

DIFFERENCES IN RATES OF FIRST-TIME IN COLLEGE STUDENTS WHO DID  
NOT PERSIST OR GRADUATE BY THEIR ETHNICITY/RACE AND  
ENROLLMENT STATUS IN TEXAS COMMUNITY COLLEGES: A MULTIYEAR,  
STATEWIDE STUDY

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A Dissertation

Presented to

The Faculty of the Department of Educational Leadership

Sam Houston State University

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In Partial Fulfillment

of the Requirements for the degree of

Doctor of Education

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By

Alisa M. McLendon

May, 2022

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## **DEDICATION**

I dedicate my dissertation work to my family, in memory of my great grandparents and grandparents of Matevosyan and Manukyan families who survived the Armenian Genocide of 1915, the Soviet Regime, and World War II. My ancestors never gave up despite dreadful life challenges. The example of their resilience and perseverance is a guide to me through all of life's challenges.

I want to express a special feeling of gratitude to each of my loving parents. This dissertation is dedicated to the memory of my dear father, Miqayel Matevosyan, who always supported me in anything that I chose to do. My father was an icon of honesty, integrity, and perseverance, and a man who led by example. I also dedicate my work to my mother, Gohar Manukyan, who never stops believing in me, and inspires me to achieve more.

I dedicate this dissertation to my loving husband W. Edward McLendon, who believes in me more than I believe in myself. His unwavering support and constant encouragements were always with me through the completion of the coursework and this dissertation. This dissertation is also dedicated to my son Michael E. McLendon III, the sunshine of my life, a great human being that spreads love and joy wherever he goes. My son has supported me through my studies, provided feedback on my presentations, and constantly encouraged and checked on my progress in writing this dissertation, not because he was promised a puppy. This dissertation is also dedicated to my loving sister and best friend Anna Matevosyan and her children Ella, Artak, and Gohar. Anna has never told me “no” and has unconditionally supported me throughout my graduate studies.

Lastly, to my son Michael, my niece Ella, my nephew Artak, and my niece Gohar-it is your turn now to carry the torch of education to the heights of excellence. I believe in each of you, and I know that you will be successful in anything you choose to do. Do not forget your ancestors and the sacrifices they made to guide us to success, prosperity, and a deeper understanding of our world.

## ABSTRACT

McLendon, Alisa M., *Differences in rates of first-time in college students who did not persist or graduate by ethnicity/race and enrollment status in Texas community colleges: A multiyear, statewide study*. Doctor of Education (Educational Leadership), May 2022, Sam Houston State University, Huntsville, Texas.

### **Purpose**

The purpose of this journal-ready dissertation was to determine the degree to which the rates of students who did not persist or graduate had changed from the 2014-2015 academic year through the 2019-2020 academic year for first-time in college students by their ethnicity/race (i.e., Hispanic, Black, White, and Asian) and enrollment status (i.e., full-time and part-time) in Texas community colleges. Any trends that were present in the rates of students who did not persist or graduate of Texas community college students by their ethnicity/race and enrollment status were determined.

### **Method**

A non-experimental causal-comparative research design was used (Johnson & Christensen, 2020) in this journal-ready dissertation. Archival data from the Texas Higher Education Coordinating Board Interactive Accountability System were obtained and analyzed for six academic years by student enrollment status and ethnicity/race. The Texas Higher Education Coordinating Board links student ethnicity/race and enrollment status with the academic year and first-time in college status; therefore, parametric paired samples *t*-tests were calculated.

### **Findings**

Statistically significant increases were documented in the rates of Hispanic and Black first-time in college students who did not persist or graduate in Texas community colleges over six academic years. The rates of Hispanic and Black first-time in college

students with full-time enrollment status who did not persist or graduate were 43% and 49%, respectively. The rates of Hispanic and Black first-time in college students with part-time enrollment status fluctuated at 30% and 50%, respectively. Hispanic and Black first-time in college students did not persist or graduate at about 40% and 50%, respectively, regardless of their enrollment status. The rates of White and Asian first-time in college students with full-time enrollment status who did not persist or graduate were 33% and 26%, respectively. The rates of White and Asian first-time in college students with part-time enrollment status varied at 47% and 28%, respectively. White and Asian first-time in college students did not persist or graduate at about 40% and 27%, respectively, regardless of their enrollment status. Overall, the rates of Hispanic, Black, White, and Asian students were highest in the 2019-2020 academic year at 41.35%, 52.43%, 42.13%, 27.92%, respectively.

*Keywords:* Texas community colleges; First-time in college students; Ethnicity; Race; Full-time enrollment status; Part-time enrollment status; College persistence; College graduation

## ACKNOWLEDGEMENTS

I am grateful for the opportunities I have received as a doctoral student in the Higher Education Leadership doctoral program at Sam Houston State University, and for the knowledgeable faculty and researchers who willingly shared their insights with me. I also want to acknowledge the administration, faculty, and staff of Lone Star College for their support with my educational journey and for providing me the opportunity to grow professionally for the last nine years.

First, my sincerest gratitude goes to Dr. John R. Slate for serving as my dissertation chair. None of this journey would have been possible without his continued guidance and support. I cross the finish line of graduation today because of Dr. Slate and his dedication to his students. Dr. Slate is known among his students as “The Machine” for his tremendous love for teaching, continuous patience with his students, constant guidance, continuous support, and endless feedback through each step of the way during both classes and the dissertation writing process. I am grateful for everything that Dr. Slate taught me, and it has been an honor to join the ranks of Dr. Slate’s doctoral students.

I would like to thank my dissertation committee members Dr. Frederick C. Lunenburg, Dr. Cynthia Martinez-Garcia, Dr. Janene W. Hemmen, for their guidance and feedback on my dissertation. I would also like to acknowledge all my Educational Leadership faculty: Dr. Julie Combs, Dr. Paul Eaton, Dr. Matthew Fuller, Dr. Peggy Holzweiss, Dr. Ricardo Montelongo, Dr. Meredith Billings, Dr. Gabriela Silvestre, Dr. Susan Troncoso Skidmore, and Dr. Slate for their guidance, support, feedback, and suggestions that influenced and shaped me as a scholar.

I want to acknowledge my fellow students in Cohort 41 - Yolanda Lopez, Kate Dumond, Christopher Dudley, Laura Cardiel, Erika Herrera, Kyle Ashton, Jamila Clayton, Jean Loveall, Veronica Gonzalez Hoff, and Cierra Sterling - for the opportunity to learn from each of them during my journey. I am especially thankful to Yolanda Lopez for her continuous encouragement, support, and friendship during my studies and the dissertation writing process. I am grateful to be part of Cohort 41 and for the opportunity to form lasting friendships with my fellow classmates. Cohort 41 members were there to support each other during the hardship and challenges of the pandemic, and together we helped each other continue to pursue our studies.

Without the family and friends who supported me through this journey – and who were always there to provide support and comfort through every challenge – this achievement would not have been possible.



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## CHAPTER I

### INTRODUCTION

The United States joined the global competition for increasing skilled workforce and college attendance for growing the country's economic strength in the early 20th century (American Association of Community Colleges, 2021c). Community colleges merged as higher education institutions providing education and training for postsecondary students close to their homes (American Association of Community Colleges, 2021c). The popularity of community colleges because of their open-door admission policy and relatively affordable tuition costs has increased over the years. Community colleges create values influencing the students' lives by offering a wide range of programs and training opportunities that provide social and employment mobility (American Association of Community Colleges, 2014).

With respect to the state of interest for this doctoral dissertation, the Texas Higher Education Coordinating Board (2015b) elaborated that higher education provides avenues for improving the quality of life for Texans. The Texas Higher Education 60X30 Plan was established to increase access and graduation rates at higher education institutions in Texas (Texas Higher Education Coordinating Board, 2015b). The Texas Higher Education Coordinating Board (2015b) described the 60X30 TX plan as “60 percent of the 25-to-34-year-old Texas population to hold a certificate or degree by 2030” (p. iv). Texas community colleges ranked nationwide as number 14 in some degree, no degree attainment in educational degree attainment for ages 25 to 34-year old students, and number 36 in the associate degree or higher for the same age group (Texas Higher Education Coordinating Board, 2020c). The Texas Higher Education Coordinating Board

(2020c) reported that public 2-year institutions of higher education had higher student enrollment rates than 4-year public institutions for Fall 2019. The statewide enrollment at the public community colleges was reported at 769,288 students for Fall 2019, where 76.9 % of the students were enrolled part-time, and 23.1% of the students held full-time enrollment status (Texas Higher Education Coordinating Board, 2020c).

Community college students embody a diverse student population wherein the majority of students are first-time college students, nontraditional students as well as students with low socioeconomic status who want to pursue education and training for entering or re-entering the workforce (Nevarez et al., 2013). Community college first-time college students face a variety of challenges while attending college, challenges that affect their persistence and graduation (Barnett, 2011; Longwell-Grice et al., 2016). College persistence and graduation have been the topic for discussion for many researchers (e.g., Juskiewicz, 2020; Ma & Baum, 2016; Spangler & Slate, 2015) who made numerous recommendations such as implementing student support services to providing academic support in the form of tutoring to increasing the persistence and graduation rates for college students. Recently, McLendon and Slate (2021) stated that students make multiple commitments to the college through admission, class registration, and showing up for the first college class, yet “an important question remains, why do students depart from a college without completing a degree after committing so many times?” (p. 190).

## **Review of Literature on First-Time in College Students Enrolled Full-Time in College**

Higher education has been viewed as a pathway to obtaining successful employment, and community colleges remain the right fit for these viewpoints (Juszkiewicz, 2020). Community colleges in the United States play an essential role in upward mobility and in the career development of individuals (American Association of Community Colleges, 2014). Viewed as a center of American higher education (Ma & Baum, 2016), community colleges contribute substantially to local economies by providing skilled employees for different industries (American Association of Community Colleges, 2014). As such, community colleges are deeply rooted in the communities that they serve as “an economic and workforce development engine” (Nevarez et al., 2013, p. xvii).

Community colleges continue to serve as a pathway for upward mobility and continue to attract many first-time college students. Student enrollment in community colleges is predicted to rise over the next decade (Juszkiewicz, 2020) due to the variety of programs and low tuition costs compared to 4-year colleges (American Association of Community Colleges, 2014). The American Association of Community Colleges (2021) reported about 11.8 million students are enrolled at community colleges nationwide. Of this number, 6.8 million of the students were enrolled in credit courses, and 5 million students were enrolled in noncredit courses.

