

DIFFERENCES IN 1-YEAR PERSISTENCE RATES BY THE INSTITUTIONAL
STATUS OF BLACK AND HISPANIC STUDENTS AT TEXAS 4-YEAR
UNIVERSITIES: A MULTIYEAR, STATEWIDE INVESTIGATION

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DEDICATION

I dedicate the completion of this dissertation to my family. My wife, Brenda, and our four children Matthew, Drew, Sydney, and Sarah are my life and my pride and joy. I particularly wish to thank my wife, Brenda, in the completion of this milestone. I never considered continuing my education after the completion of my MBA. Over the years, Brenda kept dropping hints that she thought I should continue and consider completing a doctorate. After a few years of her subtle hints, I looked into it and as they say, the rest is history. I would not have completed this degree if it was not for Brenda and I share this distinction with her. I also wish to dedicate the completion of this dissertation to my brother, Andy. Andy passed away 6 years ago at the age of 30 from leukemia. I think about him every day and miss my little brother very much.

ABSTRACT

Ballinger, Richard, M., *Differences in 1-year persistence rates by the institutional status of Black and Hispanic students at Texas 4-year universities: A multiyear, statewide investigation*. Doctor of Education (Educational Leadership), May 2018, Sam Houston State University, Huntsville, Texas.

Purpose

The purposes of this journal-ready dissertation were threefold. The first purpose was to determine the degree to which 1-year persistence rates differed as a function of the institutional status (i.e., stayed or transferred) of students enrolled at Texas 4-year public universities in the 1999-2000 through the 2013-2014 academic years. The second purpose was to analyze the degree to which differences existed in the 1-year persistence rates by the institutional status (i.e., stayed at the same Texas 4-year public university or transferred to a different Texas 4-year public university) of Black students enrolled in the 1999-2000 through the 2013-2014 academic years. The third purpose was to examine 1-year persistence rates by the institutional status of Hispanic students enrolled in Texas 4-year public universities in the 1999-2000 through the 2013-2014 academic years. Through analyzing multiple years of data for each of the thirty-eight Texas 4-year public universities, any trends that were present in the 1-year persistence rates by student institutional status at Texas 4-year public universities were determined.

Method

In this multiyear, statewide investigation, 15 years of archival data from the Texas Higher Education Coordinating Board Interactive Accountability System were downloaded and analyzed for each of the three studies in this journal ready dissertation. Specifically, archival data were obtained for the 1-year persistence rates of students

enrolled in one of the 38, 4-year Texas public universities in the 1999-2000 through the 2013-2014 academic years.

Findings

Inferential statistical analyses revealed the presence of statistically significant differences, with large effect sizes, for 100% of the analyses. All Texas undergraduate students, Black students, and Hispanic students who stayed at the same Texas 4-year public university were 42% to 51%, 35% to 49%, and 40% to 50% more likely to persist, respectively, than their peers who transferred to a different Texas 4-year public university in the 1999-2000 through the 2013-2014 academic years. Additionally, the 1-year persistence rates of these students at Texas 4-year public universities did not change at a statistically significant level over the 15 years of analyzed data. Implications for policy and for practice, as well as recommendations for future research, were discussed.

KEYWORDS: Black students, Hispanic students, 4-year university, 1-year persistence rates, staying, transferring, Texas.

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I arrived at Sam Houston State University in 2005 to start the PGA Golf Management program in the College of Business Administration. My boss, Dr. R. Dean Lewis, Dean of the College of Business Administration, became a mentor and one of my closest friends. I have learned so much from him in many areas and will be forever thankful for the opportunity he gave me at Sam Houston State University. I can always count on him and thank him for his friendship, support, and guidance in my life and career and look forward to many more rounds of golf with him over the coming years. I continued my good fortune when Dr. Lewis retired and Dr. Mitchell Muehsam took over as Dean of the College of Business Administration. Dr. Muehsam is always there for me when I need support and guidance and always has great advice. I thank him for all that he has done for me in my career and for being such a great boss. Additionally, thank you

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CHAPTER I

INTRODUCTION/REVIEW OF THE LITERATURE

Increasing student retention and completion rates in higher education has become prevalent in government and institutional planning; however, it remains a continual issue for postsecondary institutions (Tinto, 2012). Weddle-West and Bingham (2010) reported only 50% of students who enroll in a postsecondary institution earn a degree, with Hispanic students and Black students faring worse than White students in their degree achievement rates. As of 2010, only 13% of the Hispanic 25-29 year-old population has earned a 4-year university degree, whereas 19% of Black and 39% of White 25-29 year-old populations in the United States have completed bachelor's degrees (Fry, 2011).

For students, completion of a college degree can have an important influence on career advancement and compensation (Baum, Ma, & Payea, 2013; Tinto, 1987). Students who complete a college degree earn twice the annual income of students who obtain only a high school diploma (Weddle-West & Bingham, 2010). For society, individuals who earn a college degree provide a skilled workforce, are more likely to lead a healthy lifestyle, and are more likely to engage in society than individuals who earn just a high school diploma (Baum, Ma, & Payea, 2013). Additionally, over the last 40 years, the percentage of jobs in the United States requiring a postsecondary degree has more than doubled (Duncan, 2010).

Review of the Literature Regarding Persistence Rates

Student retention in higher education has been and remains an important issue (Oseguera & Rhee, 2009) and has influenced the financial and academic plans of institutions (Aljohani, 2016). Since the 1970's, many empirical studies and theoretical

models have been developed to focus on the critical issues of student retention (Aljohani, 2016), yet college completion remains a common and enduring problem (Tinto, 2012). Issues of student retention and success remain critical concerns for students and require urgent attention (Eitzen, Kinney, & Grillo, 2016). For students, the attainment of many of the prestigious positions in society becomes increasingly more difficult without a 4-year degree (Tinto, 1987). Members of society who complete a 4-year degree earn approximately twice the amount of money of those individuals who only complete a high school diploma (Weddle-West & Bingham, 2010). Since 1975, the percentage of jobs in the United States requiring a college or university degree increased from 28% to 59% (Duncan, 2010). A generation ago, the United States held the largest proportion of college graduates in the world, but has since fallen to a tie for ninth for rates of college completion (Duncan, 2010). This decline in college completion rates prompted former-President Obama to declare in 2009 that the United States must set a goal to once again have the highest proportion of college graduates in the world (Duncan, 2010). Clearly, student retention and degree achievement has become a high-profile issue for American society.

A common occurrence in postsecondary education is undergraduate students transferring to another institution. Marling (2013) determined that nearly 33% of students transfer at least once during their academic career, whereas Fauria and Fuller (2015) established that almost 60% of undergraduate students transferred, attended multiple institutions, and/or co-enrolled in institutions prior to degree completion. More recently, Walker, Sherman, and Shea (2016) documented over 33% of students enrolled in community colleges and 4-year institutions will transfer to another institution.

Many students start their education at a community college with the goal of transferring to a 4-year university to earn a degree (Laanan, 2004). In a recent investigation, 67% of students enrolled at a community college would like to transfer to a 4-year institution to earn a baccalaureate degree (Young & Litzer, 2013). Unfortunately, many of those transfer students, with intentions of completing a bachelor's degree, never reached their goal (Handel & Williams, 2012). Wang (2009) documented many transfer students who began at community colleges were less likely to achieve a degree than those students who started at a 4-year institution. The National Center for Education Statistics (2010) reported 67% of first-time community college students do not earn a degree within six years after enrolling.

Regarding transfer students, Fauria and Slate (2014) examined 1-year persistence rates by institutional status (i.e., stayed or transferred) for four ethnic/racial groups (i.e., White, Black, Hispanic, and Asian) for the thirty-eight, 4-year public universities in Texas in the 2000 and 2011 academic years. Fauria and Slate (2014) documented that regardless of ethnic/racial membership, students who stayed at the same institution persisted at a higher rate than students who transferred to a different institution. In fact, 60% of students who stayed at the same institution after 1-year persisted whereas only 15% of students who transferred to a different institution persisted after one year (Fauria & Slate, 2014).

In an extension of the Fauria and Slate (2014) research study, Ballinger and Slate (2017) investigated 1-year persistence rates by institutional status (i.e., staying or transferring) for four ethnic/racial groups (i.e., White, Black, Hispanic, and Asian) at the thirty-eight, 4-year Texas public universities in the 2014 academic year. Results of the

Ballinger and Slate (2017) analyses were congruent with the findings of Fauria and Slate (2014). Students who transferred were much less likely to persist than were students who stayed at the same Texas 4-year university. 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 persisted at their initial institution, when compared to their peers who transferred to another institution (Ballinger & Slate, 2017).

In another study in which the focus was on students enrolled in Texas 4-year public universities, Payne, Slate, and Barnes (2015) examined 6-year persistence rates by ethnicity/race (i.e., White, Black, Hispanic, and Asian) between the 2000 and 2010 academic years. The 6-year persistence rates for White students at Texas 4-year public universities were 63.23% in 2000 and 68.14% in 2010. For Black students, the 6-year persistence rates at Texas 4-year public universities were 61.55% in 2000 and 59.53% in 2010. Regarding Hispanic students, the 6-year persistence rates at Texas 4-year public universities were 65.64% in 2000 and 65.4% in 2010. Finally, for Asian students, the 6-year persistence rates at Texas 4-year public universities were 67.62% in 2000 and 74.41% in 2010 (Payne et al., 2015). The authors noted the increased attrition rates of Black and Hispanic students at Texas 4-year public universities between the 2000 and 2010 academic years.

In a similar study, but with community college students, Spangler and Slate (2015) analyzed the graduation and persistence rates of students enrolled in Texas community colleges by ethnic/racial membership (i.e., White, Black, Hispanic, and Asian) for 2000 and 2004 through the 2010 academic years. The authors established that between the 2000 and 2010 academic years, graduation and persistence rates increased

for each ethnic/racial group. White students increased their graduation and persistence rates by 8.45% over the 10 year-period. Black students increased their graduation and persistence rates by 8.27% over the 10-year period. Hispanic students increased their graduation and persistence rates by 9.78% over the 10-year period. Finally, Asian students increased their graduation and persistence rates by 11.6% over the 10-year period. Spangler and Slate (2015) recognized the improvement in 1-year persistence rates for each ethnic/racial group, but discussed the need for continued improvement due to increased enrollments at Texas community colleges.

In a recent investigation, Moss and Slate (2016) analyzed the 1-year persistence rates of Black and White students enrolled in Texas community colleges by their institutional status (i.e., stayed or transferred) in the 2000 and 2013 academic years. They documented that in 2000 Black and White students were 36% more likely to persist when staying at the same institution than when transferring to another institution. Similarly, in the 2013 academic year, Black students were 34% more likely to persist when staying at the same institution and White students were 41% more likely to persist when staying at the same institution compared to transferring to another institution.

Review of the Literature on Black Student Persistence Rates

According to Brower and Ketterhagen (2004), high school graduation rates and college admission rates over the last 50 years reflect a shift toward racial/ethnic equality. From the early 1980's to early 2000's, minority undergraduate enrollment increased by 146% (Flores & Park, 2013) and the number of Black students earning an undergraduate degree has almost doubled in the last 20 years (Naylor, Wyatt-Nichol, & Brown, 2015). However, Black students still earned less than 10% of the undergraduate degrees

obtained in the United States in 2016 (U.S. Census Bureau, 2016). Additionally, a discrepancy is present in the higher education retention statistics between White men and women and Black men and women (Keels, 2013). Approximately 50% of White men and women will drop out of a college or university within four years compared to 57% of Black women and 69% of Black men (Keels, 2013).

To compete in the global economy, the United States must educate an increasingly more diverse student population through increasing college access for low-income and students of color (Palmer, Davis, Moore, & Hilton, 2010). For students, completion of a postsecondary degree can have an important influence on lifetime earning potential. Students who earn a postsecondary degree earn twice the amount of income when compared to those students who complete just a high school diploma or equivalent (Council of Economic Advisors, 2015). Additionally, Duncan (2010) reported that since 1975 the percentage of jobs in the United States requiring postsecondary education increased from 28% to 59%. Despite improvements made, compelling racial gaps still exist relating to retention and persistence for Black students enrolled in postsecondary institutions.

Of note, community colleges are increasingly providing education for a large number of students of color in the United States (Cohen & Brawer, 2009). In particular, Black students enroll in community colleges at excessively high rates (Lowry, 2016). In the U.S., 52% of all Black undergraduate students are enrolled at community colleges (American Association of Community Colleges, 2015). Black students enrolled at community colleges are less likely to transfer to a 4-year institution and earn an undergraduate degree (Zamani, 2001). Only 8% of Black students who enroll at a

community college transfer to a 4-year university and earn a bachelor's degree within six years (Shapiro et al., 2017).

In 2016, Lowry explored the college selection process for Black students who enrolled at a community college versus a 4-year institution. In this qualitative study, 19 Black students enrolled at an urban community college in the southern part of the United States were interviewed. All 19 Black students were academically qualified to enroll at a 4-year college or university. Lowry (2016) reported participants believed attending college was their only option and that family played an important role in deciding to enroll at a community college instead of a 4-year institution. Lowry (2016) suggested high school personnel (e.g., teachers, administrators, and counselors) should become attentive to the college choice process for academically qualified Black students who could benefit by starting at a 4-year college or university.

In another qualitative study, but at a 4-year institution, Wright, Good, and Lampley (2011) examined the social, academic, and cultural expectations and experiences of Black students enrolled at two predominantly White universities in the southern United States. Participants were 20 Black junior or senior students who were in good standing at their university and had persisted at the same university since their initial enrollment. Through interviews and observation, Wright et al. (2011) recommended campuses should develop cultural sensitivity training programs, recruit and retain Black faculty and staff, develop orientation and retention programs, develop faculty-mentoring programs, and provide support for Black student organizations. Additionally, institutions should provide and support Black-oriented cultural and social events, provide diversity in the curriculum, increase scholarship opportunities, and

collaborate with the local community to improve the local racial climate (Wright et al., 2011).

Keels (2013) investigated gender and ethnic/racial differences in college grades and graduation rates for a diverse cohort of first-year students who were enrolled in one of 28 selected colleges and universities. White and Asian students had the highest GPA (i.e., 3.3), Hispanic students had the next highest GPA (i.e., 3.1), and Black students had the lowest GPA (i.e., 3.0). Additionally, the six-year degree achievement rates were 92% for White students, 90% for Asian students, 86% for Hispanic students, and 80% for Black students (Keels, 2013). Keels noted Black students had the lowest GPA (i.e., 3.0) and the lowest six-year degree achievement rates (i.e., 80%) for all four ethnic/racial groups.

In a Texas investigation, Spangler and Slate (2015) explored persistence rates and graduation rates by ethnic/racial membership (i.e., White, Black, Hispanic, and Asian) of students enrolled in community colleges for the 2000 and 2004-2010 academic years. They investigated whether trends were present for the different ethnic/racial groups between the 2000 and the 2010 academic years. Spangler and Slate (2015) documented graduation and persistence rates increased 8.27% for Black students from the 2000 academic year to the 2010 academic year. Graduation and persistence rates in the 2000 academic year were 22.80% and 31.07% in the 2010 academic year for Black students enrolled at Texas community colleges. Spangler and Slate (2015) further recognized increases in persistence rates and graduation rates for all ethnic/racial groups, but encouraged continued improvement due to the number of students choosing the community college route for higher education opportunities.

In a similar study, Moss and Slate (2016) analyzed the 1-year persistence rates by institutional status (i.e., stayed or transferred) of Black students who had been enrolled at a Texas community college in the 2000 and 2012 academic years. Moss and Slate (2016) established the 1-year persistence rate was 36% higher when Black students stayed at the same institution when compared to Black students who transferred to another institution in the 2000 academic year. Similarly, in 2012, Black students who stayed at the same institution had a 1-year persistence rate that was 27% higher than Black students who transferred to another Texas community college. Though community colleges have made efforts to increase persistence and completion rates, they continue to present a problem, not only for students but also for community colleges (Moss & Slate, 2016).

In another Texas investigation, Payne et al. (2015) examined the 6-year persistence rates of Black students enrolled at Texas 4-year public universities in the 2000 academic year through the 2010 academic year. In 2000, the 6-year persistence rates for Black students at Texas 4-year public universities were 61.55%. In 2010, the 6-year persistence rates for Black students at Texas 4-year public universities increased to 62.25%. The 6-year persistence rates for Black students increased a mere 0.70% over this 11-year period from the 2000 academic year through the 2010 academic year (Payne et al., 2015). They documented Black students had the lowest 6-year persistence rates when compared to White, Hispanic, and Asian students.

In his doctoral dissertation, Moss (2017) analyzed 1-year persistence rates of Black students enrolled in Texas community colleges by institutional status (i.e., stayed or transferred) for the 2007-2008 through the 2013-2014 academic years. Statistically significant differences were present in four of the eight academic years investigated.

Moss (2017) documented 1-year persistence rates for Black students who persisted at the same Texas community college were higher than for Black students who transferred to a different Texas community college even when statistically significant differences were not present. The 1-year persistence rates for Black students who persisted at the same Texas community college ranged from 38% to 46%, whereas the 1-year persistence rates for Black students who transferred to a different Texas community college ranged from 27% to 37% (Moss, 2017). According to Moss (2017), community colleges with low 1-year persistence rates should be proactive in examining existing programs and making necessary changes to improve the persistence rates of Black students at Texas community colleges.

Review of the Literature on Hispanic Student Persistence Rates

The Hispanic population in the United States reached 57 million in 2015 (Krogstad, 2016) and accounted for more than half (i.e., 54%) of the population growth in the United States between 2000 and 2014 (Stepler & Lopez, 2016). Specifically, the Hispanic population in Texas reached 6.7 million in 2000 (U.S. Census Bureau, 2000) and increased to 10.4 million in 2015 (Stepler & Lopez, 2016), representing a 55% increase in the Hispanic population in Texas from 2000 to 2015. Despite the Hispanic population being the largest and fastest growing ethnic/racial group in the United States (Parker, Segovia, & Tapp, 2016), bachelor's degree attainment for Hispanic students has remained low and relatively stable over the last 25 years (Contreras & Contreras, 2015). Only 13% of the Hispanic 25-29 year-old population has earned a 4-year university degree, whereas 19% of Black, 39% of White, and 53% of Asian 25-29 year-old populations in the United States have completed bachelor's degrees (Fry, 2011).

Of note, however, is the percentage of Hispanic students enrolling in a college or university has increased from 13% in 1972 to 32% in 2010 (Fry, 2011), with Hispanic student enrollment totaling 16.5% of higher education enrollments (Fry & Lopez, 2012). Improving persistence rates and graduation rates in higher education for Hispanic students is important for society (Gurantz, Hurwitz, & Smith, 2017) because the Hispanic population represents the largest minority group in the United States (Krogstad & Lopez, 2015). Since 1975, the percentage of jobs requiring a 4-year degree has increased from 28% to 59% illustrating the importance of an educated workforce in the United States (Duncan, 2010). Additionally, individuals receiving a postsecondary degree earn twice the amount of annual income when compared to individuals with just a high school diploma (Council of Economic Advisors, 2015). It is important to note the Hispanic population represents a large portion of the unskilled labor force in the United States and, therefore, this group is not as present as other ethnic/racial groups in higher paying jobs or careers (U.S. Bureau of Labor Statistics, 2014).

In 2014, Fauria and Slate investigated the 1-year persistence rates by institutional status (i.e., stayed or transferred) of Hispanic students who had been enrolled in a 4-year Texas public university for the 2000 and 2011 academic years. Hispanic students who stayed at the same 4-year institution had a 47% higher persistence rate than Hispanic students who transferred to another 4-year institution in the 2000 academic year (Fauria & Slate, 2014). Additionally, Hispanic students who stayed at the same 4-year institution in the 2011 academic year had a 51% higher persistence rate than Hispanic students who transferred to another 4-year institution in the 2011 academic year. Hispanic students

were much more likely to persist at the same 4-year institution than if they transferred to another 4-year institution (Fauria & Slate, 2014).

Extending the Fauria and Slate (2014) research study, Ballinger and Slate (2017) investigated 1-year persistence rates by institutional status (i.e., stayed or transferred) for Hispanic students enrolled at Texas 4-year public universities for the 2014 academic year. The 1-year persistence rate for Hispanic students who stayed at the same 4-year university was 66% compared to a 22% 1-year persistence rate for Hispanic students who transferred to another 4-year institution in the 2014 academic year. Hispanic students who stayed at the same 4-year institution were three times more likely to persist than Hispanic students who transferred to another 4-year institution in the 2014 academic year (Ballinger & Slate, 2017). The results of the Ballinger and Slate (2017) research were consistent with the results of the Fauria and Slate (2014) research study, and they provided justification to embolden Hispanic students to persist at the same institution rather than transferring to a different institution.

Payne et al. (2015) examined the 6-year persistence rates of Hispanic students at Texas 4-year public universities in the 2000 academic year through the 2010 academic year. In 2000, Hispanic student 6-year persistence rates were 65.64% at Texas 4-year public universities. The 6-year persistence rate for Hispanic students at Texas 4-year public universities increased 3.14% to 68.78% in the 2010 academic year. Payne et al. (2015) documented the persistence rates of Hispanic students at Texas 4-year public universities were higher than Black students, but lower when compared to White students and Asian students in the 2010 academic year (Payne et al., 2015).

In a similar study, but involving community college students, Spangler and Slate (2015) explored graduation rates and persistence rates of Hispanic students enrolled at Texas community colleges for the 2000 and 2004-2010 academic years. The average graduation and persistence rates of Hispanic students increased 9.78% (i.e., 31.52% to 41.30%) from the 2000 to 2010 academic years. Although the graduation and persistence rates increased for Hispanic students enrolled at Texas community colleges since 2000, the trend since 2004 had slightly decreased (Spangler & Slate, 2015). Between 2000 and 2004, average graduation and persistence rates increased from 31.52% in 2000 to 42.38% in 2010. However, Spangler and Slate (2015) documented average graduation and persistence rates for Hispanic students declined to 41.30% between 2004 and 2010. Spangler and Slate (2015) recognized the overall increase in average graduation and persistence rates for Hispanic students since 2000, but they expressed concern regarding the declining trend of average graduation and persistence rates since 2004.

In her doctoral dissertation, Stagg (2017) analyzed differences in 1-year persistence rates by institutional status (i.e., stayed or transferred) for Hispanic students enrolled in Texas community colleges from the 2007-2008 through the 2013-2014 academic years. Stagg documented statistically significant differences for six of the seven academic years analyzed. The 1-year persistence rates for Hispanic students who stayed at the same Texas community college from the 2007-2008 through the 2013-2014 academic years ranged from 54% to 60%, whereas the 1-year persistence rates for Hispanic students who transferred to another Texas community college during the same time period ranged from 42% to 51% (Stagg, 2017). Hispanic students are statistically significantly more likely to persist at the same Texas community college than if they

transfer to a different community college (Stagg, 2017). As such, community college leaders should explore existing programs, and possibly create and implement new programs, to assist Hispanic students with 1-year persistence rates (Stagg, 2017).

