black students at Texas community colleges ranged from 49.17% to 58.66 % and the average percentage for the Total 1-year persistence rates for these academic years was 53.91%. Depicted in Figure 2.1 are the Total 1-year persistence rates across all 15 academic years.

 Insert Figure 2.1 about here

Connections with Existing Literature

The results of this multiyear, statewide investigation were congruent with the findings of other researchers (Ingram & Slate, 2017; Moss, 2017; Moss & Slate, 2016) who conducted multiyear analyses of the persistence rates of Black students at Texas community colleges. Ingram and Slate (2017), in an analysis of the 1-year persistence rates of Black students at Texas community colleges, documented that the 1-year persistence rates of Black students in Texas community college remained stagnant over a 14-year period. Furthermore, Moss (2017) and Moss and Slate (2017) determined that the 1-year persistence rates of Black students at Texas community colleges were low across a similar time period.

Implications for Policy and Practice

Based upon the results of this multiyear, statewide study, the following implications for policy can be made. First, given the Total 1-year persistence rates of

Black students that were documented herein, a substantial percentage of Black students are clearly not graduating from Texas community colleges. When Black students are not persisting to their second year of college, they are not able to complete the required coursework to earn certificates and degrees that are needed for an educated workforce. As such, ways to support Black students to continue in Texas community colleges are needed. Either current programs need to be examined and modified or new programs need to be created and implemented so that the Total 1-year persistence rates of Black students are substantially improved. Specific reasons for Black students not persisting need to be identified and addressed by college leaders. Funding needs to be identified for programs to support Black students, so they can persist to graduation.

Third, Black students in Texas are overrepresented in developmental classes, so an examination of high schools is necessary to determine why students are graduating from high schools not being ready for postsecondary education. Barnes and Slate (2014) determined that Black students are often underprepared for college causing them to struggle while in developmental courses. To address this issue, collaboration is needed between postsecondary and secondary schools to further assist Black students being more prepared for college. The implementation of more rigorous coursework in high school for Black students must be supported.

Implications for practice involve the following suggestions. Educating all stakeholders, including parents of Black students, Black students, teachers, and educational leaders at schools, of the benefits of academic rigor is critical for increasing the numbers of Black students who enroll in postsecondary settings, as well as their success. Educational leaders should focus on both increasing the number of Black

students who enroll in dual credit, Advanced Placement, and International Baccalaureate programs, as well as improving the success of Black students, in these college preparatory programs is critical. The introduction of rigorous academic programs to Black students and their parents should begin as early as middle school so that Black students will begin to enroll in Pre-Advanced Placement classes. Starting early to educate Black students and their parents on the benefits of rigorous classes should increase the likelihood that Black students will be college-ready.

Recommendations for Future Research

Based upon the results of this Texas, statewide investigation, several recommendations for future research can be made. First, because this study was based entirely on Texas data, researchers are encouraged to replicate this study in other states. The degree to which these results based entirely on Texas students would be generalizable to students in other states is not known. A second recommendation is to extend this study to 4-year postsecondary institutions. The findings delineated in this article were only on community college students. Accordingly, the extent to which community college student results would be generalizable to 4-year postsecondary students is not clear.

A third recommendation would be to extend this investigation to other student demographic characteristics. To what degree are results based on Black students generalizable to Hispanic students, students in poverty, non-traditional students, or to first-time-in-college students? Fourth, researchers are encouraged to conduct qualitative and/or mixed methods investigations to determine the reasons for the low persistence

rates of Texas Black community college students. Such efforts could lead to the development of effective support programs.

Conclusion

In this multiyear, statewide investigation, the Total 1-year persistence rates of Black students at Texas community colleges were described. Over a 15-year time period (i.e., 1999-2000 to 2013-2014), no statistically significant improvements occurred in the Total 1-year persistence rates of Texas Black community college students. Over the 15 academic years, the Total 1-year persistence rates for Black students at Texas community colleges remained stagnant. Finally addressed in this article was the identification of the Texas community colleges that had the best Total 1-year persistence rates of their Black students for the past two academic years, as well as the Texas community colleges that had the lowest Total 1-year persistence rates.

References

- Ballinger, R., & Slate, J. R. (2017). Ethnic/racial differences in 1-year persistence rates by institutional status at Texas 4-year universities over time. *Journal of Advances in Education Research*, 2(4), 280-286. Retrieved from <https://dx.doi.org/10.22606/jaer.2017.24008>
- Barnes, W., & Slate, J. R. (2014). College-readiness rates in Texas: A statewide, multiyear study of ethnic differences. *Education and Urban Society*, 46(1), 59-87. doi:10.1177/0013124511423775
- Baum, S., Ma, J., & Payea, J. (2013). *Education pays 2013: The benefits of higher education for individuals and society*. Retrieved from <https://trends.collegeboard.org/sites/default/files/education-pays-2013-full-report.pdf>
- Bean, J. P., & Metzner, B. S. (1985). A conceptual model of nontraditional undergraduate student attrition. *Review of Educational Research*, 55(4), 485-540.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Complete College America. (2016, December). *Student services engagement*. Paper presented at Houston Community College Training for Advisors, Houston, TX.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage.
- Damashek, R. (2003). *Support programs for students on academic probation*. Retrieved from: <https://eric.ed.gov/?id=ED475734>

- 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. Retrieved from <http://search.proquest.com/openview/701c2c2421fe3741e77ec8cacb1ce0a7/1?pq-origsite=gscholar&cbl=2034856>
- Ingram, K. R., & Slate, J. R. (2017). Differences in total 1-year persistence rates of Black students at Texas community colleges: A multiyear, statewide analysis. *Cross-Currents: An International Peer-Reviewed Journal on Humanities & Social Sciences*, 3(2), 52-56. Retrieved from <http://crosscurrentpublisher.com/>
- Johnson, R. B., & Christensen, L. (2012). *Educational research: Quantitative, qualitative, and mixed approaches* (4th ed.). Los Angeles, CA: Sage.
- Mamiseishvili, K., & Deggs, D. M. (2013). Factors affecting persistence and transfer of low-income students at public two-year institutions. *Journal of College Student Retention: Research, Theory & Practice*, 15(3), 409-432. doi:10.2190/cs.15.3.f
- Mangan, K. (2014, September). Community colleges test ways to clear students' path to success. *Chronicle of Higher Education*, 61(4), A10-A11.
- McKinney, L., & Hagedorn, L. S. (2016). Performance-based funding for community colleges: Are colleges disadvantaged by serving the most disadvantaged students? *The Journal of Higher Education*, 88(2), 159-182.
doi:10.1080/00221546.2016.1243948

- Moosai, S., Walker, D. A., & Floyd, D. L. (2011). Using student and institutional characteristics to predict graduation rates at community colleges: New developments in performance measures and institutional effectiveness. *Community College Journal of Research and Practice*, 35(10), 802-816. doi:10.1080/10668926.2010.520245
- Morris, M. W. (2014). *Black stats: African Americans by the numbers in the twenty-first century*. New York, NY: The New Press.
- Moss, S. (2017). *Differences in persistence and graduation rates of Black students in Texas community colleges: A multiyear, statewide study* (Unpublished doctoral dissertation). Sam Houston State University, Huntsville, TX.
- 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(4), 206-213.
- Moss, S., & Slate, J. R. (2017). Differences in the 1-year persistence rates by student institutional status for Black students at Texas community colleges: A statewide multiyear investigation. *AASCIT Journal of Psychology*, 3(3), 25-33.
- National Center for Education Statistics. (2014). *The condition of education*. Retrieved from <https://nces.ed.gov/pubs2014/2014083.pdf>
- National Center for Education Statistics. (2018). *The condition of education*. Retrieved from <https://nces.ed.gov/pubs2018/2018144.pdf>

- Payne, J. M., Slate, J. R., & Barnes, W. (2015). Differences in persistence rates of undergraduate students by ethnicity: A multiyear, statewide analysis. *International Journal of Teaching and Faculty Development*, 4(3), 157-171.
- Retrieved from https://www.novapublishers.com/catalog/product_info.php?products_id=53063
- Rankin, D. A., Scott, J. A., & Kim, J. (2015). Oklahoma and Texas completion policies for community colleges. *eJournal of Education Policy*, 1-11.
- Spangler, J. M., & Slate, J. R. (2015). Texas community college graduation and persistence rates as a function of student ethnicity. *Community College Journal of Research and Practice*, 39(8), 741-753. doi:10.1080/10668926.2013.878261
- 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.
- Tinto, V. (1975). Dropouts from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89-125.
- Tinto, V. (2001). *Rethinking the first year of college*. Higher Education Monograph Series. Syracuse, NY: Syracuse University.
- 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
- Wood, J. L., & Turner, C. S. V. (2010). Black males and the community college: Student perspectives on faculty and academic success. *Community College Journal of Research and Practice*, 35, 135-151. doi:10.1080/10668926.2010.526052

Wood, J., & Williams, R. (2013). Persistence factors for Black males in the community college: An examination of background, academic, social, and environmental variables. *Spectrum: A Journal on Black Men*, 1(2), 1. doi:10.2979/spectrum.1.2.1

Table 2.1

Summary of Studies on the 1-Year Persistence Rates of Black Students

Author(s)	Year	Topic	Outcome
Fauria & Slate	2014	1-year persistence rates of students in Texas 4-year public universities for 2000-2011	Regardless of race/ethnicity, students are more likely to persist if they remain at the same 4-year institution
Spangler & Slate	2015	Persistence rates and graduation rates of Texas community college students by ethnicity/race	More policies to improve community college graduation and persistence rates needed.
Payne, Slate, & Barnes	2015	6-year persistence rates of Texas public university students by ethnicity between 2000-2010 academic years	Persistence of Black students at Texas public universities was the lowest between the 2000-2010 academic years
Moss & Slate	2016	1-year persistence rates of Texas community college students based on institutional status 1999-2000 through 2009-2010	1-year persistence rates remained stagnant for Black students that stayed at the same community college.

Table 2.2

Descriptive Statistics for the Total 1-Year Persistence Rates of Black Students in Texas

Community Colleges for the 1999-2000 Academic Year Through the 2013-2014

Academic Year

Academic Year	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
1999-2000	70	56.21	16.48
2000-2001	70	53.88	16.89
2001-2002	70	54.16	16.90
2002-2003	70	58.66	16.41
2003-2004	70	54.32	15.38
2004-2005	70	54.41	16.02
2005-2006	70	53.90	14.14
2006-2007	70	54.76	14.83
2007-2008	71	58.22	13.26
2008-2009	71	54.84	14.11
2009-2010	71	54.17	14.74
2010-2011	71	52.31	13.75
2011-2012	71	49.17	15.22
2012-2013	71	52.70	15.91
2013-2014	71	55.91	14.50

Table 2.3

Descriptive Statistics of the Total 1-Year Persistence Rates of Black Students in Texas

Community Colleges for the Beginning and Midpoint Academic Year Comparison

Academic Year	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
1999-2000	70	56.21	16.48
2006-2007	70	54.11	13.89

Table 2.4

Descriptive Statistics of the Total 1-Year Persistence Rates of Black Students in Texas

Community Colleges for the Midpoint and Endpoint Academic Year Comparison

Academic Year	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
2006-2007	71	54.76	14.83
2013-2014	71	55.91	14.50

Table 2.5

Descriptive Statistics of the Total 1-Year Persistence Rates of Black Students in Texas

Community Colleges for the Beginning and Endpoint Academic Year Comparison

Academic Year	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
1999-2000	70	56.21	16.48
2013-2014	70	55.60	14.36

Table 2.6

Descriptive Statistics of the Top Ten Texas Community Colleges with the Highest Total 1-Year Persistence Rates of Black Students in the 2012-2013 Academic Year

Texas Community College	M%
Alamo Community College - Palo Alto	100%
Clarendon College	88%
Del Mar College	77%
Western Texas College	76%
Lone Star College-Cy-Fair	71%
College of the Mainland Community College	70%
Victoria College	69%
Collin County Community College District	68%
Alamo Community College- Northwest Vista	66%
Wharton County Junior College	65%

Table 2.7

Descriptive Statistics of the Top Ten Texas Community Colleges with the Highest Total 1-Year Persistence Rates of Black Students in the 2013-2014 Academic Year

Texas Community College	M%
Laredo College	100%
Brazosport College	94%
South Texas College	86%
Alamo Community College- Northeast Lakeview	78%
Southwest Texas Junior College	75%
Alamo Community College- Palo Alto	75%
Lone Star College- Tomball	74%
Dallas Community College-Richland	74%
San Jacinto College- Central	71%
Alamo Community College- San Antonio	69%

Table 2.8

Descriptive Statistics of the Top Ten Texas Community Colleges with the Lowest Total 1-Year Persistence Rates of Black Students in the 2012-2013 Academic Year

Texas Community College	M%
Texas Southmost College	0%
Southwest Texas Junior College	0%
Laredo College	0%
El Paso Community College District	38%
Vernon College	38%
San Jacinto College- North	38%
Tarrant County College- South	39%
Galveston College	40%
Paris Junior College	40%
Lone Star College- North Harris	43%

Table 2.9

Descriptive Statistics of the Top Ten Texas Community Colleges with the Lowest Total 1-Year Persistence Rates of Black Students in the 2013-2014 Academic Year

Texas Community College	M%
Cisco College	0%
Galveston College	27%
Weatherford College	38%
Del Mar College	39%
Dallas Community College- Eastfield	41%
Dallas Community College- El Centro College	41%
Ranger College	42%
Houston Community College System	43%
Texarkana College	43%
Central Texas College	43%

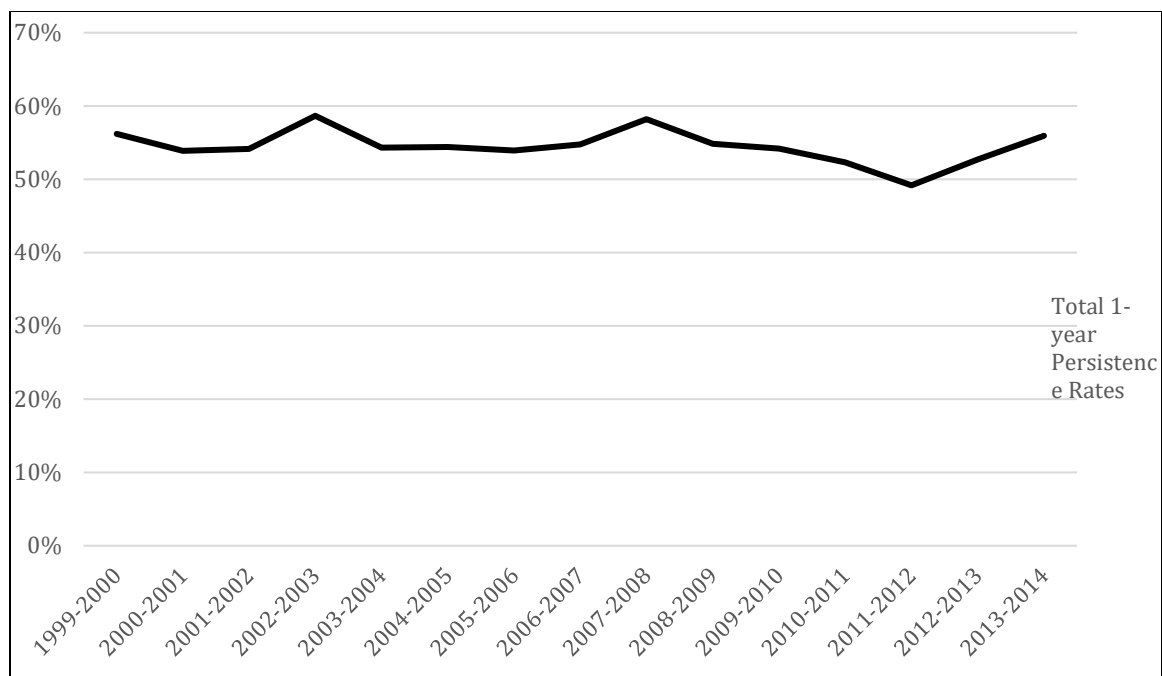


Figure 2.1. Total 1-year persistence rates of Black students at Texas community colleges for the 1999-2000 academic year through the 2013-2014 academic year.