The open-door enrollment policy as well as the variety of degree and certificate programs attract students from different socioeconomic backgrounds. In Fall 2019, demographic enrollment of students in credit courses at community colleges nationwide

was as follows: 28% Hispanic, 13% Black, 44% White, 6% Asian, and 9% other (American Association of Community Colleges, 2021). Furthermore, 769,288 students were enrolled at the community colleges statewide in Texas in Fall 2019, with the following demographics: 46.8% Hispanic, 12.6% Black, 30% White, and 10.6% other (Texas Higher Education Coordinating Board, 2020). Community colleges are principal pathways and sometimes serve as a last educational opportunity for a diverse student population, especially for students with low socioeconomic status, first-generation college students, and students of color (Nevarez et al., 2013).

Ma and Baum (2016) explored the enrollment trends for community colleges and indicated that 25% of students enrolled at community colleges in Fall 2014 were full-time students. They emphasized that community colleges serve “a large proportion of minority, first-generation, low-income, and adult students” (p. 5). Hispanic and Black students continued to be overrepresented at community colleges, with reported enrollment status increase over the years. Ma and Baum (2016) documented a decline from 29% to 25% in community college student full-time enrollment status between 2010 and 2014 academic years. The decline in full-time enrollment status was attributed to one-third of community college students working full-time while attending college (Ma & Baum, 2016). As such, policymakers were encouraged to consider the academic needs of community college students and to provide means to lift the burdens and barriers for them to succeed.

Chapa et al. (2014) stressed the need for college preparedness as an essential key for college and career success. Chapa et al. (2014) pointed out that the current “educational system was not preparing students for postsecondary studies” (p. 2),

especially for first-time in college students with low-income status. Similarly, Reid and Moore (2008) investigated the first-generation students' perceptions and attitudes about their college education preparedness. First-time in college students who were first-generation students of color with low-socioeconomic status encountered various challenges in college despite their academic successes in high school (Reid & Moore, 2008).

Some students enter postsecondary settings with pre-college academic shortfalls and disadvantages (Stewart et al., 2015). If students do not overcome their academic and social challenges in the first semester at a college, their persistence and graduation from a college will decline. Stewart et al. (2015) elaborated that ethnicity/race was statistically significantly related to student persistence rates, a finding that was consistent with the prior research studies conducted almost two decades ago. The importance of students overcoming academic challenges in their first semester of college was pointed out as an essential step in the college success of underprepared students.

The American Association of Community Colleges (2021) reported that 29% of the students who attended college were first-generation students. Longwell-Grice et al. (2016) stated that about 43% of first-time in college students identified themselves as the first-generation attending college in their families. First-time in college students enroll in postsecondary settings with unique academic and social challenges. Of importance is that first-time college students who are also first-generation students face unique challenges navigating the college system and, as a result, do not persist and graduate at the same pace as their peers (Longwell-Grice et al., 2016).



Longwell-Grice et al. (2016) documented concerns of Hispanic students at a community college with matriculation from high school to a college and the challenges such as “adjusting to the new setting” (p. 39). Concerns with family support, where their families did not accept a college education as worthy of being pursued, were reported by the participants. The first-time college students felt that they navigated the college system blindfolded without knowing where to start because of a lack of knowledge about the college system and family support. Furthermore, when challenges with being a first-time in college student were added to other issues such as low socioeconomic status and being the first generation in their families to attend college, the odds of persisting and graduating from a college were lowered (Longwell-Grice et al., 2016).

Community college students feel overwhelmed by many challenges that they encounter that affect their college persistence, especially when transferring from one community college to another (Stagg, 2017). Stagg (2017) explored the degree to which differences were present in the 1-year persistence rates for Hispanic students in Texas community colleges by their institutional status (i.e., stayed or transferred). Statistically significant differences were reported in 1-year persistence rates for Hispanic students by their institutional status in six out of seven academic years. The 1-year persistence rate of Hispanic students in Texas community colleges who stayed at the same institution varied from a low 54% to a high of 60%. On the other hand, the 1-year persistence rate of Hispanic students who transferred from one Texas community college to another fluctuated from a low 42% to a high of 51%. Stagg (2017) documented that Hispanic community college students who stay at the same institution were more likely to persist than when they transfer to another institution.

Similarly, the extent to which differences existed in 1-year persistence rates of Black students in Texas community colleges was explored by Moss (2017). The 1-year persistence rates of Black students who stayed at the same Texas community college varied from low of 38% to high 46%, whereas the 1-year persistence rates of Black students who transferred to another Texas community college ranged from low 27% to a high of 37%. Moss (2017) established that Black students who stayed at the same Texas community college were more likely to persist than when they transferred to another college. Results were similar for Hispanic students (Stagg, 2017).

In another Texas investigation, Ballinger (2018) examined the degree to which 1-year persistence rates fluctuated for Black and Hispanic students as a function of the institutional status (i.e., stayed or transferred) at Texas 4-year public universities over 15 academic years. Ballinger (2018) recorded statistically significant differences regarding the 1-year persistence rates by student institutional status for all 15 academic years for the Black students in Texas 4-year public universities. The 1-year persistence rates of Black students who remained at the same Texas 4-year public university were statistically significantly higher than Black students who transferred to a different 4-year public university. Results for 1-year persistence rates of Hispanic students who stayed at the same Texas 4-year public universities were reported statistically significant as well. Hispanic students who stayed at the same 4-year public university were 40 to 50% more likely to persist and to graduate than were Hispanic students who transferred to another 4-year public university. As documented, Black students were 35% more likely to persist at the same Texas 4-year public university than when they transferred to another university (Ballinger, 2018).

Of importance to this article, Lebron (2017) investigated enrollment by ethnicity/race for first-time in college students at Texas community colleges. He documented the presence of statistically significant differences in the enrollment of Hispanic first-time in college students with full-time enrollment status at Texas community colleges. A notable increase occurred in the enrollment percentages of Hispanic community college students, from 25% in the 1999-2000 academic year to 42% in the 2014-2015 academic year who were first-time in college students and enrolled full-time at Texas community colleges (Lebron, 2017).

In contrast with the increase in the percentage of Hispanic students, a statistically significant decrease in enrollment percentages was noted for White students who were first-time college students with full-time enrollment status. The percentages of the first-time in college, full-time White student enrollment decreased from 47% in the 1999-2000 academic year to 37% in the 2014-2015 academic year. Moreover, Lebron (2017) determined that the percentages of Black and Asian students who were first-time in college students with a full-time enrollment status remained consistent over the 15 years of data analyzed.

In a recent investigation, also conducted in Texas, Maynard (2020) investigated whether gender differences were present for first-time in college students with full-time enrollment status at Texas community colleges over 16 years. Male and female first-time in college full-time student enrollment at Texas community colleges remained constant over 16 years. Male first-time in college full-time student enrollment rates varied from 45.96% in the 2004-2005 academic year to 48.44% in the 2016-2017 academic year. These enrollment rates were reflective of a change of 2.48% increase. Female first-time

in college full-time student enrollment rates changed from 54.04% in the 2004-2005 academic year to 51.56% in the 2016-2017 academic year, a decrease of 2.48%. Over the 16 academic year period, enrollment rates for female full-time first-time in college students were greater than the enrollment rates for male counterparts (Maynard, 2020).

### **Review of Literature on First-Time in College Students Enrolled Part-Time in College**

Community colleges in the United States are valued for offering programs for students in achieving academic goals and in developing skills for employment (American Association of Community Colleges, 2014). Community colleges support and influence the industrial sector of the United States by providing skillful employees (American Association of Community Colleges, 2014). The open-door enrollment policy of community colleges welcomes students from different academic and socioeconomic backgrounds. With respect to the state of interest for this article, the Texas Higher Education Coordinating Board established the 60X30 Plan to increase students' college access and graduation rates at the higher educational institutions in Texas (Texas Higher Education Coordinating Board, 2015). The 60X30 plan was defined by the Texas Higher Education Coordinating Board (2015) as "60 percent of the 25-to-34-year-old Texas population to hold a certificate or degree by 2030" (p. iv). Student enrollment at community colleges was 769,288 students for Fall 2019, where 76.9% of students were enrolled part-time (Texas Higher Education Coordinating Board, 2020).

The American Association of Community Colleges (2021) reported that 65% of community college students were enrolled part-time, with 6.8 million students enrolled in credit courses nationally at community colleges. Of importance is that Juszkievicz

(2020) documented the presence of noticeable gaps in the persistence and graduation rates of students based on their enrollment status. Part-time students persist and graduate at only about half of the rate of full-time students at community colleges (Juszkiewicz, 2020). Despite continued long-term enrollment, part-time community college students continue to struggle and are less likely to graduate with a degree (Juszkiewicz, 2020) than are full-time students.

Student enrollment at community colleges is regarded as being nontraditional in nature, where students change between full-time and part-time enrollment status and even often skip a term or two (Crosta, 2014). Students who attend community colleges are different from their counterparts at 4-year institutions in their academic goals, preparedness, and challenges (Yu, 2017). Working while attending a college was one of the challenges identified by Yu (2017) as a negative factor influencing student college persistence because working took time from students' study time. Additionally, Yu (2017) established that first-time in college part-time students were less likely to make academic progress than were their full-time peers. Crosta (2014) connected the part-time enrollment status of the first-time in college student persistence to factors such as ethnicity/race, socioeconomic status, and family status. Students who started college on a part-time enrollment status were slower in accruing college credits than full-time students. Crosta (2014) affirmed that completing a 2-year degree within the 2-year period was highly unlikely at community colleges with low full-time student enrollment. Community college student persistence and graduation success were attributed to the continuance of full-time enrollment instead of part-time enrollment with few breaks.

Of importance to this article, Lebron (2017) examined undergraduate student enrollment for first-time college students with a part-time enrollment status by their ethnicity/race at Texas community colleges. Statistically significant differences were documented for Hispanic first-time in college with part-time enrollment status. Enrollment percentages of Hispanic first-time in college community college students with part-time enrollment status increased from 24.20% in the 1999-2000 academic year to 43.59% in the 2014-2015 academic year (Lebron, 2017).

In contrast to increasing numbers of part-time enrollment status for first-time in college Hispanic students, the part-time enrollment rates of White first-time in college students was established as decreasing (Lebron, 2017). A notable decrease occurred in the enrollment percentages of White Texas community college students, from 60.97 % in the 1999-2000 academic year to 34.03% in the 2014-2015 academic year who were first-time college students with part-time enrollment status. In contrast, the part-time college enrollment rates of Black and Asian community college students remained constant. Lebron (2017) emphasized that even though noticeable improvements in the ethnic/racial diversity of Texas community college first-time in college students with part-time enrollment status, further investigations for generating ways to improve ethnic/racial diversity were needed.