Cox, Joyner, and Slate (2011) investigated the number and percentage of associate degrees awarded to Hispanic students at Texas community colleges between the 2000 and 2008 academic years. Cox et al. (2011) established the average number of associate degrees awarded to Hispanic students at Texas community colleges more than doubled (i.e., 171.88 in 2000 and 355.83 in 2008). Of note in this study; however, was the percentage of Hispanic students receiving degrees at Texas community colleges did not increase due to the increase in the Hispanic population in Texas between 2000 and 2008. Cox et al. (2011) determined that although the average number of associate degrees increased from 2000 to 2008, further research was needed to ascertain the reasons educational attainment levels of Hispanics are lower than other ethnic/racial groups.

In their qualitative study, Perez and Saenz (2017) explored perceptions and demonstrations of achievement by high-performing Hispanic male students at predominantly White postsecondary institutions. Three themes emerged through interviews with the high-performing Hispanic students: (a) academic thriving, (b) intrapersonal thriving, and (c) interpersonal thriving. Successful Hispanic students believed earning a degree was imperative for achieving personal and professional goals (Perez & Saenz, 2017). Additionally, Hispanic students recognized the ability to overcome challenges and the importance of relationships with their families and peers during the college experience. Further, Perez and Saenz (2017) recommended

predominantly White institutions should continue to improve ways to recruit, retain, and graduate Hispanic male students.

In another qualitative study, Boden (2011) examined the perceptions of first-generation Hispanic students regarding their academic preparedness for postsecondary enrollment. Four themes emerged during semi-structured interviews with first-generation Hispanic students: (a) personal education planning, (b) guides, (c) academic skills, and (d) personal impetus (Boden, 2011). Hispanic students desired the opportunity for a better financial life for themselves and their families, access to an educational mentor, and the academic and time-management skills necessary for academic success at a college or university. To increase persistence and graduation rates, college and university administrators, faculty, and staff should recognize the need for support for first-generation Hispanic students and develop strategies to assist them in their academic achievement (Boden, 2011).

Theoretical Framework

The theoretical framework used in this journal-ready dissertation was Tinto's (1987) theory of effective retention. Tinto (1987) contended three principles of effective retention were present: (a) institutional commitment, (b) educational commitment, and (c) the development of social and intellectual communities. Institutional commitment was described as the creation of an environment that places students at the center of the institution providing a culture of caring for students by all members of the institution (Tinto, 1987). Educational commitment was defined as a responsibility to provide a quality education to all students that promotes active learning. Finally, social and intellectual communities were described as ways to integrate students into the institution

both intellectually and socially. Institutions that promote these principles attempt to create relationships with students, encourage interaction between faculty and staff, both in and away from the classroom, and create a sense of community (Tinto, 1987).

Statement of the Problem

Student retention in higher education has been a major issue for many years (Aljohani, 2016). The National Center for Education Statistics (2017) reported only 59% of students who enrolled at a postsecondary institution seeking a bachelor's degree in the fall of 2009 completed that degree within six years. Baum, Ma, and Payea (2013) contended investments in higher education benefit both the individual and society. The median annual earnings for U.S. citizens with a bachelor's degree is \$21,000 more than for citizens having a high school diploma or equivalent (Baum et al., 2013). Additionally, those individuals who earn a postsecondary degree provide a skilled workforce, are more likely to have a healthy lifestyle, and are more likely to be civically engaged than individuals who possess only a high school diploma (Baum et al., 2013).

The rising cost of postsecondary education and student loan debt are challenges for students, higher education institutions, and society (Jones-White, Radcliffe, Lorenz, & Soria, 2014). According to *The College Board*, the average published tuition and fees for in-state students at public 4-year colleges and universities, when adjusted for inflation, has increased by 114% in the last 10 years (The College Board, 2015). This rise in tuition and fees, combined with availability of student loans, can lead some students, particularly low-income students, to leave an institution without a degree and have substantial student loan debt (Jones-White et al., 2014). These students are 10 times more likely to become delinquent on their student loans and twice as likely to be without

gainful employment (Gladieux & Perna, 2005) than are students who complete a postsecondary degree.

For postsecondary institutions, student retention is a critical subject because the revenue from tuition is used to support academic offerings, infrastructure, and student services (Tinto, 1987). Moreover, many states have taken existing funding formulas and modified them to emphasize results in the form of course completions and graduation rates (McKeown-Moak, 2013). Proponents of Performance Based Funding argue the traditional way of funding higher education is not efficient because incentives are not present for higher education to improve outcomes (Azfar-Nisar, 2015). Clearly, student retention and degree achievement remain meaningful issues for students, institutions, and society, requiring immediate consideration (Eitzen, Kinney, & Grillo, 2016).

Despite compelling increases in undergraduate enrollment over the last 40 years (Flores & Park, 2013), Black students still earned less than 10% of all undergraduate degrees conferred in the United States in 2016 (U.S. Census Bureau, 2016). For students, persistence and completion of a postsecondary degree allow them the opportunity to attain some of the more prominent positions in society with higher earnings potential (Tinto, 1987). For example, in 2016, the unemployment rate in the United States for 20-24 year olds with just a high school diploma was 19% higher when compared to 20-24 year olds with a bachelor's degree or higher (National Center for Education Statistics, 2017). Additionally, the median earnings of adults 25-34 years old were 64% higher when compared to adults 25-34 years old with just a high school diploma (National Center for Education Statistics, 2017).

Specific to Texas, Fauria and Slate (2014) analyzed the 1-year persistence rates by institutional status (i.e., stayed or transferred) of Black students enrolled in 4-year Texas public universities in the 2000 and 2011 academic years. Black students who stayed at the same Texas 4-year public university were over four times more likely to persist than Black students who transferred to another Texas public 4-year university in the 2000 and 2011 academic years (Fauria & Slate, 2014). Similarly, Ballinger and Slate (2017) expanded on the Fauria and Slate (2014) research study and examined 1-year persistence rates for Black students by institutional status (i.e., stayed or transferred) at Texas 4-year public universities for the 2014 academic year. Ballinger and Slate (2017) documented Black students were 27% more likely to persist at the same 4-year Texas public university when compared to Black students who transferred to another Texas 4-year public university.

The Hispanic population is the fastest growing ethnic/racial group in the United States (Parker, Segovia, & Tapp, 2016). Yet, bachelor's degree achievement for the Hispanic population has remained low and relatively stable over the last 25 years (Contreras & Contreras, 2015) even with substantial increases in Hispanic student enrollments in higher education (Fry & Lopez, 2012). Only 13% of Hispanic adults age 24-29 have achieved a bachelor's degree (Fry, 2011).

In Texas, where the Hispanic population has grown 55% from 2000 to 2015 (Stepler & Lopez, 2016), Hispanic persistence rates in higher education continue to be an issue. In previously mentioned studies involving 4-year Texas public universities, Fauria and Slate (2014) and Ballinger and Slate (2017) established statistically significant higher persistence rates for Hispanic students who stayed at the same Texas 4-year university

compared to Hispanic students who transferred to another Texas 4-year university. Hispanic students at Texas 4-year public universities had a 47% higher 1-year persistence rate in 2000 and a 51% higher 1-year persistence rates in 2011 when they stayed at the same Texas 4-year public university versus transferring to another Texas 4-year public university (Fauria & Slate, 2014). Similarly, Ballinger and Slate (2017) documented a 44% higher 1-year persistence rates for Hispanic students who stayed at the same Texas 4-year public university when compared to Hispanic students who transferred to another Texas 4-year public university.

Purpose of the Study

The purposes of this journal-ready dissertation were threefold. The first purpose was to determine the degree to which 1-year persistence rates differed as a function of the institutional status (i.e., stayed or transferred) of students enrolled at Texas 4-year public universities in the 1999-2000 through the 2013-2014 academic years. The second purpose was to analyze the degree to which differences existed in the 1-year persistence rates by the institutional status (i.e., stayed at the same Texas 4-year public university or transferred to a different Texas 4-year public university) of Black students enrolled in the 1999-2000 to the 2013-2014 academic years. The third purpose was to examine 1-year persistence rates by the institutional status of Hispanic students enrolled in Texas 4-year public universities in the 1999-2000 to the 2013-2014 academic years. Through analyzing multiple years of data for each of the thirty-eight Texas 4-year public universities, any trends that were present in the 1-year persistence rates by student institutional status at Texas 4-year public universities were determined.

Significance of the Study

Persistence rates continue to be a critical issue for all students enrolled in higher education across the United States. Specific to transfer students, Fauria and Slate (2014) established that students who remained at the same Texas 4-year public university were four times more likely to persist than students who transferred to another institution in the 2000 and 2011 academic years. Ballinger and Slate (2017) confirmed the findings in the Fauria and Slate (2014) research study and documented statistically significant relationships between staying at the same institution and persisting in the 2014 academic year at Texas 4-year public universities. The data regarding the 1-year persistence rates of students enrolled in 4-year Texas public universities from the 1999-2000 through the 2013-2014 academic years may benefit administrators at post-secondary institutions in their decision making efforts to increase student retention.

For Black students, Moss (2017) analyzed 1-year persistence rates by institutional status (i.e., stayed or transferred) for Black students enrolled in Texas community colleges for the 2007-2008 through 2013-2014 academic years. Moss (2017) documented 1-year persistence rates by institutional status were higher for Black students who stayed at the same Texas community college when compared to Black students who transferred to a different Texas community college. The 1-year persistence rates for Black students who transferred to a different Texas community college ranged from 27% to 37%, whereas the 1-year persistence rates for Black students who stayed at the same Texas community college ranged from 38% to 46% (Moss, 2017). Through conducting this investigation, the degree to which the results of the Moss (2017) dissertation are generalizable to Black students at Texas 4-year universities was determined.

Regarding Hispanic students, Stagg (2017) completed a doctoral dissertation in which she explored differences in 1-year persistence rates at Texas community colleges for Hispanic students by institutional status (i.e., stayed or transferred) from the 2007-2008 through the 2013-2014 academic years. Stagg (2017) established 1-year persistence rates for Hispanic students enrolled at Texas community colleges ranged from 54% to 60% for Hispanic students who stayed at the same Texas community college from the 2007-2008 through the 2013-2014 academic years. Hispanic students who transferred to a different Texas community college had 1-year persistence rates ranging from 42% to 51% for the same academic years (Stagg, 2017). This article will determine the extent to which the results of Stagg's (2017) dissertation are generalizable to Hispanic students enrolled at Texas 4-year public universities.

Definition of Terms

To assist the reader in understanding the information provided in this journal-ready dissertation, the following terms have been identified and defined.

Black

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

Four-Year University

This term refers to an institution of higher education offering programs resulting result in the attainment of bachelor's and higher degrees (Merriam Webster Online, n.d.).

Hispanic

This term refers to any person having any ethnic origin to Cuba, Mexico, Puerto Rico, South or Central America, or other Spanish culture or origin, regardless of race (Texas Higher Education Coordinating Board, 2016c).

Institutional Status

This term refers to students who either stayed at the same Texas 4-year public university or transferred to another Texas 4-year public university in consecutive academic years.

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 (Texas Higher Education Coordinating Board, 2016c).

Staying

This term refers to students who enrolled at a Texas 4-year public university in one year and re-enrolled in the same Texas 4-year university in the following academic year.

Texas Higher Education Coordinating Board

This agency provides leadership and coordination for the higher education system of Texas to promote success, access, affordability, quality, success, and cost efficiency. The organizational philosophy is to promote access to and success in quality higher education across Texas and to be being recognized as a leader in the development and

implementation of innovative higher education policy (Texas Higher Education Coordinating Board, 2016b).

Texas Higher Education Coordinating Board Interactive Accountability System

This phrase refers to the Texas system used to track the performance of critical measures that exemplify the mission of higher education institutions. From 2000-2015, the statewide plan for higher education, *Closing the Gaps 2015*, focused on participation, success, excellence, and research. Beginning in 2016, the new statewide higher education plan, *60x30TX*, strives for 60% of the 25-34 year old Texas population to hold a certificate or degree by 2030. (Texas Higher Education Coordinating Board, 2016a).

Transferring

This term refers to students who enrolled at a different Texas 4-year public university in one year after having been enrolled in a Texas 4-year public university in the previous year.

Literature Review Search Procedures

The procedure used for searching for literature on the subject of persistence rates, Black student persistence rates, and Hispanic student persistence rates was an electronic search of a database. All searches were conducted through the Engine Orange database at Sam Houston State University. Key terms searched to retrieve literature on the subjects of persistence rates, Black student persistence rates, and Hispanic student persistence rates included *persistence rates in higher education* combined with *Black students*, *Hispanic students*, *ethnicity*, *transfer students*, and *institutional status*.

A key word search of *persistence rates in higher education* resulted in 10,609 matches. A key word search of *persistence rates in higher education* and *Black students*

resulted in 2,536 results. A key word search of *persistence rates in higher education* and *Hispanic students* resulted in 2,358 matches. Next, a key word search of *persistence rates in higher education* combined with *ethnicity* resulted in 4,441 matches. The next key word search of *persistence rates in higher education* and *transfer students* resulted in 2,009 matches. Finally, a key word search of *persistence rates in higher education* and *institutional status* resulted in 415 matches. Results were limited to scholarly, peer-reviewed academic journals related to the subject and were collected, assessed, and reviewed for consideration in these studies.

Delimitations

This journal-ready dissertation, with three individual studies, was delimited to the thirty-eight, 4-year Texas public universities in the 1999-2000 through the 2013-2014 academic years. The 1-year persistence rates by institutional status (i.e., stayed or transferred) of all Texas students, Black students, and Hispanic students were analyzed. Additionally, any trends that were present in the 1-year persistence rates by whether students remained or transferred to a different Texas 4-year public university were determined. Data from the Texas Higher Education Coordinating Board Interactive Accountability System were used to conduct this study (Texas Higher Education Coordinating Board, 2016a).

Limitations

In this journal-ready dissertation, the 1-year persistence rates of all Texas students, Black students, and Hispanic students were analyzed. Consequently, only quantitative data were used to measure the 1-year persistence rates of all Texas students, Black students, and Hispanic students enrolled in Texas 4-year public universities in the

1999-2000 through the 2013-2014 academic years. Additionally, this journal-ready dissertation was limited to only 1-year persistence rates and included all Texas students in the first investigation, only Black students in the second study, and only Hispanic students in the final article.

Assumptions

Data analyzed in this investigation were reported to and verified by the Texas Higher Education Coordinating Board. The assumption was made that the 1-year persistence rate data of all Texas students, Black students, and Hispanic students reported to the Texas Higher Education Coordinating Board were accurate. Any errors in the 1-year persistence rate data were assumed to be random in nature. Any violations of these assumptions could affect the accuracy of the results in the three empirical articles in this journal-ready dissertation.

Organization of the Study

This journal-ready dissertation includes three separate research investigations. The first article had research questions on the 1-year persistence rates by institutional status (i.e., stayed or transferred) for all students enrolled in Texas 4-year public universities in the 1999-2000 through the 2013-2014 academic years. The second investigation had research questions on 1-year persistence rates as a function of the institutional status of Black students enrolled in Texas 4-year public universities in the 1999-2000 through the 2013-2014 academic years. Finally, the research questions addressed in the last article were the 1-year persistence rates by institutional status for Hispanic students enrolled in Texas 4-year public universities in the 1999-2000 through the 2013-2014 academic years.

This journal-ready dissertation includes five chapters. Chapter I includes the background of the studies, purpose of the studies, significance of the studies, definition of terms, delimitations, limitations, assumptions, procedures, literature review search procedures, and finally the organization of the study. In Chapter II, the structure of the first investigation on differences in 1-year persistence rates by institutional status over time for students at Texas 4-year public universities is discussed. In Chapter III, the structure of the second investigation on differences in 1-year persistence rates by institutional status over time for Black students at Texas 4-year public universities is provided. In Chapter IV, differences in 1-year persistence rates by institutional status for Hispanic students at Texas 4-year public universities is discussed. Finally, in Chapter V, the results from each of the journal-ready research investigations on 1-year persistence rates by the institutional status of Texas 4-year public university students were summarized.

CHAPTER II

DIFFERENCES IN 1-YEAR PERSISTENCE RATES BY THE INSTITUTIONAL STATUS OF TEXAS 4-YEAR UNIVERSITY STUDENTS: A MULTIYEAR, STATEWIDE ANALYSIS

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

Abstract

In this investigation, the 1-year persistence rates of undergraduate students at Texas 4-year public universities were analyzed for the 1999-2000 through the 2013-2014 academic years. Of particular interest was whether the 1-year persistence rates of Texas undergraduate students differed by whether they stayed at the same Texas 4-year university or whether they transferred to a different Texas 4-year university. Inferential statistical analyses revealed the presence of statistically significant differences in the 1-year persistence rates by institutional status for all 15 academic years. The 1-year persistence rates were statistically significantly higher for Texas undergraduate students when they stayed (i.e., ranged from 56% to 64%) at the same 4-year university than when they transferred (i.e., ranged from 12% to 16%) to a different 4-year university. Implications for policy and for practice, as well as recommendations for future research, were discussed.

Keywords: 4-year university, 1-year persistence rates, stayed, transferred, Texas

DIFFERENCES IN 1-YEAR PERSISTENCE RATES BY THE INSTITUTIONAL
STATUS OF TEXAS 4-YEAR UNIVERSITY STUDENTS: A MULTIYEAR,
STATEWIDE ANALYSIS

Student retention in higher education has been and remains an important issue (Oseguera & Rhee, 2009) and has influenced the financial and academic plans of institutions (Aljohani, 2016). Since the 1970s, many empirical studies and theoretical models have been developed to deal with the critical issues of student retention (Aljohani, 2016), yet college completion remains a common and enduring problem (Tinto, 2012). Issues of student retention and success remain critical concerns for students and requires urgent attention (Eitzen, Kinney, & Grillo, 2016). For students, the attainment of many of the prestigious positions in society becomes increasingly more difficult without a 4-year degree (Tinto, 1987). Members of society who complete a 4-year degree earn approximately twice the amount of money of those individuals who only complete a high school diploma (Weddle-West & Bingham, 2010). Since 1975, the percentage of jobs in the United States requiring a college or university degree increased from 28% to 59% (Duncan, 2010). A generation ago, the United States once held the largest proportion of college graduates in the world, but has since fallen to a tie for ninth for rates of college completion (Duncan, 2010). This decline in college completion rates prompted former-President Obama to declare in 2009 that the United States must set a goal to once again have the highest proportion of college graduates in the world (Duncan, 2010). Clearly, student retention and degree achievement has become a high-profile issue for American society.

A common occurrence in postsecondary education is undergraduate students transferring to another institution. Marling (2013) determined that nearly 33% of students transfer at least once during their academic career, whereas Fauria and Fuller (2015) established that almost 60% of undergraduate students transferred, attended multiple institutions, and/or co-enrolled in institutions prior to degree completion. More recently, Walker, Sherman, and Shea (2016) documented over 33% of students enrolled in community colleges and 4-year institutions will transfer to another institution.

Many students start their education at a community college with the goal of transferring to a 4-year university to earn a degree (Laanan, 2004). In a recent investigation, 67% of students enrolled at a community college would like to transfer to a 4-year institution to earn a baccalaureate degree (Young & Litzer, 2013). Unfortunately, many of those transfer students, with intentions of completing a bachelor's degree, never reached their goal (Handel & Williams, 2012). Wang (2009) documented many transfer students who began at community colleges were less likely to achieve a degree than those students who started at a 4-year institution. The National Center for Education Statistics (2010) reported 67% of first-time community college students do not earn a degree within six years after enrolling.

Regarding transfer students, Fauria and Slate (2014) examined 1-year persistence rates by institutional status (i.e., stayed or transferred) for four ethnic/racial groups (i.e., White, Black, Hispanic, and Asian) for the thirty-eight, 4-year public universities in Texas in the 2000 and 2011 academic years. Fauria and Slate (2014) documented that regardless of ethnic/racial membership, students who stayed at the same institution persisted at a higher rate than students who transferred to a different institution. In fact,

60% of students who stayed at the same institution after 1-year persisted whereas only 15% of students who transferred to a different institution persisted after one year (Fauria & Slate, 2014).

In an extension of the Fauria and Slate (2014) research study, Ballinger and Slate (2017) investigated 1-year persistence rates by institutional status (i.e., staying or transferring) for four ethnic/racial groups (i.e., White, Black, Hispanic, and Asian) at the thirty-eight, 4-year Texas public universities in the 2014 academic year. Results of the Ballinger and Slate (2017) analyses were congruent with the findings of Fauria and Slate (2014). Students who transferred were much less likely to persist than were students who stayed at the same Texas 4-year university. 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 persisted at their initial institution, when compared to their peers who transferred to another institution (Ballinger & Slate, 2017).

In another study in which the focus was on students enrolled in Texas 4-year public universities, Payne, Slate, and Barnes (2015) examined 6-year persistence rates by ethnicity/race (i.e., White, Black, Hispanic, and Asian) between the 2000 and 2010 academic years. The 6-year persistence rates for White students at Texas 4-year public universities were 63.23% in 2000 and 68.14% in 2010. For Black students, the 6-year persistence rates at Texas 4-year public universities were 61.55% in 2000 and 59.53% in 2010. Regarding Hispanic students, the 6-year persistence rates at Texas 4-year public universities were 65.64% in 2000 and 65.4% in 2010. Finally, for Asian students, the 6-year persistence rates at Texas 4-year public universities were 67.62% in 2000 and 74.41% in 2010 (Payne et al., 2015). The authors noted the increased attrition rates of

Black and Hispanic students at Texas 4-year public universities between the 2000 and 2010 academic years.

In a similar study of community college students in Texas, Spangler and Slate (2015) analyzed the graduation and persistence rates by ethnic/racial membership (i.e., White, Black, Hispanic, and Asian) for 2000 and 2004 through the 2010 academic years. The authors established that between the 2000 and 2010 academic years, graduation and persistence rates increased for each ethnic/racial group. White students increased their graduation and persistence rates by 8.45% over the 10-year period. Black students increased their graduation and persistence rates by 8.27% over the 10-year period. Hispanic students increased their graduation and persistence rates by 9.78% over the 10-year period. Finally, Asian students increased their graduation and persistence rates by 11.6% over the 10-year period. Spangler and Slate (2015) recognized the improvement in 1-year persistence rates for each ethnic/racial group, but discussed the need for continued improvement due to increased enrollments at Texas community colleges.