CHAPTER III

DIFFERENCES IN TOTAL 2-YEAR PERSISTENCE RATES OF BLACK STUDENTS OVER TIME AT TEXAS COMMUNITY COLLEGES: A STATEWIDE MULTIYEAR INVESTIGATION

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

Abstract

In this multiyear, statewide investigation, the Total 2-year persistence rates of Black students enrolled in Texas community colleges from the 1999-2000 academic year to the 2013-2014 academic year were described. Inferential statistical procedures did not reveal the presence of statistically significant differences in Total 2-year persistence rates of Black students enrolled in Texas community colleges from the beginning point to the midpoint (i.e., 1999-2000 academic year compared to the 2006-2007 academic year), from the midpoint to the endpoint (i.e., 2006-2007 academic year to the 2013-2014 academic year), and from the beginning point to the endpoint (i.e., 1999-2000 academic year to the 2013-2014 academic year). For all 15 academic years, the Total 2-year persistence rates for Black students enrolled in Texas community colleges remained consistently around 40%. Implications of results and research recommendations were discussed.

Keywords: Black students, 2-year persistence rates, Texas community colleges, Total persistence rates

DIFFERENCES IN TOTAL 2-YEAR PERSISTENCE RATES OF BLACK STUDENTS OVER TIME AT TEXAS COMMUNITY COLLEGES: A STATEWIDE MULTIYEAR INVESTIGATION

As a result of adopting a performance-based funding model, the State of Texas is being forced to analyze enrollment shortages at community colleges (McKinney & Hagedorn, 2016). In Texas, 52% of students enrolled in postsecondary education attend community colleges (Texas Association of Community Colleges, 2014). This student population is composed of a number of low-income students with diverse backgrounds. Because Texas community colleges educate large populations of underrepresented students, low persistence rates must be addressed, especially considering that half of the students who enroll do not return for the second year (McKinney & Hagedorn, 2016).

According to the Texas Higher Education Coordinating Board (2014), only one of every three community college students obtains a postsecondary credential after 6 years of being initially enrolled. Because Texas community colleges serve a large number of students who are disadvantaged (e.g., Black, Hispanic, nontraditional, low-income, and academically underprepared), funding is limited for obtaining resources and implementing programs to assist them to persist to graduation (Morrice, 2011; Stuart, Rios-Aguilar, & Deil-Amen, 2014). Currently, the performance funding system for Texas community colleges rewards community college systems that have increased enrollment rates but not for increases in academic progression (i.e., persistence) to graduation. As a result, modifications are needed in the current performance funding system for Texas community colleges (Natale & Jones, 2017). More degrees obtained from community colleges are essential to fulfill the needs of the 21st century workforce.

Having educated workers is a national priority (Lumina Foundation, 2015). As such, the State of Texas should encourage institutions through incentives to improve their number of graduates (Natale & Jones, 2017).

More Black and Hispanic students will need to persist to graduation to ensure the number of students with degrees in Texas increases. For both ethnic/racial groups, community colleges are essential for them to obtain the necessary training at an affordable cost to become employed in the workforce. By addressing ways in which the persistence rates of Black and Hispanic students at Texas community colleges can be increased, the number of future graduates from Texas community colleges should be able to be increased.

In 2000, the Texas Higher Education Coordinating Board approved the *Closing the Gaps by 2015* program to address ways to improve the enrollment, retention, and graduation rates of Black, White, and Hispanic students. This program was one of the first initiatives in which deficiencies in the student success of Texas community college students were addressed. The outcomes of the *Closing the Gaps by 2015* initiative was evaluated by Rankin, Scott, and JoHyun (2015). They documented that the graduation rates of Black students at Texas community colleges decreased by 6.9%. This figure was in stark contrast to the 8% increase in the graduation rates of Hispanic students and a slight decrease of 0.09% in the graduation rates of White students (Rankin et al., 2015).

In a study of the 2-year persistence rates of Texas community college students, Moss and Slate (2014) examined the 2-year persistence rates of Black students who had been enrolled in Texas community colleges for the 1999-2000 and 2011-2012 academic years. For Black students who stayed at the same Texas community college, the average

2-year persistence rate was only about 22% in the 1999-2000 academic year. In comparison, the 2-year persistence rate of Black students who transferred to a different Texas community college was only 21% in the 1999-2000 academic year. During the 2011-2012 academic year, the 2-year persistence rates of Black students who stayed at the same community college was approximately 20%, compared to 17% for Black students who transferred to a different Texas community college. Moss and Slate (2014) concluded that 2-year persistence rates were not statistically significantly different between Black students who stayed at the same Texas community college and Black students who transferred to a different Texas community college. Regardless of their institutional status, the 2-year persistence rates of Black community college students in Texas were low.

In another Texas study, Moss (2017) investigated the 2-year persistence rates of Black students at community colleges based on their institutional status (i.e., stayed or transferred). Archival data for the 2006-2007 through the 2013-2014 academic years were analyzed. For all academic years, the 2-year persistence rates of Black Texas community college students ranged from 22% to 28%. The 2-year persistence rates for Black students who stayed at the same community college changed by less than 1% whereas the 2-year persistence rates of Black students who transferred to a different Texas community college changed by less than 2%. Moss (2017) documented that the 2-year persistence rates of Black students by their institutional status (i.e., stayed or transferred) were quite similar and low.

Regarding the 2-year persistence rates of Hispanic Texas community college students, Stagg and Slate (2017) analyzed statewide data for the 2006-2007 academic

year through the 2012-2013 academic year. Similar to Moss (2017), Stagg and Slate (2017) examined the 2-year persistence rates of Hispanic students by their institutional status (i.e., stayed at the same community college or transferred to a different community college). Statistically significant differences existed during all seven academic years. For those Hispanic students who stayed at the same Texas community college, the 2-year persistence rates ranged from 34% to 39%. In contrast, the 2-year persistence rates of Hispanic students who transferred to a different community college ranged from 18% to 25%. Stagg and Slate (2017) established that the 2-year persistence rates for Hispanic students who stayed at the same Texas community college were statistically significantly higher than the 2-year persistence rates of Hispanic students who transferred to a different community college.

Another analysis of 2-year persistence rates of Hispanic students at community college was completed by Stagg (2017) who documented that the 2-year persistence rates of Hispanic students who stayed at their initial Texas community college were statistically significantly higher than the 2-year persistence rates of Hispanic students who transferred to a different Texas community college. The 2-year persistence rates of Texas community college students were 13% higher for Hispanic students who stayed at the same community college than the 2-year persistence rates of Hispanic students who transferred to a different Texas community college.

According to Complete College America (2018), only 3% of Black students in Texas graduated with an associate's degrees, compared to 6% for Asian students, 4% for Hispanic students, and 5% for White students. The low percentage of graduates at Texas community colleges is an indication of barriers to student success at community colleges.

These barriers include students not enrolling full-time due to working, inadequately designed remedial classes that delay students from being on college-level, and too many unclear choices for the types of classes that are needed to complete degrees. With a rate of only 5% of students who complete an associate's degree within two years, it is clear that community colleges are not meeting the needs of the students they serve (Complete College America, 2018). As a result, employers in the state of Texas will experience a shortage of graduates who can enter the workforce as a skilled worker. A summary of the articles discussed in this review of the literature is presented in Table 3.1.

Insert Table 3.1 about here

Statement of the Problem

For community college students, only 35% earn a degree (Radford, Berkner, Wheelless, & Shephard, 2010). According to the National Student Clearinghouse Research Center Persistence and Retention Report (2018), Black students who entered a 2-year public college in fall 2016 had the lowest persistence rates at 56%, compared to Asian students with the highest persistence rate at 74.1%, White students at 67.6%, and Hispanic students at 62.7%. For Black students attending Texas community colleges, persistence rates have declined despite of the implementation of various programs to close the gaps (Rankin et al., 2015).

Purpose of the Study

The five-fold purpose of this study was to examine the Total 2-year persistence rates of Black students at Texas community colleges. The first purpose was to determine

the extent to which differences were present in the Total 2-year persistence rates of Black community college students between the 1999-2000 academic year and the 2006-2007 academic year. A second purpose was to ascertain the degree to which the Total 2-year persistence rates of Black community students differ between the 2006-2007 academic year and the 2013-2014 academic years. The third purpose was to determine the extent to which differences existed in the Total 2-year persistence rates of Black community college students between the 1999-2000 academic year and the 2013-2014 academic year. The fourth purpose was to identify the top 10 Texas community colleges with the highest Total 2-year persistence rates of Black students in the last two academic years of available data. The fifth purpose was to identify the top 10 Texas community colleges with the lowest Total 2-year persistence rates of their Black students in the last two academic years of available data.

Significance of the Study

Non-completers of degrees and certificates at community colleges incur long-term detrimental financial costs. Students who receive financial benefits and do not graduate owe financial institutions thousands of dollars for an education they did not complete. This situation causes an economic and civic loss to the U.S. society because of the absence of citizens who could potentially contribute to addressing workforce demands. Consequently, a well-educated populace is beneficial to corporations and businesses (Bowman & Denson, 2013). Having educated workers is essential for higher wages that can be contributed to the tax base of the United States.

In Texas community colleges, Black students are not persisting and graduating at the same rate as other ethnic/racial groups. As such, they continue to lag behind other

ethnic/racial groups in their educational attainment (Rankin et al., 2015). The overrepresentation of Black students in developmental education courses indicates the education system is not working for them (Complete College America, 2016). For over 14 years, total 2-year persistence rates have remained stagnant for Black students at Texas community colleges (Ingram & Slate, 2017). Of the Texas community college population, only 3% of students complete a degree or certificate (Complete College, 2016). Developing and implementing programs to help students persist to graduation should be a top priority for legislators, administrators, faculty, and staff to ensure that more graduates are prepared to enter the workforce (Carnevale & Rose, 2011).

Research Questions

In this study, six research questions were addressed: (a) What are the Total 2-year persistence rates of Black community college students in the 1999-2000 academic year through the 2013-2014 academic year?; (b) What is the difference in the Total 2-year persistence rates of Black community college students between the 1999-2000 academic year and the 2006-2007 academic years?; (c) What is the difference in the Total 2-year persistence rates of Black community college students between the 2006-2007 academic year and the 2013-2014 academic years?; (d) What is the difference in the Total 2-year persistence rates of Black community college students between the 1999-2000 academic year and the 2013-2014 academic year?; (e) What are the Texas community colleges with the highest Total 2-year persistence rates of Black students in the 2011-2012 and 2013-2014 academic years?; and (f) What are the Texas community colleges with the lowest Total 2-year persistence rates of Black students in the 2011-2012 and 2013-2014 academic years?

Method

Research Design

In this study, a non-experimental causal-comparative research design was present (Creswell, 2009; Johnson & Christensen, 2012). With this research design, the independent variable and the dependent variables cannot be manipulated or altered. In this study, archival data from the Texas Higher Education Coordinating Board Interactive Accountability System were analyzed. The independent variable in this investigation was the academic year in which data were reported. The dependent variables were the Total 2-year persistence rates of Black students at Texas community colleges.

Participants and Instrumentation

For this study, a non-experimental causal-comparative research design was used (Creswell, 2009; Johnson & Christensen, 2012). With this research design, the independent variable and the dependent variables cannot be manipulated or altered. In this study, archival data from the Texas Higher Education Coordinating Board Interactive Accountability System were analyzed. Community college districts are required to report the 2-year persistence rates of their students by ethnicity /race. The independent variable in this investigation was the academic year in which data were reported. The dependent variables were the Total 2-year persistence rates of Black students at Texas community colleges. According to the Texas Higher Education Coordinating Board (2012c), 2-year persistence rates can be defined as the percent of first-time entering students who are seeking a degree while being enrolled in 12 hours of semester credit and continue to reenroll their second academic year. These students are still enrolled at the same institution or a different institution for two fall semesters. For the 15 academic years, 70

Texas community colleges provided data that were analyzed for the 1999-2000 academic year and the 2006-2007 academic years, 71 Texas community colleges provided data that were analyzed for the 2006-2007 academic year and 2013-2014 academic years. Finally, 70 Texas community colleges provided data that were analyzed for the 1999-2000 academic year and the 2013-2014 academic years.

Results

Because the Texas Higher Education Coordinating Board links the 2-year persistence rates of Black students with the academic year and with the student demographic characteristic, paired samples *t*-tests were used in this study. Because the majority of the underlying assumptions of this inferential statistical procedure were met, parametric paired samples *t*-tests were deemed to be appropriate (Slate & Rojas-LeBouef, 2011). Results will now be reported by research question.

Results for Research Question One

To answer the first research question, “What are the Total 2-year persistence rates of Black community college students in the 1999-2000 academic year through the 2013-2014 academic year?” descriptive statistics were calculated. As revealed in Table 3.2, the Total 2-year persistence rates over this 15-year period were quite consistent. The Total 2-year persistence rates of Texas Black community college students ranged from a low of 36.75% in the 2009-2010 academic year to a high of 43.79% in the 2007-2008 academic year. As such, the Total 2-year persistence rates of Texas Black community college students varied by only 7.04 percentage points in this 15-year period.