In a recent study conducted in Texas, Maynard (2020) examined whether gender differences existed in the enrollment rates of first-time in college students in Texas community colleges over 16 years by the part-time enrollment status. Maynard (2020) established that the enrollment rates for male and female first-time in college students in Texas community colleges changed by 3.97 percentage points over the 16 academic years

of data analyzed. Enrollment rates for female first-time in college students with part-time enrollment status in Texas community colleges fluctuated from 53.52% in the 2009-2010 academic year to 57.49% in the 2003-2004 academic year. Enrollment rates for first-time in college male students with part-time enrollment status in Texas community colleges varied from 42.51% in the 2003-2004 academic year to 46.48% in the 2009-2010 academic years. Overall, enrollment rates for first-time in college students with part-time enrolment status at Texas community colleges averaged 44.82% for male students and 55.18% for female students over 16 academic years.

Students who held part-time enrollment status at the community colleges most likely face challenges balancing academic, work, and family responsibilities (Juszkiewicz, 2020), challenges that contribute toward low college persistence and graduation rates. Community college students are enrolled at postsecondary institutions on a part-time basis, usually while employed and after they started a family, and after they have assumed additional responsibilities (Lee, 2017). First-time in college, part-time students face a substantially higher risk in departing from college than their full-time counterparts. Lee (2017) examined the needs and challenges of part-time students at a large community college to find effective ways of enhancing academic and social experiences to increase part-time student persistence and graduation rates. Part-time student challenges were generalized under three overarching factors of “academic, personal, and financial” (Lee, 2017, p. 3) that pose barriers for college persistence and graduation. He reported that 56.10% of the part-time students in the study identified with more than one challenging factor, such as academic, personal, and financial, while attending a community college. A majority of the part-time students, about 82.9%, of the

study expressed balancing school, work, and personal life as the most challenging factor influencing their academic success and college persistence, followed by the academic factor at 39.02% and the financial factor at 36.58%. Findings of the Lee study were consistent with prior research results, and that the three overarching factors of challenges that part-time students encounter were still valid. Lee (2017) concluded that the part-time student population continues to grow in community colleges, and subsequently, the challenges that part-time students face growing with them.

Community colleges enroll almost one-half of the students nationwide and report the lowest persistence and graduation rates (Barnett, 2011). Furthermore, community college students are members of different ethnic/racial groups from low socioeconomic families with limited resources. Barnett (2011) explored connections with student academic integration in a college and intent to persisting and graduating from a college, considering differences in student demographics and faculty validations. Reported was that Hispanic and Black students would more likely articulate a wish for persisting and graduating from college because of faculty encouragement and validation than were their White counterparts. Faculty-student interactions that included academic motivation and approval from the faculty contributed to college persistence and graduation. Recommendations were made toward capitalizing on faculty-student interactions to improve student college persistence and graduation (Barnett, 2011).

Millea et al. (2018) determined that first-year in college student “persistence and graduation rates were higher for students who were academically prepared, received grants or scholarships, and were enrolled in a smaller class” (p. 309). They suggested that higher education institutions consider providing financial assistance and smaller



classrooms to improve first-time in college student persistence and academic success at colleges. Juszkiwicz (2020) predicted an increase in part-time enrollment at the community colleges because of financial challenges faced by students and their families due to the COVID-19 pandemic escalate. Juszkiwicz (2020) drew attention to the gaps among ethnic/racial, sex, and age groups still exist in college completion despite the increasing persistence and graduation rates. Students who historically fell behind continue to face socioeconomic challenges and hardship, especially during the national pandemic year (Juszkiwicz, 2020). In the efforts of targeting to increase the persistence and graduation rates, “equity will have to remain the bull’s eye” (Juszkiwicz, 2020, p. 16).

Moss (2017) investigated the extent to which differences were present in graduation rates of Black and White students in Texas community colleges over nine academic years. Graduation rates of White students were statistically significantly higher than the graduation rates of Black students in Texas community colleges. Graduation rates for White students were highest at 46%, compared to Black students at 34% over nine academic years. White students were more likely to earn a college degree than were Black students. Moss (2017) contended that an immediate need was present to address the gap in graduation rates among ethnic/racial student groups and recommended community college leaders and government officials to decrease that gap.

Stagg (2017) examined the extent to which differences existed in the 1-year graduation rates by ethnicity/race (i.e., Hispanic and White) in Texas community colleges over seven academic years. Stagg (2017) documented the presence of statistically significant differences in graduation rates between Hispanic and White Texas community

college students in the 2008-2009 through the 2012-2013 academic years. Graduation rates for Hispanic students were about 3% lower than the graduation rates for White students at Texas community colleges in the 2008-2009 academic year through the 2012-2013 academic year.

In a similar study, but involving 4-year public universities in Texas, Ballinger (2018) explored the extent to which differences were present in the 1-year persistence rates of Hispanic and Black students by their institutional status (i.e., stayed or transferred) for 15 academic years. Statistically significant differences were reported in 1-year persistence rates of Hispanic students and Black students by their institutional status. Hispanic and Black students who stayed at the same Texas 4-year public university persisted at substantially higher rates than Hispanic and Black students who transferred from one 4-year university to another university. Ballinger (2018) stated that Hispanic and Black students who stayed at the same 4-year public university were more likely to graduate than their peers who transferred to another college.

Community colleges continue serving diverse, underrepresented student populations and supporting local economies, but they are continuously criticized for low persistence and graduation rates (Yu, 2017). Student persistence and graduation serve as a merit for evaluating the progress and measuring success for higher education institutions, usually using the first-time in college students as a subject for the study (Millea et al., 2018). Mertes and Jankoviak (2016) stated that the academic programs supporting college student persistence were of critical importance for public community colleges, but many community colleges lack funding for the educational support programs. Community college students failed to complete their studies, where Attewell et

al. (2011) reported that 68% of first-time college students seeking a college degree did not earn one six years later. On average, community colleges have much lower student persistence and graduation rates than 4-year colleges. Attewell et al. (2011) questioned whether community college low student persistence and graduation could be the result of the open-door policy of accepting all students despite their academic preparedness.

### **Review of Literature on the First-Time in College Students Ethnic/Racial Diversity**

Community colleges in the United States create values through degree and certificate programs that they offer for diverse student populations. As such, community colleges serve an important role in helping students to achieve academic goals and to acquire career training (American Association of Community Colleges, 2014). According to the American Association of Community Colleges (2021), in Fall 2019, 6.8 million students were enrolled in credit courses, and 5 million students were enrolled in noncredit courses at community colleges nationwide. First-time in college students represented 39% of the total student enrollment, where 16% were Asian, 44% were White, 13% were Black, and 27% were Hispanic. Community college enrollment is predicted to increase (Juszkiewicz, 2020) as the need for a well-educated and trained workforce continues to grow (American Association of Community Colleges, 2014).

As higher education continues to remain a key for providing social and economic mobility for many people (Texas Higher Education Coordinating Board, 2015b), several initiatives have been implemented in Texas in attempts to increase access to a college education for all people and to enhance college persistence and graduation in Texas higher education institutions. Following the *Closing the Gaps 2015* (Texas Higher Education Coordinating Board, 2015a) higher education plan, the 60X30 plan was

established to foster an increase in college access and graduation rates at the higher education institutions statewide. The 60X30 plan was described by the Texas Higher Education Coordinating Board (2015b) as a plan where “60 percent of the 25-to-34-year-old Texas population to hold a certificate or degree by 2030” (p. iv). Texas higher education stakeholders and policymakers recognized that demographic shifts in the state population were continuing and that postsecondary student enrollment and graduation rates represented the ethnic/diversity of the Texas state population (Texas Higher Education Coordinating Board, 2015b).

Total enrollment at Texas Community colleges was 769,288 students in Fall 2019 (Texas Higher Education Coordinating Board, 2020). Texas community colleges serve a diverse student population of 8.6% Asian, 30% White, 12.6% Black, and 46.8% Hispanic students (Texas Higher Education Coordinating Board, 2020). The Texas Higher Education Coordinating Board (2020) reported an 8% growth in student enrollment from the 2013-2014 academic year through the 2018-2019 academic year. Graduation rates at Texas community colleges vary by student ethnicity/race. For example, 7.1% of the 8.6% enrolled Asian students were awarded a degree or a certificate in Fall 2019 (Texas Higher Education Coordinating Board, 2020); 43.5% of the 46.8% enrolled Hispanic students graduated with a degree or a certificate; and 12.2% of the 12.6% enrolled Black students earned a degree or certificate (Texas Higher Education Coordinating Board, 2020). Although degree/certificate attainment rates were lower in comparison to the enrollment rates for Asian, Hispanic, and Black students, the difference between enrollment and degree attainment rates for White students at Texas community colleges was reported at

33.6%, 3.6% higher than the enrollment rate of 30% for Fall 2019 (Texas Higher Education Coordinating Board, 2020).

As documented above, the student population in Texas community colleges is diverse, not only with respect to ethnicity/race but also with respect to economic status and academic backgrounds. Lebron (2017) addressed the extent to which changes had occurred in the racial/ethnic diversity of Texas community college students in a multiyear research study. He did not document any substantive changes in Black and Asian student enrollment at Texas community colleges and reported that their enrollment rates remained constant over 16 years. In contrast, Hispanic student enrollment rates steadily increased over the years, and the enrollment rates of White students substantially decreased. Lebron (2017) encouraged education leaders and researchers to evaluate the statewide initiatives and programs to improve the ethnic/racial diversity of the community college student population, especially drawing attention to Black and Asian student enrollment rates that have stayed constant over 16-years.

In another recent Texas investigation, Maynard (2020) examined, over a 16-year time period, the extent to which changes were present for male and female first-time in college students who were enrolled in Texas community colleges. Maynard (2020) established that enrollment rates for first-time in college male students in Texas community colleges slightly increased by 0.69 percentage points over the 16 academic years. In contrast, the enrollment rates for first-time in college female students in Texas community colleges slightly decreased by 0.69 percentage points. The average enrollment rates for the first-time in college male students at Texas community colleges averaged at 45.98%, and for female students at 54.02%. Maynard (2020) asserted that the

findings of this investigation were concurrent with prior investigations where first-time in college female student enrollment rates were higher than male student enrollment rates at Texas community colleges.

Community colleges strive to address the changing academic needs of the diverse student population through academic support programs. Gaps in persistence and graduation rates, however, still exist for students of color (Moss, 2017). Moss (2017) investigated the degree to which differences were present in graduation rates between Black and White students in Texas community colleges over nine academic years. Moss (2017) established that statistically significant differences existed in graduation rates between Black and white students. Black students graduated at a lower rate of 31% compared to a rate of 44% for White students. Moss (2017) noted that Black students were falling behind in every step of the educational process and that Black students were less likely to graduate with a college degree than White students.