In a recent investigation, Moss and Slate (2016) analyzed the 1-year persistence rates of Black and White students enrolled in Texas community colleges by their institutional status (i.e., stayed or transferred) in the 2000 and 2013 academic years. They documented that in 2000 Black and White students were 36% more likely to persist when staying at the same institution than when transferring to another institution. Similarly, in the 2013 academic year, Black students were 34% more likely to persist when staying at the same institution and White students were 41% more likely to persist when staying at the same institution compared to transferring to another institution.

Statement of the Problem

Student retention in higher education has been a major issue for many years (Aljohani, 2016). Recently, only 59% of students who enrolled at a postsecondary institution seeking a bachelor's degree in the fall of 2009 completed that degree within six years (National Center for Education Statistics, 2017). Baum, Ma, and Payea (2013) reported investments in higher education benefit both the individual and society. For individuals, the median annual earnings for citizens with a bachelor's degree is \$21,000 more than for citizens having a high school diploma or equivalent (Baum et al., 2013). Additionally, those individuals who earn a postsecondary degree provide a skilled workforce, are more likely to have a healthy lifestyle, and are more likely to be civically engaged than individuals who possess only a high school diploma (Baum et al., 2013).

The rising cost of postsecondary education and student loan debt are challenges for students, higher education institutions, and society (Jones-White, Radcliffe, Lorenz, & Soria, 2014). According to *The College Board*, the average published tuition and fees for in-state students at public 4-year colleges and universities, when adjusted for inflation, has increased by 114% in the last 10 years (The College Board, 2015). This rise in tuition and fees, combined with availability of student loans, can lead some students, particularly low-income students, to leave an institution without a degree and have substantial student loan debt (Jones-White et al., 2014). These students are 10 times more likely to go delinquent on their student loans and twice as likely to go without gainful employment (Gladieux & Perna, 2005) than are students who complete a postsecondary degree.

For postsecondary institutions, student retention is a critical subject because the revenue from tuition is used to support academic offerings, physical and human infrastructure, and student services (Tinto, 1987). Moreover, many states have taken existing funding formulas and modified them to emphasize results in the form of course completions and graduation rates (McKeown-Moak, 2013). Proponents of Performance Based Funding contend the traditional way of funding higher education is not efficient because incentives are not present for higher education to improve outcomes (Azfar-Nisar, 2015). Clearly, student retention and degree achievement remain meaningful issues for students, institutions, and society requiring immediate consideration (Eitzen et al., 2016).

Purpose of the Study

The purpose of this empirical statewide analysis was to determine the degree to which 1-year persistence rates differed as a function of the institutional status of students enrolled at Texas 4-year public universities in the 1999-2000 through the 2013-2014 academic years. That is, whether the 1-year persistence rates differed by student institutional status (i.e., stayed or transferred) for Texas 4-year public university students was investigated. Through analyzing multiple years of data for each of the thirty-eight Texas 4-year public universities, any trends that were present in the 1-year persistence rates by whether students stayed or transferred to different Texas 4-year public universities were determined.

Significance of the Study

Persistence rates continue to be a critical issue for all students enrolled in higher education across the United States. Specific to transfer students, Fauria and Slate (2014)

established that students who remained at the same Texas 4-year public university were four times more likely to persist than students who transferred to other institutions in the 2000 and 2011 academic years. Ballinger and Slate (2017) confirmed the findings in the Fauria and Slate (2014) research study, documenting statistically significant relationships between staying at the same institution and persistence in the 2014 academic year at Texas 4-year public universities. The data regarding the 1-year persistence rates of students enrolled in 4-year Texas public universities from the 1999-2000 through the 2013-2014 academic years may benefit administrators at post-secondary institutions in their decision making efforts to increase student retention.

Research Questions

In this study, the following research questions were addressed: (a) What is the difference in the 1-year persistence rates as a function of the institutional status (i.e., stayed or transferred) of students enrolled at Texas 4-year public universities?; (b) What is the difference in the 1-year persistence rates of Texas students who stayed at the same 4-year university between the 1999-2000 and the 2007-2008 academic years, between the 2007-2008 and 2013-2014 academic years, and between the 1999-2000 and the 2013-2014 academic years?; (c) What is the difference in the 1-year persistence rates of Texas students who transferred to a different 4-year university between the 1999-2000 and the 2007-2008 academic years, between the 2007-2008 and 2013-2014 academic years, and between the 1999-2000 and the 2013-2014 academic years?; and (d) What trend is present in the 1-year persistence rates as a function of the institutional status of Texas 4-year public university students from the 1999-2000 through the 2013-2014 academic years? The first research question was repeated for 15 academic years, from 1999-2000

through 2013-2014, whereas the last research question involved results from all 15 academic years.

Method

Research Design

In this study, a quantitative, non-experimental, causal-comparative research design was used (Creswell, 2013). In this multiyear investigation, archival data from the Texas Higher Education Coordinating Board were analyzed. As such, both the independent variable and the dependent variables had already occurred. The independent variable in this study was the institutional status (i.e., stayed or transferred) of all 4-year university students and the dependent variables were the 1-year persistence rates of all students enrolled in Texas 4-year public universities in the 1999-2000 through the 2013-2014 academic years. Use of archival data in this context constituted a causal-comparative research design (Creswell, 2013).

Participants and Instrumentation

Data for this study were retrieved from the Texas Higher Education Coordinating Board Interactive Accountability System database. The Texas Higher Education Coordinating Board promotes access to and success in quality higher education across Texas (Texas Higher Education Coordinating Board, 2016b). The Texas Higher Education Coordinating Board Interactive Accountability System is a publicly accessible database that tracks the performance of critical measures that exemplify the mission of higher education institutions (Texas Higher Education Coordinating Board, 2016a). The data available at the website were downloaded in Microsoft Excel and then recoded into SPSS format for statistical analysis. Participants were all Texas students who were

enrolled in the 1999-2000 to the 2013-2014 academic years at one of the thirty-eight, 4-year Texas public universities.

For the purposes of this study, the term 1-year persistence rates refers to the percent of first-time entering, degree-seeking undergraduates enrolled in at least 12 semester credit hours in the fall semester who enrolled at the same or another institution the following fall (Texas Higher Education Coordinating Board, 2016c). In this article, a transfer student refers to a student who enrolled at a different Texas 4-year public university in one year after having been enrolled in a Texas 4-year public university in the previous year (Texas Higher Education Coordinating Board, 2016c). The term staying refers to a student who enrolled at a 4-year institution in one year and then re-enrolled in the same 4-year institution the following academic year.

Results

Prior to conducting inferential statistics to determine whether a statistically significant difference was present between the 1-year persistence rates of Texas students who stayed at the same Texas 4-year public university compared to Texas students who transferred to a different Texas 4-year public university in the 1999-2000 through the 2013-2014 academic years, checks were conducted to determine the extent to which the data were normally distributed (Onwuegbuzie & Daniel, 2002). Although some of the 1-year persistence rate data were not normally distributed, a decision was made to use parametric dependent samples *t*-tests to answer the research questions. Statistical results will now be presented by research questions.

Research Question One Results

To answer the first research question, statistical analyses were conducted separately for the 1999-2000 through the 2013-2014 academic years. Specifically compared were the 1-year persistence rates of all students who stayed at the same 4-year university to the 1-year persistence rates of all students who transferred to a different 4-year university. Results will now be presented, beginning with the 1999-2000 academic year.

For the 1999-2000 academic year, the parametric dependent samples *t*-test revealed a statistically significant difference in the 1-year persistence rates, $t(34) = 11.73$, $p < .001$, between Texas students who stayed at the same Texas 4-year public university and Texas students who transferred to a different Texas 4-year public university. This difference represented a large effect size (Cohen's *d*) of 2.50 (Cohen, 1998). The 1-year persistence rates of students who stayed at the same 4-year public university were almost 44% higher than the 1-year persistence rates of students who transferred to a different 4-year public university. Readers are directed to Table 2.1 for the descriptive statistics for this analysis.

Insert Table 2.1 about here

Concerning the 2000-2001 academic year, the parametric dependent samples *t*-test revealed a statistically significant difference in the 1-year persistence rates, $t(34) = 11.83$, $p < .001$, between Texas students who stayed at the same Texas 4-year public university and Texas students who transferred to a different Texas 4-year public

university. This difference represented a large effect size (Cohen's d) of 2.48 (Cohen, 1998). The 1-year persistence rates of students who stayed at the same 4-year public university were over 43% higher than the 1-year persistence rates of students who transferred to a different 4-year public university. Table 2.1 contains for the descriptive statistics for this analysis.

With respect to the 2001-2002 academic year, the parametric dependent samples t -test revealed a statistically significant difference in the 1-year persistence rates, $t(34) = 8.65, p < .001$, between Texas students who stayed at the same Texas 4-year public university and Texas students who transferred to a different Texas 4-year public university. This difference represented a large effect size (Cohen's d) of 2.10 (Cohen, 1998). The 1-year persistence rates of students who stayed at the same 4-year public university were 42% higher than the 1-year persistence rates of students who transferred to a different 4-year public university. Delineated in Table 2.1 are the descriptive statistics for this analysis.

Regarding the 2002-2003 academic year, the parametric dependent samples t -test revealed a statistically significant difference in the 1-year persistence rates, $t(34) = 10.84, p < .001$, between Texas students who stayed at the same Texas 4-year public university and Texas students who transferred to a different Texas 4-year public university. This difference represented a large effect size (Cohen's d) of 2.22 (Cohen, 1998). The 1-year persistence rates of students who stayed at the same 4-year public university were over 42% higher than the 1-year persistence rates of students who transferred to a different 4-year public university. Readers are directed to Table 2.1 for the descriptive statistics for this analysis.

For the 2003-2004 academic year, a statistically significant difference was yielded in the 1-year persistence rates, $t(33) = 11.83, p < .001$, between Texas students who stayed at the same Texas 4-year public university and Texas students who transferred to a different Texas 4-year public university. This difference represented a large effect size (Cohen's d) of 2.80 (Cohen, 1998). The 1-year persistence rates of students who stayed at the same 4-year public university were almost 50% higher than the 1-year persistence rates of students who transferred to a different 4-year public university. Revealed in Table 2.1 are the descriptive statistics for this analysis.

Concerning the 2004-2005 academic year, a statistically significant difference was revealed in the 1-year persistence rates, $t(34) = 9.10, p < .001$, between Texas students who stayed at the same Texas 4-year public university and Texas students who transferred to a different Texas 4-year public university. This difference represented a large effect size (Cohen's d) of 2.16 (Cohen, 1998). The 1-year persistence rates of students who stayed at the same 4-year public university were 42% higher than the 1-year persistence rates of students who transferred to a different 4-year public university. Table 2.2 contains the descriptive statistics for this analysis.

 Insert Table 2.2 about here

With respect the to the 2005-2006 academic year, a statistically significant difference was yielded in the 1-year persistence rates, $t(34) = 11.43, p < .001$, between Texas students who stayed at the same Texas 4-year public university and Texas students who transferred to a different Texas 4-year public university. This difference represented

a large effect size (Cohen's d) of 2.31 (Cohen, 1998). The 1-year persistence rates of students who stayed at the same 4-year public university were 43% higher than the 1-year persistence rates of students who transferred to a different 4-year public university.

Delineated in Table 2.2 are the descriptive statistics for this analysis.

Regarding the 2006-2007 academic year, a statistically significant difference was revealed in the 1-year persistence rates, $t(34) = 12.39, p < .001$, between Texas students who stayed at the same Texas 4-year public university and Texas students who transferred to a different Texas 4-year public university. This difference represented a large effect size (Cohen's d) of 2.60 (Cohen, 1998). The 1-year persistence rates of students who stayed at the same 4-year public university were 46% higher than the 1-year persistence rates of students who transferred to a different 4-year public university.

Readers are directed to Table 2.2 for the descriptive statistics for this analysis.

For the 2007-2008 academic year, a statistically significant difference was yielded in the 1-year persistence rates, $t(34) = 13.11, p < .001$, between Texas students who stayed at the same Texas 4-year public university and Texas students who transferred to a different Texas 4-year public university. This difference represented a large effect size (Cohen's d) of 2.31 (Cohen, 1998). The 1-year persistence rates of students who stayed at the same 4-year public university were 49% higher than the 1-year persistence rates of students who transferred to a different 4-year public university. Revealed in Table 2.2 are the descriptive statistics for this analysis.

Concerning the 2008-2009 academic year, a statistically significant difference was again present in the 1-year persistence rates, $t(37) = 10.20, p < .001$, between Texas students who stayed at the same Texas 4-year public university and Texas students who

transferred to a different Texas 4-year public university. This difference represented a large effect size (Cohen's d) of 2.09 (Cohen, 1998). The 1-year persistence rates of students who stayed at the same 4-year public university were almost 43% higher than the 1-year persistence rates of students who transferred to a different 4-year public university. Table 2.2 contains the descriptive statistics for this analysis.

With respect to the 2009-2010 academic year, a statistically significant difference was yielded in the 1-year persistence rates, $t(37) = 11.89, p < .001$, between Texas students who stayed at the same Texas 4-year public university and Texas students who transferred to a different Texas 4-year public university. This difference represented a large effect size (Cohen's d) of 2.69 (Cohen, 1998). The 1-year persistence rates of students who stayed at the same 4-year public university were 45% higher than the 1-year persistence rates of students who transferred to a different 4-year public university. Delineated in Table 2.3 are the descriptive statistics for this analysis.

Insert Table 2.3 about here

Regarding the 2010-2011 academic year, a statistically significant difference was revealed in the 1-year persistence rates, $t(37) = 12.86, p < .001$, as a function of institutional status. This difference represented a large effect size (Cohen's d) of 2.92 (Cohen, 1998). The 1-year persistence rates of students who stayed at the same 4-year public university were over 48% higher than the 1-year persistence rates of students who transferred to a different 4-year public university. Readers are directed to Table 2.3 for the descriptive statistics for this analysis.

For the 2011-2012 academic year, a statistically significant difference was yielded in the 1-year persistence rates, $t(37) = 14.41, p < .001$, by student institutional status. This difference represented a very large effect size (Cohen's d) of 3.37 (Cohen, 1998). The 1-year persistence rates of students who stayed at the same 4-year public university were 51% higher than the 1-year persistence rates of students who transferred to a different 4-year public university. Revealed in Table 2.3 are the descriptive statistics for this analysis.

Concerning the 2012-2013 academic year, a statistically significant difference was revealed in the 1-year persistence rates, $t(37) = 13.39, p < .001$, by student institutional status. This difference represented a large effect size (Cohen's d) of 2.82 (Cohen, 1998). The 1-year persistence rates of students who stayed at the same 4-year public university were 49% higher than the 1-year persistence rates of students who transferred to a different 4-year public university. Table 2.3 contains the descriptive statistics for this analysis.

With respect to the 2013-2014 academic year, a statistically significant difference was yielded in the 1-year persistence rates, $t(37) = 7.53, p < .001$, by student institutional status. This difference represented a large effect size (Cohen's d) of 2.04 (Cohen, 1998). The 1-year persistence rates of students who stayed at the same 4-year public university were 44% higher than the 1-year persistence rates of students who transferred to a different 4-year public university. Delineated in Table 2.3 are the descriptive statistics for this analysis.

Research Question Two Results

To answer the second research question, statistical analyses were conducted separately for three comparisons: (a) between the 1999-2000 and the 2007-2008 academic years, (b) between the 2007-2008 and 2013-2014 academic years, and (c) between the 1999-2000 and the 2013-2014 academic years. Specifically analyzed were the 1-year persistence rates of all students who stayed at the same 4-year university. Results will now be presented, beginning with the 1999-2000 and the 2007-2008 academic year comparison.

For the 1999-2000 and the 2007-2008 academic year comparison, a statistically significant difference was not present at the conventional level of statistical significance, $t(34) = -2.00, p = .06$, in the 1-year persistence rates for students who stayed at the same Texas 4-year university. Though not statistically significant at the conventional level, the 1-year persistence rate was approximately 5% higher for students who stayed at the same 4-year university in the 2007-2008 academic year than in the 1999-2000 academic year. Readers are directed to Table 2.4 for the descriptive statistics for this analysis.

Insert Table 2.4 about here

Concerning the 2007-2008 and the 2013-2014 academic year comparison, a statistically significant difference was not yielded in the 1-year persistence rates, $t(34) = -0.16, p = .87$, for students who stayed at the same Texas 4-year university. The 1-year persistence rates of students who stayed at the same 4-year public university were similar,

63% and 60%, respectively, in the 2007-2008 and the 2013-2014 academic years.

Revealed in Table 2.4 are the descriptive statistics for this analysis.

With respect to the 1999-2000 and the 2013-2014 academic year comparison, a statistically significant difference was not revealed in the 1-year persistence rates, $t(34) = -1.34, p = .19$, for students who stayed at the same Texas 4-year university. The 1-year persistence rates of students who stayed at the same 4-year public university were similar, 58% and 60%, respectively, in the 1999-2000 and the 2013-2014 academic years.

Delineated in Table 2.4 are the descriptive statistics for this analysis.

Research Question Three Results

To answer this research question, statistical analyses were conducted separately for three comparisons: (a) between the 1999-2000 and the 2007-2008 academic years, (b) between the 2007-2008 and 2013-2014 academic years, and (c) between the 1999-2000 and the 2013-2014 academic years. Specifically analyzed were the 1-year persistence rates of all students who transferred to another 4-year university. Results will now be presented, beginning with the 1999-2000 and the 2007-2008 academic years.

Regarding the 1999-2000 and the 2007-2008 academic years, the parametric dependent samples t -test did not reveal a statistically significant difference in the 1-year persistence rates, $t(34) = 0.79, p = .44$, of Texas students who transferred to a different Texas 4-year public university. The 1-year persistence rates of students who transferred to a different 4-year public university were similar, 15% and 14%, respectively, in the 1999-2000 and the 2007-2008 academic years. Readers are directed to Table 2.5 for the descriptive statistics for this analysis.

Insert Table 2.5 about here

For the 2007-2008 and 2013-2014 academic years, a statistically significant difference was not present in the 1-year persistence rates, $t(34) = -1.13$, $p = .27$, of Texas students who transferred to a different Texas 4-year public university. The 1-year persistence rates of students who transferred to a different 4-year public university were similar, 14% and 16%, respectively, in the 2007-2008 and 2013-2014 academic years. Revealed in Table 2.5 are the descriptive statistics for this analysis.

Concerning the 1999-2000 and 2013-2014 academic years, a statistically significant difference was not present in the 1-year persistence rates, $t(34) = -1.06$, $p = .30$, of Texas students who transferred to a different Texas 4-year public university. The 1-year persistence rates of students who transferred to a different 4-year public university were similar, 15% and 16%, respectively, in the 1999-2000 and 2013-2014 academic years. Delineated in Table 2.5 are the descriptive statistics for this analysis.

Research Question Four Results

The final research question involved an analysis of all 15 years of data for the 1-year persistence rates of Texas 4-year public university students. As revealed in Table 2.6 and Figure 2.1, trends were present in the 1-year persistence rates by institutional status (i.e., stayed or transferred) for Texas 4-year public university students. The 1-year persistence rates of Texas 4-year public university students who stayed at the same Texas 4-year public university were consistently higher than the 1-year persistence rates of students who transferred to a different Texas 4-year public university. Over the 15 year

period, the 1-year persistence rates of students who stayed at the same Texas 4-year public university fluctuated between 56-64%. During that same 15 year period, the 1-year persistence rates of students who transferred to a different Texas 4-year university varied between 12-16%.

 Insert Table 2.6 and Figure 2.1 about here

Discussion

In this study, the degree to which 1-year persistence rates differed as a function of the institutional status (i.e., stayed or transferred) of students enrolled at Texas 4-year public universities in the 1999-2000 through the 2013-2014 academic years was presented. The 15 years of archival data analyzed herein were obtained from the Texas Higher Education Coordinating Board Interactive Accountability system. In this investigation, data were analyzed from the 38 Texas 4-year public universities from the 1999-2000 through the 2013-2014 academic years.

Statistically significant differences were present in the 1-year persistence rate as a function of the institutional status (i.e., stayed or transferred) of Texas undergraduate students in all 15 years analyzed. The 1-year persistence rates of Texas undergraduate students who stayed at the same 4-year public university ranged from a low of 56% to a high of 64%. In contrast, the 1-year persistence rates of Texas undergraduate students who transferred to a different Texas 4-year public university ranged from a low of 12% to a high of 16%. Readers are directed to Table 2.6 and Figure 2.1 for a summary of the

results of the 1-year persistence rates by the institutional status of Texas undergraduate students for all 15 academic years.

Connections with the Existing Literature

In this multiyear, statewide investigation, the 1-year persistence rates of undergraduate students at Texas 4-year public universities were statistically significantly higher when they stayed at the same 4-year university than when they transferred to a different 4-year university. These results were congruent with Fauria and Slate (2014) and Ballinger and Slate (2017) who also analyzed 1-year persistence rates at Texas 4-year public universities. Fauria and Slate (2014) documented that in the 1999-2000 and 2010-2011 academic years, 60% of students persisted when staying at the same university, whereas only 15% of students who transferred persisted after one year. Ballinger and Slate (2017) investigated 1-year persistence rates at Texas 4-year public universities in the 2013-2014 academic year and established that students who transfer are much less likely to persist than students who stayed at the same Texas 4-year university.

In this investigation, the 1-year persistence rates of Texas undergraduate students were higher when they stayed at the same Texas 4-year public university than when they transferred to a different Texas 4-year public university. However, undergraduate students transferring to another institution has become commonplace in higher education. Marling (2013) stated that almost 33% of students will transfer at least once in their academic career and Fauria and Fuller (2015) discovered that almost 60% of undergraduate students transferred, attended multiple institutions, and or co-enrolled in institutions prior to degree completion. Unfortunately, as evidenced in this investigation and in existing literature (i.e., Ballinger & Slate, 2017; Fauria & Slate, 2014), 1-year

persistence rates have remained consistently low over time for students who transfer to another institution.

Implications for Policy and for Practice

Based upon the results of this multiyear investigation, several implications are present for policy and for practice. First, as evidenced by the results of this study and previous research (Ballinger & Slate, 2017; Fauria & Slate, 2014), students attending Texas public 4-year universities should be discouraged from transferring. Students who stayed at the same 4-year university were, at a minimum, 42% more likely to persist than students who transferred to a different 4-year university over the 15 years of analyzed data. Second, existing programs that deal with transfer students should be evaluated because the majority of them are simply not effective. The 1-year persistence rates of transfer students have remained low and relatively stable over the last 15 years at Texas 4-year public universities. Students who transferred to a different 4-year university had 1-year persistence rates ranging from a low of 12% to a high of only 16% over the 15 year period. Third, higher education administrators should consider developing new programs in which student persistence is addressed, as well as evaluate those programs frequently for effectiveness. Finally, any existing programs that have high persistence rates for their transfer students should be promoted to and implemented at other universities.