Insert Table 3.2 about here

Results for Research Question Two

To answer the second research question, “What is the difference in the Total 2-year persistence rates of Black community college students between the 1999-2000 academic year (i.e., beginning point) and the 2006-2007 academic year (i.e., midpoint)?”, a paired samples *t*-test was calculated. This analysis did not reveal a statistically significant difference in the Total 2-year persistence rates, $t(69) = 1.52, p = .42$. Texas Black community college students had similar Total 2-year persistence rates in the 1999-2000 academic year, 42.24%, and in the 2006-2007 academic year, 41.82%. Table 3.3 contains the descriptive statistics for this analysis.

Insert Table 3.3 about here

Results for Research Question Three

In reference to the third research question, “What is the difference in the Total 2-year persistence rates of Black community college students between the midpoint academic year and the endpoint academic year?”, a statistically significant difference was not yielded, $t(70) = 2.04, p = .41$. Texas Black community college students had similar Total 2-year persistence rates in the 2006-2007 academic year, 41.94%, and in the 2013-2014 academic year, 37.86%. Readers are directed to Table 3.4 for the descriptive statistics.

Insert Table 3.4 about here

Results for Research Question Four

Concerning the fourth research question, “What is the difference in the Total 2-year persistence rates of Black community college students between the beginning point and endpoint?” another paired samples *t*-test was conducted. A statistically significant difference was not yielded in the Total 2-year persistence rates of Black community college students, $t(69) = 1.75, p = .42$. Texas Black community college students had similar Total 2-year persistence rates in the 1999-2000 academic year, 42.24%, and in the 2013-2014 academic year, 37.54%. Delineated in Table 3.5 are the descriptive statistics for this analysis.

Insert Table 3.5 about here

Results for Research Question Five

To answer the fifth research question, “What are the Texas community colleges that have the highest Total 2-year persistence rates of Black students in the 2011-2012 and 2012-2013 academic years?”, descriptive statistics were calculated. As revealed in Table 3.6, Texas Southmost College had the highest Total 2-year persistence rates of their Black students, followed by Alamo Community College, Galveston College, Brazosport College, and Midland College. The Total 2-year persistence rates of Black

students ranged from 100% to 51% for the top 10 Texas community colleges in the 2011-2012 academic year.

Insert Table 3.6 about here

With respect to the 2012-2013 academic year, Alamo Community College-Palo Alto had the best Total 2-year persistence rates of their Black students, followed by Alamo Community College-Northwest Vista, Alamo Community College-Northeast Lakeview, Lone Star College-Cy-Fair, and Victoria College. The Total 2-year persistence rates of Black student ranged from 100% to 51% for the top 10 Texas community college in the 2012-2013 school year. Table 3.7 contains the descriptive statistics for this analysis.

Insert Table 3.7 about here

Results for Research Question Six

To answer the final research question, “What are the Texas community colleges with the lowest Total 2-year persistence rates of Black students in the 2011-2012 and the 2012-2013 academic years? descriptive statistics were calculated. As revealed in Table 3.8, Laredo College had the lowest Total 2-year persistence rates for Black students, followed by South Texas College, Southwest Collegiate Institute for the Deaf, and Howard County Junior College District. The Total 2-year persistence rates of Black

students at the lowest 10 Texas community colleges ranged from 0% at Laredo College to 23% at Paris Junior College.

Insert Table 3.8 about here

Concerning the 2012-2013 academic year, Texas Southmost College had the poorest Total 2-year persistence rates of their Black students, followed by Southwest Texas Junior College, Laredo College, South Texas College, and El Paso Community College District. The Total 2-year persistence rates of Black students ranged from 0% at Texas Southmost College to a 27% at Dallas County Community College-Brookhaven. Delineated in Table 2.9 are the descriptive statistics for this analysis.

Insert Table 3.9 about here

Discussion

In this multiyear statewide study, the Total 2-year persistence rates of Black students who were enrolled in Texas community colleges in 15 academic years (i.e., 1999-2000 through 2013-2014) were described. For 15 academic years, the Total 2-year persistence rates of Black students were quite similar. Their Total 2-year persistence rates ranged from a low of 36.75% in the 2009-2010 academic year to a high of 43.79% in the 2007-2008 academic year. As such, the Total 2-year persistence rates of Black students varied by only 7.04% across this 15-year period. With respect to the inferential analyses, no statistically significant differences were revealed. The Total 2-year

persistence rates of Black students at Texas community colleges did not improve over the 15 academic years of data that were analyzed herein. Over the 14 academic years, the Total 2-year persistence rates of Black students at Texas community colleges ranged from 36.75% to 43.79 % and the average percentage for the Total 2-year persistence rates for these academic years was 39.30%. Depicted in Figure 3.1 are the Total 2-year persistence rates across all 15 academic years.

Insert Figure 3.1 about here

Connections with Existing Literature

The results of this multiyear, statewide investigation were congruent with the findings of other researchers (e.g., Moss, 2017; Moss & Slate, 2015) who conducted multiyear analyses of 2-year persistence rates of Black students enrolled in Texas community colleges. Moss and Slate (2015) determined after analyzing 2-year persistence rates of Black students enrolled in Texas community colleges in the 2000 and 2012 academic years that 2-year persistence rates of Black student were not statistically significantly different for students that stayed at the same institution rather than transferring to a different community college. Even though student success efforts have been implemented at community colleges, low persistence rates still exist (Moss, 2017). Consequently, almost half of the community college students leave before completing at least one year of college.

Implications for Policy and Practice

Based upon the results of this multiyear, statewide study, the following implications for policy can be made. Based upon the low percentages of Black students who persisted at the 2-year point, clearly many Black students were not graduating from Texas community colleges with an associate's degree. This situation creates difficulties with having an educated workforce that can meet the demands of current employers. Second, mentors to support Black students to continue in Texas community colleges are needed to help increase Total 2-year persistence rates of Black students. These mentors can help identify exact reasons for Black students not persisting so that college leaders can implement proper programming for support. As always, specific funding needs to be provided to support Black students, so they can persist and graduate.

Because many Black students in Texas begin their postsecondary experiences in developmental education courses, policymakers are encouraged to examine this issue in detail. What are the specific reasons that many students of color are not prepared academically for a postsecondary education? An examination of high schools is needed to identify why so many Black student are not college ready.

Implications for practice involve the following suggestions. Black students while enrolled in community colleges their first-year, need extra support. They need peer mentors, faculty mentors, appointed Advisors, and student organization affiliations to assist with retaining them. Without these groups of people being available for support, Black students will continue to drop out their first year and not return their second year. Funding along with an identified retention coordinator is needed for special populations at each campus to implement these types of retention efforts. Also, proper data collection

programs, such as predictive analytics to help to identify students who are at-risk early, could assist counselors and advisors with reaching out to students. Without knowing who is at-risk for dropping out of college, efforts of support would not be as productive if not applied to the appropriate group of students. By collaborating with other community colleges, local high schools, and local businesses, resources could be maximized to help increase student retention.

Recommendations for Future Research

Based upon the results of this Texas, statewide investigation, several recommendations for future research can be made. First, this study should be conducted in other states because the data analyzed in this investigation were solely from Texas community colleges. Accordingly, the extent to which the findings delineated herein would be generalizable to other states is not known. A second recommendation is to extend this study to 4-year university settings. The results of this multi-year investigation might not be generalizable to 4-year university students.

A third recommendation would be to extend this investigation to other student demographic characteristics. The degree to which results based solely on Black students would be generalizable to Hispanic students or to English Language Learners or to students in poverty is not known. Fourth, the results of this multiyear, statewide study were entirely from empirical quantitative data. As such, researchers are encouraged to conduct qualitative and/or mixed methods research. Such studies could involve researchers addressing the reasons for the low persistence rates of Texas Black community college students.

Conclusion

In this multiyear, statewide analysis, the Total 2-year persistence rates of Black students at Texas community colleges were analyzed for the 1999-2000 academic year through the 2013-2014 academic years. Inferential statistical analyses revealed that no improvements had occurred in these persistence rates between the beginning point, the midpoint, and the endpoint academic years. Over the 15 academic years, the Total 2-year persistence rates for Black students at Texas community colleges remained consistent at 39.30%. Also identified in this article were the Texas community colleges that had the highest Total 2-year persistence rates of Black students in the past two academic years, as well as the Texas community colleges that had the poorest Total 2-year persistence rates of Black students. Of importance to the reader should be that despite extensive efforts by Texas such as Closing the Gaps and Achieving the Dream, Black community college students do not appear to have benefitted in the least from these efforts. Their Total 2-year persistence rates have not changed, despite these highly publicized and funded state efforts. The State of Texas is encouraged to consider new and innovative ways to improve the lives of Texas Black community college students.

References

- Bowman, N. A., & Denson, N. (2013). A missing piece of the departure puzzle: Student–institution fit and intent to persist. *Research in Higher Education*, 55(2), 123-142. doi:10.1007/s11162-013-9320-9
- Carnevale, A. P., & Rose, S. J. (2011). *The undereducated American*. Retrieved from <http://cew.georgetown.edu/cew-reports/the-undereducated-american/#full-report>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Complete College America. (2016, December). *Student services engagement*. Paper presented at Houston Community College Training for Advisors, Houston, TX.
- Complete College America. (2018). *The data dashboard*. Retrieved from <https://completecollege.org/data-dashboard/>
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage.
- Ingram, K. R., & Slate, J. R. (2017). Differences in total 1-year persistence rates of Black students at Texas community colleges: A multiyear, statewide analysis. *Cross-Currents: An International Peer-Reviewed Journal on Humanities & Social Sciences*, 3(2), 52-56. Retrieved from <http://crosscurrentpublisher.com/>
- Johnson, R. B., & Christensen, L. (2012). *Educational research: Quantitative, qualitative, and mixed approaches* (4th ed.). Los Angeles, CA: Sage.
- Lumina Foundation. (2015). *A stronger nation through higher education*. Retrieved from <https://www.luminafoundation.org/news-and-views/stronger-nation-2015>

- McKinney, L., & Hagedorn, L. S. (2016). Performance-based funding for community colleges: Are colleges disadvantaged by serving the most disadvantaged students? *The Journal of Higher Education*, 88(2), 159-182.
doi:10.1080/00221546.2016.1243948
- 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.
- Moss, S. (2017). *Differences in persistence and graduation rates of Black students in Texas community colleges: A multiyear, statewide study* (Unpublished doctoral dissertation). Sam Houston State University, Huntsville, TX.
- Moss, S., & Slate, J. R. (2014). Differences in Black students' persistence rates in Texas community colleges by institutional status. *International Journal of University Teaching and Faculty Development*, 5(3), 165-174. Retrieved from <https://search.proquest.com/docview/1841113154?accountid=7036>
- Natale, V. C., & Jones, S. J. (2017). Impact of institutional and student characteristics on Texas community colleges under the state's performance funding model. *Community College Journal of Research and Practice*, 42(10), 660-677.
doi:10.1080/10668926.2017.1352543
- National Student Clearinghouse Research Center. (2018). *The snapshot report persistence-retention*. Retrieved from <https://nscresearchcenter.org/wp-content/uploads/SnapshotReport33.pdf>

- Radford, A. W., Berkner, L., Wheelless, S. C., & Shepherd, B. (2010). *Persistence and attainment of 2003-04 Beginning Postsecondary Students: After 6 years* (NCES 2011-151). Washington, DC: U.S. Department of Education.
- Rankin, D. A., Scott, J. A., & Kim, J. (2015). Oklahoma and Texas completion policies for community colleges. *eJournal of Education Policy*, 1-11.
- 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
- Stagg, D. R. (2017). *Differences in persistence and graduation rates of Hispanic students in Texas community colleges: A Texas statewide study*. Retrieved from <http://proxy.lib.odu.edu/login?url=https://search-proquest-com.proxy.lib.odu.edu/docview/1896119541?accountid=12967>
- Stagg, D. R., & Slate, J. R. (2017). 2-year persistence rate differences by the institutional status of Hispanic students in Texas community colleges. (Researching information)
- 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
- Texas Association of Community Colleges. (2014). *Community college enrollment*. Retrieved from <http://www.tacc.org/pages/data-and-info/community-college-enrollment>

Texas Higher Education Coordinating Board. (2014). *Community and technical colleges: 6-year graduation rates of first-time entering undergraduates*, fall 2008.