In a similar study, Stagg (2017) determined the extent to which differences were present in college graduation rates as a function of student ethnicity/race (i.e., Hispanic and White) in Texas community colleges over seven academic years was determined by Stagg (2017). Statistically significant differences were documented in graduation rates for Hispanic and White students in the 2008-2009 through the 2012-2013 academic years. Stagg (2017) established similar graduation rates for Hispanic students and for White students in the 2013-2014 and 2014-2015 academic years. Graduation rates for Hispanic students in Texas community colleges fluctuated from a low of 41% to a high of 43%, whereas the graduation rates for White students ranged from a low of 43% to a high of 46%. Stagg (2017) raised concerns that the graduation rates in Texas community

colleges for Hispanic and White students were less than 50% and recommended further investigation of graduation rates of students by another ethnicity/racial groups.

In another recent Texas study, Ballinger (2018) investigated 1-year persistence rates in Texas 4-year public universities for Black and Hispanic students as a function of their institutional enrollment (i.e., stayed or transferred) in a multiyear study. Statistically significant differences were documented for Black and Hispanic student 1-year persistence in Texas 4-year public universities in the 1999-2000 through 2013-2014 academic years (Ballinger, 2018). The 1-year persistence rates for Black students who stayed at the same Texas 4-year public university varied from a low of 52% to a high of 60%. In contrast, the 1-year persistence rates for Black students who transferred to another Texas 4-year public university ranged from a low of 10% to a high of 17%.

Similarly, 1-year persistence rates for the Hispanic students who stayed at the same university fluctuated from a low of 55% to a high of 62%. The 1-year persistence rates for Hispanic students who transferred to another Texas 4-year university ranged from a low of 12% to a high of 17%. Ballinger (2018) concluded that Hispanic and Black students who stayed at the same Texas 4-year university were more likely to persist and to graduate with a degree than were Hispanic and Black students who transferred to another university.

The ethnic/racial membership of the student population at institutions of higher education has changed over the last decade. Research investigations into postsecondary issues have changed as well where the ethnic/racial differences in educational experiences, challenges, and college persistence were accounted for in developed theories (Diehl et al., 2019). Diehl et al. (2019) addressed Black and White persistence and factors

that contributed toward decisions of dropping out of college or not. An important difference that Diehl et al. (2019) noted was that White students associated with the general sense of belonging within a college in consideration of persisting in a college or not, whereas Black students associated their decisions of dropping out of a college or not with the diversity of campus climate. Many higher education institutions set goals to increase student persistence and graduation rates. Diehl et al. (2019) recommended that higher education leaders consider the needs of diverse students regarding institutional connection in achieving that goal.

Different factors influence first-time in college students' college persistence and graduation (DeNicco et al., 2015). DeNicco et al. (2015) explored persistence and graduation in connection to student demographics for first-time in college students at a state community college. In comparison, ethnicity/race was documented as a statistically significant predictor of college persistence for first-time college students. DeNicco et al. (2015) established that Hispanic students were less likely to persist in the first year at college than were White students. Black students were second in low persistence rates in first-year college persistence. DeNicco et al. (2015) concluded that student performance in the first year at a college was the most substantial predictor of whether the student would persist and graduate or depart from the college.

Enrollment of students of color in postsecondary settings has increased over the last decade, especially the enrollment increased of Hispanic students (Clayton et al., 2019). Clayton et al. (2019) noted that most students of color attending college were first-time college first-generation students who faced challenges and barriers once they enrolled in college. Furthermore, first-time in college first-generation students lacked



access to academic and social networks that posed an obstacle toward their college persistence and graduation. Clayton et al. (2019) reported that some of the Hispanic participants in their study were better integrated into the campus and community in the alignment of Tinto's (1975) model, which the researchers predicted would contribute toward increasing the likelihood of Hispanic participant's college persistence.

Researchers (e.g., Clayton et al., 2019; DeNicco et al., 2015; Spangler & Slate, 2015) have documented the presence of relationships between student ethnicity/race to their persistence and college graduation. Spangler and Slate (2015) investigated the persistence and graduation rates of Texas community college students by ethnicity/race (i.e., Hispanic, Black, White, and Asian). They documented statistically significant differences in student persistence and graduation rates by student ethnicity/race over a 10-year time period at Texas community colleges. A substantive significant increase was established, from 31.52% to 41.30%, in Hispanic students' persistence and graduation rates over 10 years. Similarly, Black students' persistence and graduation rates increased as well from 22.80% to 31.07% for the same 10-year period. The persistence and graduation rates also increased for White students from 36.30% to 44.75%, and for Asian students from 37.29% to 48.89%. Persistence and graduation rates increased for all four groups of students. Asian student persistence and graduation rates increased the most, and Black student persistence and graduation rates increased the least. Spangler and Slate (2015) asserted that based on the results of their study, the *Closing the Gaps 2015* (Texas Higher Education Coordinating Board, 2015a) higher education plan achieved some success in community college student success. They recommended for the policymakers

and key stakeholders to develop goals and targets measuring student success that directly addresses community college concerns.

Though opportunities in pursuing a college degree have increased in the past several decades, student graduation rates remain low (Ingram et al., 2019). In a recent Texas statewide analysis, Ingram et al. (2019) addressed the extent to which differences were present in graduation rates between Black students compared to White, Hispanic, and Asian students for the 2007-2008 through the 2015-2016 academic years in Texas community colleges. Statistically significant differences were reported for all comparisons. The graduation rates of Black students in Texas community colleges were nine times lower than the graduation rates of White students, five times lower than the graduation rates for Hispanic students, and 10 times lower than the graduation rates of Asian students. Graduation rates of Black students in Texas community colleges were consistent over the nine academic years at 31.86%, compared to 44.65% for White students, 42.02% for Hispanic students, and 46.60% for Asian students (Ingram et al., 2019). The persistence and graduation rates of Black students did not show an improvement in comparison to other ethnic/racial groups in Texas community colleges, primarily as the statewide initiative of the *Closing the Gaps 2015* (Texas Higher Education Coordinating Board, 2015a) was implemented, that concentrated efforts toward improving student persistence and graduation rates at postsecondary institutions (Ingram et al., 2019).

Similarly, Cox et al. (2011) reported that the persistence and graduation rates for Hispanic students in Texas community colleges were unsuccessful in keeping up with the rapid Hispanic population growth and were lower than other ethnic/racial groups. Cox et

al. (2011) stated that Hispanic students get stuck or drop out at different stages of their educational journey. The college persistence and graduation rates will continue to stay the same without thorough guidance on navigating the college, college curricula, and student support services (Cox et al., 2011). Educational policymakers were encouraged to reevaluate the existing initiatives to include plans that would increase the persistence and graduation rates for students of different ethnic/racial groups (Ingram et al., 2019).

### **Statement of the Problem**

Many researchers (e.g., Lebron, 2017; Longwell-Grice, 2016; Ma & Baum, 2016) in the last decade have addressed college student persistence and graduation. Almost one-half of the students nationwide were enrolled at community colleges, with reported lowest persistence and graduation rates (Barnett, 2011; Juskiewicz, 2020). Community college students represent a diverse student population who are first-time in college students, nontraditional students, and students with low socioeconomic status (Nevarez et al., 2013). The student population for ethnic/racial groups increased at higher education institutions over the last decade (Clayton et al., 2019; Nevarez et al., 2013; Texas Higher Education Coordinating Board, 2020c). A decline in full-time enrollment rates for first-time college students at Texas community colleges was reported (Lebron, 2017; Maynard, 2020). Additionally, a substantial decline was reported in full-time enrollment percentages for first-time in college students (Ma & Baum, 2016). Persistence and graduation rates are substantially lower for part-time students than for first-time college students who are enrolled full-time (Juskiewicz, 2020). Even though initiatives such as the *Closing the Gaps 2015* (Texas Higher Education Coordinating Board, 2015a) and 60X30 plan (Texas Higher Education Coordinating Board, 2015b) achieved some success

in community college student success, persistence and graduation rates continue staying constant without an increase (Cox et al., 2011; Lebron, 2017; Spangler & Slate, 2015). As such, further examination of rates of first-time in college students who did not persist or graduate by enrollment status and ethnicity/race will inform the key stakeholders in establishing programs to support first-time college students' academic success and college graduation.

### **Purpose of the Study**

The purpose of this journal-ready dissertation was to determine the degree to which the rates of students who did not persist or graduate had changed from the 2014-2015 academic year through the 2019-2020 academic year for first-time in college students by their ethnicity/race (i.e., Hispanic, Black, White, and Asian) and enrollment status (i.e., full-time and part-time) in Texas community colleges. Specifically, the rates of first-time in college students who did not persist or graduate in Texas community colleges were examined by ethnicity/race and enrollment status between the beginning year of data and the midpoint recent year of data, the midpoint year of data, and the most recent year of data, beginning year of data and the most recent year of data. Any trends that were present in the rates of first-time in college students who did not persist or graduate of Texas community college students by their ethnicity/race and enrollment status were determined.

### **Significance of the Study**

The Texas Higher Education Coordinating Board (2015a) introduced the 60X30 plan, where “60 percent of the 25-to-34-year-old Texas population to hold a certificate or degree by 2030” (p. iv). The 60X30 plan was a follow-up to the statewide initiative of the

*Closing the Gaps 2015*, as educational leaders in Texas concentrated efforts toward student persistence and graduation at postsecondary institutions (Texas Higher Education Coordinating Board, 2015a). Specifically emphasized in the *Second Goal: Completion of the 60X30 plan* is the importance of the college degree or a certificate completion as a way of “social and economic mobility” (Texas Higher Education Coordinating Board, 2015a, p. 3) for Texans. Therefore, information from the three empirical studies conducted in this journal-ready dissertation will be helpful to stakeholders, policymakers, legislators, and higher education leaders with information about the extent to which the Texas statewide 60X30 initiative had influenced student persistence and college graduation.

### **Theoretical Framework**

For this journal-ready dissertation, the persistence and graduation rates of first-time Texas community college students by their ethnicity/race and enrollment status were explored. Student motivation for learning and for being successful in postsecondary settings is connected to how they feel and to the support they receive from the institution (Owolabi, 2018). Commonly referred to in student retention/dropout literature, Tinto’s theory of student departure (1975) was used as the theoretical framework for this research study.

Tinto (1975) generated his theoretical model to explain the reasons why students drop out of college from Durkheim’s theory of suicide (1961). Tinto (1975) stated that “according to Durkheim (1961), suicide is more likely to occur when individuals are insufficiently integrated into the fabric of society” (p. 91). Similarly, Tinto’s theory of student departure is framed around the concept of human integration and the feeling of

connectedness within a society. The idea is present in the theory that college students undergo an integration process with a college campus and the feeling of connectedness within the college influences student persistence or departure.