Recommendations for Future Research

In this quantitative investigation, the 1-year persistence rates by institutional status for undergraduate students at Texas 4-year public universities were examined. Accordingly, several recommendations can be made for future research. First,

researchers are encouraged to extend this investigation to other states to determine whether the results delineated herein are generalizable to other states. Second, researchers are encouraged to examine 1-year persistence rates by ethnic/racial group membership. The results obtained in this multiyear investigation were on the 1-year persistence rates of all students. The extent to which these results would be generalizable to Black or Hispanic students is not known. A third recommendation for future research would be to determine whether differences are present between male and female students in their 1-year persistence rates. Fourth, researchers are encouraged to analyze the relationship of other student demographic characteristics such as their economic status or at-risk status to their persistence at 4-year universities.

A fifth recommendation would be, particularly for Texas given the large numbers of English Language Learners, for researchers to analyze their 1-year persistence rates. The degree to which the findings obtained herein on all students would be generalizable to English Language Learners in Texas is not known. Sixth, researchers are encouraged to extend this study to community colleges. Given the differences in students who enroll in 2-year and in 4-year postsecondary settings, the 1-year persistence rates of students in 2-year postsecondary settings warrants investigation. Seventh, researchers are encouraged to investigate 2-year persistence rates by institutional status. The results obtained in this investigation only took into consideration 1-year persistence rates. Finally, researchers should consider conducting qualitative studies to comprehend the reasons why students transfer to different institutions.

Conclusion

In this multiyear investigation, the degree to which 1-year persistence rates differed by which undergraduate students stayed at the same Texas 4-year university or transferred to a different Texas 4-year university was addressed. Inferential statistical analyses for the 1999-2000 through the 2013-2014 academic years revealed the presence of statistically significant differences in the 1-year persistence rates between students who stayed and students who transferred in all 15 years of data analyzed. The 1-year persistence rates were statistically significantly higher for Texas undergraduate students who stayed at the same Texas 4-year university than for their peers who transferred to a different Texas 4-year university. Previous researchers (i.e., Ballinger & Slate, 2017; Fauria & Slate, 2014) have established that students who remained at the same Texas 4-year public university were statistically significantly more likely to persist if they stayed at the same university when compared to transferring to a different university.

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Table 2.1

Descriptive Statistics for 1-Year Persistence Rates by the Institutional Status of Texas

Undergraduates for the 1999-2000 through the 2003-2004 Academic Years

Academic Year and Institutional Status	<i>n</i> of universities	<i>M</i> %	<i>SD</i> %
1999-2000			
Stayed	35	58.38	23.31
Transferred	35	14.51	8.62
2000-2001			
Stayed	35	58.73	23.50
Transferred	35	15.00	8.27
2001-2002			
Stayed	35	57.92	25.58
Transferred	35	15.80	12.16
2002-2003			
Stayed	35	57.00	25.52
Transferred	35	14.57	8.90
2003-2004			
Stayed	34	63.30	23.55
Transferred	34	13.73	8.50

Table 2.2

Descriptive Statistics for 1-Year Persistence Rates by the Institutional Status of Texas

Undergraduates for the 2004-2005 through the 2008-2009 Academic Years

Academic Year and Institutional Status	<i>n</i> of universities	<i>M</i> %	<i>SD</i> %
2004-2005			
Stayed	35	57.44	25.81
Transferred	35	15.09	10.24
2005-2006			
Stayed	35	57.46	25.70
Transferred	35	13.64	7.61
2006-2007			
Stayed	35	59.79	23.90
Transferred	35	13.74	7.38
2007-2008			
Stayed	35	62.93	21.95
Transferred	35	13.88	8.35
2008-2009			
Stayed	38	56.12	27.16
Transferred	38	13.30	10.07

Table 2.3

Descriptive Statistics for 1-Year Persistence Rates by the Institutional Status of Texas

Undergraduates for the 2009-2010 through the 2013-2014 Academic Years

Academic Year and Institutional Status	<i>n</i> of universities	<i>M</i> %	<i>SD</i> %
2009-2010			
Stayed	38	61.04	21.45
Transferred	38	15.98	10.05
2010-2011			
Stayed	38	61.59	21.77
Transferred	38	13.34	8.54
2011-2012			
Stayed	38	63.96	20.17
Transferred	38	12.82	7.40
2012-2013			
Stayed	38	61.50	23.72
Transferred	38	12.23	7.05
2013-2014			
Stayed	38	60.28	25.76
Transferred	38	16.13	16.56

Table 2.4

Descriptive Statistics for 1-Year Persistence Rates of Texas Undergraduates Who Stayed at the Same University for the 1999-2000 and 2007-2008, 2007-2008 and 2013-2014, and for the 1999-2000 and 2013-2014 Academic Year Comparisons

Academic Year Comparison	<i>n</i> of universities	<i>M</i> %	<i>SD</i> %
Beginning to Midpoint			
1999-2000	35	58.38	23.31
2007-2008	35	62.93	21.95
Midpoint to Ending			
2007-2008	35	62.93	21.95
2013-2014	35	60.28	25.76
Beginning to Ending			
1999-2000	35	58.38	23.31
2013-2014	35	60.28	25.76

Table 2.5

Descriptive Statistics for 1-Year Persistence Rates of Texas Undergraduates Who Transferred to a Different University for the 1999-2000 and 2007-2008, 2007-2008 and 2013-2014, and for the 1999-2000 and 2013-2014 Academic Year Comparisons

Academic Year Comparison	<i>n</i> of universities	<i>M</i> %	<i>SD</i> %
Beginning to Midpoint			
1999-2000	35	14.51	8.62
2007-2008	35	13.88	8.35
Midpoint to Ending			
2007-2008	35	13.88	8.35
2013-2014	35	16.13	16.56
Beginning to Ending			
1999-2000	35	14.51	8.62
2013-2014	35	16.13	16.56

Table 2.6

Summary of Results for the 1-Year Persistence Rate Analyses in the 1999-2000 Academic Year through the 2013-2014 Academic Year

Academic Year	Statistically Significant	Effect Size	Higher Persistence Rate	Difference in Persistence Rates%
1999-2000	Yes	Large	Stayed	43.87
2000-2001	Yes	Large	Stayed	43.73
2001-2002	Yes	Large	Stayed	42.12
2002-2003	Yes	Large	Stayed	42.43
2003-2004	Yes	Large	Stayed	49.57
2004-2005	Yes	Large	Stayed	42.35
2005-2006	Yes	Large	Stayed	43.82
2006-2007	Yes	Large	Stayed	46.05
2007-2008	Yes	Large	Stayed	49.05
2008-2009	Yes	Large	Stayed	42.82
2009-2010	Yes	Large	Stayed	45.06
2010-2011	Yes	Large	Stayed	48.25
2011-2012	Yes	Large	Stayed	51.14
2012-2013	Yes	Large	Stayed	49.27
2013-2014	Yes	Large	Stayed	44.15

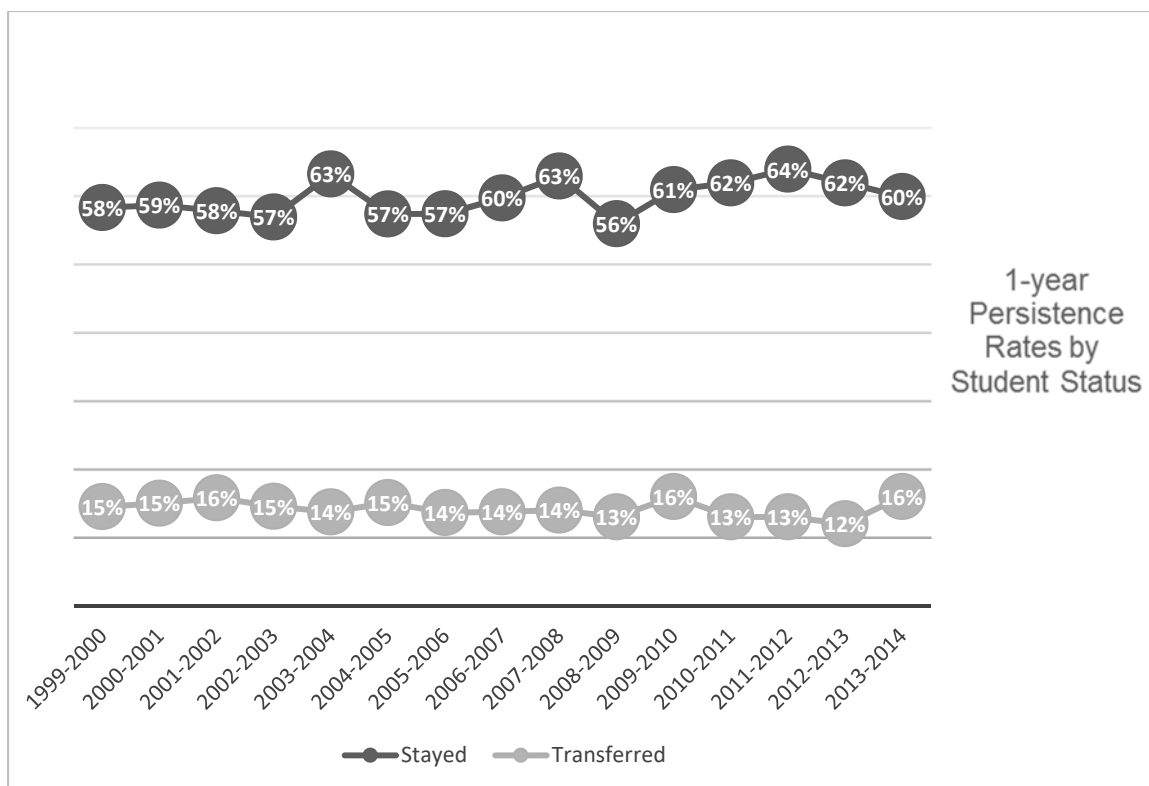


Figure 2.1. Trends in 1-year persistence rates by the institutional status of Texas undergraduates for the 1999-2000 through the 2013-2014 academic years.

CHAPTER III

DIFFERENCES IN 1-YEAR PERSISTENCE RATES BY THE INSTITUTIONAL STATUS OF BLACK STUDENTS AT TEXAS 4-YEAR UNIVERSITIES: A MULTIYEAR, STATEWIDE ANALYSIS

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

Abstract

In this multiyear, statewide investigation, the 1-year persistence rates of Black students at Texas 4-year public universities were analyzed for the 1999-2000 through the 2013-2014 academic years. Of particular interest was whether the 1-year persistence rates of Black students differed by their institutional status (i.e., stayed at the same Texas 4-year university or transferred to a different Texas 4-year university). Inferential statistical analyses revealed the presence of statistically significant differences in the 1-year persistence rates of Black students by their institutional status in all 15 academic years. The 1-year persistence rates were statistically significantly higher for Black students when they stayed (i.e., ranged from 52% to 60%) at the same 4-year university than when they transferred (i.e., ranged from 10% to 17%) to a different 4-year university. Implications for policy and for practice, as well as recommendations for future research, were discussed.

Keywords: Black students, 4-year university, 1-year persistence rates, stayed, transferred, Texas

DIFFERENCES IN 1-YEAR PERSISTENCE RATES BY THE INSTITUTIONAL
STATUS OF BLACK STUDENTS AT TEXAS 4-YEAR UNIVERSITIES: A
MULTIYEAR, STATEWIDE ANALYSIS

According to Brower and Ketterhagen (2004), high school graduation rates and college admission rates over the last 50 years reflect a shift toward racial/ethnic equality. From the early 1980's to early 2000's, minority undergraduate enrollment increased by 146% (Flores & Park, 2013) and the number of Black students earning an undergraduate degree has almost doubled in the last 20 years (Naylor, Wyatt-Nichol, & Brown, 2015). However, Black students still earned less than 10% of the undergraduate degrees obtained in the United States in 2016 (U.S. Census Bureau, 2016). Additionally, a discrepancy is present in the higher education retention statistics between White men and women and Black men and women (Keels, 2013). Approximately 50% of White men and women will drop out of a college or university within four years compared to 57% of Black women and 69% of Black men (Keels, 2013).

To compete in the global economy, the United States must educate an increasingly more diverse student population through increasing college access for low-income and students of color (Palmer, Davis, Moore, & Hilton, 2010). For students, completion of a postsecondary degree can have an important influence on lifetime earning potential. Students who earn a postsecondary degree earn twice the amount of income when compared to those students who complete just a high school diploma or equivalent (Council of Economic Advisors, 2015). Additionally, Duncan (2010) reported that since 1975 the percentage of jobs in the United States requiring postsecondary education increased from 28% to 59%. Despite improvements made, compelling racial

gaps relating to retention and persistence for Black students enrolled in postsecondary institutions still exist.

Of note, community colleges are increasingly providing education for a large number of students of color in the United States (Cohen & Brawer, 2009). In particular, Black students enroll in community colleges at excessively high rates (Lowry, 2016). In the U.S., 52% of all Black undergraduate students are enrolled at community colleges (American Association of Community Colleges, 2015). Black students enrolled at community colleges are less likely to transfer to a 4-year institution and earn an undergraduate degree (Zamani, 2001). Only 8% of Black students who enroll at a community college transfer to a 4-year university and earn a bachelor's degree within six years (Shapiro et al., 2017).

In 2016, Lowry explored the college selection process for Black students who enrolled at a community college versus a 4-year institution. In this qualitative study, 19 Black students enrolled at an urban community college in the southern part of the United States were interviewed. All 19 Black students were academically qualified to enroll at a 4-year college or university. Lowry (2016) reported participants believed attending college was their only option and that family played an important role in deciding to enroll at a community college instead of a 4-year institution. Lowry (2016) suggested high school personnel (e.g., teachers, administrators, and counselors) should become attentive to the college choice process for academically qualified Black students who could benefit by starting at a 4-year college or university.

In another qualitative study, but at a 4-year institution, Wright, Good, and Lampley (2011) examined the social, academic, and cultural expectations and

experiences of Black students enrolled at two predominantly White universities in the southern United States. Participants were 20 Black junior or senior students who were in good standing at their university and had persisted at the same university since their initial enrollment. Through interviews and observation, Wright et al. (2011) recommended campuses should develop cultural sensitivity training programs, recruit and retain Black faculty and staff, develop orientation and retention programs, develop faculty-mentoring programs, and provide support for Black student organizations. Additionally, institutions should provide and support Black-oriented cultural and social events, provide diversity in the curriculum, increase scholarship opportunities, and collaborate with the local community to improve the local racial climate (Wright et al., 2011).

Keels (2013) investigated gender and ethnic/racial differences in college grades and graduation rates for a diverse cohort of first-year students who were enrolled in one of 28 selected colleges and universities. White and Asian students had the highest GPA (i.e., 3.3), Hispanic students had the next highest GPA (i.e., 3.1), and Black students had the lowest GPA (i.e., 3.0). Additionally, the six-year degree achievement rates were 92% for White students, 90% for Asian students, 86% for Hispanic students, and 80% for Black students (Keels, 2013). Keels noted Black students had the lowest GPA (i.e., 3.0) and the lowest six-year degree achievement rates (i.e., 80%) for all four ethnic/racial groups.

In a Texas investigation, Spangler and Slate (2015) explored persistence rates and graduation rates by ethnic/racial membership (i.e., White, Black, Hispanic, and Asian) of students enrolled in community colleges for the 2000 and 2004-2010 academic years.

They investigated whether trends were present for the different ethnic/racial groups between the 2000 and the 2010 academic years. Spangler and Slate (2015) documented graduation and persistence rates increased 8.27% for Black students from the 2000 academic year to the 2010 academic year. Graduation and persistence rates in the 2000 academic year were 22.80% and 31.07% in the 2010 academic year for Black students enrolled at Texas community colleges. Spangler and Slate (2015) further recognized increases in persistence rates and graduation rates for all ethnic/racial groups, but encouraged continued improvement due to the number of students choosing the community college route for higher education opportunities.

In a similar study, Moss and Slate (2016) analyzed the 1-year persistence rates by institutional status (i.e., stayed or transferred) of Black students who had been enrolled at a Texas community college in the 2000 and 2012 academic years. Moss and Slate (2016) established the 1-year persistence rate was 36% higher when Black students stayed at the same institution when compared to Black students who transferred to another institution in the 2000 academic year. Similarly, in 2012, Black students who stayed at the same institution had a 1-year persistence rate that was 27% higher than Black students who transferred to another Texas community college. Though community colleges have made efforts to increase persistence and completion rates, they continue to present a problem, not only for students but also for community colleges (Moss & Slate, 2016).

In another Texas investigation, Payne et al. (2015) examined the 6-year persistence rates of Black students enrolled at Texas 4-year public universities in the 2000 academic year to the 2010 academic year. In 2000, the 6-year persistence rates for Black students at Texas 4-year public universities were 61.55%. In 2010, the 6-year

persistence rates for Black students at Texas 4-year public universities increased to 62.25%. The 6-year persistence rates for Black students increased a mere 0.70% over this 11-year time period, from the 2000 academic year to the 2010 academic year (Payne et al., 2015). They documented Black students had the lowest 6-year persistence rates when compared to White, Hispanic, and Asian students.

In his doctoral dissertation, Moss (2017) analyzed 1-year persistence rates of Black students enrolled in Texas community colleges by institutional status (i.e., stayed or transferred) for the 2007-2008 through the 2013-2014 academic years. Statistically significant differences were present in four of the eight academic years investigated. Moss (2017) documented 1-year persistence rates for Black students who persisted at the same Texas community college were higher than for Black students who transferred to a different Texas community college even when statistically significant differences were not present. The 1-year persistence rates for Black students who persisted at the same Texas community college ranged from 38% to 46%, whereas the 1-year persistence rates for Black students who transferred to a different Texas community college ranged from 27% to 37% (Moss, 2017). According to Moss (2017), community colleges with low 1-year persistence rates should be proactive in examining existing programs and making necessary changes to improve the persistence rates of Black students at Texas community colleges.

Statement of the Problem

Despite increases in undergraduate enrollment for Black students over the last 40 years (Flores & Park, 2013), Black students still earned less than 10% of all undergraduate degrees conferred in the United States in 2016 (U.S. Census Bureau,

2016). For students, persistence and completion of a postsecondary degree comes with the opportunity to achieve some of the more prominent positions in society with higher earnings potential (Tinto, 1987). For example, in 2016, the unemployment rate in the United States for 20-24 year olds with just a high school diploma was 19% higher when compared to 20-24 year olds with a bachelor's degree or higher (National Center for Education Statistics, 2017). Additionally, the median earnings of adults 25-34 years old was 64% higher when compared to adults 25-34 years old with just a high school diploma (National Center for Education Statistics, 2017).

Specific to Texas, Fauria and Slate (2014) analyzed the 1-year persistence rates by institutional status (i.e., stayed or transferred) of Black students enrolled in 4-year Texas public universities in the 2000 and 2011 academic years. Black students who stayed at the same Texas 4-year public university were over four times more likely to persist than Black students who transferred to other Texas public 4-year universities in the 2000 and 2011 academic years (Fauria & Slate, 2014). Similarly, Ballinger and Slate (2017) expanded on the Fauria and Slate (2014) research study and examined 1-year persistence rates for Black students by institutional status (i.e., stayed or transferred) at Texas 4-year public universities for the 2014 academic year. Ballinger and Slate (2017) documented Black students were 27% more likely to persist when staying at the same 4-year Texas public universities when compared to Black students who transferred to other Texas 4-year public universities.

Purpose of the Study

The purpose of this study was to examine the 1-year persistence rates of Black students who had been enrolled in Texas 4-year public universities in the 1999-2000

through the 2013-2014 academic years. In particular, the degree to which differences were present in the 1-year persistence rates by the institutional status (i.e., stayed at the same Texas 4-year public university or transferred to a different Texas 4-year public university) of Black students was ascertained. Through the analyses of 15 years of Texas statewide data for all Texas 4-year public universities, the extent to which trends were present in the 1-year persistence rates of Black students by their institutional status were identified.

Significance of the Study

As previously noted, Moss (2017) analyzed 1-year persistence rates by institutional status (i.e., stayed or transferred) for Black students enrolled in Texas community colleges for the 2007-2008 through 2013-2014 academic years. Moss (2017) documented 1-year persistence rates by institutional status were higher for Black students who stayed at the same Texas community colleges when compared to Black students who transferred to different Texas community colleges. The 1-year persistence rates for Black students who transferred to different Texas community colleges ranged from 27% to 37%, whereas the 1-year persistence rates for Black students who stayed at the same Texas community colleges ranged from 38% to 46% (Moss, 2017). Through conducting this investigation, the degree to which the results of the Moss (2017) dissertation are generalizable to Black students at Texas 4-year universities was confirmed.

Research Questions

The following research questions were answered in this study: (a) What is the difference in the 1-year persistence rates as a function of the institutional status (i.e., stayed or transferred) of Black students who were enrolled at Texas 4-year public

universities?; (b) What is the difference in the 1-year persistence rates of Black students who stayed at the same 4-year university between the 1999-2000 and the 2007-2008 academic years, between the 2007-2008 and 2013-2014 academic years, and between the 1999-2000 and the 2013-2014 academic years?; (c) What is the difference in the 1-year persistence rates of Black students who transferred to a different 4-year university between the 1999-2000 and the 2007-2008 academic years, between the 2007-2008 and 2013-2014 academic years, and between the 1999-2000 and the 2013-2014 academic years?; and (d) What trend is present in the 1-year persistence rates as a function of the institutional status of Black students who were enrolled at Texas 4-year universities from the 1999-2000 through the 2013-2014 academic years? The first research question was repeated for 15 academic years, from 1999-2000 through 2013-2014, whereas the last research question involved results from all 15 academic years.

Method

Research Design

A quantitative, non-experimental, causal-comparative research design was used for this study (Creswell, 2013). Archival data from the Texas Higher Education Coordinating Board were analyzed in this study. Causal comparative research allows the ability to analyze two or more groups through an independent variable that has already occurred (Creswell, 2013). The independent variable in this study was the institutional status (i.e., stayed or transferred) of Black students and the dependent variables were the 1-year persistence rates of Black students enrolled in Texas 4-year public universities in the 1999-2000 to the 2013-2014 academic years.