Retrieved from

<http://www.thecb.state.tx.us/reports/PDF/6405.PDF?CFID=31530988&CFTOKEN=643399431>

Table 3.1

Summary of Studies on 2-Year Persistence Rates of Black Students

Author(s)	Year	Topic	Outcome
Moss	2017	2-year persistence of Black students enrolled in Texas community colleges 2007-2014	2-year persistence rates of Black students were not significantly affected by institutional status.
Stagg	2017	2-year persistence of Hispanic students enrolled in Texas community colleges 2007-2014	2-year persistence rates of Hispanic students were higher for those students who stayed at the same institution as compared to those students who transferred to a different institution.
Stagg & Slate	2017	2-year persistence of Hispanic students enrolled in Texas community colleges 2006-2013	2-year persistence rates of Hispanic students were higher for those students who stayed at the same institution as compared to those students who transferred to a different institution.
Moss & Slate	2015	2-year persistence of Black students enrolled in Texas community college during 2000 and 2012	2-year persistence rates of Black students were not significantly affected by institutional status

Table 3.2

Descriptive Statistics for the Total 2-Year Persistence Rates of Black Students in Texas

Community Colleges for the 1999-2000 Academic Year Through the 2013-2014

Academic Year

Academic Year	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
1999-2000	70	42.24	17.84
2000-2001	70	39.03	14.76
2001-2002	70	40.74	15.35
2002-2003	70	38.84	15.59
2003-2004	70	39.20	16.28
2004-2005	70	38.11	13.38
2005-2006	70	37.64	12.51
2006-2007	70	41.94	13.17
2007-2008	71	43.79	14.54
2008-2009	71	41.24	13.58
2009-2010	71	36.75	12.90
2010-2011	71	36.83	14.14
2011-2012	71	37.83	15.11
2012-2013	71	37.86	15.20
2013-2014	71	37.54	18.80

Table 3.3

Descriptive Statistics of the Total 2-Year Persistence Rates of Black Students in Texas

Community Colleges for the Beginning and Midpoint Academic Year Comparison

Academic Year	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
1999-2000	70	42.24	17.84
2006-2007	70	41.82	13.23

Table 3.4

Descriptive Statistics of the Total 2-Year Persistence Rates of Black Students in Texas

Community Colleges for the Midpoint and Endpoint Academic Year Comparison

Academic Year	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
2006-2007	71	41.94	13.17
2013-2014	71	37.86	15.20

Table 3.5

Descriptive Statistics of the Total 2-Year Persistence Rates of Black Students in Texas

Community Colleges for the Beginning and Endpoint Academic Year Comparison

Academic Year	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
1999-2000	70	42.24	17.84
2013-2014	70	37.54	15.08

Table 3.6

Descriptive Statistics of the Top Ten Texas Community Colleges with the Highest Total 2-Year Persistence Rates of Black Students in the 2011-2012 Academic Year

Texas Community College	M%
Texas Southmost College	100%
Alamo Community College	64%
Galveston College	61%
Brazosport College	61%
Midland College	55%
San Jacinto College-Central	55%
Alamo Community College-San Antonio	55%
Tarrant County College	55%
Collin County Community College District	53%
Lone Star College-Cy-Fair	51%

Table 3.7

Descriptive Statistics of the Top Ten Texas Community Colleges with the Highest Total 2-Year Persistence Rates of Black Students in the 2012-2013 Academic Year

Texas Community College	M%
Alamo Community College-Palo Alto	100%
Alamo Community College-Northwest Vista	63%
Alamo Community College-Northeast Lakeview	60%
Lone Star College-Cy-Fair	56%
Victoria College	54%
Alvin Community College	53%
Lone Star College- Tomball	53%
San Jacinto Community College-Central	53%
Collin County Community College District	52%
Lee College	51%

Table 3.8

Descriptive Statistics of the Top Ten Texas Community Colleges with the Lowest Total 2-Year Persistence Rates of Black Students in the 2011-2012 Academic Year

Texas Community College	M%
Laredo College	0%
South Texas College	0%
Southwest Collegiate Institute for the Deaf	13%
Howard County Junior College District	16%
Southwest Texas Junior College	17%
Howard College	17%
Clarendon College	19%
Odessa College	20%
Frank Phillips College	22%
Paris Junior College	23%

Table 3.9

Descriptive Statistics of the Top Ten Texas Community Colleges with the Lowest Total 2-Year Persistence Rates of Black Students in the 2012-2013 Academic Year

Texas Community College	M%
Texas Southmost College	0%
Southwest Texas Junior College	0%
Laredo College	0%
South Texas College	0%
El Paso Community College District	17%
Grayson College	18%
Galveston College	23%
Southwest Collegiate Institute for the Deaf	25%
Tarrant County College-South	26%
Dallas County Community College-Brookhaven	27%

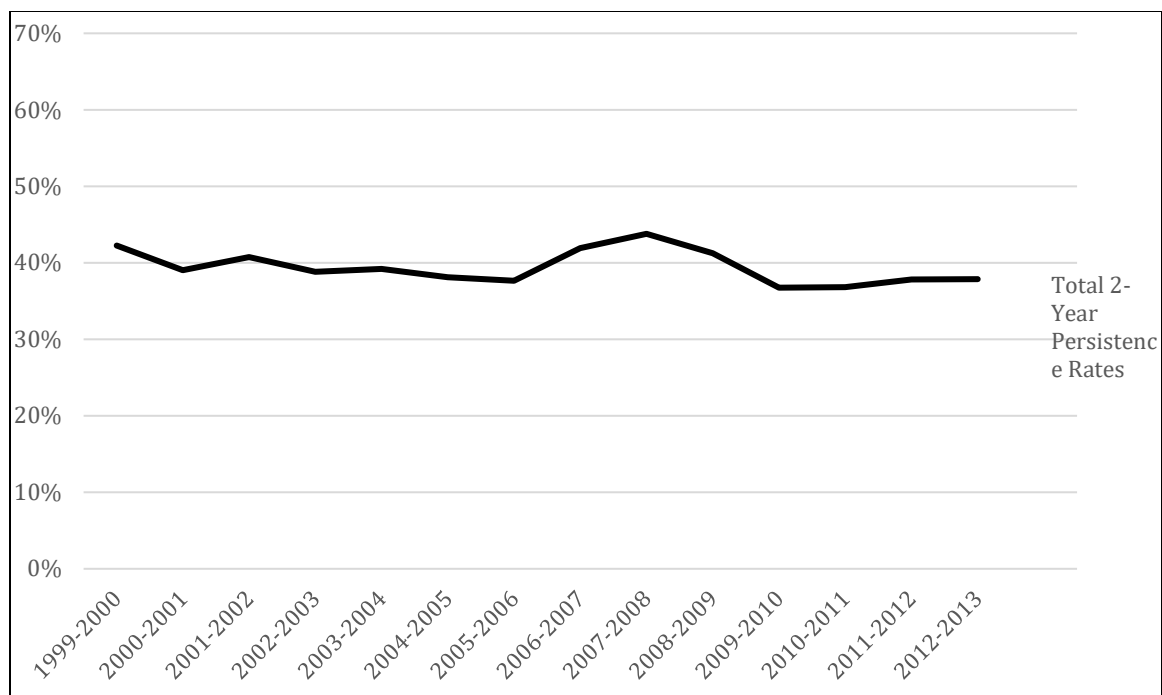


Figure 3.1. Total 2-year persistence rates of Black students at Texas community colleges for the 1999-2000 academic year through the 2013-2014 academic year.

CHAPTER IV

DIFFERENCES IN GRADUATION RATES BY STUDENT ETHNICITY/RACE AT TEXAS COMMUNITY COLLEGES OVER TIME: A MULTIYEAR, STATEWIDE EXAMINATION

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

Abstract

In this multiyear, statewide investigation, the degree to which differences were present in graduation rates between Black and White, Black and Hispanic, and Black and Asian students was addressed for the 2007-2008 academic year to the 2015-2016 academic years. Inferential statistical procedures revealed the presence of statistically significant differences for all 9 academic years. In all 9 years, Black students had statistically significantly lower graduation rates than White, Hispanic, and Asian students. Also identified were the Texas community colleges that had the highest and that had the lowest graduation rates of their Black students in the last two academic years. Implications of these findings and recommendations for future research were discussed.

Keywords: Asian, Black, Hispanic, White, Texas community colleges, graduation rates

DIFFERENCES IN GRADUATION RATES BY STUDENT ETHNICITY/RACE AT TEXAS COMMUNITY COLLEGES OVER TIME: A MULTIYEAR, STATEWIDE EXAMINATION

Community colleges provide students across the United States with a feasible way to obtain relevant and affordable training to ensure they can obtain gainful employment in the 21st century. According to the American Association of Community Colleges (2018), community colleges served 41% of all United States undergraduates in the fall of 2015. Most community colleges serve a large population of students who are low-income and underrepresented. The education provided at these institutions is essential for these types of students to have a pathway to attaining upward economic success (Levesque, 2018). Unfortunately, less than 40% of community college students earned a certificate or degree within six years (Bailey, Jaggars, & Jenkins, 2015).

A pathway to becoming middle-class citizens can be created for low-income and underrepresented individuals through community colleges (Scrivener et al., 2015). Completing an associate's degree or certificate compared to simply earning a high school diploma is related with higher earnings. Continuing low completion rates at community colleges; however, intensify the prevailing economic inequalities present in the United States (Levesque, 2018). Continuing to address low completion rates, especially for underrepresented individuals, will allow the United States to remain competitive globally (Baber, 2018).

According the United States National Census Report (2015), even though educational attainment has increased for all ethnic/racial groups, a higher percentage of Asian students obtained a bachelor's degree, 38%, compared to a rate of 21% for White

students, 11% for Black students, and 10% for Hispanic students. Asian and White students are more likely to complete a bachelor's degree than are Black and Hispanic students. As such, efforts should be made to ensure underrepresented groups, such as Hispanic and Black individuals, are prepared to earn their bachelor's degrees (Community College Research Center, 2013).

Community colleges have a diverse student body, with an average of 6% Asians, 13% Blacks, 24% Hispanics, and 47% Whites enrolled (American Association of Community Colleges, 2018). Accordingly, community colleges are leaders in educating students from varied backgrounds (Cox, Joyner, & Slate, 2011). Because most community colleges have open enrollment admissions policies, meeting graduation performance outcomes may be difficult for some students, given their lack of college-readiness (Moosai, Walker, & Floyd, 2011).

Though college access has increased, graduation rates have remained low. In Texas, only one of every three students who initially enrolled at a Texas community college has completed a postsecondary credential after being enrolled over a 6-year period (Texas Higher Education Coordinating Board, 2014). Because future funding is based on success points achieved by meeting certain performance measures, Texas community colleges must reform by improving their student outcomes (e.g., graduation rates) immediately to ensure proper funding (McKinney & Hagedorn, 2017).

Spangler and Slate (2015) examined graduation rates of Texas community college students by ethnicity/race. They analyzed Texas community college statewide data for the 1999-2000 through the 2009-2010 academic years. Spangler and Slate (2015) established that the graduation rates of Asian, Black, Hispanic, and White Texas community college

students increased over this 10-year period. Asian students had the highest graduation rates, followed by White students, Hispanic students, and finally by Black students. Black students had the lowest persistence and graduation rates of the four ethnic/racial groups of Texas community college students. Established in the Spangler and Slate (2015) investigation was that, over a 10-year period, the graduation rates of White and Hispanic students increased by 9%. For Black students, graduation rates increased by 8% over this 10-year period. For graduation rates to increase further, Spangler and Slate (2015) contended that policymakers should implement policies and procedures to improve graduation rates at community colleges.

In a recent study, Moss (2017) conducted an analysis of the graduation rates of Black and White Texas community college students for the 2007-2008 through the 2015-2016 academic years. Inferential statistical analyses revealed the presence of statistically significant differences in graduation rates between Black and White students in all nine years of Texas statewide data. White students had statistically significantly higher graduation rates, almost 15% higher, than the graduation rates of Black students at Texas community colleges.

In a recent dissertation, Stagg (2017) compared the graduation rates of Hispanic and White students at Texas community colleges for the 2008-2009 academic year through the 2014-2015 academic year. Inferential statistical analyses revealed the presence of statistically significant differences between Hispanic and White students in all seven years of academic statewide data. White students had statistically significantly higher graduation rates that ranged from 43% to 46% than the graduation rates of

Hispanic students that ranged from 41% to 43%. Readers should note, however, that the graduation rates of both groups of students were less than 50%.

Price and Tovar (2014) conducted another examination of graduation rates at community colleges, in relation to student engagement. After analyzing data from the Community College Survey of Student Engagement survey and the Integrated Postsecondary Education Data System, Price and Tovar (2014) documented the presence of relationships between positive student engagement and graduation rates. Price and Tovar (2014) contended that by addressing institution-wide policies and practices at community colleges to include support for students, enhanced student engagement can lead to improvement in student success (e.g., graduation and completion rates).

In empirical comparisons of the graduation rates of Texas and Oklahoma community college students, Rankin et al. (2015) examined the graduation rates of Black, Hispanic, and White students. Documented in that investigation was the presence of a decline in 3-year graduation rates for students in both states between the 2002 and the 2012 academic years. This decline was established despite the fact that both states had adopted policies to increase graduation rates. With respect to the State of Texas, the *Closing the Gaps by 2015* program was created to improve graduation rates of Black, Hispanic, and White students. Even though this program was adopted, fewer Black and White students graduated from Texas community colleges. On the positive side, the graduation rates of Hispanic students increased.

Statement of the Problem

The highest percentage of students of color in the U.S. is being educated at community colleges. Consequently, in many states more Black students are enrolled in

community colleges than are enrolled at 4-year universities. The question that needs to be answered by community colleges is the degree to which the needs of students of color are being met (Cohen & Brawer, 2009). Despite a focus of community colleges on enrolling and retaining students, the persistence and retention rates of community college students is 67% lower than the persistence and retention rates of 4-year university students (Garcia, 2010). A disconnect still exists in Texas between enrollment and retention rates because enrollment has increased but persistence rates have not improved (Spangler & Slate, 2015). Because of open admissions policies for community colleges, the unique challenges of serving underrepresented students is not being considered when persistence and retention quotas are derived by policymakers. In Texas, the Texas Higher Education Coordinating Board formulates unattainable policies concerning community colleges when it pertains to meeting persistence and retention goals (Spangler & Slate, 2015).

Purpose of the Study

The overall purpose of this study was to examine the degree to which differences were present in graduation rates among Asian, Black, White, and Hispanic students enrolled in Texas community colleges. Specifically focused on in this article were the graduation rates of Black students compared with the graduation rates of White, Hispanic, and Asian students. Graduation rates were addressed for the 2007-2008 through the 2015-2016 academic years for Texas community college students. The final purposes of this investigation involved identifying Texas community colleges with the highest and with the lowest graduation rates of their Black students in the last two academic years of available data.

Significance of the Study

Non-completers of degrees and certificates at community colleges leads to long-term detrimental financial costs. Students who received financial benefits and did not graduate will owe thousands of dollars for education they did not complete. This issue causes an economic and civic loss to the U.S. society. The diminishing number of citizens who could potentially contribute to addressing workforce demands will linger as long as young adults continue to enter the workforce underprepared (Lumina Foundation, 2018). A well-educated populace is beneficial to corporations and businesses (Bowman & Denson, 2013).

In Texas community colleges, Black students are not persisting and graduating, causing them to fall behind all other ethnic/racial groups (Rankin et al., 2015). The overrepresentation of Black students in developmental education courses may be interpreted to indicate that the education system is not working for them as they continue to lag behind other ethnic/racial groups (Complete College America, 2016). For over 14 years, the total 1-year persistence rates have remained stagnant for Black students at Texas community colleges (Ingram & Slate, 2017). Of the Texas community college population, only 3% of students complete a degree or certificate (Complete College, 2016). Making sure students persist to graduation should be a top priority for legislators, administrators, faculty, and staff because without more college graduates with specialized skills, employers will lack qualified applicants for jobs (Carnevale & Rose, 2011). Consequently, by 2020 two thirds of the jobs in the workforce across the United States will require some type of postsecondary education (Lumina Foundation, 2018).