Tinto (1975) emphasized that students come to postsecondary settings with a range of individual characteristics such as sex, race, social status, family background, and prior educational experiences, all of which influence their success at the school. College departure is viewed as an ongoing process of failure between individuals and their academic and social interaction within the college system. The individual's experiences at a college influence setting goals and committing to the school, leading to the student's college persistence and graduation. Long (2012) summarized Tinto's theory of student departure by pointing out that "the sources of student departure primarily fall into three specific areas—academic problems, failure to integrate socially and intellectually with the culture of the college or university, or a low level of commitment to the college or university" (p. 52).

Tinto's theory (1975) revolves around the idea of social and academic integration and its connection with whether a student will fail or succeed in earning a college degree. Academic integration could be described as a student's educational self-esteem, interest, enjoyment in studying certain subjects, and earned grades. Social integration may also be viewed as a student making new friends, joining clubs, volunteering for causes, and interacting with peers and faculty/staff. Tinto (1975) introduced a conceptual schema for dropout from the college model showing the student's pathway through college related to commitments and the educational systems that may lead to college dropout. Suggested in Tinto's model is that "both student characteristics and interactions with the social and

academic environments of the institution are the principal determinants of educational goals and institutional commitment” (Napoli & Wortman, 1998, p. 419).

Student success in a college connects to different factors that determine whether a student persists or not at a college. Student success and persistence in the first year of college are vital contributors to graduating from college. Established in Tinto’s (1975) student departure theory is the connection between student persistence and graduation of college or not through student academic and social integration into the college. Student academic and social integration contribute to student success, especially in the first year of college.

The open-door policy of community colleges allows students from different ethnic/racial backgrounds and from different socioeconomic statuses to enroll and to attend. Researchers (e.g., Stewart et al., 2015, p. 18) have documented the presence of “a statistically significant effect for ethnicity/race on persistence”, wherein White students are more likely to persist at a college than are students of color. Additionally, the enrollment status of community college students varies from full-time to part-time, depending on family and life responsibilities, and work status. Students also change their enrollment status in response to the changes in their life circumstances. Changes in enrollment status from full-time to part-time influences college persistence and graduation (Crosta, 2014). Accordingly, the ethnic/racial background of students, along with their enrollment status, play a critical role with respect to persistence and graduation. It is these two demographic characteristics of students that were addressed through the lens of persistence and graduation rates for Texas community college students.

## Research Questions

The following overarching research questions were addressed in this multiyear investigation: (a) What is the difference in rates of first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges between the beginning year of data and the midpoint recent year of data?; (b) What is the difference in rates of first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges between the midpoint year of data and the most recent year of data?; (c) What is the difference in rates of first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges between the beginning year of data and the most recent year of data?; (d) What trends are present in the ethnic/racial diversity of first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges? The first research question was repeated for the 2014-2015 academic year through the 2019-2020 academic year, whereas the second through the fourth research question involved comparisons of two years of data. The final research question, the trend question, involved all six academic years of data. Research questions were analyzed for full-time enrollment status, part-time enrollment status, enrollment status regardless whether full-time or part-time, and were analyzed separately for Asian, Black, Hispanic, and White students.



## Definition of Terms

In the following section, the reader is provided with definitions of the terms used in this journal-ready dissertation

### **Asian**

The Texas Higher Education Coordinating Board (2017) defined Asian as “race of a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India” (p. 4)

### **Black/African American**

Black or African American was defined as “the race of a person having origins in any of the black racial groups of Africa” (Texas Higher Education Coordinating Board 2017, p. 8).

### **Community Colleges**

The American Association of Community Colleges (2021a) defined Community Colleges as “two-year, associate degree-granting institutions” (p. 1). Furthermore, the American Association of Community Colleges President noted that community colleges in the United States enroll and serve most underrepresented students (American Association of Community Colleges 2021a, p. 1).

### **Closing the Gaps 2015**

The Texas Higher Education Coordinating Board’s (2015a) the *Closing the Gaps 2015* plan focused on to

close the gaps within the state in enrollment and success, close the gaps in excellence by providing high quality educational programs which meet and

exceed that of other states, and close the gaps in research by building research centers that go beyond those of other states. (p. 4)

### **Ethnic Origin**

With respect to the term of ethnic origin, the Texas Higher Education Coordinating Board proposed three categories: “Hispanic or Latino origin; Not Hispanic or Latino origin; Not answered” (Texas Higher Education Coordinating Board, 2017, p. 29).

### **First-Time in College Student**

The Texas Higher Education Coordinating Board defined first-time first-year students as students who previously had never attended any higher education institution post-high school completion. This definition also includes students that have previously earned college credit before high school graduation (Texas Higher Education Coordinating Board, 2017, p. 32).

### **Full-Time/Part-Time Status**

Noted on the Texas Higher Education Coordinating Board’s (2020b) *Community Colleges Accountability Measures and Definitions* page was, “Part-time is considered less than 12 semester credit hours. Full-time is considered 12 or more semester credit hours” (p. 2).

### **Graduation and Persistence Rate**

The Texas Higher Education Coordinating Board (2020a) defined graduation and Persistence rate as the

percentage of first-time, full-time credential-seeking students who enrolled in a minimum of 12 semester credit hours (SCH) their first fall semester and have

graduated or are still enrolled at the same institution or another Texas public or private (independent) institution after six academic years by race/ethnicity. (p. 2)

### **Hispanic/Latino**

Hispanic or Latino was defined by the Texas Higher Education Coordinating Board (2017) as “An ethnic origin of a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race” (p. 38).

### **Higher Education Accountability System**

The Texas Higher Education Coordinating Board (2020a) had been using the “Higher Education Accountability System to track performance on critical measures that exemplify higher education institutions’ missions” (p. 2). The system design was based on the *Closing the Gaps 2015* higher education plan that “focused on four targeted areas of participation, success, excellence, and research” (Texas Higher Education Coordinating Board, 2020a, p. 2).

### **1-Year Persistence Rate**

As defined by the Texas Higher Education Coordinating Board (2020a), 1-year persistence rates are the “percentage of first-time, credential-seeking students enrolled in at least 12 semester credit hours (SCH) in the fall semester who are enrolled at the same or another Texas public or private (independent) institution one and two academic fall semester later” (p. 2).

### **Race**

The term, race, was defined by the Texas Higher Education Coordinating Board (2017) as categories to designate “a group to which an individual belongs, identifies with, or belongs in the eyes of the community” (p. 50). The Texas Higher Education

Coordinating Board (2017) noted that the categories did not indicate “scientific definitions of anthropological origins” (p. 50).

### **Texas Higher Education Strategic Plan: 60X30 TX**

The Texas Higher Education Coordinating Board (2015b) described the 60X30 TX plan as “60 percent of the 25-to-34-year-old Texas population to hold a certificate or degree by 2030” (p. iv). Furthermore, the *60X30 TX Plan* focused on “increasing student success at higher education institutions through collaborative efforts of stakeholder’s expertise and resources (Texas Higher Education Coordinating Board, 2015b).

### **White**

The *Glossary of Terms* produced by Texas Higher Education Coordinating Board (2017) classified White as “a race of a person having origins in any of the original peoples of Europe, the Middle East or North Africa” (p. 68).

### **Literature Review Search Procedures**

For this journal-ready dissertation, a literature review for persistence and graduation rates by ethnicity/race and enrollment status of college students was conducted. The following key phrases were used in the searches for current literature: persistence, graduation, academic success, first generation, first gen, community college, community, ethnicity, race, African American, Hispanic, Latina, Latino. Limited terms like scholarly peer-reviewed journals, full text, and published between 2010-2020 were applied. The Education Source, ERIC, APA Psycinfo, Education Full text, Education Administration Abstract, databases were searched for the scholarly peer-reviewed articles.

### **Delimitations**

In this journal-ready dissertation, several delimitations were present. A dataset from the Texas Higher Education Coordinating Board Interactive Accountability System was obtained and analyzed for this study. Only data from Texas community colleges were downloaded from this website. Moreover, data analyses were conducted for only the major four ethnic/racial groups (i.e., Asian, Black Hispanic, and White) of students in Texas. Datasets that were downloaded were for the past six academic years. As such, information and findings from this journal-ready dissertation were limited to Texas community colleges, to the four ethnic/racial groups of students, and to the specific academic years mentioned.

### **Limitations**

In this journal-ready dissertation, existing archival data from the Texas Higher Education Coordinating Board Interactive Accountability System were obtained and analyzed. Accordingly, no data from the Texas Education Agency or any other statewide database were used herein. Statistical analyses were limited to only Texas community colleges and did not involve any Texas 4-year universities. Additionally, only rates of first-time in college students who did not persist or graduate were analyzed by their ethnicity/race and enrollment status in Texas community colleges.

### **Assumptions**

Several assumptions were present in this journal-ready dissertation. The first assumption was that the data provided by the Texas Higher Education Coordinating Board by the Texas community colleges were accurate. Next, it was assumed that the data reported on rates of first-time in college students who did not persist or graduate by

ethnicity/race were free of errors. These assumptions were believed to be appropriate because the Texas Higher Education Coordinating Board audits the data reported by the Texas community colleges periodically for accuracy and errors.

### **Organization of the Study**

This journal-ready dissertation consists of three research studies on rates of first-time in college students who did not persist or graduate by their ethnicity/race and enrollment status in Texas community colleges for the 2014-2015 through 2019-2020 academic years. This journal-ready dissertation consists of five chapters. Chapter I included the introduction, literature review, statement of the problem, purpose of the study, the significance of the study, definition of terms, delimitations, limitations, assumptions, and organization of study sections. Chapter II was the first research study about the rates of first-time in college students who did not persist or graduate in Texas community colleges by their ethnicity/race and full-time enrollment status over six academic years. Chapter III was about the second investigation into the rates of first-time in college students who did not persist or graduate in Texas community colleges by their ethnicity/race and part-time enrollment status for six academic years. Discussed in Chapter IV were the rates of first-time in college students who did not persist or graduate in Texas community colleges by their ethnicity/race for six academic years. Finally, in Chapter V were the results and summaries for each of the three research articles in this journal-ready dissertation. Also, recommendations for future research and implication for policymakers and higher education leaders were discussed in Chapter V.