Participants and Instrumentation

The data for this study were acquired from the Texas Higher Education Coordinating Board Interactive Accountability System database. The Texas Higher Education Coordinating Board Interactive Accountability System is a publicly accessible database that tracks the performance of critical measures that exemplify the mission of higher education institutions (Texas Higher Education Coordinating Board, 2016a). The Texas Higher Education Coordinating Board provides these archival data and promotes access to and success in quality higher education across Texas (Texas Higher Education Coordinating Board, 2016b). Data from their website were downloaded in Microsoft Excel format and then recoded into SPSS format for statistical analysis. Participants in this article were Texas Black students who were enrolled in the 1999-2000 to the 2013-2014 academic years at one of the thirty eight, 4-year Texas public universities.

In this investigation, the term of 1-year persistence rates was used to refer 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 4-year university or who enrolled at a different 4-year university the following fall semester (Texas Higher Education Coordinating Board, 2016c). The term transfer student was used to refer to a student who enrolled at a different 4-year university one year after having been enrolled in his or her first 4-year university (Texas Higher Education Coordinating Board, 2016c). In this article, the term staying was used to refer to a student who enrolled at a 4-year university in one year and then re-enrolled in the same 4-year university the following academic year.

Results

Prior to conducting inferential statistics to determine whether a statistically significant difference was present between the 1-year persistence rates of Black students who stayed at the same Texas 4-year public university compared to Black students who transferred to a different Texas 4-year public university in the 1999-2000 through the 2013-2014 academic years, checks were conducted to determine the extent to which the data were normally distributed (Onwuegbuzie & Daniel, 2002). Although some of the 1-year persistence rate data were not normally distributed, a decision was made to use parametric dependent samples *t*-tests to answer the research questions. Statistical results will now be presented by research questions.

Research Question One Results

To answer the first research question, statistical analyses were conducted separately for the 1999-2000 through the 2013-2014 academic years. Specifically compared were the 1-year persistence rates of Black students who stayed at the same 4-year university to the 1-year persistence rates of Black students who transferred to a different 4-year university. Results will now be presented, beginning with the 1999-2000 academic year.

For the 1999-2000 academic year, the parametric dependent samples *t*-test revealed a statistically significant difference in the 1-year persistence rates, $t(34) = 10.25$, $p < .001$, between Black students who stayed at the same Texas 4-year public university and Black students who transferred to a different Texas 4-year public university. This difference represented a large effect size (Cohen's *d*) of 2.33 (Cohen, 1998). The 1-year persistence rates of Black students who stayed at the same 4-year public university were

almost 48% higher than the 1-year persistence rates of Black students who transferred to a different 4-year public university. Readers are directed to Table 3.1 for the descriptive statistics for this analysis.

Insert Table 3.1 about here

Concerning the 2000-2001 academic year, the parametric dependent samples t -test revealed a statistically significant difference in the 1-year persistence rates, $t(34) = 9.43, p < .001$, between Black students who stayed at the same Texas 4-year public university and Black students who transferred to a different Texas 4-year public university. This difference represented a large effect size (Cohen's d) of 2.01 (Cohen, 1998). The 1-year persistence rates of Black students who stayed at the same 4-year public university were over 43% higher than the 1-year persistence rates of Black students who transferred to a different 4-year public university. Table 3.1 contains for the descriptive statistics for this analysis.

With respect to the 2001-2002 academic year, a statistically significant difference was revealed in the 1-year persistence rates, $t(34) = 10.11, p < .001$, between Black students who stayed at the same Texas 4-year public university and Black students who transferred to a different Texas 4-year public university. This difference represented a large effect size (Cohen's d) of 2.21 (Cohen, 1998). The 1-year persistence rates of Black students who stayed at the same 4-year public university were almost 49% higher than the 1-year persistence rates of Black students who transferred to a different 4-year public university. Delineated in Table 3.1 are the descriptive statistics for this analysis.

Regarding the 2002-2003 academic year, a statistically significant difference was yielded in the 1-year persistence rates, $t(34) = 9.81, p < .001$, between Black students who stayed at the same Texas 4-year public university and Black students who transferred to a different Texas 4-year public university. This difference represented a large effect size (Cohen's d) of 2.15 (Cohen, 1998). The 1-year persistence rates of Black students who stayed at the same 4-year public university were almost 44% higher than the 1-year persistence rates of Black students who transferred to a different 4-year public university. Readers are directed to Table 3.1 for the descriptive statistics for this analysis.

For the 2003-2004 academic year, a statistically significant difference was yielded in the 1-year persistence rates, $t(33) = 9.65, p < .001$, between Black students who stayed at the same Texas 4-year public university and Black students who transferred to a different Texas 4-year public university. This difference represented a large effect size (Cohen's d) of 2.05 (Cohen, 1998). The 1-year persistence rates of Black students who stayed at the same 4-year public university were almost 44% higher than the 1-year persistence rates of black students who transferred to a different 4-year public university. Revealed in Table 3.1 are the descriptive statistics for this analysis.

Concerning the 2004-2005 academic year, a statistically significant difference was revealed in the 1-year persistence rates, $t(34) = 10.49, p < .001$, between Black students who stayed at the same Texas 4-year public university and Black students who transferred to a different Texas 4-year public university. This difference represented a very large effect size (Cohen's d) of 3.03 (Cohen, 1998). The 1-year persistence rates of Black students who stayed at the same 4-year public university were 45% higher than the

1-year persistence rates of Black students who transferred to a different 4-year public university. Table 3.2 contains the descriptive statistics for this analysis.

Insert Table 3.2 about here

With respect the to the 2005-2006 academic year, a statistically significant difference was yielded in the 1-year persistence rates, $t(34) = 9.28, p < .001$, between Black students who stayed at the same Texas 4-year public university and Black students who transferred to a different Texas 4-year public university. This difference represented a large effect size (Cohen's d) of 2.13 (Cohen, 1998). The 1-year persistence rates of Black students who stayed at the same 4-year public university were almost 40% higher than the 1-year persistence rates of Black students who transferred to a different 4-year public university. Delineated in Table 3.2 are the descriptive statistics for this analysis.

Regarding the 2006-2007 academic year, a statistically significant difference was revealed in the 1-year persistence rates, $t(34) = 10.52, p < .001$, between Black students who stayed at the same Texas 4-year public university and Black students who transferred to a different Texas 4-year public university. This difference represented a large effect size (Cohen's d) of 2.30 (Cohen, 1998). The 1-year persistence rates of Black students who stayed at the same 4-year public university were over 44% higher than the 1-year persistence rates of Black students who transferred to a different 4-year public university. Readers are directed to Table 3.2 for the descriptive statistics for this analysis.

For the 2007-2008 academic year, a statistically significant difference was yielded in the 1-year persistence rates, $t(34) = 9.92, p < .001$, between Black students who stayed at the same Texas 4-year public university and Black students who transferred to a different Texas 4-year public university. This difference represented a large effect size (Cohen's d) of 2.36 (Cohen, 1998). The 1-year persistence rates of Black students who stayed at the same 4-year public university were almost 47% higher than the 1-year persistence rates of Black students who transferred to a different 4-year public university. Revealed in Table 3.2 are the descriptive statistics for this analysis.

Concerning the 2008-2009 academic year, a statistically significant difference was again present in the 1-year persistence rates, $t(37) = 9.49, p < .001$, between Black students who stayed at the same Texas 4-year public university and Black students who transferred to a different Texas 4-year public university. This difference represented a large effect size (Cohen's d) of 1.99 (Cohen, 1998). The 1-year persistence rates of Black students who stayed at the same 4-year public university were 43% higher than the 1-year persistence rates of Black students who transferred to a different 4-year public university. Table 3.2 contains the descriptive statistics for this analysis.

With respect to the 2009-2010 academic year, a statistically significant difference was yielded in the 1-year persistence rates, $t(37) = 9.30, p < .001$, between Black students who stayed at the same Texas 4-year public university and Black students who transferred to a different Texas 4-year public university. This difference represented a large effect size (Cohen's d) of 2.02 (Cohen, 1998). The 1-year persistence rates of Black students who stayed at the same 4-year public university were almost 40% higher

than the 1-year persistence rates of Black students who transferred to a different 4-year public university. Delineated in Table 3.3 are the descriptive statistics for this analysis.

Insert Table 3.3 about here

Regarding the 2010-2011 academic year, a statistically significant difference was revealed in the 1-year persistence rates, $t(37) = 5.79, p < .001$, as a function of institutional status for Black students. This difference represented a large effect size (Cohen's d) of 1.52 (Cohen, 1998). The 1-year persistence rates of Black students who stayed at the same 4-year public university were almost 35% higher than the 1-year persistence rates of Black students who transferred to a different 4-year public university. Readers are directed to Table 3.3 for the descriptive statistics for this analysis.

For the 2011-2012 academic year, a statistically significant difference was yielded in the 1-year persistence rates, $t(37) = 9.65, p < .001$, by student institutional status. This difference represented a large effect size (Cohen's d) of 2.25 (Cohen, 1998). The 1-year persistence rates of Black students who stayed at the same 4-year public university were over 42% higher than the 1-year persistence rates of Black students who transferred to a different 4-year public university. Revealed in Table 3.3 are the descriptive statistics for this analysis.

Concerning the 2012-2013 academic year, a statistically significant difference was revealed in the 1-year persistence rates, $t(37) = 9.88, p < .001$, by student institutional status. This difference represented a large effect size (Cohen's d) of 2.30 (Cohen, 1998). The 1-year persistence rates of Black students who stayed at the same 4-

year public university were over 44% higher than the 1-year persistence rates of Black students who transferred to a different 4-year public university. Table 3.3 contains the descriptive statistics for this analysis.

With respect to the 2013-2014 academic year, a statistically significant difference was yielded in the 1-year persistence rates, $t(37) = 6.03, p < .001$, by student institutional status. This difference represented a large effect size (Cohen's d) of 1.59 (Cohen, 1998). The 1-year persistence rates of Black students who stayed at the same 4-year public university were almost 37% higher than the 1-year persistence rates of Black students who transferred to a different 4-year public university. Delineated in Table 3.3 are the descriptive statistics for this analysis.

Research Question Two Results

To answer the second research question, statistical analyses were conducted separately for three comparisons: (a) between the 1999-2000 and the 2007-2008 academic years, (b) between the 2007-2008 and 2013-2014 academic years, and (c) between the 1999-2000 and the 2013-2014 academic years. Specifically analyzed were the 1-year persistence rates of Black students who stayed at the same 4-year university. Results will now be presented, beginning with the 1999-2000 and the 2007-2008 academic year comparison.

For the 1999-2000 and the 2007-2008 academic year comparison, a statistically significant difference was not present, $t(34) = -0.11, p = .91$, in the 1-year persistence rates of Black students who stayed at the same Texas 4-year university. The 1-year persistence rates of Black students who stayed at the same 4-year public university were

similar, 58%, in the 1999-2000 and the 2007-2008 academic years. Readers are directed to Table 3.4 for the descriptive statistics for this analysis.

 Insert Table 3.4 about here

Concerning the 2007-2008 and the 2013-2014 academic year comparison, a statistically significant difference was not yielded in the 1-year persistence rates, $t(34) = -0.48, p = .64$, of Black students who stayed at the same Texas 4-year university. The 1-year persistence rates of Black students who stayed at the same 4-year public university were similar, 58% and 54%, respectively, in the 2007-2008 and the 2013-2014 academic years. Revealed in Table 3.4 are the descriptive statistics for this analysis.

With respect to the 1999-2000 and the 2013-2014 academic year comparison, a statistically significant difference was not revealed in the 1-year persistence rates, $t(34) = 0.33, p = .74$, of Black students who stayed at the same Texas 4-year university. The 1-year persistence rates of Black students who stayed at the same 4-year public university were similar, 58% and 54%, respectively, in the 1999-2000 and the 2013-2014 academic years. Delineated in Table 3.4 are the descriptive statistics for this analysis.

Research Question Three Results

To answer this research question, statistical analyses were conducted separately for three comparisons: (a) between the 1999-2000 and the 2007-2008 academic years, (b) between the 2007-2008 and 2013-2014 academic years, and (c) between the 1999-2000 and the 2013-2014 academic years. Specifically analyzed were the 1-year persistence

rates of Black students who transferred to another 4-year university. Results will now be presented, beginning with the 1999-2000 and the 2007-2008 academic years.

Regarding the 1999-2000 and the 2007-2008 academic years, the parametric dependent samples t -test did not reveal a statistically significant difference in the 1-year persistence rates, $t(34) = -1.08, p = .29$, of Black students who transferred to a different Texas 4-year public university. The 1-year persistence rates of Black students who transferred to a different 4-year public university were similar, 10% and 12%, respectively, in the 1999-2000 and the 2007-2008 academic years. Readers are directed to Table 3.5 for the descriptive statistics for this analysis.

 Insert Table 3.5 about here

For the 2007-2008 and 2013-2014 academic years, a statistically significant difference was not present in the 1-year persistence rates, $t(34) = -1.75, p = .09$, of Black students who transferred to a different Texas 4-year public university. The 1-year persistence rates of Black students who transferred to a different 4-year public university were similar, 12% and 17%, respectively, in the 2007-2008 and 2013-2014 academic years. Table 3.5 contains the descriptive statistics for this analysis.

Concerning the 1999-2000 and 2013-2014 academic years, a statistically significant difference was present in the 1-year persistence rates, $t(34) = -2.10, p = .04$, of Black students who transferred to a different Texas 4-year public university. This difference represented a moderate effect size (Cohen's d) of 0.55. The 1-year persistence rates of Black students who transferred to a different 4-year public university were 10%

and 17%, respectively, in the 1999-2000 and 2013-2014 academic years. As such, an improvement was present in the 1-year persistence rates of Black students who transferred to a different Texas 4-year university from the first year of data analyzed herein to the last academic year of data analyzed. Delineated in Table 3.5 are the descriptive statistics for this analysis.

Research Question Four Results

The final research question involved an analysis of all 15 years of data for the 1-year persistence rates of Black students enrolled at Texas 4-year public universities. As revealed in Table 3.6 and Figure 3.1, trends were present in the 1-year persistence rates by institutional status (i.e., stayed or transferred) for Black students enrolled at Texas 4-year public universities. The 1-year persistence rates of Black students enrolled at Texas 4-year public universities who stayed at the same Texas 4-year public university were consistently higher than the 1-year persistence rates of Black students who transferred to a different Texas 4-year public university. Over the 15 year period, the 1-year persistence rates of Black students who stayed at the same Texas 4-year public university fluctuated between 52% and 60%. During that same 15 year period, the 1-year persistence rates of Black students who transferred to a different Texas 4-year university varied between 10% and 17%.

Insert Table 3.6 and Figure 3.1 about here

Discussion

In this investigation, the degree to which 1-year persistence rates differed as a function of the institutional status (i.e., stayed or transferred) of Black students enrolled at Texas 4-year public universities in the 1999-2000 through the 2013-2014 academic years was addressed. Fifteen years of archival data were obtained from the Texas Higher Education Coordinating Board Interactive Accountability System. Data were analyzed from the 38 Texas 4-year public universities from the 1999-2000 through the 2013-2014 academic years.

Statistically significant differences were present in all 15 years of analyzed data regarding the 1-year persistence rates as a function of institutional status (i.e., stayed or transferred) of Black students at Texas 4-year universities. The 1-year persistence rates of Black students who stayed at the same 4-year public university ranged from a low of 52% to a high of 60%. In comparison, the 1-year persistence rates of Black students who transferred to a different Texas 4-year public university ranged from a low of 10% to a high of 17%. Delineated in Table 3.6 and Figure 3.1 are a summary of the results of the 1-year persistence rates by institutional status of Black students at Texas 4-year public universities for all 15 academic years.

Connections with the Existing Literature

In this 15 year statewide study, the 1-year persistence rates of Black students at Texas 4-year public universities were statistically significantly higher when they stayed at the same 4-year university when compared to Black students who transferred to a different 4-year university. In previous research on 1-year persistence rates at Texas 4-year public universities, Ballinger and Slate (2017) and Fauria and Slate (2014)

established the presence of commensurate results to the ones presented in this study. Fauria and Slate (2014) established that Black students were four times more likely to persist if they remained at the same 4-year university than if they transferred to a different 4-year university. Similarly, Ballinger and Slate (2017) documented that Black students were 27% more likely to persist if they remained at the same 4-year university than if they transferred to a different 4-year university in the 2011 academic year.

Researchers (Moss & Slate, 2016; Moss, 2017) have also examined the 1-year persistence rates by the institutional status (i.e., stayed or transferred) of Black students at Texas community colleges with similar results. Moss and Slate (2016) analyzed 1-year persistence rates by institutional status for Black students in the 2000 and 2012 academic years. Moss and Slate (2016) established that the 1-year persistence rates for Black students who stayed at the same university was 36% higher in 2000 and 27% higher in 2012 when compared to Black students who transferred to another institution. Similarly, in 2017, Moss documented that Black students who stayed at the same Texas community college had 1-year persistence rates ranging from 38% to 46%, whereas the 1-year persistence rates for Black students who transferred to a different Texas community college ranged from 27% to 37%.

Implications for Policy and for Practice

In this study, the 1-year persistence rates of Black students at Texas 4-year universities were statistically significantly lower when Black students transferred to a different Texas 4-year university than when they stayed at the same Texas 4-year university. As documented in this investigation, Black students were, at a minimum, 35% more likely to persist if they stayed at the same Texas 4-year university than when

they transferred to a different Texas 4-year university. As such, Black students attending Texas 4-year public universities should be deterred from transferring. Next, existing retention programs, if any, for Black students who transfer to a different Texas 4-year public university should be evaluated because they have not been demonstrated to be effective. Over the last 15 years, the 1-year persistence rates for Black students who transferred to a different Texas 4-year university have remained low and stable ranging from 10% to 17%. Finally, Texas 4-year universities should consider developing new programs designed for Black students who transfer to different 4-year universities. Amongst other ideas, Wright et al. (2011) recommended that institutions develop orientation and retention programs, develop faculty-mentoring programs, and provide support for Black student organizations to assist with retention for Black students.

Recommendations for Future Research

In this 15 year statewide investigation, the 1-year persistence rates by institutional status for Black students at Texas 4-year universities were analyzed. As such, a number of recommendations can be made for future research. First, researchers are encouraged to study 1-year persistence rates for other ethnic/racial groups. This investigation was limited to 1-year persistence rates for Black students and it is unknown whether these results would be generalizable to other ethnic/racial groups. A second recommendation for future research would be to extend this investigation to other states to determine whether the results presented herein are similar in other states. Third, researchers are encouraged to determine whether differences are present for Black male students and Black female students in their 1-year persistence rates. A fourth recommendation would be to extend this study on 1-year persistence rates to community colleges. With the

differences in Black students who enroll in community colleges and 4-year universities, the 1-year persistence rates of Black students in community colleges warrants investigation. Fifth, researchers are encouraged to analyze 2-year persistence rates as this pertained to 1-year persistence rates. Sixth, researchers are encouraged to analyze other student demographic characteristics such as economic status or at-risk status to ascertain the relationship of those characteristics to 1-year persistence rates at 4-year universities. Finally, researchers are encouraged to conduct qualitative and/or mixed methods studies to discern the reasons why Black students transfer to different institutions.

Conclusion

In this multiyear, statewide study, the degree to which 1-year persistence rates of Black students in Texas 4-year universities differed by institutional status (i.e., stayed or transferred) was addressed. Statistically significant differences were present in the 1-year persistence rates between Black students who stayed and Black students who transferred in all 15 years of data in the inferential statistical analyses for the 1999-2000 through the 2013-2014 academic years. Black students who stayed at the same Texas 4-year university were 35% to 48% more likely to persist than Black students who transferred to a different Texas 4-year university. Previous researchers (Ballinger & Slate, 2017; Fauria & Slate, 2014; Moss, 2017; Moss & Slate, 2016) at Texas 4-year universities and Texas community colleges have documented that Black students were more likely to persist if they stayed at the same Texas 4-year university or Texas community college when compared to Black students who transferred to a different 4-year university or community college.