Research Questions

In this study, the following research questions were addressed: (a) What is the difference in graduation rates between Black and White students enrolled in Texas community colleges?; (b) What is the difference in the graduation rates between Black and Hispanic students enrolled in Texas community colleges?; (c) What is the difference in the graduation rates between Black and Asian students enrolled in Texas community colleges?; (d) What trend is present in the graduation rates of Black, White, Hispanic, and Asian students over this 9-year period?; (e) What are the Texas community colleges that have the highest graduation rates of Black students in the 2013-2014 and the 2015-2016 academic years?; and (f) What are the Texas community colleges that have the lowest graduation rates of Black students in the 2013-2014 and the 2015-2016 academic years? The first three research questions were repeated for the 2007-2008 through the 2015-2016 academic years whereas the fourth research question involved a comparison of results across all nine academic years. The last two research questions involved analyses of the last two academic years of available data.

Method

Research Design

For this study, a non-experimental causal-comparative research design was present (Creswell, 2009; Johnson & Christensen, 2012). The independent variable present in causal comparative research cannot be manipulated. Archival data that were examined denoted events that had occurred previously (Johnson & Christensen, 2012). The independent variable in this investigation was ethnicity/race (i.e., Black, White, Hispanic, Asian). The dependent variables were the graduation rates of these four

ethnic/racial groups of community college students in each academic year. A total of 9 years of data was analyzed.

Participants and Instrumentation

Archival data were obtained for the 2007-2008 through the 2015-2016 academic years on Texas community colleges from the Texas Higher Education Coordinating Board Interactive Accountability System. Statistical data on every community college in Texas is maintained by the Texas Higher Education Coordination Board. Community college districts are required to report the graduation rates of their students by ethnicity /race along with other data. These data are made available to the public after being aggregated by the Texas Higher Education Coordinating Board. The graduation rates of Asian, Black, Hispanic, and White students were downloaded from the Texas Higher Education Coordinating Board Interactive Accountability System. According to the Texas Higher Education Coordinating Board (2016c), graduation rates for students at 2-year institutions include students who graduate with an associate degree or certificate within three years. For the 9 academic years, 70 Texas community colleges provided data that were analyzed for the 2007-2008 academic year through the 2012-2013 academic years. For the 2013-2014 and 2015-2016 academic years, 71 Texas community colleges provided data that were analyzed.

Results

Because the Texas Higher Education Coordinating Board links the graduation rates of Black and White students, Black and Hispanic students, and Black and Asian students with the academic year and demographic characteristic, dependent samples *t*-tests were used in this study. Dependent samples *t*-tests are a suitable inferential

statistical procedure to calculate when the variables (i.e., graduation rates) are associated (Slate & Rojas-LeBouef, 2011). Results will now be reported by research question for all nine academic years.

Results for Research Question One

The first research question, “What is the difference in graduation rates between Black and White students enrolled in Texas community colleges?” was repeated for each of nine academic years, beginning with the 2007-2008 academic year and ending with the 2015-2016 academic year. With respect to the 2007-2008 academic year, a statistically significant difference was revealed between Black and White students in their graduation rates, $t(69) = -7.48, p < .001$. This difference represented a large effect size (Cohen’s d) of 1.30 (Cohen, 1988). The graduation rates of Black students were more than 9 times lower than the graduation rates of White students. Table 4.1 contains the descriptive statistics for this analysis.

 Insert Table 4.1 about here

For the 2008-2009 academic year, a statistically significant difference was present in graduation rates, $t(69) = -6.11, p < .001$ between Black and White students. This difference represented a large effect size (Cohen’s d) of 1.20 (Cohen, 1988). The graduation rates of Black students were more than 8 times lower than the graduation rates of White students. Delineated in Table 4.1 are the descriptive statistics for this analysis. Concerning the 2009-2010 academic year, a statistically significant difference was yielded in graduation rates, $t(69) = -8.67, p < .001$ between Black and White students.

This difference represented a large effect size (Cohen's d) of 1.50 (Cohen, 1988). The graduation rates of Black students were more than 10 times lower than the graduation rates of White students. Table 4.1 contains the descriptive statistics for this analysis.

With respect to the 2010-2011 academic year, a statistically significant difference was revealed in graduation rates, $t(69) = -7.98, p < .001$ between Black and White students. This difference represented a large effect size (Cohen's d) of 1.31 (Cohen, 1988). The graduation rates of Black students were more than 9 times lower than the graduation rates of White students. Revealed in Table 4.1 are the descriptive statistics for this analysis. For the 2011-2012 academic year, a statistically significant difference was yielded in graduation rates, $t(69) = -7.48, p < .001$ between Black and White students. This difference represented a large effect size (Cohen's d) of 1.31 (Cohen, 1988). The graduation rates of Black students were more than 9 times lower than the graduation rates of White students. Table 4.2 contains the descriptive statistics for this analysis.

Insert Table 4.2 about here

For the 2012-2013 academic year, a statistically significant difference was present in graduation rates, $t(69) = -8.13, p < .001$ between Black and White students. This difference represented a large effect size (Cohen's d) of 1.24 (Cohen, 1988). The graduation rates of Black students were more than 8 times lower than the graduation rates of White students. Readers are directed to Table 4.2 for the descriptive statistics of this analysis. Regarding the 2013-2014 academic year, a statistically significant difference was present in graduation rates, $t(70) = -10.45, p < .001$ between Black and White

students. This difference represented a large effect size (Cohen's d) of 1.31 (Cohen, 1988). The graduation rates of Black students were more than 9 times lower than the graduation rates of White students. Delineated in Table 4.2 are the descriptive statistics for this analysis.

Concerning the 2014-2015 academic year, a statistically significant difference was yielded in graduation rates, $t(70) = -7.69, p < .001$ between Black and White students. This difference represented a large effect size (Cohen's d) of 1.13 (Cohen, 1988). The graduation rates of Black students were more than 6 times lower than the graduation rates of White students. Table 4.2 contains the descriptive statistics for this analysis. With respect to the 2015-2016 academic year, a statistically significant difference was present in graduation rates, $t(70) = -8.34, p < .001$ between Black and White students. This difference represented a large effect size (Cohen's d) of 1.16 (Cohen, 1988). The graduation rates of Black students were more than 6 times lower than the graduation rates of White students. Table 4.2 contains the descriptive statistics for this analysis.

Results for Research Question Two

The second research question, "What is the difference in graduation rates between Black and Hispanic students enrolled in Texas community colleges?" was repeated for each of nine academic years, beginning with the 2007-2008 academic year and ending with the 2015-2016 academic year. With respect to the 2007-2008 academic year, a statistically significant difference was revealed between Black and Hispanic students in their graduation rates, $t(69) = -7.06, p < .001$. This difference represented a large effect size (Cohen's d) of 1.11 (Cohen, 1988). The graduation rates of Black students were

more than 6 times lower than the graduation rates of Hispanic students. Table 4.3 contains the descriptive statistics for this analysis.

 Insert Table 4.3 about here

For the 2008-2009 academic year, a statistically significant difference was present in graduation rates, $t(69) = -5.11, p < .001$ between Black and Hispanic students. This difference represented a large effect size (Cohen's d) of 1.03 (Cohen, 1988). The graduation rates of Black students were more than 6 times lower than the graduation rates of Hispanic students. Delineated in Table 4.3 are the descriptive statistics for this analysis. Concerning the 2009-2010 academic year, a statistically significant difference was present in graduation rates, $t(69) = -6.32, p < .001$ between Black and Hispanic students. This difference represented a large effect size (Cohen's d) of 1.26 (Cohen, 1988). The graduation rates of Black students were more than 8 times lower than the graduation rates of Hispanic students. Table 4.3 contains the descriptive statistics for this analysis. With respect to the 2010-2011 academic year, a statistically significant difference was present in graduation rates, $t(69) = -5.47, p < .001$ between Black and Hispanic students. This difference represented a large effect size (Cohen's d) of 0.94 (Cohen, 1988). The graduation rates of Black students were more than 5 times lower than the graduation rates of Hispanic students. Delineated in Table 4.3 are the descriptive statistics for this analysis.

Concerning the 2011-2012 academic year, a statistically significant difference was present in graduation rates, $t(69) = -5.11, p < .001$ between Black and Hispanic

students. This difference represented a large effect size (Cohen's d) of 0.90 (Cohen, 1988). The graduation rates of Black students were more than 5 times lower than the graduation rates of Hispanic students. Delineated in Table 4.4 are the descriptive statistics for this analysis.

 Insert Table 4.4 about here

For the 2012-2013 academic year, a statistically significant difference was present in graduation rates, $t(69) = -5.80, p < .001$ between Black and Hispanic students. This difference represented a large effect size (Cohen's d) of 0.95 (Cohen, 1988). The graduation rates of Black students were more than 5 times lower than the graduation rates of Hispanic students. Table 4.4 contains the descriptive statistics for this analysis. With respect to the 2013-2014 academic year, a statistically significant difference was present in graduation rates, $t(70) = -5.82, p < .001$ between Black and Hispanic students. This difference represented a large effect size (Cohen's d) of 0.93 (Cohen, 1988). The graduation rates of Black students were more than 5 times lower than the graduation rates of Hispanic students. Readers are directed to Table 4.4 for the descriptive statistics of this analysis.

Concerning the 2014-2015 academic year, a statistically significant difference was present in graduation rates, $t(70) = -6.41, p < .001$ between Black and Hispanic students. This difference represented a large effect size (Cohen's d) of 0.96 (Cohen, 1988). The graduation rates of Black students were more than 5 times lower than the graduation rates of Hispanic students. Revealed in Table 4.4 are the descriptive statistics

for this analysis. With respect to the 2015-2016 academic year, a statistically significant difference was present in graduation rates, $t(70) = -6.78, p < .001$ between Black and Hispanic students. This difference represented a large effect size (Cohen's d) of 1.02 (Cohen, 1988). The graduation rates of Black students were more than 6 times lower than the graduation rates of Hispanic students. Table 4.4 contains the descriptive statistics for this analysis.

Results for Research Question Three

The third research question, "What is the difference in graduation rates between Black and Asian students enrolled in Texas community colleges?" was repeated for each of nine academic years, beginning with the 2007-2008 academic year and ending with the 2015-2016 academic year. With respect to the 2007-2008 academic year, a statistically significant difference was revealed between Black and Asian students in their graduation rates, $t(69) = -4.65, p < .001$. This difference represented a large effect size (Cohen's d) of 1.54 (Cohen, 1988). The graduation rates of Black students were more than 10 times lower than the graduation rates of Asian students. Table 4.5 contains the descriptive statistics for this analysis.

 Insert Table 4.5 about here

For the 2008-2009 academic year, a statistically significant difference was present in graduation rates, $t(69) = -3.32, p < .001$ between Black and Asian students. This difference represented a large effect size (Cohen's d) of 1.28 (Cohen, 1988). The graduation rates of Black students were more than 8 times lower than the graduation rates

of Asian students. Delineated in Table 4.5 are the descriptive statistics for this analysis. Concerning the 2009-2010 academic year, a statistically significant difference was present in graduation rates, $t(69) = -5.20, p < .001$ between Black and Asian students. This difference represented a large effect size (Cohen's d) of 1.79 (Cohen, 1988). The graduation rates of Black students were more than 12 times lower than the graduation rates of Asian students. Table 4.5 contains the descriptive statistics for this analysis.

With respect to the 2010-2011 academic year, a statistically significant difference was present in graduation rates, $t(69) = -5.26, p < .001$ between Black and Asian students. This difference represented a large effect size (Cohen's d) of 1.82 (Cohen, 1988). The graduation rates of Black students were more than 12 times lower than the graduation rates of Asian students. Revealed in Table 4.5 are the descriptive statistics for this analysis. Concerning the 2011-2012 academic year, a statistically significant difference was present in graduation rates, $t(69) = -2.83, p < .001$ between Black and Asian students. This difference represented a large effect size (Cohen's d) of 1.15 (Cohen, 1988). The graduation rates of Black students were more than 6 times lower than the graduation rates of Asian students. Delineated in Table 4.6 are 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, $t(69) = -3.48, p < .001$ between Black and Asian students. This difference represented a large effect size (Cohen's d) of 1.03 (Cohen, 1988). The

graduation rates of Black students were more than 5 times lower than the graduation rates of Asian students. Table 4.6 contains the descriptive statistics for this analysis. With respect to the 2013-2014 academic year, a statistically significant difference was present in graduation rates, $t(70) = -3.13, p < .001$ between Black and Asian students. This difference represented a large effect size (Cohen's d) of 1.03 (Cohen, 1988). The graduation rates of Black students were more than 5 times lower than the graduation rates of Asian students. Readers are directed to Table 4.6 for the descriptive statistics of this analysis.

Concerning the 2014-2015 academic year, a statistically significant difference was present in graduation rates, $t(70) = -5.09, p < .001$ between Black and Asian students. This difference represented a large effect size (Cohen's d) of 1.82 (Cohen, 1988). The graduation rates of Black students were more than 12 times lower than the graduation rates of Asian students. Revealed in Table 4.6 are the descriptive statistics for this analysis. With respect to the 2015-2016 academic year, a statistically significant difference was present in graduation rates, $t(70) = -6.85, p < .001$ between Black and Asian students. This difference represented a large effect size (Cohen's d) of 2.04 (Cohen, 1988). The graduation rates of Black students were more than 15 times lower than the graduation rates of Asian students. Table 4.6 contains the descriptive statistics for this analysis.

Results for Research Question Four

The fourth research question involved determining the degree to which a trend was present in the graduation rates of Black, White, Hispanic, and Asian students over this 9-year time period. Depicted in Figure 4.1 are the graduation trends over time of

Black, White, Hispanic, and Asian students for the 2007-2008 academic year through the 2015-2016 academic years. The graduation rates of Black students remained consistently lower than the graduation rates of White, Hispanic, and Asian students over time. Asian students had the highest graduation rates followed by White students and then Hispanic students.

 Insert Figure 4.1 about here

Results for Research Question Five

What are the Texas community colleges that had the highest graduation rates of Black students in the 2013-2014 and the 2014-2015 academic years?, descriptive statistics were calculated. As revealed in Table 4.7, Vernon College had the best graduation rates for their Black students followed by Southwest Texas Junior College, South Texas College, Brazosport College, and Lone Star College-Cy-Fair. The graduation rates of Black students ranged from 76% to 44% for the top 10 Texas community college in the 2013-2014 academic year.

 Insert Table 4.7 about here

With respect to the 2014-2015 academic year, Laredo College had the best graduation rates of their Black students, followed by Texas Southmost College, Brazosport College, Southwest Texas Junior College District, and Lone Star College-Cy-Fair. The graduation rates of Black students ranged from 100% to 42% for the top 10

Texas community colleges in the 2014-2015 school year. Table 4.8 contains the descriptive statistics for this analysis.