**CHAPTER II**

DIFFERENCES IN RATES OF FIRST-TIME IN COLLEGE STUDENTS WHO DID  
NOT PERSIST OR GRADUATE BY ETHNICITY/RACE AND FULL-TIME  
ENROLLMENT STATUS IN TEXAS COMMUNITY COLLEGES: A STATEWIDE,  
MULTIYEAR INVESTIGATION

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

### **Abstract**

In this statewide, multiyear study, the extent to which differences were present in the rates of first-time in college students who did not persist or graduate by their ethnicity/race and full-time enrollment status in Texas community colleges was investigated for six academic years (i.e., from 2014-2015 through 2019-2020). Inferential statistical procedures revealed statistically significant increases in the rates of Hispanic and of Black first-time college students with full-time enrollment status who did not persist or graduate in Texas community college over this 6-year time period. Rates of Hispanic and Black first-time in college students with full-time enrollment status who did not persist or graduate were 44% and 56%, respectively, in the 2018-2019 academic year. These high percentages should be cause for concern for policymakers and community college leaders.

*Keywords:* Texas community colleges; First-time in college students; Ethnicity; Race; Full-time enrollment status; College persistence; College graduation



DIFFERENCES IN RATES OF FIRST-TIME IN COLLEGE STUDENTS WHO DID  
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Higher education has been viewed as a pathway to obtaining successful employment, and community colleges remain the right fit for these viewpoints (Juszkiewicz, 2020). Community colleges in the United States play an essential role in upward mobility and in the career development of individuals (American Association of Community Colleges, 2014). Viewed as a center of American higher education (Ma & Baum, 2016), community colleges contribute substantially to local economies by providing skilled employees for different industries (American Association of Community Colleges, 2014). As such, community colleges are deeply rooted in the communities that they serve as “an economic and workforce development engine” (Nevarez et al., 2013, p. xvii).

Community colleges continue to serve as a pathway for upward mobility and continue to attract many first-time college students. Student enrollment in community colleges is predicted to rise over the next decade (Juszkiewicz, 2020) due to the variety of programs and low tuition costs compared to 4-year colleges (American Association of Community Colleges, 2014). The American Association of Community Colleges (2021) reported about 11.8 million students are enrolled at community colleges nationwide. Of this number, 6.8 million of the students were enrolled in credit courses, and 5 million students were enrolled in noncredit courses.

The open-door enrollment policy as well as the variety of degree and certificate programs attract students from different socioeconomic backgrounds. In Fall 2019, demographic enrollment of students in credit courses at community colleges nationwide was as follows: 28% Hispanic, 13% Black, 44% White, 6% Asian, and 9% other (American Association of Community Colleges, 2021). Furthermore, 769,288 students were enrolled at the community colleges statewide in Texas in Fall 2019, with the following demographics: 46.8% Hispanic, 12.6% Black, 30% White, and 10.6% other (Texas Higher Education Coordinating Board, 2020). Community colleges are principal pathways and sometimes serve as a last educational opportunity for a diverse student population, especially for students with low socioeconomic status, first-generation college students, and students of color (Nevarez et al., 2013).

Ma and Baum (2016) explored the enrollment trends for community colleges and indicated that 25% of students enrolled at community colleges in Fall 2014 were full-time students. They emphasized that community colleges serve “a large proportion of minority, first-generation, low-income, and adult students” (p. 5). Hispanic and Black students continued to be overrepresented at community colleges, with reported enrollment status increase over the years. Ma and Baum (2016) documented a decline from 29% to 25% in community college student full-time enrollment status between 2010 and 2014 academic years. The decline in full-time enrollment status was attributed to one-third of community college students working full-time while attending college (Ma & Baum, 2016). As such, policymakers were encouraged to consider the academic needs of community college students and to provide means to lift the burdens and barriers for them to succeed.

Chapa et al. (2014) stressed the need for college preparedness as an essential key for college and career success. Chapa et al. (2014) pointed out that the current “educational system was not preparing students for postsecondary studies” (p. 2), especially for first-time in college students with low-income status. Similarly, Reid and Moore (2008) investigated the first-generation students’ perceptions and attitudes about their college education preparedness. First-time in college students who were first-generation students of color with low-socioeconomic status encountered various challenges in college despite their academic successes in high school (Reid & Moore, 2008).

Some students enter postsecondary settings with pre-college academic shortfalls and disadvantages (Stewart et al., 2015). If students do not overcome their academic and social challenges in the first semester at a college, their persistence and graduation from a college will decline. Stewart et al. (2015) elaborated that ethnicity/race was statistically significantly related to student persistence rates, a finding that was consistent with the prior research studies conducted almost two decades ago. The importance of students overcoming academic challenges in their first semester of college was pointed out as an essential step in the college success of underprepared students.

The American Association of Community Colleges (2021) reported that 29% of the students who attended college were first-generation students. Longwell-Grice et al. (2016) stated that about 43% of first-time in college students identified themselves as the first-generation attending college in their families. First-time in college students enroll in postsecondary settings with unique academic and social challenges. Of importance is that first-time college students who are also first-generation students face unique challenges

navigating the college system and, as a result, do not persist and graduate at the same pace as their peers (Longwell-Grice et al., 2016).

Longwell-Grice et al. (2016) documented concerns of Hispanic students at a community college with matriculation from high school to a college and the challenges such as “adjusting to the new setting” (p. 39). Concerns with family support, where their families did not accept a college education as worthy of being pursued, were reported by the participants. The first-time college students felt that they navigated the college system blindfolded without knowing where to start because of a lack of knowledge about the college system and family support. Furthermore, when challenges with being a first-time in college student were added to other issues such as low socioeconomic status and being the first generation in their families to attend college, the odds of persisting and graduating from a college were lowered (Longwell-Grice et al., 2016).

Community college students feel overwhelmed by many challenges that they encounter that affect their college persistence, especially when transferring from one community college to another (Stagg, 2017). Stagg (2017) explored the degree to which differences were present in the 1-year persistence rates for Hispanic students in Texas community colleges by their institutional status (i.e., stayed or transferred). Statistically significant differences were reported in 1-year persistence rates for Hispanic students by their institutional status in six out of seven academic years. The 1-year persistence rate of Hispanic students in Texas community colleges who stayed at the same institution varied from a low 54% to a high of 60%. On the other hand, the 1-year persistence rate of Hispanic students who transferred from one Texas community college to another fluctuated from a low 42% to a high of 51%. Stagg (2017) documented that Hispanic

community college students who stay at the same institution were more likely to persist than when they transfer to another institution.

Similarly, the extent to which differences existed in 1-year persistence rates of Black students in Texas community colleges was explored by Moss (2017). The 1-year persistence rates of Black students who stayed at the same Texas community college varied from low of 38% to high 46%, whereas the 1-year persistence rates of Black students who transferred to another Texas community college ranged from low 27% to a high of 37%. Moss (2017) established that Black students who stayed at the same Texas community college were more likely to persist than when they transferred to another college. Results were similar for Hispanic students (Stagg, 2017).

In another Texas investigation, Ballinger (2018) examined the degree to which 1-year persistence rates fluctuated for Black and Hispanic students as a function of the institutional status (i.e., stayed or transferred) at Texas 4-year public universities over 15 academic years. Ballinger (2018) recorded statistically significant differences regarding the 1-year persistence rates by student institutional status for all 15 academic years for the Black students in Texas 4-year public universities. The 1-year persistence rates of Black students who remained at the same Texas 4-year public university were statistically significantly higher than Black students who transferred to a different 4-year public university. Results for 1-year persistence rates of Hispanic students who stayed at the same Texas 4-year public universities were reported statistically significant as well. Hispanic students who stayed at the same 4-year public university were 40 to 50% more likely to persist and to graduate than were Hispanic students who transferred to another 4-year public university. As documented, Black students were 35% more likely to persist at

the same Texas 4-year public university than when they transferred to another university (Ballinger, 2018).

Of importance to this article, Lebron (2017) investigated enrollment by ethnicity/race for first-time in college students at Texas community colleges. He documented the presence of statistically significant differences in the enrollment of Hispanic first-time in college students with full-time enrollment status at Texas community colleges. A notable increase occurred in the enrollment percentages of Hispanic community college students, from 25% in the 1999-2000 academic year to 42% in the 2014-2015 academic year who were first-time in college students and enrolled full-time at Texas community colleges (Lebron, 2017).

In contrast with the increase in the percentage of Hispanic students, a statistically significant decrease in enrollment percentages was noted for White students who were first-time college students with full-time enrollment status. The percentages of the first-time in college, full-time White student enrollment decreased from 47% in the 1999-2000 academic year to 37% in the 2014-2015 academic year. Moreover, Lebron (2017) determined that the percentages of Black and Asian students who were first-time in college students with a full-time enrollment status remained consistent over the 15 years of data analyzed.

In a recent investigation, also conducted in Texas, Maynard (2020) investigated whether gender differences were present for first-time in college students with full-time enrollment status at Texas community colleges over 16 years. Male and female first-time in college full-time student enrollment at Texas community colleges remained constant over 16 years. Male first-time in college full-time student enrollment rates varied from

45.96% in the 2004-2005 academic year to 48.44% in the 2016-2017 academic year.

These enrollment rates were reflective of a change of 2.48% increase. Female first-time in college full-time student enrollment rates changed from 54.04% in the 2004-2005 academic year to 51.56% in the 2016-2017 academic year, a decrease of 2.48%. Over the 16 academic year period, enrollment rates for female full-time first-time in college students were greater than the enrollment rates for male counterparts (Maynard, 2020).

### **Statement of the Problem**

Many researchers (e.g., Lebron, 2017; Longwell-Grice, 2016; Ma & Baum, 2016) in the last decade have addressed college student persistence and graduation. Researchers (e.g., Lebron, 2017; Maynard, 2020) reported a decline in full-time enrollment rates for first-time college students at Texas community colleges, and a significant decline was reported in full-time enrollment percentages for first-time in college students (Ma & Baum, 2016). Attention was directed toward full-time enrollment status and first-time college students' academic success (Crosta, 2014; Lebron, 2017; Maynard, 2020). Researchers (e.g., Lebron, 2017; Maynard, 2020) encouraged investigating the relationship of demographic characteristics such as ethnicity/race and full-time enrollment status at community colleges. Community colleges enroll the most students nationwide (Barnett, 2011). As such, investigating the rates of first-time college students with full-time enrollment status who did not persist or graduate and any trends will inform the key stakeholders in establishing student recruitment and support programs to increase full-time enrollment status and student academic success for first-time in college students.

### **Purpose of the Study**

The purpose of this study was to determine the extent to which differences were present in the rates of students who did not persist or graduate from the 2014-2015 academic year through the 2019-2020 academic year for first-time in college students by their ethnicity/race (i.e., Hispanic, Black, White, and Asian) and full-time enrollment status in Texas community colleges. Specifically, the rates of students who did not persist or graduate of first-time in college, full-time students in Texas community colleges were examined between the beginning year of data and the midpoint recent year of data, the midpoint year of data, and the most recent year of data, beginning year of data and the most recent year of data. Trends that were present by ethnicity/race were determined.