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Table 3.1

Descriptive Statistics for 1-Year Persistence Rates by the Institutional Status of Black

Undergraduate Students for the 1999-2000 through the 2003-2004 Academic Years

Academic Year and Institutional Status	<i>n</i> of universities	<i>M</i> %	<i>SD</i> %
1999-2000			
Stayed	35	58.10	27.86
Transferred	35	9.89	8.77
2000-2001			
Stayed	35	56.62	28.55
Transferred	35	13.50	10.11
2001-2002			
Stayed	35	59.86	30.16
Transferred	35	10.91	8.31
2002-2003			
Stayed	35	57.16	27.36
Transferred	35	13.17	9.21
2003-2004			
Stayed	34	55.59	28.97
Transferred	34	11.84	8.40

Table 3.2

Descriptive Statistics for 1-Year Persistence Rates by the Institutional Status of Black

Undergraduate Students for the 2004-2005 through the 2008-2009 Academic Years

Academic Year and Institutional Status	<i>n</i> of universities	<i>M%</i>	<i>SD%</i>
2004-2005			
Stayed	35	57.50	27.28
Transferred	35	11.99	7.44
2005-2006			
Stayed	35	53.46	26.44
Transferred	35	13.78	9.00
2006-2007			
Stayed	35	56.68	26.24
Transferred	35	12.02	8.26
2007-2008			
Stayed	35	58.49	26.67
Transferred	35	11.86	8.40
2008-2009			
Stayed	38	54.77	29.51
Transferred	38	11.44	8.71

Table 3.3

Descriptive Statistics for 1-Year Persistence Rates by the Institutional Status of Black

Undergraduate Students for the 2009-2010 through the 2013-2014 Academic Years

Academic Year and Institutional Status	<i>n</i> of universities	<i>M</i> %	<i>SD</i> %
2009-2010			
Stayed	38	54.66	25.52
Transferred	38	15.00	10.82
2010-2011			
Stayed	38	51.82	26.50
Transferred	38	17.15	18.47
2011-2012			
Stayed	38	55.58	24.45
Transferred	38	13.16	10.53
2012-2013			
Stayed	38	58.45	24.99
Transferred	38	13.92	11.18
2013-2014			
Stayed	38	53.74	28.00
Transferred	38	16.87	17.20

Table 3.4

Descriptive Statistics for the 1-Year Persistence Rates of Black Undergraduate Students Who Stayed at the Same University for the 1999-2000 and 2007-2008, 2007-2008 and 2013-2014, and for the 1999-2000 and 2013-2014 Academic Year Comparisons

Academic Year Comparison	<i>n</i> of universities	<i>M</i> %	<i>SD</i> %
Beginning to Midpoint			
1999-2000	35	58.10	27.86
2007-2008	35	58.49	26.67
Midpoint to Ending			
2007-2008	35	58.49	26.67
2013-2014	35	53.74	28.00
Beginning to Ending			
1999-2000	35	58.10	27.86
2013-2014	35	53.74	28.00

Table 3.5

Descriptive Statistics for the 1-Year Persistence Rates of Black Undergraduate Students Who Transferred to a Different University for the 1999-2000 and 2007-2008, 2007-2008 and 2013-2014, and for the 1999-2000 and 2013-2014 Academic Year Comparisons

Academic Year Comparison	<i>n</i> of universities	<i>M</i> %	<i>SD</i> %
Beginning to Midpoint			
1999-2000	35	9.89	8.77
2007-2008	35	11.86	8.40
Midpoint to Ending			
2007-2008	35	11.86	8.40
2013-2014	35	16.87	17.20
Beginning to Ending			
1999-2000	35	9.89	8.77
2013-2014	35	16.87	17.20

Table 3.6

*Summary of Results for the 1-Year Persistence Rate Analyses of Black Undergraduate**Students in the 1999-2000 Academic Year through the 2013-2014 Academic Year*

Academic Year	Statistically Significant	Effect Size	Higher Persistence Rate	Difference in Persistence Rates%
1999-2000	Yes	Large	Stayed	48.21
2000-2001	Yes	Large	Stayed	43.12
2001-2002	Yes	Large	Stayed	48.95
2002-2003	Yes	Large	Stayed	43.99
2003-2004	Yes	Large	Stayed	43.75
2004-2005	Yes	Large	Stayed	45.51
2005-2006	Yes	Large	Stayed	39.68
2006-2007	Yes	Large	Stayed	44.66
2007-2008	Yes	Large	Stayed	46.63
2008-2009	Yes	Large	Stayed	43.33
2009-2010	Yes	Large	Stayed	39.66
2010-2011	Yes	Large	Stayed	34.67
2011-2012	Yes	Large	Stayed	42.42
2012-2013	Yes	Large	Stayed	44.53
2013-2014	Yes	Large	Stayed	36.87

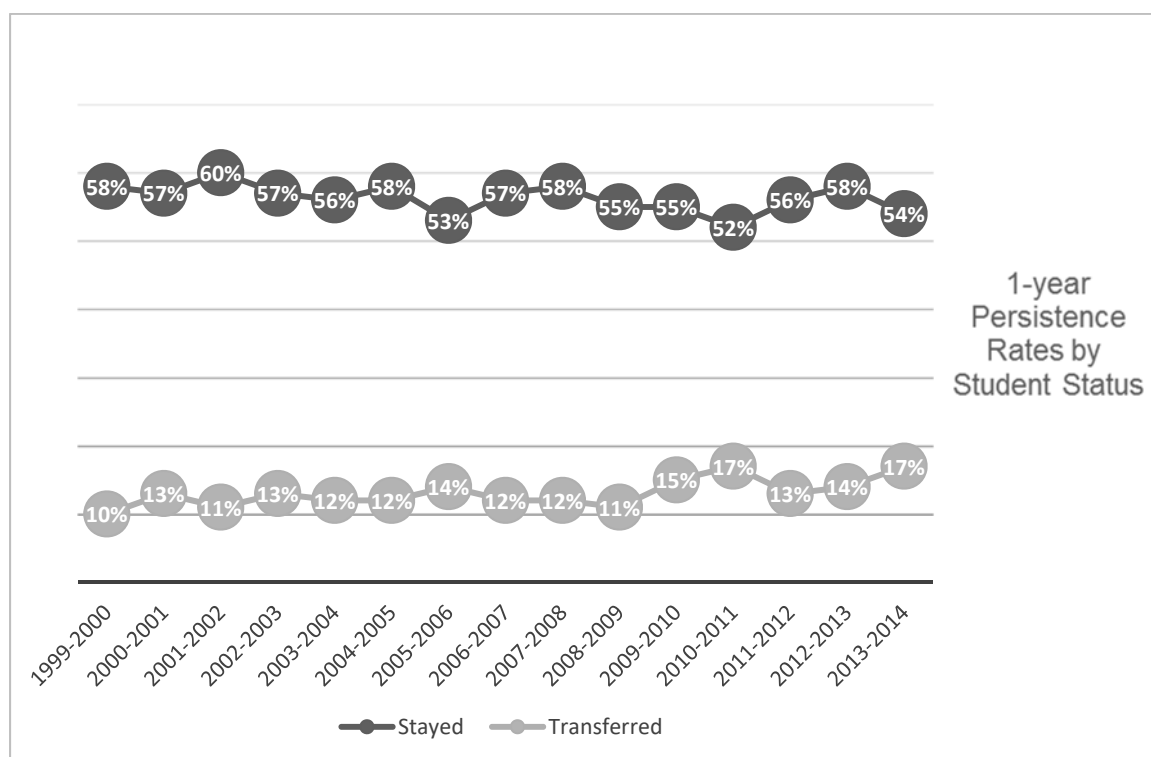


Figure 3.1. Trends in 1-year persistence rates by the institutional status of Black undergraduate students for 1999-2000 through the 2013-2014 academic years.

CHAPTER IV

DIFFERENCES IN 1-YEAR PERSISTENCE RATES BY THE INSTITUTIONAL STATUS OF HISPANIC STUDENTS AT TEXAS 4-YEAR UNIVERSITIES: A STATEWIDE, MULTIYEAR INVESTIGATION

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

Abstract

In this investigation, the 1-year persistence rates of Hispanic students at Texas 4-year public universities were analyzed for the 1999-2000 through the 2013-2014 academic years. Of particular interest was whether the 1-year persistence rates were higher for Hispanic students who stayed at the same Texas 4-year university or for Hispanic students who transferred to a different Texas 4-year university. Inferential statistical analyses revealed the presence of statistically significant differences in the 1-year persistence rates by student institutional status in all 15 academic years. The 1-year persistence rates were statistically significantly higher for Hispanic students when they stayed (i.e., ranged from 55% to 62%) at the same 4-year university than when they transferred (i.e., ranged from 12% to 17%) to a different 4-year university. Implications and recommendations for future research were discussed.

Keywords: Hispanic students, 4-year university, 1-year persistence rates, stayed, transferred, Texas

DIFFERENCES IN 1-YEAR PERSISTENCE RATES BY THE INSTITUTIONAL STATUS OF HISPANIC STUDENTS AT TEXAS 4-YEAR UNIVERSITIES: A STATEWIDE, MULTIYEAR INVESTIGATION

The Hispanic population in the United States reached 57 million in 2015 (Krogstad, 2016) and accounted for more than half (i.e., 54%) of the population growth in the United States between 2000 and 2014 (Stepler & Lopez, 2016). Specifically, the Hispanic population in Texas reached 6.7 million in 2000 (U.S. Census Bureau, 2000) and increased to 10.4 million in 2015 (Stepler & Lopez, 2016), representing a 55% increase in the Hispanic population in Texas from 2000 to 2015. Despite the Hispanic population being the largest and fastest growing ethnic/racial group in the United States (Parker, Segovia, & Tapp, 2016), bachelor's degree attainment for Hispanic students has remained low and relatively stable over the last 25 years (Contreras & Contreras, 2015). Only 13% of the Hispanic 25-29 year-old population has earned a 4-year university degree, whereas 19% of Black, 39% of White, and 53% of Asian 25-29 year-old populations in the United States have completed bachelor's degrees (Fry, 2011).

Of note, however, is the percentage of Hispanic students enrolling in a college or university has increased from 13% in 1972 to 32% in 2010 (Fry, 2011), with Hispanic student enrollment totaling 16.5% of higher education enrollments (Fry & Lopez, 2012). Improving persistence rates and graduation rates in higher education for Hispanic students is important for society (Gurantz, Hurwitz, & Smith, 2017) because the Hispanic population represents the largest minority group in the United States (Krogstad & Lopez, 2015). From 1975 through 2010, the percentage of jobs requiring a 4-year degree increased from 28% to 59% illustrating the importance of an educated workforce in the

United States (Duncan, 2010). Additionally, individuals receiving a postsecondary degree earn twice the amount of annual income when compared to individuals with just a high school diploma (Council of Economic Advisors, 2015). It is important to note the Hispanic population represents a large portion of the unskilled labor force in the United States and, therefore, are not as present as other ethnic/racial groups in higher paying jobs or careers (U.S. Bureau of Labor Statistics, 2014).

In 2014, Fauria and Slate investigated the 1-year persistence rates by institutional status (i.e., stayed or transferred) of Hispanic students who had been enrolled in a 4-year Texas public university for the 2000 and 2011 academic years. Hispanic students who stayed at the same 4-year institution had a 47% higher persistence rate than Hispanic students who transferred to another 4-year institution in the 2000 academic year (Fauria & Slate, 2014). Additionally, Hispanic students who stayed at the same 4-year institution in the 2011 academic year had a 51% higher persistence rate than Hispanic students who transferred to another 4-year institution in the 2011 academic year. Hispanic students were much more likely to persist at the same 4-year institution than if they transferred to another 4-year institution (Fauria & Slate, 2014).

Extending the Fauria and Slate (2014) research study, Ballinger and Slate (2017) investigated 1-year persistence rates by institutional status (i.e., stayed or transferred) for Hispanic students enrolled at Texas 4-year public universities for the 2014 academic year. The 1-year persistence rate for Hispanic students who stayed at the same 4-year university was 66% compared to a 22% 1-year persistence rate for Hispanic students who transferred to another 4-year institution in the 2014 academic year. Hispanic students who stayed at the same 4-year institution were three times more likely to persist than

Hispanic students who transferred to another 4-year institution in the 2014 academic year (Ballinger & Slate, 2017). The results of the Ballinger and Slate (2017) research were consistent with the results of the Fauria and Slate (2014) research study, and they provided justification to embolden Hispanic students to persist at the same institution rather than transferring to a different institution.

In 2015, Payne et al. (2015) examined the 6-year persistence rates of Hispanic students at Texas 4-year public universities in the 2000 academic year to the 2010 academic year. In 2000, Hispanic student 6-year persistence rates were 65.64% at Texas 4-year public universities. The 6-year persistence rate for Hispanic students at Texas 4-year public universities increased 3.14% to 68.78% in the 2010 academic year. Payne et al. (2015) documented the persistence rates of Hispanic students at Texas 4-year public universities were higher than Black students, but lower when compared to White students and Asian students in the 2010 academic year (Payne et al., 2015).

In a similar study, but involving community college students, Spangler and Slate (2015) explored graduation rates and persistence rates of Hispanic students enrolled at Texas community colleges for the 2000 and 2004-2010 academic years. The average graduation and persistence rates of Hispanic students increased 9.78% (i.e., 31.52% to 41.30%) from the 2000 to 2010 academic years. Although the graduation and persistence rates increased for Hispanic students enrolled at Texas community colleges since 2000, the trend since 2004 had slightly decreased (Spangler & Slate, 2015). Between 2000 and 2004, average graduation and persistence rates increased from 31.52% in 2000 to 42.38% in 2010. However, Spangler and Slate (2015) documented average graduation and persistence rates for Hispanic students declined to 41.30% between 2004 and 2010.

Spangler and Slate (2015) recognized the overall increase in average graduation and persistence rates for Hispanic students since 2000, but they expressed concern regarding the declining trend of average graduation and persistence rates since 2004.

In her doctoral dissertation, Stagg (2017) analyzed differences in 1-year persistence rates by institutional status (i.e., stayed or transferred) for Hispanic students enrolled in Texas community colleges from the 2007-2008 through the 2013-2014 academic years. Stagg documented statistically significant differences for six of the seven academic years analyzed. The 1-year persistence rates for Hispanic students who stayed at the same Texas community college from the 2007-2008 through the 2013-2014 academic years ranged from 54% to 60%, whereas the 1-year persistence rates for Hispanic students who transferred to another Texas community college during the same time period ranged from 42% to 51% (Stagg, 2017). Hispanic students are statistically significantly more likely to persist at the same Texas community college than if they transfer to a different community college (Stagg, 2017). As such, community college leaders should explore existing programs, and possibly create and implement new programs, to assist Hispanic students with 1-year persistence rates (Stagg, 2017).

Cox, Joyner, and Slate (2011) investigated the number and percentage of associate degrees awarded to Hispanic students at Texas community colleges between the 2000 and 2008 academic years. Cox et al. (2011) established the average number of associate degrees awarded to Hispanic students at Texas community colleges more than doubled (i.e., 171.88 in 2000 and 355.83 in 2008). Of note in this study; however, was the percentage of Hispanic students receiving degrees at Texas community colleges did not increase due to the increase in the Hispanic population in Texas between 2000 and

2008. Cox et al. (2011) determined that although the average number of associate degrees increased from 2000 to 2008, further research was needed to ascertain the reasons educational attainment levels of Hispanics are lower than other ethnic/racial groups.

In their qualitative study, Perez and Saenz (2017) explored perceptions and demonstrations of achievement by high-performing Hispanic male students at predominantly White postsecondary institutions. Three themes emerged through interviews with the high-performing Hispanic students: (a) academic thriving, (b) intrapersonal thriving, and (c) interpersonal thriving. Successful Hispanic students believed earning a degree was imperative for achieving personal and professional goals (Perez & Saenz, 2017). Additionally, Hispanic students recognized the ability to overcome challenges and the importance of relationships with their families and peers during the college experience. Further, Perez and Saenz (2017) recommended predominantly White institutions should continue to improve ways to recruit, retain, and graduate Hispanic male students.

In another qualitative study, Boden (2011) examined the perceptions of first-generation Hispanic students regarding their academic preparedness for postsecondary enrollment. Four themes emerged during semi-structured interviews with first-generation Hispanic students: (a) personal education planning, (b) guides, (c) academic skills, and (d) personal impetus (Boden, 2011). Hispanic students wanted the opportunity for a better financial life for themselves and their families, access to an educational mentor, and the academic and time-management skills necessary for academic success at a college or university. To increase persistence and graduation rates, college and university

administrators, faculty, and staff should recognize the need for support for first-generation Hispanic students and develop strategies to assist them in their academic achievement (Boden, 2011).

Statement of the Problem

The Hispanic population is the fastest growing ethnic/racial group in the United States (Parker, Segovia, & Tapp, 2016). Yet, bachelor's degree achievement for the Hispanic population has remained low and relatively stable over the last 25 years (Contreras & Contreras, 2015) even with substantial increases in Hispanic student enrollments in higher education (Fry & Lopez, 2012). Only 13% of Hispanic adults age 24-29 have achieved a bachelor's degree (Fry, 2011).

In Texas, where the Hispanic population has increased 55% from 2000 to 2015 (Stepler & Lopez, 2016), Hispanic persistence rates in higher education continue to be an issue. In previously mentioned studies involving 4-year Texas public universities, Fauria and Slate (2014) and Ballinger and Slate (2017) established statistically significant higher persistence rates for Hispanic students who stayed at the same Texas 4-year university compared to Hispanic students who transferred to another Texas 4-year university. Hispanic students at Texas 4-year public universities had a 47% higher 1-year persistence rate in 2000 and a 51% higher 1-year persistence rates in 2011 when they stayed at the same Texas 4-year public university versus transferring to another Texas 4-year public university (Fauria & Slate, 2014). Similarly, Ballinger and Slate (2017) documented a 44% higher 1-year persistence rates for Hispanic students who stayed at the same Texas 4-year public university when compared to Hispanic students who transferred to another Texas 4-year public university.

Purpose of the Study

The purpose of this study was to examine the 1-year persistence rates of Hispanic students who were enrolled in Texas 4-year public universities in the 1999-2000 to the 2013-2014 academic years. Specifically, the 1-year persistence rates by the institutional status (i.e., stayed or transferred) of Hispanic students who had been enrolled a Texas 4-year public university were analyzed. Through examining 15 years of Texas statewide data, any trends in the 1-year persistence rates of Hispanic students who stayed at the same Texas 4-year public university or who transferred to a different Texas 4-year public university were determined.

Significance of the Study

Stagg (2017) completed a doctoral dissertation in which she explored differences in 1-year persistence rates at Texas community colleges for Hispanic students by institutional status (i.e., stayed or transferred) from the 2007-2008 through the 2013-2014 academic years. Stagg (2017) established 1-year persistence rates for Hispanic students enrolled at Texas community colleges ranged from 54% to 60% for Hispanic students who stayed at the same Texas community college from the 2007-2008 through the 2013-2014 academic years. Hispanic students who transferred to a different Texas community college had 1-year persistence rates ranging from 42% to 51% for the same academic years (Stagg, 2017). Through conducting this investigation, the degree to which the results of the Stagg (2017) dissertation are generalizable to Hispanic students at Texas 4-year universities was determined.

Research Questions

In this study, the following research questions were addressed: (a) What is the difference in the 1-year persistence rates as a function of the institutional status (i.e., stayed or transferred) of Hispanic students at Texas 4-year public universities?; (b) What is the difference in the 1-year persistence rates of Hispanic students who stayed at the same 4-year university between the 1999-2000 and the 2007-2008 academic years, between the 2007-2008 and 2013-2014 academic years, and between the 1999-2000 and the 2013-2014 academic years?; (c) What is the difference in the 1-year persistence rates of Hispanic students who transferred to a different 4-year university between the 1999-2000 and the 2007-2008 academic years, between the 2007-2008 and 2013-2014 academic years, and between the 1999-2000 and the 2013-2014 academic years?; and (d) What trend is present in the 1-year persistence rates as a function of the institutional status of Hispanic students at Texas 4-year universities from the 1999-2000 through the 2013-2014 academic years? The first research question was repeated for 15 academic years, from 1999-2000 through 2013-2014, whereas the last research question involved results from all 15 academic years.

Method

Research Design

In this study, a non-experimental, causal-comparative research design was used (Creswell, 2013). The archival data, which have already occurred, were obtained from the Texas Higher Education Coordinating Board and constitute a causal-comparative design (Creswell, 2013). The independent variable analyzed in this study was the institutional status (i.e., stayed or transferred) of Hispanic students and the dependent

variables was the 1-year persistence rates for Hispanic students enrolled in Texas 4-year public universities in the 1999-2000 to the 2013-2014 academic years. Accordingly, neither the independent variable nor the dependent variables were manipulated or modified.

Participants and Instrumentation

The Texas Higher Education Coordinating Board Interactive Accountability System database was used to obtain and download the data that was analyzed in this study. The Texas Higher Education Coordinating Board promotes success in higher education across Texas (Texas Higher Education Coordinating Board, 2016b) and provides the Texas Higher Education Coordinating Board Interactive Accountability System, which is a publicly accessible database that tracks critical measures exemplifying the mission of higher education institutions (Texas Higher Education Coordinating Board, 2016a). The archival data available at the Texas Higher Education Coordinating Board website were downloaded in Microsoft Excel and then recoded into SPSS format for statistical analysis. Participants were Hispanic students who were enrolled in the 1999-2000 to the 2013-2014 academic years at one of the thirty eight, 4-year Texas public universities.

For purposes of this investigation, the Texas Higher Education Coordinating Board's (2016c) definition of the term 1-year persistence rates was used. 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. A student who transfers was defined as a student who enrolled at a different 4-year institution one year after having been enrolled his or her

first 4-year institution the previous academic year (Texas Higher Education Coordinating Board, 2016c). The term staying was used to refer to a student who enrolled at a 4-year institution in one year and re-enrolled in the same 4-year institution the following academic year.

Results

Prior to conducting inferential statistics to determine whether a statistically significant difference was present between the 1-year persistence rates of Hispanic students who stayed at the same Texas 4-year public university compared to Hispanic students who transferred to a different Texas 4-year public university in the 1999-2000 through the 2013-2014 academic years, checks were conducted to determine the extent to which the data were normally distributed (Onwuegbuzie & Daniel, 2002). Although some of the 1-year persistence rate data were not normally distributed, a decision was made to use parametric dependent samples *t*-tests to answer the research questions. Statistical results will now be presented by research questions.

Research Question One Results

To answer the first research question, statistical analyses were conducted separately for the 1999-2000 through the 2013-2014 academic years. Specifically compared were the 1-year persistence rates of Hispanic students who stayed at the same 4-year university to the 1-year persistence rates of Hispanic students who transferred to a different 4-year university. Results will now be presented, beginning with the 1999-2000 academic year.

For the 1999-2000 academic year, the parametric dependent samples *t*-test revealed a statistically significant difference in the 1-year persistence rates, $t(34) = 11.65$,

$p < .001$, between Hispanic students who stayed at the same Texas 4-year public university and Hispanic students who transferred to a different Texas 4-year public university. This difference represented a large effect size (Cohen's d) of 2.39 (Cohen, 1998). The 1-year persistence rates of Hispanic students who stayed at the same 4-year public university were almost 42% higher than the 1-year persistence rates of Hispanic students who transferred to a different 4-year public university. Readers are directed to Table 4.1 for the descriptive statistics for this analysis.

 Insert Table 4.1 about here

Concerning the 2000-2001 academic year, the parametric dependent samples t -test revealed a statistically significant difference in the 1-year persistence rates, $t(34) = 11.40$, $p < .001$, between Hispanic students who stayed at the same Texas 4-year public university and Hispanic students who transferred to a different Texas 4-year public university. This difference represented a large effect size (Cohen's d) of 2.39 (Cohen, 1998). The 1-year persistence rates of Hispanic students who stayed at the same 4-year public university were almost 42% higher than the 1-year persistence rates of Hispanic students who transferred to a different 4-year public university. Table 4.1 contains for the descriptive statistics for this analysis.

With respect to the 2001-2002 academic year, the parametric dependent samples t -test revealed a statistically significant difference in the 1-year persistence rates, $t(34) = 8.52$, $p < .001$, between Hispanic students who stayed at the same Texas 4-year public university and Hispanic students who transferred to a different Texas 4-year public

university. This difference represented a large effect size (Cohen's d) of 2.08 (Cohen, 1998). The 1-year persistence rates of Hispanic students who stayed at the same 4-year public university were almost 42% higher than the 1-year persistence rates of Hispanic students who transferred to a different 4-year public university. Delineated in Table 4.1 are the descriptive statistics for this analysis.

Regarding the 2002-2003 academic year, a statistically significant difference was yielded in the 1-year persistence rates, $t(34) = 10.82, p < .001$, as a function of the institutional status of Hispanic students. This difference represented a large effect size (Cohen's d) of 2.26 (Cohen, 1998). The 1-year persistence rates of Hispanic students who stayed at the same 4-year public university were over 43% higher than the 1-year persistence rates of Hispanic students who transferred to a different 4-year public university. Readers are directed to Table 4.1 for the descriptive statistics for this analysis.

For the 2003-2004 academic year, a statistically significant difference was yielded in the 1-year persistence rates, $t(33) = 11.74, p < .001$, as a function of the institutional status of Hispanic students. This difference represented a large effect size (Cohen's d) of 2.55 (Cohen, 1998). The 1-year persistence rates of Hispanic students who stayed at the same 4-year public university were over 46% higher than the 1-year persistence rates of Hispanic students who transferred to a different 4-year public university. Revealed in Table 4.1 are the descriptive statistics for this analysis.