Insert Table 4.8 about here

Results for Research Question Six

To answer the final research question, “What are the Texas community colleges that have the lowest graduation rates of Black students in the 2013-2014 and the 2015-2016 academic years?, descriptive statistics were calculated. As presented in Table 4.9, Laredo College had the poorest graduation rates for their Black students followed by Frank Phillips College, Amarillo College, Alamo Community College-St. Philip’s College, and Howard College. The graduation rates of Black students ranged from 21% to 0% for the poorest 10 Texas community colleges in the 2013-2014 academic year.

Insert Table 4.9 about here

Concerning the 2014-2015 academic year, Victoria College had the poorest graduation rates of their Black students, followed by Southwest Collegiate Institute for the Deaf, Weatherford College, Lone Star College-Kingwood, and Del Mar College. The graduation rates of Black students ranged from 22% to 0% for the poorest Texas community colleges in the 2014-2015 school year. Table 4.10 contains the descriptive statistics for this analysis.

Insert Table 4.10 about here

Discussion

In this multiyear statewide study, the difference in graduation rates of Black students compared to White, Hispanic, and Asian students who were enrolled in Texas community colleges in 9 academic years (i.e., 2007-2008 through 2015-2016) were described. For all 9 academic years, statistically significant differences were revealed for all comparisons. Over the 9-year period, the graduation rates of Black students were more than 10 times lower than the graduation rates of Asian students; 9 times lower than the graduation rates of White students; and more than 5 times lower than the graduation rates of Hispanic students. Over the 9 academic years, the graduation rates for Black students at Texas community colleges remained consistent at 31.86% as compared to 44.65% for White students, 42.02% for Hispanic students, and 46.60% for Asian students. The graduation rates of Black students in Texas community colleges have not improved over time and continue to lag in comparison to other ethnic/racial groups. Also identified were the Texas community colleges that had the best graduation rates of Black students in the last two academic years of available data. Finally identified were the Texas community colleges that had the lowest graduation rates of their Black students in the last two academic years of available data.

Connections with Existing Literature

The results of this multiyear, statewide investigation were congruent with the findings of other researchers (Moss, 2017; Stagg, 2017) who conducted multiyear

analyses of graduation rates of Black, White, and Hispanic students enrolled in Texas community colleges. In particular, Moss (2017) determined, after analyzing the graduation rates of Black and White students enrolled in Texas community colleges over nine years (i.e., 2007-2008 through 2015-2016), that statistically significant differences were present with graduation rates for Black students ranging from 28.78% to 33.57% and 43.32% to 46.00% for White students. In his multiyear, statewide analysis, the graduation rates of Black students were consistently lower than the graduation rates of White students.

In a related study, Stagg (2017) investigated the graduation rates of Hispanic and White students enrolled in Texas community colleges between the 2008-2010 academic year and the 2014-2015 academic years. Over seven academic years, statistically significant differences were present in five academic years. In every academic year analyzed, the graduation rates of Hispanic students were consistently lower than the graduation rates of White students.

Implications for Policy and Practice

Based upon the results of this multiyear, statewide study, the following implications for policy can be made. First, the low graduation rates of Black students at Texas community colleges clearly result in a reduced number of Black educated persons who are trained and ready for the current Texas workforce. When Black students do not graduate with a certificate or a degree, it is difficult for them to obtain the education needed for employment in the 21st century. This situation also creates difficulties with meeting the demands of current employers who do not have a sufficient number of educated employees especially in manufacturing technology fields which support the oil

industry in Texas. Second, mentors to support Black students who are attending Texas community colleges are needed to help increase the graduation rates of individuals in this ethnic/racial group.. Hopefully by having these mentors, Black students will have the support that is needed to overcome barriers to graduating. In particular, specific funding in the form of targeted grants should be provided to Texas community colleges to support Black students, to ensure they persist to graduation. With this grant money, barriers to Black students such as a lack of child care, transportation, and housing could be addressed to help retain them.

Third, addressing the number of Black students in developmental classes in Texas community college must occur. By starting with an examination of high schools especially in high poverty areas is needed to identify why a large number of Black students are not college ready. Black students who remain in remedial classes for long periods tend to lose motivation and dropout. Texas colleges must implement strategies to move Black students faster through remedial coursework (i.e., implementation of 8-week classes and co-remediation). Offering extensive tutoring for support often moves the students faster through developmental classes (Complete College America, 2016). Finally, requiring Black students to take student success courses that emphasize study skills, time management skills, and test-taking skills is crucial for their success. Even though most community colleges and many universities require first-time students to take student success classes, this class should be offered in high school as an elective. In turn, the knowledge gained from student success classes will help Black students develop the necessary academic strategies and skills while in high school to become ready for the expectations of college earlier.

Implications for practice involve the following suggestions. A required organization affiliation to assist with retaining Black students in Texas community colleges is needed. By having these types of support groups, Black students will continue in Texas community colleges and graduate. Having the funding for support services is necessary but also having an identified retention coordinator for Black students accessible on campus to implement these types of retention efforts is crucial. Special support programs that have retention advisors who use predictive analytics software could assist Black students who are at-risk early in their postsecondary endeavors. This software could be utilized by admissions departments and faculty members as a tool to help Black students who are at-risk be identified early allowing them to be provided extra assistance to persist to graduation. The collaboration of Texas community colleges, local high schools, the Texas Workforce Commission, and local businesses, along with the Department of Education on a national level, could maximize resources to help Black students persist through community colleges and graduate.

Recommendations for Future Research

Based upon the results of this Texas, statewide investigation, several recommendations for future research can be made. First, because this study was based entirely on Texas data, researchers are encouraged to extend this study to other states. The extent to which the findings delineated herein would be generalizable to students in other states is not known. A second recommendation would be to extend this study to 4-year university settings. By extending this study to 4-year postsecondary institutions, data will be collected regarding the degree to which the results delineated herein solely on community college students would be generalizable to 4-year university students.

A third recommendation would be to replicate this investigation to other student demographic characteristics such as gender. The degree to which results based on Black students would be generalizable specifically to Black female and Black male students is not known. Fourth, because this multiyear, statewide study was based entirely on empirical quantitative data, researchers are encouraged to conduct qualitative and/or mixed methods research. As such, these studies could involve researchers addressing the reasons for low graduation rates of Texas Black community college students and derive targeted solutions for solving this problem.

Conclusion

In this multiyear, statewide analysis, the graduation rates of Black students at Texas community colleges were analyzed for the 2007-2008 academic year through the 2015-2016 academic years. Inferential statistical analyses revealed that graduation rates for Black students at Texas community college were statistically significantly lower than graduation rates of White, Hispanic, and Asian students. Over the 9 academic years, the graduation rates for Black students at Texas community colleges remained consistent at 31.86% as compared to 44.65% for White students, 42.02% for Hispanic students, and 46.60% for Asian students. The graduation rates of Black students in Texas community colleges have not improved over time and continue to lag in comparison to other ethnic/racial groups. These low graduation rates, not only of Black students, should be cause for concern especially given the strong focus on improving postsecondary education in Texas. With the two initiatives of Closing the Gaps and Achieving the Dream, little positive results appear to have occurred, at least in respect to graduation rates. Perhaps it is time for educational policymakers and leaders to re-examine the

initiatives they propose and, for once, propose initiatives that will have positive outcomes.

References

- American Association of Community Colleges. (2018). *American Association of Community Colleges fast facts 2018*. Retrieved from <https://www.aacc.nche.edu/wp-content/uploads/2018/04/2018-Fast-Facts.pdf>
- Baber, L. D. (2018). “Living in the along”: Validating experiences among urban community college students in a college transition program. *Community College Review*, 46(3), 316. doi:10.1177/0091552118775813
- Bailey, T., Jaggars, S. S., & Jenkins, D. (2015). *Redesigning America’s community colleges: A clearer path to student success*. Cambridge, MA: Harvard University Press.
- Bowman, N. A., & Denson, N. (2013). A missing piece of the departure puzzle: Student–institution fit and intent to persist. *Research in Higher Education*, 55(2), 123-142. doi:10.1007/s11162-013-9320-9
- Carnevale, A. P., & Rose, S. J. (2011). *The undereducated American*. Retrieved from Georgetown University Center on Education and the Workforce website: <http://cew.georgetown.edu/cew-reports/the-undereducated-american/#full-report>
- Cohen, A., & Brawer, F. (2009). *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.
- Complete College America. (2016, December). *Student services engagement*. Paper presented at Houston Community College Training for Advisors, Houston, TX.

- 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.
- Garcia, M. (2010). When Hispanic students attempt to succeed in college, but do not. *Community College Journal of Research and Practice*, 34(10), 839-847.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage.
- Ingram, K. R., & Slate, J. R. (2017). Differences in total 1-year persistence rates of Black students at Texas community colleges: A multiyear, statewide analysis. *Cross-Currents: An International Peer-Reviewed Journal on Humanities & Social Sciences*, 3(2), 52-56. Retrieved from <http://crosscurrentpublisher.com/>
- Levesque, E. M. (2018, October 8). *Improving community college completion rates by addressing structural and motivational barriers*. Retrieved from Brookings website: <https://www.brookings.edu/research/community-college-completion-rates-structural-and-motivational-barriers/>
- Lumina Foundation. (2018). *Facts and figures*. Retrieved from <https://www.luminafoundation.org/facts-and-figures>
- Johnson, R. B., & Christensen, L. (2012). *Educational research: Quantitative, qualitative, and mixed approaches* (4th ed.). Los Angeles, CA: Sage.
- McKinney, L., & Hagedorn, L. S. (2016). Performance-based funding for community colleges: Are colleges disadvantaged by serving the most disadvantaged students? *The Journal of Higher Education*, 88(2), 159-182.
doi:10.1080/00221546.2016.1243948

- Moosai, S., Walker, D. A., & Floyd, D. L. (2011). Using student and institutional characteristics to predict graduation rates at community colleges: New developments in performance measures and institutional effectiveness. *Community College Journal of Research and Practice*, 35(10), 802-816. doi:10.1080/10668926.2010.520245
- Moss, S. (2017). *Differences in persistence and graduation rates of Black students in Texas community colleges: A multiyear, statewide study* (Unpublished doctoral dissertation). Sam Houston State University, Huntsville, TX.
- 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
- Rankin, D. A., Scott, J. A., & Kim, J. (2015). Oklahoma and Texas completion policies for community colleges. *eJournal of Education Policy*, 1-11.
- 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>
- Spangler, J. M., & Slate, J. R. (2015). Texas community college graduation and persistence rates as a function of student ethnicity. *Community College Journal of Research and Practice*, 39(8), 741-753. doi:10.1080/10668926.2013.878261

Stagg, D. R. (2017). *Differences in persistence and graduation rates of Hispanic students in Texas community colleges: A Texas statewide study*. Doctoral Dissertation, Sam Houston State University, Huntsville, TX.

Texas Higher Education Coordinating Board. (2014). *Community and technical colleges: 6-year graduation rates of first-time entering undergraduates, fall 2008*.

Retrieved from

<http://www.thecb.state.tx.us/reports/PDF/6405.PDF?CFID=31530988&CFTOKEN=643399431>

Texas Higher Education Coordinating Board. (2016). *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

United States Census Bureau. (2015). *Educational attainment in the United States: 2015*. Retrieved from <https://www.census.gov/library/publications/2016/demo/p20-578.html>

Table 4.1

Descriptive Statistics of the Graduation Rates of Black and White Students in Texas

Community College in the 2007-2008 through the 2010-2011 Academic Years

Academic Year and Student Group	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
2007-2008			
Black	70	31.01	13.00
White	70	44.09	9.94
2008-2009			
Black	70	31.70	15.68
White	70	43.76	6.47
2009-2010			
Black	70	29.92	15.38
White	70	44.98	6.83
2010-2011			
Black	70	31.67	12.21
White	70	44.84	6.36

Table 4.2

Descriptive Statistics of the Graduation Rates of Black and White Students in Texas

Community College in the 2011-2012 through the 2015-2016 Academic Years

Academic Year and Student Group	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
2011-2012			
Black	70	31.64	13.46
White	70	44.83	7.41
2012-2013			
Black	70	32.78	11.11
White	70	45.24	6.36
2013-2014			
Black	71	32.80	11.75
White	71	45.91	6.90
2014-2015			
Black	71	33.38	12.49
White	71	44.75	8.46
2015-2016			
Black	71	31.86	12.99
White	70	43.50	7.23

Table 4.3

Descriptive Statistics of the Graduation Rates of Black and Hispanic Students in Texas

Community College in the 2007-2008 through the 2010-2011 Academic Years

Academic Year and Student Group	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
2007-2008			
Black	70	31.01	13.00
Hispanic	70	42.14	7.69
2008-2009			
Black	70	31.70	15.68
Hispanic	70	42.08	8.83
2009-2010			
Black	70	29.92	15.38
Hispanic	70	42.62	8.32
2010-2011			
Black	70	31.67	12.21
Hispanic	70	41.08	6.78

Table 4.4

Descriptive Statistics of the Graduation Rates of Black and Hispanic Students in Texas

Community College in the 2011-2012 through the 2015-2016 Academic Years

Academic Year and Student Group	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
2011-2012			
Black	70	31.64	13.46
Hispanic	70	40.69	7.46
2012-2013			
Black	70	32.78	11.11
Hispanic	70	42.37	7.37
2013-2014			
Black	71	32.80	11.75
Hispanic	71	42.11	9.18
2014-2015			
Black	71	33.38	12.49
Hispanic	71	43.05	7.55
2015-2016			
Black	71	31.86	12.99
Hispanic	71	42.12	7.35

Table 4.5

Descriptive Statistics of the Graduation Rates of Black and Asian Students in Texas

Community College in the 2007-2008 through the 2011-2012 Academic Years

Academic Year and Student Group	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
2007-2008			
Black	70	31.01	13.00
Asian	70	46.42	2.98
2008-2009			
Black	70	31.70	15.68
Asian	70	44.59	2.85
2009-2010			
Black	70	29.92	15.38
Asian	70	47.86	2.70
2010-2011			
Black	70	31.67	12.21
Asian	70	49.88	27.66

Table 4.6

Descriptive Statistics of the Graduation Rates of Black and Asian Students in Texas

Community College in the 2011-2012 through the 2015-2016 Academic Years

Academic Year and Student Group	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
2011-2012			
Black	70	31.64	13.46
Asian	70	43.23	29.86
2012-2013			
Black	70	32.78	11.11
Asian	70	43.17	25.70
2013-2014			
Black	71	32.80	11.75
Asian	71	43.11	24.77
2014-2015			
Black	71	33.38	12.49
Asian	71	51.63	28.84
2015-2016			
Black	71	31.86	12.99
Asian	70	52.29	25.77