### **Significance of the Study**

Community college student enrollment was predicted to increase over the next decade (Juszkiewicz, 2020). A decline in full-time student enrollment at community colleges was present that was attributed to most community college students working full-time while attending college (Ma & Baum, 2016). Community colleges continue to serve diverse student populations, especially first-time in college students (Nevarez et al., 2013). Community college first-time in college, full-time students face many academic challenges and fall behind their peers in college persistence and graduation rates (Longwell-Grice et al., 2016). As such, more empirical investigations were needed on first-time in college full-time student persistence and graduation by student demographics (McLendon & Slate, 2021) in Texas community colleges. The findings of this study contributed information for community college administrators in implementing student



support programs in overcoming academic challenges for first-time in college, full-time students (Stewart et al., 2015).

### **Research Questions**

The following research questions were addressed in this multiyear investigation:

(a) What is the difference in rates of first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges between the beginning year of data and the midpoint recent year of data?; (b) What is the difference in rates of first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges between the midpoint year of data and the most recent year of data?; (c) What is the difference in rates of first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges between the beginning year of data and the most recent year of data?; (d) What trends are present in the ethnic/racial diversity of first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges? The first research question was repeated for the 2014-2015 academic year through the 2019-2020 academic year, whereas the second through the fifth research question involved comparisons of two years of data. The final research question, the trend question, involved all six academic years of data. Research questions were analyzed separately for Asian, Black, Hispanic, and White students.

## **Method**

### **Research Design**

In this research study, a non-experimental causal-comparative research design was used (Creswell & Creswell, 2018; Johnson & Christensen, 2020). Manipulation of the independent variable cannot occur in a causal-comparative research investigation (Johnson & Christensen, 2020). Archival existing data were obtained from Texas Higher Education Coordinating Board Interactive Accountability System. Data were obtained for the 2014-2015 academic year through the 2019-2020 academic year on rates of first-time in college students who did not persist or graduate in Texas community colleges by their enrollment status (i.e., full-time) and their ethnicity/race (i.e., Hispanic, Black, White, and Asian).

### **Participants and Instrumentation**

Texas community college students who were first-time in college student with a full-time enrollment status between the 2014-2015 and 2019-2020 academic years were the participants in this research study. Existing archival data from the Texas Higher Education Coordinating Board Interactive Accountability System for the 2014-2015 through the 2019-2020 academic years on rates of first-time in college students who did not persist or graduate in Texas community colleges by enrollment status and ethnicity/race were obtained. The Texas Higher Education Coordinating Board requires all higher education institutions to report data on persistence and graduation rates along with the other data such as enrollment status and ethnicity/race for students.

All the collected data from all higher education institutions were aggregated and made publicly available by the Texas Higher Education Coordinating Board through the

Texas Higher Education Coordinating Board Interactive Accountability System. Texas Higher Education Coordinating Board Interactive Accountability System was the instrument in obtaining data for this research study. The database contained information on every Texas community college, including descriptive statistics. A total of six academic years of data were examined for this research study.

## **Results**

The Texas Higher Education Coordinating Board links student ethnicity/race and enrollment status with the academic year and first-time in college status; therefore, parametric paired samples *t*-tests were calculated and reported separately for each research question. Prior to conducting these inferential statistical procedures, their underlying assumptions were checked. The majority of these assumptions were met. Accordingly, it was appropriate to calculate parametric paired samples *t*-tests to answer the previously discussed research questions. Results of the data analysis will be reported by ethnicity/race for each research question separately.

### **Results for Hispanic Students**

Prior to addressing the research questions for Hispanic students, descriptive statistics were calculated for each of the six academic years. As presented in Table 2.1, the rates of Hispanic first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges were relatively consistent. Their rates varied from a low of 30.53% in the 2017-2018 academic year to a high of 43.51% in the 2018-2019 academic year.

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Insert Table 2.1 about here  
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With respect to the beginning year comparison (i.e., 2014-2015) and the midpoint year comparison (i.e., 2016-2017), a statistically significant difference was not revealed for Hispanic students,  $t(56) = 0.81, p = .43$ . Similar percentages, approximately 32%, of Hispanic students did not persist or graduate in these two academic years. Table 2.2 contains the descriptive statistics for these analyses.

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Regarding the midpoint year comparison (i.e., 2017-2018) and the most recent year comparison (i.e., 2019-2020), a statistically significant difference was yielded for Hispanic students,  $t(55) = -4.11, p < .001$ , Cohen's  $d = 0.56$ , a moderate effect size (Cohen, 1988). A statistically significant higher rate of Hispanic students who did not persist or graduate, almost 4% higher, was present in the most recent year comparison than in the midpoint year comparison. Delineated in Table 2.2 are the descriptive statistics for this analysis.

Concerning the beginning year comparison (i.e., 2014-2015) and the most recent year comparison (i.e., 2019-2020), a statistically significant difference was not revealed for Hispanic students,  $t(55) = -1.57, p = .12$ . The percentages of Hispanic students who did not persist or graduate in these two academic years were similar at 32.69% in the

2014-2015 academic year and 34.54% in the 2019-2020 academic year. Descriptive statistics for this analysis are delineated in Table 2.2.

### **Results for Black Students**

Before addressing the research questions for Black first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges, descriptive statistics were calculated for each of the six academic years. The percentage of Black first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges increased by 10.87% over the six-year period. Their rates fluctuated from a low of 44.87% in the 2014-2015 academic year to a high of 55.74% in the 2019-2020 academic year. Contained in Table 2.3 are the descriptive statistics for this analysis.

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With respect to the beginning year comparison (i.e., 2014-2015) and the midpoint year comparison (i.e., 2016-2017), the parametric paired samples *t*-test did not reveal a statistically significant difference in the rates of Black students who did not persist or graduate  $t(48) = -1.66, p = .10$ . Although not statistically significant, the rates of Black first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges were in the beginning academic year, almost 4% lower than in the midpoint academic year. Delineated in Table 2.4 are the descriptive statistics for this analysis.

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Regarding the midpoint year comparison (i.e., 2017-2018) and the most recent year comparison (i.e., 2019-2020), a statistically significant difference was present for Black students,  $t(46) = -2.11$ ,  $p = .04$ , Cohen's  $d = 0.27$ , a small effect size (Cohen, 1988). In the most recent academic year, a statistically significant higher percentage, almost 4% higher, was present for the rates of Black first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges. Descriptive statistics for this analysis are revealed in Table 2.4.

Concerning the beginning year comparison (i.e., 2014-2015) and the most recent year comparison (i.e., 2019-2020), the parametric paired samples  $t$ -test yielded a statistically significant difference for Black students,  $t(45) = -3.80$ ,  $p < .001$ , Cohen's  $d = 0.76$ , a near-large effect size (Cohen, 1988). The percentage of Black first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges in the most recent year comparison was statistically significantly higher, almost 11% higher, than in the beginning year comparison. Table 2.4 contains the descriptive statistics for this analysis.

### **Results for White Students**

Prior to addressing the research questions for White students, descriptive statistics were calculated for each of the six academic years. The rates of White first-time in college students with full-time enrollment status students who did not persist or graduate in Texas community colleges were relatively consistent across the six academic years.

Their rates varied from a low of 31.27% in the 2015-2016 academic year to a high of 37.12% in the 2019-2020 academic year. Presented in Table 2.5 are the descriptive statistics for this analysis.

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Insert Table 2.5 about here  
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Regarding the beginning year comparison (i.e., 2014-2015) and the midpoint year comparison (i.e., 2016-2017), a statistically significant difference was not revealed in the rates of White students who did not persist or graduate  $t(56) = -1.47, p = .15$ . The rates of White first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges were commensurate in these two academic years at 34.55% and 32.45%, respectively. Delineated in Table 2.6 are the descriptive statistics for this analysis.

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Insert Table 2.6 about here  
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Concerning the midpoint year comparison (i.e., 2017-2018) and the most recent year comparison (i.e., 2019-2020), a statistically significant difference was not present for White first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges students,  $t(56) = -1.23, p = .23$ . Their rates of not persisting or graduating were consistent in these two academic years, 33.53% and 37.12%, respectively. Presented in Table 2.6 are the descriptive statistics for this analysis.

With respect to the beginning year comparison (i.e., 2014-2015) and the most recent year comparison (i.e., 2019-2020), the parametric paired samples  $t$ -test did not yield a statistically significant difference for White students,  $t(56) = -0.21, p = .84$ . The percentages of White first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges were similar in these two academic years, 37.12% and 34.55%, respectively. Table 2.6 contains the descriptive statistics for this analysis.

### **Results for Asian Students**

Before addressing the research questions for Asian first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges, descriptive statistics were calculated for each of the six academic years. The percentage of Asian first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges was relatively consistent over the six-year period. Their rates varied from a low of 23.06% in the 2014-2015 academic year to a high of 28.32% in the 2018-2019 academic year. Table 2.7 contains the descriptive statistics for this analysis.

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With respect to the beginning year comparison (i.e., 2014-2015) and the midpoint year comparison (i.e., 2016-2017), the parametric samples  $t$ -test did not reveal a statistically significant difference in the rates of Asian students who did not persist or graduate,  $t(16) = 0.57, p = .58$ . The rates of Asian first-time in college students with full-



time enrollment status who did not persist or graduate in Texas community colleges were similar in these two academic years, 32.06% and 25.80%, respectively. Delineated in Table 2.8 are the descriptive statistics for these analyses.

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Insert Table 2.8 about here  
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Regarding the midpoint year comparison (i.e., 2017-2018) and the most recent year comparison (i.e., 2019-2020), a statistically significant difference was not present for Asian first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges students,  $t(13) = 0.89, p = .39$ . The rates of Asian students who did not persist or graduate were commensurate in these two academic years, 25.50% and 26.63%, respectively. Table 2.8 contains the descriptive statistics for this analysis.

Concerning the beginning year comparison (i.e., 2014-2015) and the most recent year comparison (i.e., 2019-2020), the parametric paired samples  $t$ -test did not yield a statistically significant difference for Asian first-time college students with full-time enrollment status who did not persist or graduate in Texas community colleges,  $t(22) = -1.93, p = .07$ . Though not statistically significant, a higher percentage, 5% higher, of Asian first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges was present in the 2019-2020 academic year comparison. Revealed in Table 2.8 are the descriptive statistics for this analysis.

## Discussion

Addressed in this multiyear empirical investigation was the extent to which differences were present in the rates of first-time in college students who did not persist or graduate at Texas community colleges by their ethnicity/race and full-time enrollment status. Archival data were obtained and analyzed from the Texas Higher Education Coordinating Board Interactive Accountability System. Six academic years (i.e., 2014-2015 through 2019-2020) of data from all Texas community colleges were examined in this article.