Concerning the 2004-2005 academic year, a statistically significant difference was revealed in the 1-year persistence rates, $t(34) = 7.19, p < .001$, as a function of the institutional status of Hispanic students. This difference represented a large effect size

(Cohen's d) of 1.84 (Cohen, 1998). The 1-year persistence rates of Hispanic students who stayed at the same 4-year public university were almost 40% higher than the 1-year persistence rates of Hispanic students who transferred to a different 4-year public university. Table 4.2 contains the descriptive statistics for this analysis.

 Insert Table 4.2 about here

With respect to the 2005-2006 academic year, a statistically significant difference was yielded in the 1-year persistence rates, $t(34) = 11.26, p < .001$, as a function of the institutional status of Hispanic students. This difference represented a large effect size (Cohen's d) of 2.28 (Cohen, 1998). The 1-year persistence rates of Hispanic students who stayed at the same 4-year public university were over 42% higher than the 1-year persistence rates of Hispanic students who transferred to a different 4-year public university. Delineated in Table 4.2 are the descriptive statistics for this analysis.

Regarding the 2006-2007 academic year, a statistically significant difference was revealed in the 1-year persistence rates, $t(34) = 13.42, p < .001$, as a function of the institutional status of Hispanic students. This difference represented a large effect size (Cohen's d) of 2.71 (Cohen, 1998). The 1-year persistence rates of Hispanic students who stayed at the same 4-year public university were over 46% higher than the 1-year persistence rates of Hispanic students who transferred to a different 4-year public university. Readers are directed to Table 4.2 for the descriptive statistics for this analysis.

For the 2007-2008 academic year, a statistically significant difference was yielded in the 1-year persistence rates, $t(34) = 13.81, p < .001$, as a function of the institutional status of Hispanic students. This difference represented a very large effect size (Cohen's d) of 3.00 (Cohen, 1998). The 1-year persistence rates of Hispanic students who stayed at the same 4-year public university were over 48% higher than the 1-year persistence rates of Hispanic students who transferred to a different 4-year public university. Revealed in Table 4.2 are the descriptive statistics for this analysis.

Concerning the 2008-2009 academic year, a statistically significant difference was again present in the 1-year persistence rates, $t(37) = 9.72, p < .001$, as a function of the institutional status of Hispanic students. This difference represented a large effect size (Cohen's d) of 1.98 (Cohen, 1998). The 1-year persistence rates of Hispanic students who stayed at the same 4-year public university were over 42% higher than the 1-year persistence rates of Hispanic students who transferred to a different 4-year public university. Table 4.2 contains the descriptive statistics for this analysis.

With respect to the 2009-2010 academic year, a statistically significant difference was yielded in the 1-year persistence rates, $t(37) = 11.16, p < .001$, as a function of the institutional status of Hispanic students. This difference represented a large effect size (Cohen's d) of 2.67 (Cohen, 1998). The 1-year persistence rates of Hispanic students who stayed at the same 4-year public university were over 43% higher than the 1-year persistence rates of Hispanic students who transferred to a different 4-year public university. Delineated in Table 4.3 are the descriptive statistics for this analysis.

Insert Table 4.3 about here

Regarding the 2010-2011 academic year, a statistically significant difference was revealed in the 1-year persistence rates, $t(37) = 12.64, p < .001$, as a function of institutional status for Hispanic students. This difference represented a large effect size (Cohen's d) of 2.90 (Cohen, 1998). The 1-year persistence rates of Hispanic students who stayed at the same 4-year public university were almost 49% higher than the 1-year persistence rates of Hispanic students who transferred to a different 4-year public university. Readers are directed to Table 4.3 for the descriptive statistics for this analysis.

For the 2011-2012 academic year, a statistically significant difference was yielded in the 1-year persistence rates, $t(37) = 13.71, p < .001$, as a function of the institutional status of Hispanic students. This difference represented a very large effect size (Cohen's d) of 3.03 (Cohen, 1998). The 1-year persistence rates of Hispanic students who stayed at the same 4-year public university were almost 50% higher than the 1-year persistence rates of Hispanic students who transferred to a different 4-year public university.

Revealed in Table 4.3 are the descriptive statistics for this analysis.

Concerning the 2012-2013 academic year, a statistically significant difference was revealed in the 1-year persistence rates, $t(37) = 13.49, p < .001$, as a function of the institutional status of Hispanic students. This difference represented a large effect size (Cohen's d) of 2.81 (Cohen, 1998). The 1-year persistence rates of Hispanic students who stayed at the same 4-year public university were almost 49% higher than the 1-year

persistence rates of Hispanic students who transferred to a different 4-year public university. Table 4.3 contains the descriptive statistics for this analysis.

With respect to the 2013-2014 academic year, a statistically significant difference was yielded in the 1-year persistence rates, $t(37) = 7.32, p < .001$, as a function of the institutional status of Hispanic students. This difference represented a large effect size (Cohen's d) of 1.97 (Cohen, 1998). The 1-year persistence rates of Hispanic students who stayed at the same 4-year public university were almost 43% higher than the 1-year persistence rates of Hispanic students who transferred to a different 4-year public university. Delineated in Table 4.3 are the descriptive statistics for this analysis.

Research Question Two Results

To answer the second research question, statistical analyses were conducted separately for three comparisons: (a) between the 1999-2000 and the 2007-2008 academic years, (b) between the 2007-2008 and 2013-2014 academic years, and (c) between the 1999-2000 and the 2013-2014 academic years. Specifically analyzed were the 1-year persistence rates of Hispanic students who stayed at the same 4-year university. Results will now be presented, beginning with the 1999-2000 and the 2007-2008 academic year comparison.

For the 1999-2000 and the 2007-2008 academic year comparison, a statistically significant difference was revealed in the 1-year persistence rates, $t(34) = -2.48, p = .02$, for Hispanic students who stayed at the same Texas 4-year public university. This difference represented a small effect size (Cohen's d) of 0.26 (Cohen, 1998). The 1-year persistence rate for Hispanic students who stayed was approximately 5% higher from the 1999-2000 to the 2007-2008 academic year. The 1-year persistence rate for Hispanic

students who stayed was approximately 57% in the 1999-2000 academic year and over 62% in the 2007-2008 academic year. Readers are directed to Table 4.4 for the descriptive statistics for this analysis.

 Insert Table 4.4 about here

Concerning the 2007-2008 and the 2013-2014 academic year comparison, a statistically significant difference was not yielded in the 1-year persistence rates, $t(34) = -0.04$, $p = .96$, of Hispanic students who stayed at the same Texas 4-year public university. The 1-year persistence rates of Hispanic students who stayed were similar, 62% and 59%, respectively, in the 2007-2008 and the 2013-2014 academic years. Revealed in Table 4.4 are the descriptive statistics for this analysis.

With respect to the 1999-2000 and the 2013-2014 academic year comparison, a statistically significant difference was not revealed in the 1-year persistence rates, $t(34) = -1.54$, $p = .13$, of Hispanic students who stayed at the same Texas 4-year public university. The 1-year persistence rates of Hispanic students who stayed were similar, 57% and 59%, respectively, in the 1999-2000 and the 2013-2014 academic years. Delineated in Table 4.4 are the descriptive statistics for this analysis.

Research Question Three Results

To answer this research question, statistical analyses were conducted separately for three comparisons: (a) between the 1999-2000 and the 2007-2008 academic years, (b) between the 2007-2008 and 2013-2014 academic years, and (c) between the 1999-2000 and the 2013-2014 academic years. Specifically analyzed were the 1-year persistence

rates of Hispanic students who transferred to another 4-year university. Results will now be presented, beginning with the 1999-2000 and the 2007-2008 academic years.

Regarding the 1999-2000 and the 2007-2008 academic years, a statistically significant difference was not present in the 1-year persistence rates, $t(34) = 1.02, p = .31$, of Hispanic students who transferred to a different Texas 4-year public university. The 1-year persistence rates of Hispanic students who transferred to a different 4-year public university were similar, 15% and 14%, respectively, in the 1999-2000 and the 2007-2008 academic years. Table 4.5 contains the descriptive statistics for this analysis.

 Insert Table 4.5 about here

For the 2007-2008 and 2013-2014 academic years, a statistically significant difference was not present in the 1-year persistence rates, $t(34) = -1.36, p = .18$, of Hispanic students who transferred to a different Texas 4-year public university. The 1-year persistence rates of Hispanic students who transferred to a different 4-year public university were similar, 14% and 17%, respectively, in the 2007-2008 and 2013-2014 academic years. Revealed in Table 4.5 are the descriptive statistics for this analysis.

Concerning the 1999-2000 and 2013-2014 academic years, a statistically significant difference was not present in the 1-year persistence rates, $t(34) = -1.20, p = .24$, of Hispanic students who transferred to a different Texas 4-year public university. The 1-year persistence rates of Hispanic students who transferred to a different 4-year public university were similar, 15% and 17%, respectively, in the 1999-2000 and 2013-

2014 academic years. Delineated in Table 4.5 are the descriptive statistics for this analysis.

Research Question Four Results

The final research question involved an analysis of all 15 years of data for the 1-year persistence rates for Hispanic students enrolled at Texas 4-year public universities. As revealed in Table 4.6 and Figure 4.1, trends were present in the 1-year persistence rates by the institutional status (i.e., stayed or transferred) of Hispanic students enrolled at Texas 4-year public universities. The 1-year persistence rates of Hispanic students enrolled at Texas 4-year public universities who stayed at the same Texas 4-year public university were consistently higher than the 1-year persistence rates of Hispanic students who transferred to a different Texas 4-year public university. Over the 15 year period, the 1-year persistence rates of Hispanic students who stayed at the same Texas 4-year public university fluctuated between 55% and 62%. During that same 15 year period, the 1-year persistence rates of Hispanic students who transferred to a different Texas 4-year university varied between 12% and 17%.

Insert Table 4.6 and Figure 4.1 about here

Discussion

In this investigation, the degree to which 1-year persistence rates differed as a function of institutional status (i.e., stayed or transferred) of Hispanic students enrolled at Texas 4-year public universities in the 1999-2000 through the 2013-2014 academic years was examined. Fifteen years of archival data were obtained from the Texas Higher

Education Coordinating Board Interactive Accountability System. In this study, data were analyzed from the 38 Texas 4-year public universities from the 1999-2000 through the 2013-2014 academic years.

For all 15 years of academic data that were analyzed, statistically significant differences were present in the 1-year persistence rates as a function of institutional status (i.e., stayed or transferred) of Hispanic students enrolled at Texas 4-year public universities. The 1-year persistence rates of Hispanic students who stayed at the same 4-year public university ranged from a low 55% of to a high of 62%. In comparison, the 1-year persistence rates of Hispanic students who transferred to a different 4-year public university varied between a low of 12% to a high of 17%. Presented in Table 4.6 and Figure 4.1 are a summary of the results of 1-year persistence rates by institutional status of Hispanic students who were enrolled at Texas 4-year public universities from the 1999-2000 through the 2013-2014 academic years.

Connections with the Existing Literature

Previously, researchers (Ballinger & Slate, 2017; Fauria & Slate, 2014) examined the 1-year persistence rates of Hispanic students by their institutional status at Texas 4-year public universities. In this investigation, the 1-year persistence rates of Hispanic students at Texas 4-year public universities were statistically significantly higher than when they stayed at the same 4-year university than when they transferred to a different 4-year university. These results were consistent with studies conducted by Ballinger and Slate (2017) and Fauria and Slate (2014). In 2014, Fauria and Slate documented that Hispanic students who stayed at the same Texas 4-year public university had a 47% higher 1-year persistence rate in the 1999-2000 academic year and a 51% higher 1-year

persistence rate in 2010-2011 academic year when compared to Hispanic students who transferred to another 4-year university in the same time period. Similarly, Ballinger and Slate (2017) established that Hispanic students who stayed at the same Texas 4-year public university were three times more likely to persist than Hispanic students who transferred to another 4-year university in the 2014 academic year.

Stagg (2017) recently analyzed 1-year persistence rates of Hispanic community college students by their institutional status (i.e., stayed or transferred). Specifically, in her doctoral dissertation, Stagg (2017) explored the differences in 1-year persistence rates by institutional status for Hispanic students at Texas community colleges from the 2007-2008 through the 2013-2014 academic years. Stagg (2017) established that 1-year persistence rates for Hispanic students who stayed at the same Texas community college ranged from a low of 54% to a high of 60% from the 2007-2008 through the 2013-2014 academic years. Conversely, the 1-year persistence rates for Hispanic students who transferred to a different Texas community college ranged from 42% to 51% for those same academic years.

Implications for Policy and for Practice

In this investigation, the 1-year persistence rates for Hispanic students enrolled at Texas 4-year public universities were statistically significantly higher when Hispanic students stayed at the same 4-year university than when they transferred to a different 4-year university in the 1999-2000 through the 2013-2014 academic years. Based upon these results, implications are present for policy and practice. First, Hispanic students enrolled in Texas 4-year public universities should be dissuaded from transferring to another postsecondary setting. Hispanic students who stayed at the same Texas 4-year

public university were 40% to 50% more likely to persist than Hispanic students who transferred to a different 4-year university in the 1999-2000 through the 2013-2014 academic years. Second, existing programs for Hispanic transfer students at Texas 4-year universities should be critically examined because they clearly are not effective. The 1-year persistence rates for Hispanic students who transfer to a different 4-year university have remained consistently very low, ranging from 12% to 17% over the 15 years of analyzed data. Third, administrators at Texas 4-year public universities should consider developing programs that assist Hispanic students in persistence. Finally, any current programs that have high persistence rates should be analyzed by administrators for best practices that may be transferrable to other areas of the university.

Recommendations for Future Research

In this study, the 1-year persistence rates by institutional status for Hispanic students at Texas 4-year public universities was addressed. In future investigations, researchers are encouraged to examine whether differences exist in 1-year persistence rates by the gender of Hispanic students. In addition, researchers should examine 1-year persistence rates by ethnic/racial group membership as the results of this study pertained only to Hispanic students. Another recommendation would be to extend this study to other states to ascertain the extent to which results might be generalizable to other states. Researchers are also encouraged to extend this study to Texas community colleges given the differences that exist between Hispanic students who enroll at community colleges and Hispanic students who enroll at 4-year universities. Next, researchers are encouraged to analyze the relationship of other student demographic characteristics such as economic status or at-risk status with 1-year persistence rates. In future studies, researches should

consider investigating 2-year persistence rates by institutional status for Hispanic students as the results of this study pertained only to the 1-year persistence rates of Hispanic students. Finally, researchers should consider conducting qualitative and/or mixed methods investigations to examine the reasons why Hispanic students transfer to different institutions.

Conclusion

The purpose of this multiyear, statewide investigation was to determine the extent to which differences were present in the 1-year persistence rates of Hispanic students at Texas 4-year public universities by institutional status. Inferential statistical analyses for the 1999-2000 through the 2013-2014 academic years revealed the presence of statistically significant differences in the 1-year persistence rates between Hispanic students who stayed and Hispanic students who transferred in all 15 years of analyzed data. The 1-year persistence rates were statistically significantly higher for Hispanic students who remained stayed at the same Texas 4-year public university than for Hispanic students who transferred to a different Texas 4-year university. Previous researchers (Ballinger & Slate, 2017; Fauria & Slate, 2014; Stagg, 2017) at Texas 4-year public universities and Texas community colleges documented similar results concluding that Hispanic students who stayed at the same Texas 4-year public university or Texas community college were more likely to persist than when they transferred to different Texas 4-year public university or Texas community college.

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Table 4.1

Descriptive Statistics for 1-Year Persistence Rates by the Institutional Status of Hispanic

Undergraduate Students for the 1999-2000 through the 2003-2004 Academic Years

Academic Year and Institutional Status	<i>n</i> of universities	<i>M</i> %	<i>SD</i> %
1999-2000			
Stayed	35	56.55	23.15
Transferred	35	14.96	8.43
2000-2001			
Stayed	35	57.48	23.22
Transferred	35	15.70	8.48
2001-2002			
Stayed	35	57.63	25.62
Transferred	35	15.74	12.45
2002-2003			
Stayed	35	56.40	25.29
Transferred	35	13.29	9.32
2003-2004			
Stayed	34	59.79	24.77
Transferred	34	13.27	7.33

Table 4.2

Descriptive Statistics for 1-Year Persistence Rates by the Institutional Status of Hispanic

Undergraduate Students for the 2004-2005 through the 2008-2009 Academic Years

Academic Year and Institutional Status	<i>n</i> of universities	<i>M</i> %	<i>SD</i> %
2004-2005			
Stayed	35	56.77	25.56
Transferred	35	16.99	16.79
2005-2006			
Stayed	35	56.69	25.23
Transferred	35	14.00	8.10
2006-2007			
Stayed	35	59.82	23.26
Transferred	35	13.48	6.53
2007-2008			
Stayed	35	62.37	21.40
Transferred	35	14.02	7.93
2008-2009			
Stayed	38	55.37	28.71
Transferred	38	12.88	3.73

Table 4.3

Descriptive Statistics for 1-Year Persistence Rates by the Institutional Status of Hispanic

Undergraduate Students for the 2009-2010 through the 2013-2014 Academic Years

Academic Year and Institutional Status	<i>n</i> of universities	<i>M</i> %	<i>SD</i> %
2009-2010			
Stayed	38	58.78	23.00
Transferred	38	15.63	10.72
2010-2011			
Stayed	38	62.03	21.95
Transferred	38	13.44	8.88
2011-2012			
Stayed	38	62.24	22.16
Transferred	38	12.59	6.86
2012-2013			
Stayed	38	60.95	23.59
Transferred	38	12.34	6.61
2013-2014			
Stayed	38	59.45	25.46
Transferred	38	16.80	16.99

Table 4.4

Descriptive Statistics for 1-Year Persistence Rates of Hispanic Undergraduate Students Who Stayed at the Same University for the 1999-2000 and 2007-2008, 2007-2008 and 2013-2014, and for the 1999-2000 and 2013-2014 Academic Year Comparisons

Academic Year Comparison	<i>n</i> of universities	<i>M</i> %	<i>SD</i> %
Beginning to Midpoint			
1999-2000	35	56.55	23.15
2007-2008	35	62.37	21.40
Midpoint to Ending			
2007-2008	35	62.37	21.40
2013-2014	35	59.45	25.46
Beginning to Ending			
1999-2000	35	56.55	23.15
2013-2014	35	59.45	25.46

Table 4.5

Descriptive Statistics for 1-Year Persistence Rates of Hispanic Undergraduate Students Who Transferred to a Different University for the 1999-2000 and 2007-2008, 2007-2008 and 2013-2014, and for the 1999-2000 and 2013-2014 Academic Year Comparisons

Academic Year Comparison	<i>n</i> of universities	<i>M</i> %	<i>SD</i> %
Beginning to Midpoint			
1999-2000	35	14.96	8.43
2007-2008	35	14.02	7.93
Midpoint to Ending			
2007-2008	35	14.02	7.93
2013-2014	35	16.80	16.99
Beginning to Ending			
1999-2000	35	14.96	8.43
2013-2014	35	16.80	16.99

Table 4.6

*Summary of Results for the 1-Year Persistence Rate Analyses of Hispanic**Undergraduates in the 1999-2000 Academic Year through the 2013-2014 Academic Year*

Academic Year	Statistically Significant	Effect Size	Higher Persistence Rate	Difference in Persistence Rates%
1999-2000	Yes	Large	Stayed	41.59
2000-2001	Yes	Large	Stayed	41.78
2001-2002	Yes	Large	Stayed	41.89
2002-2003	Yes	Large	Stayed	43.11
2003-2004	Yes	Large	Stayed	46.52
2004-2005	Yes	Large	Stayed	39.78
2005-2006	Yes	Large	Stayed	42.69
2006-2007	Yes	Large	Stayed	46.34
2007-2008	Yes	Large	Stayed	48.28
2008-2009	Yes	Large	Stayed	42.49
2009-2010	Yes	Large	Stayed	43.15
2010-2011	Yes	Large	Stayed	48.59
2011-2012	Yes	Large	Stayed	49.65
2012-2013	Yes	Large	Stayed	48.61
2013-2014	Yes	Large	Stayed	42.65

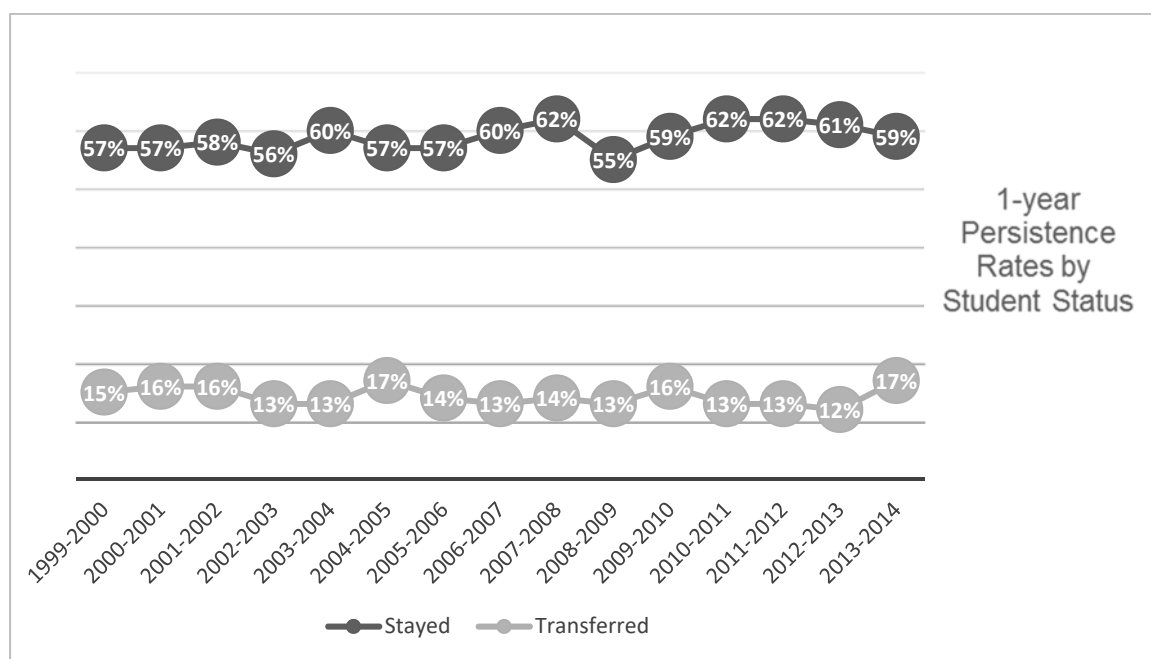


Figure 4.1. Trends in the 1-year persistence rates by the institutional status of Hispanic undergraduate students for 1999-2000 through the 2013-2014 academic years.