Table 4.7

Descriptive Statistics of the Top Ten Texas Community Colleges with the Highest Graduation Rates of Black Students in the 2013-2014 Academic Year

Texas Community College	M%
Vernon College	76%
Southwest Texas Junior College	67%
South Texas College	56%
Brazosport College	55%
Lone Star College-Cy-Fair	51%
Alvin Community College	50%
Ranger College	50%
Lee College	49%
Western College	45%
Tarrant County College-Northwest	44%

Table 4.8

Descriptive Statistics of the Top Ten Texas Community Colleges with the Highest Graduation Rates of Black Students in the 2014-2015 Academic Year

Texas Community College	<i>M%</i>
Laredo College	100%
Texas Southmost College	60%
Brazosport College	53%
Southwest Texas Junior College District	50%
Lone Star College-Cy-Fair	47%
San Jacinto College- South	46%
Alamo Community College- Palo Alto	46%
Vernon College	45%
Coastal Bend College	44%
Amarillo College	42%

Table 4.9

Descriptive Statistics of the Top Ten Texas Community Colleges with the Lowest Graduation Rates of Black Students in the 2013-2014 Academic Year

Texas Community College	M%
Laredo College	0%
Frank Phillips College	12%
Amarillo College	14%
Alamo Community College- St. Philip's College	17%
Howard College	19%
Temple College	19%
Howard County Junior College District	20%
Victoria College	20%
Grayson College	20%
Del Mar College	21%

Table 4.10

Descriptive Statistics of the Top Ten Texas Community Colleges with the Lowest Graduation Rates of Black Students in the 2014-2015 Academic Year

Texas Community College	M%
Victoria College	0%
Southwest Collegiate Institute for the Deaf	0%
Weatherford College	18%
Lone Star College-Kingwood	21%
Del Mar College	21%
Central Texas College	21%
Alamo Community College-St. Philip's College	21%
McLennan Community College	22%
Dallas County Community College-El Centro	22%
Dallas County Community College-North Lake	22%

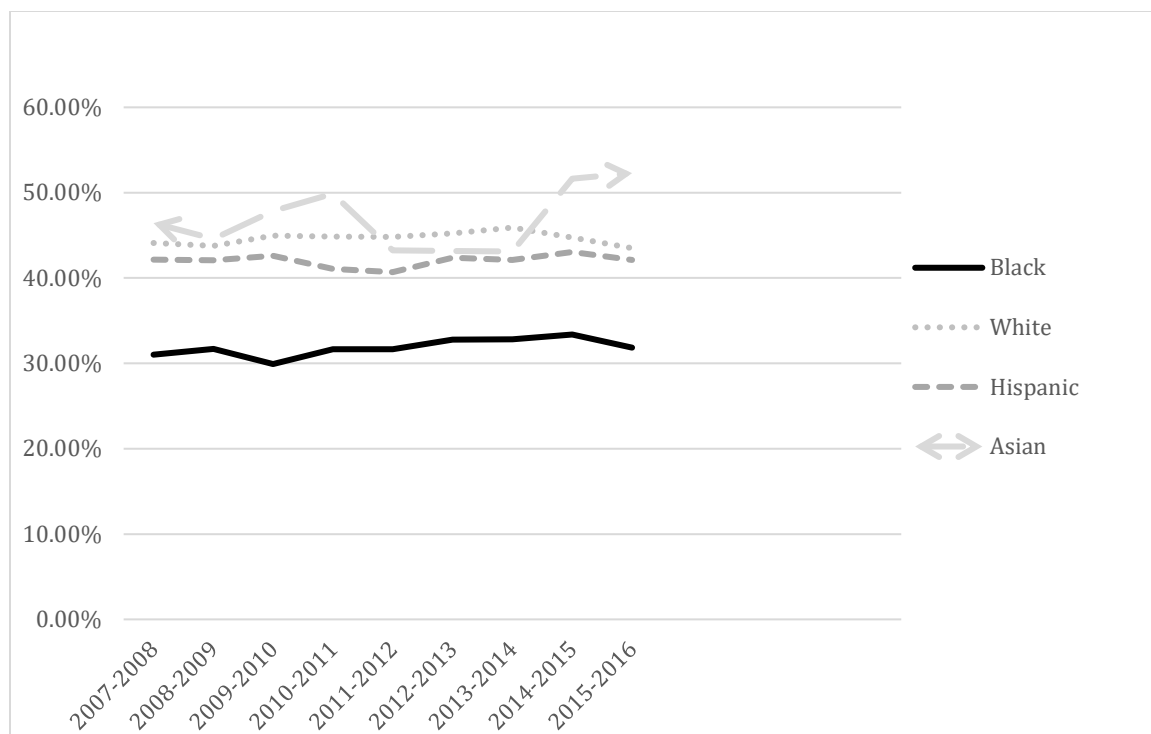


Figure 4.1. Graduation rate trends of Black, White, Hispanic, and Asian students at Texas community colleges for the 2007-2008 academic year through the 2015-2016 academic year.

CHAPTER V

DISCUSSION

The purposes of this journal-ready dissertation were to examine the Total 1-year persistence rates and the Total 2-year persistence rates of Black students at Texas community colleges. Another purpose involved a comparison of the graduation rates of Black community college students with the graduation rates of Asian, White, and Hispanic community college students. Specifically investigated was the extent to which differences were present in the Total 1-year and Total 2-year persistence rates of Black community college students between the 1999-2000 academic year and the 2006-2007 academic year; between the 2006-2007 academic year and the 2013-2014 academic years; and between the 1999-2000 academic year and the 2013-2014 academic year. With respect to graduation rates, the extent to which graduation rates of the four major ethnic/racial groups (i.e., Asian, Black, Hispanic, and White) in Texas differed for the 2007-2008 through the 2015-2016 academic years were examined. By examining multiple years of data, the extent to which trends were present in graduation rates was determined. This chapter will include a summary of the results of each article. Implications for policy and for practice will be provided, followed by recommendations for future research. Finally, this chapter will be concluded with a summary section.

Study One Results

In the first investigation in this journal-ready dissertation, the Total 1-year persistence rates of Black students enrolled in Texas community colleges for the 1999-2000 academic year to the 2013-2014 academic year were examined. Fifteen years of archival data from the Texas Higher Education Coordinating Board Interactive

Accountability System were obtained and analyzed. Over 15-years, the Total 1-year persistence rates for Black students at Texas community colleges remained stagnant. The Total 1-year persistence rates of Black students ranged from a low of 49.10% during the 2011-2012 academic year to a high of 58.66% in the 2002-2003 academic year. The Total 1-year persistence rates during 15-years varied by only 9.49%. For the 1999-2000 academic year (i.e., beginning point) through the 2006-2007 academic year (i.e., midpoint), the Total 1-year persistence rates were 56.21% and 54.11%, respectively. For the midpoint 2006-2007 academic year to the endpoint 2013-2014 academic year, the Total 1-year persistence rates of Black students were 54.76% and 55.91%, respectively. Finally, for the last comparison, of the beginning point, 1999-2000 academic year, to the end point, the 2013-2014 academic year, the Total 1-year persistence rates of Black students were 56.21% and 55.60%, respectively. As such, the Total 1-year persistence rates of Black students at Texas community colleges remained stagnant and did not show improvements over time.

Study Two Results

Examined in the second investigation in this journal-ready dissertation were the Total 2-year persistence rates of Black students enrolled in Texas community colleges for the 1999-2000 academic year to the 2013-2014 academic year. Fifteen years of archival data from the Texas Higher Education Coordinating Board Interactive Accountability System were obtained and analyzed. Over this 15-year period, the Total 2-year persistence rates for Black students at Texas community colleges remained stagnant. With respect to the Total 2-year persistence rates of Black Texas community college students, percentages ranged from 36.75% in the 2009-2010 academic year to 43.79% in

the 2007-2008 academic year. During this 15-year period, the Total 2-year persistence rates of Black students at Texas community colleges varied by only 7.04%. For the 1999-2000 academic year (i.e., beginning point) through the 2006-2007 academic year (i.e., midpoint), the Total 2-year persistence rates were 42.24% and 41.82%, respectively. For the midpoint 2006-2007 academic year to the endpoint 2013-2014 academic year, the Total 2-year persistence rates were 41.94% and 37.86%, respectively. Finally, for the beginning point 1999-2000 academic year to the end point 2013-2014 academic year, the Total 2-year persistence rates of Black students at Texas community colleges were 42.24% and 37.54%, respectively. Clearly, the Total 2-year persistence rates of Black students at Texas community colleges remained stagnant and did not show improvements over time.

Study Three Results

Analyzed in the third investigation of this journal-ready dissertation were the graduation rates of Black and White, Black and Hispanic, and Black and Asian students at Texas community colleges. Archival data for nine years from the Texas Higher Education Coordinating Board Interactive Accountability System were analyzed beginning with the 2007-2008 academic year through the 2015-2016 academic year. Inferential statistical analyses revealed that graduation rates of Black students in Texas community colleges were more than 10 times lower than graduation rates of Asian students. The graduation rates of Black students in Texas community colleges were more than 9 times lower than the graduation rates of White students and 5 times lower than the graduation rates of Hispanic students. Over 9 academic years, the graduation rates of

Black students at Texas community colleges were consistently lower than the graduation rates of Asian, White, and Hispanic students.

Summary of Results

In the first two articles, both on the persistence rates of Black students at Texas community colleges, the Total 1-year and Total 2-year persistence rates of Black Texas community college students remained stagnant from the 1999-2000 academic year to the 2013-2014 academic year. With respect to graduation rates of Black and White students, Black and Hispanic, and Black and Asian students at Texas community colleges, Black students had statistically significantly lower graduation rates at Texas community colleges than did Asian, White, and Hispanic students. The graduation rates of Black students at Texas community colleges also remained stagnant over time.

Connections with the Theoretical Framework

Tinto's (1975) model of student departure is the most popular framework for traditional students. Bean and Metzner's (1985) theoretical framework is more applicable for nontraditional students at community colleges because of its inclusion of environmental factors that affect nontraditional students at community colleges. These environmental factors can be categorized as housing issues, childcare issues, transportation issues, work issues, family issues, and/or financial issues that could cause a student to not persist while enrolled at a community college. In particular, Black students are faced with more of these environmental problems with no support which could cause to them to become unfocused on collegiate responsibilities. As reviewed in the first and second articles, the Total 1-year and Total 2-year persistence rates of Black students at Texas community colleges have not improved and were stagnant over 15 years. These

persistence rates clearly affect graduation rates which were in the focus of the third article over 9-years. Specifically, if Black students do not persist through their first year of college to the second year of college, they will not graduate from Texas community colleges.

Implications for Policy and Practice

The benefit of Black students enrolling in academic programs in high schools that are rigorous are crucial to their success as new college students in Texas community colleges. The education of parents of Black students on the benefits of academic rigor could increase the chances of Black students persisting through their first year of college to their second year of college. By increasing the number of Black students who enroll in dual credit, Advanced Placement, and International Baccalaureate programs could eliminate the number of Black students that are not prepared academically for Texas community colleges.

An examination of the number of Black students in developmental classes in Texas community colleges must occur. This examination must transpire especially in high schools located in high poverty areas to determine why a large number of Black students are entering Texas community colleges and are not college ready. When Black students remain in remedial classes for long periods of time they tend to dropout due to a lack of motivation. Moving faster through remedial classes is necessary for retaining Black students. Also, addressing the development of study skills, time management skills, and test-taking skills while in high school through a student success course could assist Black students with understanding collegiate expectations earlier.

When Black students enroll in Texas community colleges they need support during their first year of college to persist to the second year of college. This support should consist of an appointed peer and faculty mentor along with an appointed advisor based on their career interests. Along with mentor and advisor assistance, Black students should join a student organization to assist with retention so that they feel like they belong in a community college. According to Tinto (2017), a sense of belonging is critical for students believing they matter.

Without support, Black students will continue to drop out and not persist through their first year to their second year. For this to happen, funding is needed to implement specific retention efforts. Also, having the proper technology to identify at-risk students such as predictive analytics is necessary for assisting counselors and advisors with outreach efforts. Furthermore, a collaboration with other community colleges, local high schools, and local businesses will be necessary for maximizing resources for addressing this issue.

Regarding graduation rates of Black students at Texas community colleges, if they do not increase fewer educated Black students who are trained to address the shortages in the Texas workforce will be available. Being untrained in the 21st century causes more Black students to become unable to find jobs with sustainable wages to provide for themselves and their families. Because the oil industry of Texas demands more manufacturing workers, less Black students will be available to fill this demand which is detrimental to Texas oil companies having qualified employees.

Recommendations for Future Research and Practice

Opportunities for future research are present based on the results of the three empirical studies in this journal-ready dissertation. The first recommendation is researchers can extend the studies in this journal-ready dissertation to include community colleges in other states because this study was based entirely on Texas data. The extent to which the findings delineated herein would be generalizable to students in other states is not known. The second recommendation will be for researchers to extend this study to include 4-year universities. By extending this study to such 4-year postsecondary institutions, data can be collected regarding the degree to which the results delineated herein solely on community college students would be generalizable to 4-year university students.

A third recommendation would be for researchers to replicate this investigation to other student demographic characteristics such as gender, Hispanic students, English Language Learners, or students in poverty. The degree to which results based on Black students would be generalizable to these various demographic characteristics is not known. Fourth, because this multiyear, statewide study was entirely from empirical quantitative data, researchers are encouraged to conduct qualitative and/or mixed methods research. As such, these studies could involve researchers addressing the reasons for low graduation and persistence rates of Texas Black community college students and derive directed solutions.

Conclusion

The purpose of this journal-ready dissertation was to examine the persistence rates of Black students at Texas community colleges. In addition, the graduation rates of Black, White, Hispanic, and Asian students were compared. For Black students at Texas community colleges, Total 1-year and 2-year persistence rates remained unchanged over 15-years. With respect to the graduation rates of Black students, statistically significant differences were present over 9-years. The graduation rates of Black students at Texas community colleges were statistically significantly lower than the graduation rates of Asian, White, and Hispanic students in all nine years. It is imperative that community college leaders create and implement strategies to improve persistence and graduation rates of Black students in Texas community colleges. Until such time, the degree to which equity exists with respect to educational opportunity for all individuals will not be present.

REFERENCES

- American Association of Community Colleges. (2018). *American Association of Community Colleges fast facts 2018*. Retrieved from <https://www.aacc.nche.edu/wp-content/uploads/2018/04/2018-Fast-Facts.pdf>
- Baber, L. D. (2018). "Living in the along": Validating experiences among urban community college students in a college transition program. *Community College Review*, 46(3), 316. doi:10.1177/0091552118775813
- Ballinger, R., & Slate, J. R. (2017). Ethnic/racial differences in 1-year persistence rates by institutional status at Texas 4-year universities over time. *Journal of Advances in Education Research*, 2(4), 280-286. Retrieved from <https://dx.doi.org/10.22606/jaer.2017.24008>
- Bailey, T., Jaggars, S. S., & Jenkins, D. (2015). *Redesigning America's community colleges: A clearer path to student success*. Cambridge, MA: Harvard University Press.
- Barnes, W., & Slate, J. R. (2014). College-readiness rates in Texas: A statewide, multiyear study of ethnic differences. *Education and Urban Society*, 46 (1), 59-87. doi:10.1177/0013124511423775
- Barnett, E. A. (2010). Validation experiences and persistence among community college students. *Review of Higher Education*, 34(2), 193-230. doi:10.1353/rhe.2010.0019
- Baum, S., Ma, J., & Payea, J. (2013). *Education pays 2013: The benefits of higher education for individuals and society*. Retrieved from <https://trends.collegeboard.org/sites/default/files/education-pays-2013-full-report.pdf>

- Bean, J. P., & Metzner, B. S. (1985). A conceptual model of nontraditional undergraduate student attrition. *Review of Educational Research*, 55(4), 485-540.
- Bowman, N. A., & Denson, N. (2013). A missing piece of the departure puzzle: Student-institution fit and intent to persist. *Research in Higher Education*, 55(2), 123-142.
doi:10.1007/s11162-013-9320-9
- Carnevale, A. P., & Rose, S. J. (2011). *The undereducated American*. Retrieved from Georgetown University Center on Education and the Workforce website:
<http://cew.georgetown.edu/cew-reports/the-undereducated-american/#full-report>
- Cohen, A., & Brawer, F. (2009). *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.
- Community College Research Center. (2013). *Texas would benefit by improving its community college to bachelor's transfer system*. Retrieved from
https://www.edtx.org/our-impact-areas/higher-education/texas-student-success-council/tssc_transfer.pdf
- Complete College America. (2016, December). *Student services engagement*. Paper presented at Houston Community College Training for Advisors, Houston, TX.
- Complete College America. (2018). *The data dashboard*. Retrieved from
<https://completecollege.org/data-dashboard/>
- 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.
- Damashek, R. (2003). *Support programs for students on academic probation*. Retrieved from U.S. Department of Education Office of Educational Research and Improvement website: <https://eric.ed.gov/?id=ED475734>
- 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. Retrieved from <http://search.proquest.com/openview/701c2c2421fe3741e77ec8cacb1ce0a7/1?pq-origsite=gscholar&cbl=2034856>
- Garcia, M. (2010). When Hispanic students attempt to succeed in college, but do not. *Community College Journal of Research and Practice*, 34(10), 839-847. doi:10.1080/10668926.2010.485003
- Ingram, K. R., & Slate, J. R. (2017). Differences in total 1-year persistence rates of Black students at Texas community colleges: A multiyear, statewide analysis. *Cross-Currents: An International Peer-Reviewed Journal on Humanities & Social Sciences*, 3(2), 52-56. Retrieved from <http://crosscurrentpublisher.com/>
- Johnson, R. B., & Christensen, L. (2012). *Educational research: Quantitative, qualitative, and mixed approaches* (4th ed.). Los Angeles, CA: Sage.
- Levesque, E. M. (2018, October 8). *Improving community college completion rates by addressing structural and motivational barriers*. Retrieved from Brookings website: <https://www.brookings.edu/research/community-college-completion-rates-structural-and-motivational-barriers/>

- Lumina Foundation. (2015). *A stronger nation through higher education*. Retrieved from <https://www.luminafoundation.org/news-and-views/stronger-nation-2015>
- Lumina Foundation. (2018). *Facts and figures*. Retrieved from <https://www.luminafoundation.org/facts-and-figures>
- Mamiseishvili, K., & Deggs, D. M. (2013). Factors affecting persistence and transfer of low-income students at public two-year institutions. *Journal of College Student Retention: Research, Theory & Practice*, 15(3), 409-432. doi:10.2190/cs.15.3.f
- Mangan, K. (2014, September). Community colleges test ways to clear students' path to success. *Chronicle of Higher Education*, 61(4), A10-A11.
- Matthews, C. R. (2018). *Higher education in Texas: Its beginnings to 1970*. Denton, TX: University of North Texas Press.
- McKinney, L., & Hagedorn, L. S. (2016). Performance-based funding for community colleges: Are colleges disadvantaged by serving the most disadvantaged students? *The Journal of Higher Education*, 88(2), 159-182.
doi:10.1080/00221546.2016.1243948
- Moosai, S., Walker, D. A., & Floyd, D. L. (2011). Using student and institutional characteristics to predict graduation rates at community colleges: New developments in performance measures and institutional effectiveness. *Community College Journal of Research and Practice*, 35(10), 802-816.
doi:10.1080/10668926.2010.520245
- 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.

- Morris, M. W. (2014). *Black stats: African Americans by the numbers in the twenty-first century*. New York, NY: The New Press.
- Moss, S. (2017). *Differences in persistence and graduation rates of Black students in Texas community colleges: A multiyear, statewide study* (Unpublished doctoral dissertation). Sam Houston State University, Huntsville, TX.
- Moss, S., & Slate, J. R. (2014). Differences in Black students' persistence rates in Texas community colleges by institutional status. *International Journal of University Teaching and Faculty Development*, 5(3), 165-174. Retrieved from <https://search.proquest.com/docview/1841113154?accountid=7036>
- 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(4), 206-213.
- Moss, S., & Slate, J. R. (2017). Differences in the 1-year persistence rates by student institutional status for Black students at Texas community colleges: A statewide multiyear investigation. *AASCIT Journal of Psychology*, 3(3), 25-33.
- 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.
- National Center for Education Statistics. (2014). *The condition of education*. Retrieved from <https://nces.ed.gov/pubs2014/2014083.pdf>
- National Center for Education Statistics. (2018). *The condition of education*. Retrieved from <https://nces.ed.gov/pubs2018/2018144.pdf>

- National Center for Higher Education Management Systems. (2018). *Increasing college attainment in the United States: Variations in returns to states and their residents*. Retrieved from <https://www.nchems.org/projects/increasing-college-attainment-in-the-united-states>
- National Student Clearinghouse Research Center. (2015). *The snapshot report persistence-retention*. Retrieved from [https:// nscresearchcenter.org/wp-content/uploads/SnapshotReport28a.pdf](https://nscresearchcenter.org/wp-content/uploads/SnapshotReport28a.pdf)
- National Student Clearinghouse Research Center. (2018). *The snapshot report persistence-retention*. Retrieved from <https://nscresearchcenter.org/wp-content/uploads/SnapshotReport33.pdf>
- Organisation for Economic Cooperation and Development. (2017). *Education at a glance 2017: OECD indicators*. Paris, France: Author. doi:10.1787/eag-2017-en
- Payne, J. M., Slate, J. R., & Barnes, W. (2015). Differences in persistence rates of undergraduate students by ethnicity: A multiyear, statewide analysis. *International Journal of Teaching and Faculty Development*, 4(3), 157-171. Retrieved from https://www.novapublishers.com/catalog/product_info.php?products_id=53063
- 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

- Radford, A. W., Berkner, L., Wheelless, S. C., & Shepherd, B. (2010). *Persistence and attainment of 2003-04 Beginning Postsecondary Students: After 6 years* (NCES 2011-151). Washington, DC: U.S. Department of Education.
- Rankin, D. A., Scott, J. A., & Kim, J. (2015). Oklahoma and Texas completion policies for community colleges. *eJournal of Education Policy*, 1-11.
- 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>
- Spangler, J. M., & Slate, J. R. (2015). Texas community college graduation and persistence rates as a function of student ethnicity. *Community College Journal of Research and Practice*, 39(8), 741-753. doi:10.1080/10668926.2013.878261
- Stagg, D. R. (2017). *Differences in persistence and graduation rates of Hispanic students in Texas community colleges: A Texas statewide study*. Doctoral Dissertation, Sam Houston State University, Huntsville, TX.
- Strayhorn, T. L. (2011a). Bridging the pipeline: Increasing underrepresented students' preparation for college through a summer bridge program. *American Behavioral Scientist*, 55(2), 142-159.
- Strayhorn, T. L. (2011b). Traits, commitments, and college satisfaction among Black American community college students. *Community College Journal of Research & Practice*, 35(6), 437-453.
- Strayhorn, T. L. (2012a). *College students' sense of belonging: A key to educational success for all students*. New York, NY: Routledge.

- Strayhorn, T. L. (2012b). Satisfaction and retention among African American men at 2-year community colleges. *Community College Journal of Research and Practice*, 36(5), 358-375.
- Strayhorn, T. L. (2016). *Student development theory in higher education: A social psychological approach* (1st ed.). New York, NY: Routledge.
- 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.
- 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
- Texas Association of Community Colleges. (2014). *Community college enrollment*. Retrieved from <http://www.tacc.org/pages/data-and-info/community-college-enrollment>
- Texas Higher Education Coordinating Board. (2012). Glossary of terms. Retrieved from <http://www.thecb.state.tx.us/Reports/PDF/1316.PDF>
- Texas Higher Education Coordinating Board. (2014). *Community and technical colleges: 6-year graduation rates of first-time entering undergraduates, fall 2008*. Retrieved from <http://www.thecb.state.tx.us/reports/PDF/6405.PDF?CFID=31530988&CFTOKEN=643399431>

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. (2018). *THECB - Texas Higher Education Coordinating Board*. Retrieved from <http://www.thecb.state.tx.us/>

Tinto, V. (1975). Dropouts from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89-125.

Tinto, V. (2001). *Rethinking the first year of college*. Higher Education Monograph Series. Syracuse, NY: Syracuse University.

Tinto, V. (2017). Reflections on student persistence. *Student Success*, 8(2), 1-8.
doi:10.5204/ssj.v8i2.376

- United States Census Bureau. (2015). *Educational attainment in the United States: 2015*. Retrieved from <https://www.census.gov/library/publications/2016/demo/p20-578.html>
- Weis, L. (1985). Without dependence on welfare for life: Black women in the community college. *The Urban Review*, 17(4), 233-255.
- 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
- Wood, J. L., & Turner, C. S. V. (2010). Black males and the community college: Student perspectives on faculty and academic success. *Community College Journal of Research and Practice*, 35, 135-151. doi:10.1080/10668926.2010.526052
- Wood, J., & Williams, R. (2013). Persistence factors for Black males in the community college: An examination of background, academic, social, and environmental variables. *Spectrum: A Journal on Black Men*, 1(2), 1. doi:10.2979/spectrum.1.2.1

APPENDIX



Date: Jan 30, 2019 1:06 PM CST

TO: Kim Ingram

John Slate

FROM: SHSU IRB

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

PROTOCOL #: IRB-2019-29

SUBMISSION TYPE: Initial

ACTION: Exempt

DECISION DATE: January 30, 2019

EXEMPT REVIEW CATEGORY: Category 4. Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

Greetings,

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.

Since Cayuse IRB does not currently possess the ability to provide a "stamp of approval" on any recruitment or consent documentation, it is the strong recommendation of this office to please include the following approval language in the footer of those recruitment and consent documents: IRB-2019-29/January 30, 2019.

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

VITA

Kim Rushing Ingram

Doctorate of Education – Higher Education Leadership, May 2019
 Sam Houston State University, Huntsville, TX
 Dissertation: Differences in Total Persistence and Graduation Rates of Black Students in Texas Community Colleges: A Multiyear, Statewide Study

Master of Arts Degree, Rehabilitation Counseling, December 1997
South Carolina State University, Orangeburg, SC
 Bachelor of Science Degree, Radio, TV, and Film, May 1992
University of Southern Mississippi, Hattiesburg, MS
 Minor: English

PROFESSIONAL EXPERIENCE

Counselor/Advisor/Manager, **Houston Community College**, 2006-Present
 Supervisor/Counselor, **Universal Technical Institute**, 2003-2006
 Employment Counselor/Training Specialist, **WorkSource**, 2002-2003
 Academic Counselor/ADA Counselor, **Nunez Community College** 1999-2002
 Soldier and Family Assistance Program Manager/Master Trainer **New Orleans U.S. Army Recruiting Battalion**, 1998-1999

AWARDS

Jackie Merchant Memorial Leadership Award, SERA Dean's Award for Exceptional Graduate Student Research, Houston Community College Central Advising Outstanding Service and Leadership Award, Commander's Award for Civilian Service

PRESENTATIONS AND PUBLICATIONS

- Ingram, K., Bartee, K., Salehi, N., Hooey, S., McClain, A., Terry, P. (2019, March) *Surviving Hurricane Harvey: Strategies for Advising Students after the Storm*, National Academic Advising Association Regional Conference, San Antonio, TX.
- Ingram, K. (2018, February). *Comprehensive Review of Miseducation of a Negro*. Paper presented at annual conference of the Louisiana State University College of Human Services and Education Curriculum Camp, Baton Rouge, LA.
- Ingram, K. (2018, February) *Hurricane Harvey Listening Post-Houston Community College Higher Education Leadership Internship Project*. Retrieved from <https://edutube.hccs.edu/channel/Hurricane+Harvey+Stories/85927142>
- Ingram, K. R., & Slate, J. R. (2017). Differences in total 1-year persistence rates of Black students at Texas community colleges: A multiyear, statewide analysis. *Cross-Currents: An International Peer-Reviewed Journal on Humanities & Social Sciences*, 3(2), 52-56. Retrieved from <http://crosscurrentpublisher.com>
- Sechelski, A. N., Alsakran, R. I., Tritico, R. B., Boyd, C. D., Ingram, K. R. & Flores, B. R. (2017, February). *Experiences of Select Higher Education Doctoral Students*

- Who Persisted to Graduation*. Paper presented at annual conference of the Southwest Educational Research Association, San Antonio, TX.
- Ingram, K. (2009, September). *ADA VS. 504/IDEA. HCC Faculty Training*, Houston Community College, Houston, TX.
- Ingram, K. (2008, October). *Advocacy for ADA Students. HCC Faculty and Staff Training Coleman Campus*, Houston Community College, Houston, TX.