CHAPTER V

DISCUSSION

The purposes of this journal-ready dissertation were threefold. The first purpose was to determine the degree to which 1-year persistence rates differed as a function of the institutional status (i.e., stayed or transferred) of students enrolled at Texas 4-year public universities in the 1999-2000 through the 2013-2014 academic years. The second purpose was to analyze the degree to which differences existed in the 1-year persistence rates by the institutional status (i.e., stayed at the same Texas 4-year public university or transferred to a different Texas 4-year public university) of Black students enrolled in the 1999-2000 to the 2013-2014 academic years. The third purpose was to examine 1-year persistence rates by the institutional status of Hispanic students enrolled in Texas 4-year public universities in the 1999-2000 to the 2013-2014 academic years. Through analyzing multiple years of data for each of the thirty-eight Texas 4-year public universities, any trends that were present in the 1-year persistence rates by student institutional status at Texas 4-year public universities were determined.

In the first journal ready article, the 1-year persistence rates of undergraduate students at Texas 4-year public universities were analyzed by institutional status (i.e., stayed at the same Texas 4-year university or transferred to a different Texas 4-year university) for the 1999-2000 through the 2013-2014 academic years. In the second study, the 1-year persistence rates of Black students at Texas 4-year public universities were examined by institutional status for the 1999-2000 through the 2013-2014 academic years. In the final article, the 1-year persistence rates of Hispanic students at Texas 4-year public universities were examined by institutional status for the 1999-2000 through

the 2013-2014 academic years. Each of the three studies included 15 years of data from the 38 Texas 4-year public universities. This chapter contains a brief summary of each of the articles and a discussion of the results. Implications for policy and practice are discussed and recommendations for future studies are also provided.

Summary of Study One Results

In the first study, the extent to which differences were present in the 1-year persistence rates of undergraduate students at Texas 4-year public universities by their institutional status (i.e., stayed at the same 4-year university or transferred to a different 4-year university) was addressed. Data were obtained from the Texas Higher Education Coordinating Board Interactive Accountability System for the 1999-2000 through the 2013-2014 academic years. Inferential statistical procedures revealed the presence of statistically significant differences, with large effect sizes, in all 15 years of 1-year persistence rate data analyzed. In the 15 years of Texas statewide data that were examined, undergraduate students who stayed at the same Texas 4-year university had statistically significantly higher 1-year persistence rates than undergraduate students who transferred to a different Texas 4-year university. The average 1-year persistence rate for undergraduate students who stayed at the same Texas 4-year public university was 60% whereas the average 1-year persistence rate for undergraduate students who transferred to a different 4-year university was 14%. Presented in Table 5.1 are a summary of the results for the 1-year persistence rates of undergraduate students by their institutional status (i.e., stayed or transferred) in Texas 4-year public universities across all 15 years of data analyzed in the study.

Table 5.1

Summary of Results for the 1-Year Persistence Rates by the Institutional Status of Texas

Undergraduate Students for the 1999-2000 through the 2013-2014 Academic Years

Academic Year	Statistically Significant	Effect Size	Lowest Performing Group
1999-2000	Yes	Large	Transferred
2000-2001	Yes	Large	Transferred
2001-2002	Yes	Large	Transferred
2002-2003	Yes	Large	Transferred
2003-2004	Yes	Large	Transferred
2004-2005	Yes	Large	Transferred
2005-2006	Yes	Large	Transferred
2006-2007	Yes	Large	Transferred
2007-2008	Yes	Large	Transferred
2008-2009	Yes	Large	Transferred
2009-2010	Yes	Large	Transferred
2010-2011	Yes	Large	Transferred
2011-2012	Yes	Large	Transferred
2012-2013	Yes	Large	Transferred
2013-2014	Yes	Large	Transferred

Summary of Study Two Results

In the second investigation, the degree to which differences were present in the 1-year persistence rates of Black students at Texas 4-year public universities by institutional status (i.e., stayed at the same Texas 4-year university or transferred to a different 4-year university) were analyzed. Fifteen years of archival data from the Texas Higher Education Coordinating Board Interactive Accountability System were obtained and analyzed for the 1999-2000 through the 2013-2014 academic year. Inferential statistical procedures revealed the presence of statistically significant differences, with large effect sizes, in all 15 years of data examined. In the 15 years analyzed, Black students who stayed at the same Texas 4-year public university were statistically significantly more likely to persist than Black students who transferred to a different Texas 4-year public university. The average 1-year persistence rate for Black students who stayed at the same 4-year university was 56% whereas the average 1-year persistence rates for Black students who transferred to a different 4-year university was 13%. Readers are directed to Table 5.2 for a summary of the results for the 1-year persistence rates of Black students by their institutional status (i.e., stayed or transferred) in Texas 4-year public universities across all 15 years of data in the study.

Table 5.2

Summary of Results for the 1-Year Persistence Rates by the Institutional Status of Texas

Black Undergraduate Students for the 1999-2000 through the 2013-2014 Academic Years

Academic Year	Statistically Significant	Effect Size	Lowest Performing Group
1999-2000	Yes	Large	Transferred
2000-2001	Yes	Large	Transferred
2001-2002	Yes	Large	Transferred
2002-2003	Yes	Large	Transferred
2003-2004	Yes	Large	Transferred
2004-2005	Yes	Large	Transferred
2005-2006	Yes	Large	Transferred
2006-2007	Yes	Large	Transferred
2007-2008	Yes	Large	Transferred
2008-2009	Yes	Large	Transferred
2009-2010	Yes	Large	Transferred
2010-2011	Yes	Large	Transferred
2011-2012	Yes	Large	Transferred
2012-2013	Yes	Large	Transferred
2013-2014	Yes	Large	Transferred

Summary of Study Three Results

In the final study, the extent to which differences were present in the 1-year persistence rates of Hispanic students at Texas 4-year public universities by institutional status (i.e., stayed at the same 4-year university or transferred to a different 4-year university) were examined. Fifteen years of archival data from the Texas Higher Education Coordinating Board Interactive Accountability System were analyzed for the 1999-2000 through the 2013-2014 academic years. For all 15 years examined, statistically significant differences were present, with large effect sizes, for the 1-year persistence rate data. In the 15 years analyzed, Hispanic students who stayed at the same Texas 4-year public university were statistically significantly more likely to persist than Hispanic students who transferred to another Texas 4-year university. The average 1-year persistence rate for Hispanic students who stayed at the same 4-year university was 59% whereas the average 1-year persistence rate for Hispanic students who transferred to a different 4-year university was 14%. Presented in Table 5.3 is a summary of results of the 1-year persistence rates of Hispanic students by their institutional status (i.e., stayed or transferred) at Texas 4-year public universities for all 15 academic years analyzed.

Table 5.3

Summary of Results for the 1-Year Persistence Rates by Institutional Status of Texas

Hispanic Undergraduate Students for the 1999-2000 through the 2013-2014 Academic Years

Academic Year	Statistically Significant	Effect Size	Lowest Performing Group
1999-2000	Yes	Large	Transferred
2000-2001	Yes	Large	Transferred
2001-2002	Yes	Large	Transferred
2002-2003	Yes	Large	Transferred
2003-2004	Yes	Large	Transferred
2004-2005	Yes	Large	Transferred
2005-2006	Yes	Large	Transferred
2006-2007	Yes	Large	Transferred
2007-2008	Yes	Large	Transferred
2008-2009	Yes	Large	Transferred
2009-2010	Yes	Large	Transferred
2010-2011	Yes	Large	Transferred
2011-2012	Yes	Large	Transferred
2012-2013	Yes	Large	Transferred
2013-2014	Yes	Large	Transferred

Summary of Results Across the Three Studies

Across the three studies conducted in this journal-ready dissertation, statistically significant relationships, with large effect sizes, were present in 100% of the analyses. First, Texas undergraduate students who stayed at the same Texas 4-year public university were 42% to 51% more likely to persist than Texas undergraduate students who transferred to a different Texas 4-year public university in the 1999-2000 through the 2013-2014 academic years. Second, Black students at Texas 4-year public universities were 35% to 49% more likely to persist when they stayed at the same 4-year university when compared to Black students who transferred to another 4-year university in the 1999-2000 through the 2013-2014 academic years. Finally, Hispanic students who stayed at the same Texas 4-year public university were 40% to 50% more likely to persist than Hispanic students who transferred to a different 4-year university in the 1999-2000 through the 2013-2014 academic years. In all instances, students who stayed at the same Texas 4-year university were statistically significantly more likely to persist than their peers who transferred to a different Texas 4-year university. Presented in Figure 5.1 is a summary of the 1-year persistence rates of Texas undergraduate students, Black students, and Hispanic students who stayed at the same Texas 4-year public university in the 1999-2000 through the 2013-2014 academic years.

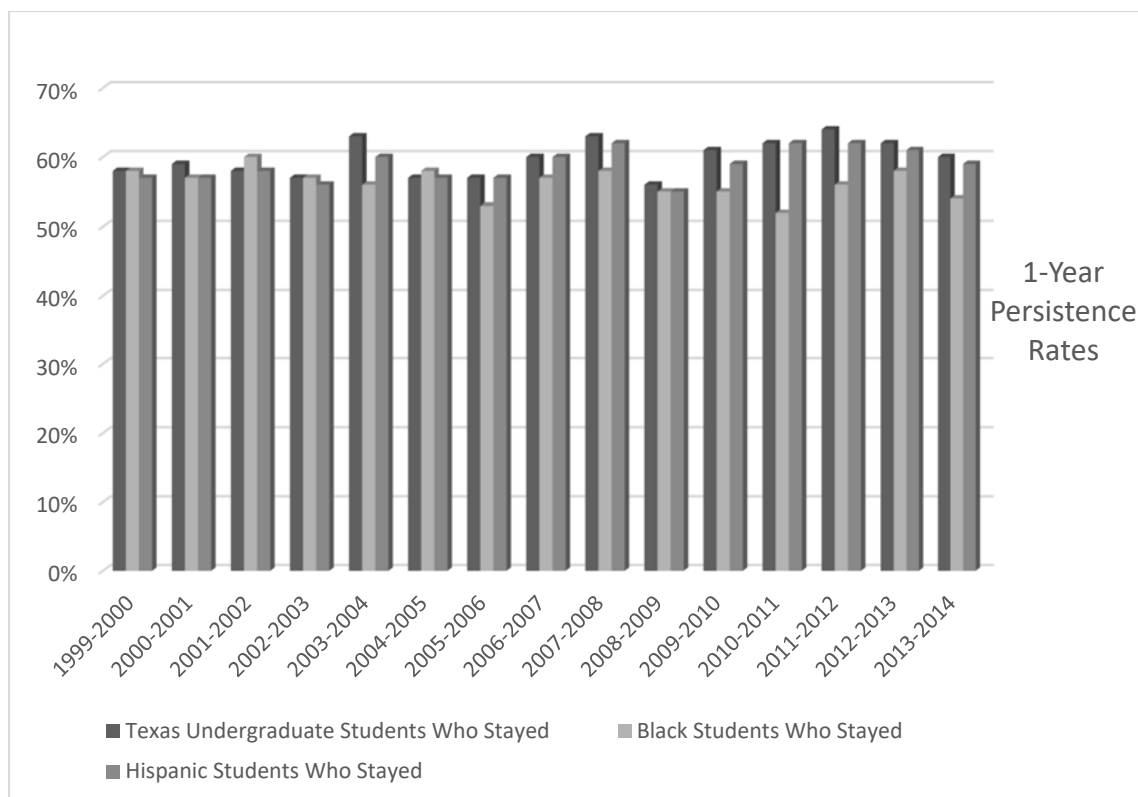


Figure 5.1. Summary of 1-year persistence rates of Texas undergraduate students, Black students, and Hispanic students who stayed at the same Texas 4-year public university in the 1999-2000 through the 2013-2014 academic years.

Depicted in Figure 5.2 is a summary of the 1-year persistence rates of Texas undergraduate students, Black students, and Hispanic students who transferred to a different Texas 4-year public university during the same time period. As revealed in this figure, the 1-year persistence rates for all three groups of undergraduate students were consistently low across the 15 academic years. Less than 20% of these students who transferred to a different Texas 4-year university persisted for one year.

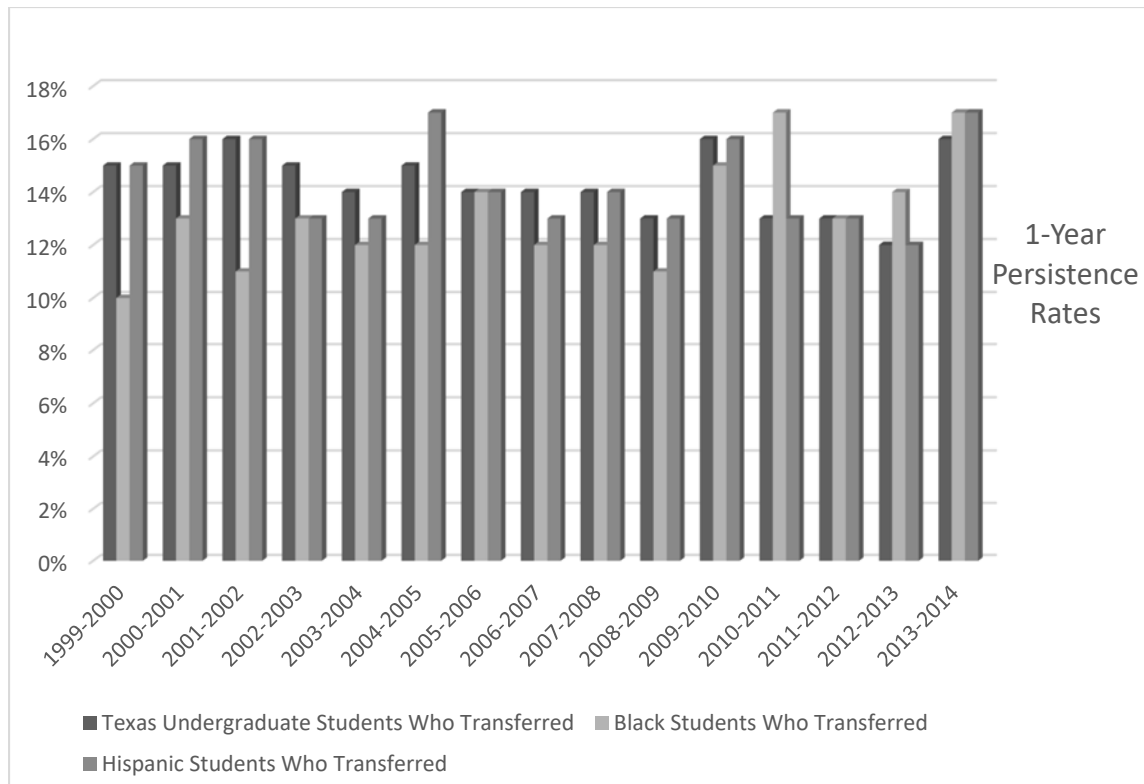


Figure 5.2. Summary of 1-year persistence rates of Texas undergraduate students, Black students, and Hispanic students who transferred a different Texas 4-year public university in the 1999-2000 through the 2013-2014 academic years.

Connections to Theoretical Framework

In this journal ready dissertation, Tinto's (1987) theory of effective retention was used as the theoretical framework. Tinto contended three principles of effective retention were present: (a) institutional commitment, (b) educational commitment, and (c) the development of social and intellectual communities. As revealed in the results of the three empirical studies conducted in this journal-ready dissertation, Texas undergraduate students, Black students, and Hispanic students were statistically significantly more likely to persist when they stayed at the same Texas 4-year public university than when they transferred to a different Texas 4-year public university. As such, students should be discouraged from transferring to different institutions. As Tinto (1987) described, higher education administrators should strive to create a student centered environment, provide a

quality education, and integrate students into the institution, both intellectually and socially. When institutions can successfully create relationships with students, student persistence will increase. Administrators should encourage student interaction with the faculty and staff, both in and out of the classroom, and create a sense of community, entrenching the student at the university and increasing the likelihood of student persistence.

Implications for Policy and Practice

In this investigation, the 1-year persistence rates for Texas undergraduate students who remained at the same 4-year university were, at a minimum, 42% higher when compared to Texas undergraduate students who transferred to a different 4-year university over the 15 years of analyzed data. With respect to Black students, 1-year persistence rates were, at a minimum, 35% higher for Black students who stayed at the same Texas 4-year university than for Black students who transferred to a different Texas 4-year university. Finally, Hispanic students who stayed at the same Texas 4-year public university were, at a minimum, 40% more likely to persist than Hispanic students who transferred to a different Texas 4-year public university. Findings from the three studies have important implications for policy and practice at Texas 4-year public universities.

First, students attending Texas 4-year public universities should be discouraged from transferring. As documented in these studies, Texas undergraduate students, Black students, and Hispanic students were, at a minimum, 42%, 35%, and 40% more likely to persist when they stayed at the same Texas 4-year public university than when they transferred to a different Texas 4-year public university, respectively, in the 1999-2000 through the 2013-2014 academic years. Next, existing retention programs should be

evaluated because they clearly are not effective. The 1-year persistence rates for transfer students have remained low and stable over the last 15 years for Texas undergraduate students, Black students, and Hispanic students. One-year persistence rates for Texas undergraduate transfer students ranged from a low of 12% and a high of 16%, a low of 10% and a high of 17% for Black transfer students, and a low of 12% and a high of 17% for Hispanic transfer students over the 15 years of analyzed data. Third, higher education administrators at Texas 4-year public universities should consider developing new programs for student persistence. Targeted in these programs should be the needs of transfer students, in general, and consider designing specific programs for Black students and Hispanic students. Finally, any existing programs that have high persistence rates should be examined to determine any best practices that could be implemented in other areas of the university.

Recommendations for Future Research

Based upon the results of the investigations conducted in this journal ready dissertation, recommendations can be made for future research. First, researchers are encouraged to extend this investigation to other states to determine whether the documented results herein are generalizable to other states. Next, researchers are encouraged to examine 1-year persistence rates by ethnic/racial group membership. The results of the three investigations in this study pertained to Texas undergraduate students, Black students, and Hispanic students at Texas 4-year public universities. Researchers could conduct, for example, similar investigations to examine 1-year persistence rates for White students and Asian students. Third, researchers are encouraged to determine whether differences are present between male and female students in their 1-year

persistence rates. A fourth recommendation would be for researchers to extend this study to Texas community colleges given the differences that exist between the characteristics of students who enroll at 4-year universities and students who enroll at community colleges.

Next, researchers could investigate 2-year persistence rates by institutional status as only 1-year persistence rate data were analyzed in this investigation. Researchers should also consider analyzing the relationship of other student demographic characteristics such as their economic status or at-risk status to their persistence at 4-year universities. Seventh, researchers should consider investigating the 1-year persistence rates of English Language Learners, given the large numbers, particularly in Texas. The degree to which the results in this study would be generalizable to English Language Learners is not known. A final recommendation would be for researchers to conduct qualitative and/or mixed methods investigations to determine the reasons why students transfer to different institutions.

Conclusion

The purpose of this journal-ready dissertation was to examine the extent to which differences were present in the 1-year persistence rates of students enrolled in Texas 4-year public universities. Specifically, the 1-year persistence rates of Texas undergraduate students, Black students, and Hispanic students by their institutional status (i.e., stayed or transferred). Statistically significant differences were revealed in all analyses for all three studies. Texas undergraduate students, Black students, and Hispanic students are statistically significantly more likely to persist if they remain at the same Texas 4-year university than if they transfer to a different Texas 4-year university.

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APPENDIX



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

DATE: October 5, 2017

TO: Richard Ballinger [Faculty Sponsor: Dr. John Slate]

FROM: Sam Houston State University (SHSU) IRB

PROJECT TITLE: *Differences In 1-Year Persistence Rates by Institutional Status for Black and Hispanic Students at Texas 4-Year Universities: A Multiyear, Statewide Investigation [T/D]*

PROTOCOL #: 2017-09-35809

SUBMISSION TYPE: INITIAL REVIEW

ACTION: DETERMINATION OF EXEMPT STATUS

DECISION DATE: October 5, 2017

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

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

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

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

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

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

Sincerely,

Donna Desforges
 IRB Chair, PHSC

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

VITA

Richard M. Ballinger

Educational History

Doctor of Education – Educational Leadership
Specialization in Higher Education Administration
Sam Houston State University, Huntsville, Texas

Dissertation: Differences in 1-year Persistence Rates by the Institutional Status of Black and Hispanic Students at Texas 4-Year Universities: A Multiyear, Statewide Investigation

Master of Business Administration
Specialization in Management
Sam Houston State University, Huntsville, Texas

Bachelor of Science in Business Administration
Major in Marketing
Minor in Professional Golf Management
Ferris State University, Big Rapids, Michigan

Publications

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>

Presentations

Ballinger, R. (2016). *Ethnic/racial differences in 1-year persistence rates by institutional status at Texas 4-year universities over time*. Paper presented at Texas Council of Professors of Educational Administration (TCPEA) Graduate Exchange, Houston, TX.

Professional Experience

Director
PGA Golf Management Program and Golf Operations
Sam Houston State University, Huntsville, Texas
February 2005 – Present

Internship/Recruiting Director
 PGA Golf Management Program
Coastal Carolina University, Conway, South Carolina
 April 2003 – January 2005

Professional Affiliations

- Class “A” PGA of America Professional - 1996
- PGA Certified Professional – General Management - 2010
- PGA Certified Professional – Golf Operations - 2011
- PGA Master Professional – General Management – 2011

Committees and Task Forces

- PGA of America National Apprentice Task Force – 2006-2008
- PGA of America National PGA/PGM Task Force – 2008-2010
- PGA of America’s University Accreditation and Evaluation Team – 2008-2013
- Secretary of PGA Golf Management Education Association – 2010-2011
- Southern Texas PGA Golf 2.0 Committee – 2010-2012
- President of PGA Golf Management Education Association – 2012-2013
- Southern Texas PGA Employment Committee Chair – 2012-2014
- PGA of America Adjunct Faculty Member – PGA MPP 2.0 – 2012–present
- PGA Subject Matter Expert, Business Planning – 2010-present
- PGA National Employment Committee – 2015-2017
- Southern Texas PGA Education & Employment Committee Chair – 2015-2016
- Southern Texas PGA Awards Committee – 2015-2016
- Southern Texas PGA Education Committee Chair – 2017-present

Honors and Awards

- Southern Texas PGA Horton Smith Award for outstanding contributions to golf professional education – 2008, 2012, 2014, and 2017
- Finalist, PGA National Horton Smith Award - 2015