With respect to Hispanic first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges, their rates fluctuated over six academic years. Notably, the rates of Hispanic first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges statistically significantly increased by 13% from the 2017-2018 academic year to the 2018-2019 academic year. Hispanic first-time in college students with full-time enrollment status did not persist or graduate in Texas community colleges at a rate of almost 30%, with an increase to about 44% documented in the 2018-2019 academic year.

Concerning Black first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges, their rates varied from the low of 44.87% to a high of 55.74% in these six academic years. The rates for Black first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges increased over this time period. It is important to mention that the rates for Black first-time in college students with full-time enrollment status who

did not persist or graduate in Texas community colleges increased over the six academic years to almost 56% in the most recent 2019-2020 academic year.

For White first-time in college students with full-time enrollment status who did not persist or graduate, their rates varied from a low of 31.27% in the 2015-2016 academic year to a high of 37.12% in the 2019-2020 academic year. The rates of White first-time in college students with full-time enrollment status who did not persist or graduate were at their highest, at 37%, in the 2019-2020 academic year. Overall, the rates of the White students who did not persist or graduate fluctuated in mid-30% over six academic years and were lower than the rates for Hispanic and Black students.

Rates were relatively constant for Asian first-time in college students with full-time enrollment status. Rates of Asian first-time in college students with full-time enrollment status varied from a low of 23% in the 2014-2015 academic year to a high of almost 28% in the 2018-2019 academic years. Readers are directed to Figures 2.1 through 2.5 for the visual depiction of results by ethnicity/race across all six years.

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Insert Figures 2.1 through 2.5 about here  
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### **Connections to Existing Literature**

In this statewide, multi-year empirical study, the rates of first-time in college students who did not persist or graduate in Texas community colleges by ethnicity/race and full-time enrollment status were investigated. The rates for first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges varied by ethnicity/race for the six academic years in this

investigation. Results delineated herein were congruent with the findings of other researchers (Lebron, 2017; Longwell-Grice et al., 2016; Moss, 2017; Stagg, 2017).

Results of this investigation were consistent with Longwell-Grice et al. (2016) who noted that first-time in college students face unique challenges. These unique challenges are undoubtedly related to their lack of persistence and graduation. With respect to Hispanic students, Stagg (2017) documented statistically significant differences in their 1-year persistence and graduation rates, wherein persistence and graduation rates were lower for Hispanic students who transferred from one Texas community college to another than for Hispanic students who remained at the same community college.

Results of this study were similar to the findings of Longwell-Grice et al. (2016) and Stagg (2017), where the rates of Hispanic first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges statistically significantly increased over six academic years (i.e., 2014-2015 through 2019-2020). Lebron (2017) determined that the percentage of Asian students who were first-time in college students with a full-time enrollment status remained consistent. Also present were relatively consistent rates for Asian first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges.

Concerning Black students, Moss (2017) established that the 1-year persistence rates for Black students who stayed at the same Texas community college varied from low of 38% to high 46%. Moreover, rates were statistically significantly lower for Black students who transferred to another Texas community college than for Black students who remained at the same community college. Findings of this multiyear investigation were commensurate with Moss's (2017) results, where about half of the Black first-time

in college students with full-time enrollment status did not persist or graduate in Texas community colleges in the recent six academic years (i.e., 2014-2015 through 2019-2020). Moss (2017) documented that graduation rates were statistically higher for White students at 46% compared to Black students at 34%, and similarly, the rates for White first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges were lower than for Black students. Black and Hispanic students continue to persist and graduate at a lower rate than White and Asian students in Texas community colleges.

### **Implications for Policy and Practice**

Investigated in this multiyear empirical study were the rates of first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges by ethnicity/race and full-time enrollment status. Documented was that Hispanic and Black first-time in college students with full-time enrollment status are less likely to persist or graduate in Texas community colleges. As such, several implications are present for policy and practice.

With respect to policy, the Texas Higher Education Coordinating Board leaders are encouraged to review the initiatives and programs that support the 60X30 Plan to include support service programs that target first-time in college Hispanic and Black students' unique needs to aid their college persistence and graduation. Moreover, policymakers should review past and current measures of first-time in college student persistence to determine factors that would influence increasing community college persistence and graduation. The results of this investigation can serve as benchmark data

for policymakers of the rates of first-time in college students with full-time enrollment status who did not persist or graduate before and during the Covid-19 pandemic.

Regarding practice, the results of this multi-year investigation can provide information to the community college leaders to design student support initiatives to support first-time in college student persistence and graduation. Community college first-time in college, full-time students face many academic challenges and fall behind their peers in college persistence and graduation rates (Longwell-Grice et al., 2016). Texas community college leaders should explore implementing coaching initiatives in guiding first-time in college students through their studies and navigating the academic support services that they may benefit from in support of college persistence and graduation. Juskiewicz (2020) predicted that community college enrollment would increase over the next decade.

### **Recommendations for Future Research**

In this statewide, multiyear investigation, the rates of first-time in college students who did not persist or graduate in Texas community colleges by ethnicity/race and full-time enrollment status. Accordingly, several recommendations can be made for future research studies. First, researchers are encouraged to investigate the rates of first-time in college students who did not persist or graduate in Texas community colleges by ethnicity/race and part-time enrollment status. Second, researchers are encouraged to examine the rates of first-time in college students who did not persist or graduate in Texas community colleges by their ethnicity/race. Another recommendation for future research is to replicate this study for Texas 4-year universities. The extent to which the results discussed herein would be generalizable to 4-year universities is not known.

Furthermore, researchers are encouraged to investigate first-time in college student persistence and graduation in a qualitative research study to gain insight into factors that influence student persistence and graduation in Texas community colleges from students' perspectives. Similar future investigations could also be conducted for community colleges in other states to explore whether the results of this multiyear empirical research study could be generalized outside of Texas.

### **Conclusion**

The purpose of this multiyear research study was to determine the extent to which differences were present in the rates of students who did not persist or graduate from the 2014-2015 academic year through the 2019-2020 academic year for first-time in college students by their ethnicity/race and full-time enrollment status in Texas community colleges. The rates of Hispanic and of Black first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges statistically significantly increased over six academic years. A decline in full-time enrollment rates for first-time in college students in Texas community colleges was reported by researchers (e.g., Lebron, 2017; Maynard, 2020). Additionally, the first-time in college students with full-time enrollment status in Texas community colleges struggle with college persistence and graduation, as demonstrated in this multi-year research study results. Accordingly, educational leaders should focus attention on establishing student support programs to increase the first-time in college student full-time enrollment, persistence, and graduation.

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**Table 2.1**

*Descriptive Statistics for Hispanic First-Time in College Students with Full-Time Enrollment Status in Texas Community Colleges Who Did Not Persist or Graduate Between the 2014-2015 and 2019-2020 Academic Years*

Academic Year	<i>n</i> of community colleges	<i>M%</i>	<i>SD%</i>
2014-2015	57	32.69	7.05
2015-2016	56	30.92	7.08
2016-2017	59	31.61	9.27
2017-2018	59	30.53	7.08
2018-2019	57	43.51	8.65
2019-2020	58	34.54	8.88

**Table 2.2**

*Descriptive Statistics for Hispanic First-Time in College Students with Full-Time Enrollment Status in Texas Community Colleges Who Did Not Persist or Graduate for the Beginning, Midpoint, and Most Recent Years Comparison*

Academic Year	<i>n</i> of community colleges	<i>M%</i>	<i>SD%</i>
Comparison			
Beginning to Midpoint			
2014-2015	57	32.69	7.05
2016-2017	59	31.61	9.27
Midpoint to Most Recent			
2017-2018	59	30.53	7.08
2019-2020	58	34.54	8.88
Beginning to Most Recent			
2014-2015	57	32.69	7.05
2019-2020	58	34.54	8.88

**Table 2.3**

*Descriptive Statistics for Black First-Time in College Students with Full-Time Enrollment Status in Texas Community Colleges Who Did Not Persist or Graduate Between the 2014-2015 and 2019-2020 Academic Years*

Academic Year	<i>n</i> of community colleges	<i>M%</i>	<i>SD%</i>
2014-2015	52	44.87	12.11
2015-2016	48	50.59	15.64
2016-2017	52	48.79	12.57
2017-2018	50	52.02	14.50
2018-2019	52	55.39	13.73
2019-2020	51	55.74	14.17

**Table 2.4**

*Descriptive Statistics for Black First-Time in College Students with Full-Time Enrollment Status in Texas Community Colleges Who Did Not Persist or Graduate for the Beginning, Midpoint, and Most Recent Years Comparison*

Academic Year	<i>n</i> of community colleges	<i>M%</i>	<i>SD%</i>
Comparison			
Beginning to Midpoint			
2014-2015	52	44.87	12.11
2016-2017	52	48.79	12.57
Midpoint to Most Recent			
2017-2018	50	52.02	14.50
2019-2020	51	55.74	14.17
Beginning to Most Recent			
2014-2015	52	44.87	12.11
2019-2020	51	55.74	14.17

**Table 2.5**

*Descriptive Statistics for White First-Time in College Students with Full-Time Enrollment Status in Texas Community Colleges Who Did Not Persist or Graduate Between the 2014-2015 and 2019-2020 Academic Years*

Academic Year	<i>n</i> of community colleges	<i>M%</i>	<i>SD%</i>
2014-2015	57	34.55	8.42
2015-2016	57	31.27	4.82
2016-2017	57	32.45	8.69
2017-2018	59	33.53	8.20
2018-2019	59	32.62	7.35
2019-2020	59	37.12	8.93

**Table 2.6**

*Descriptive Statistics for White First-Time in College Students with Full-Time Enrollment Status in Texas Community Colleges Who Did Not Persist or Graduate for the Beginning, Midpoint, and Most Recent Years Comparison*

Academic Year	<i>n</i> of community colleges	<i>M%</i>	<i>SD%</i>
Comparison			
Beginning to Midpoint			
2014-2015	57	34.55	8.42
2016-2017	57	32.45	8.69
Midpoint to Most Recent			
2017-2018	59	33.53	8.20
2019-2020	59	37.12	8.93
Beginning to Most Recent			
2014-2015	57	34.55	8.42
2019-2020	59	37.12	8.93



**Table 2.7**

*Descriptive Statistics for Asian First-Time in College Students with Full-Time Enrollment Status in Texas Community Colleges Who Did Not Persist or Graduate Between the 2014-2015 and 2019-2020 Academic Years*

Academic Year	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
2014-2015	35	23.06	15.25
2015-2016	31	27.25	14.85
2016-2017	28	25.80	12.63
2017-2018	26	25.50	17.21
2018-2019	29	28.32	14.77
2019-2020	29	26.63	15.33

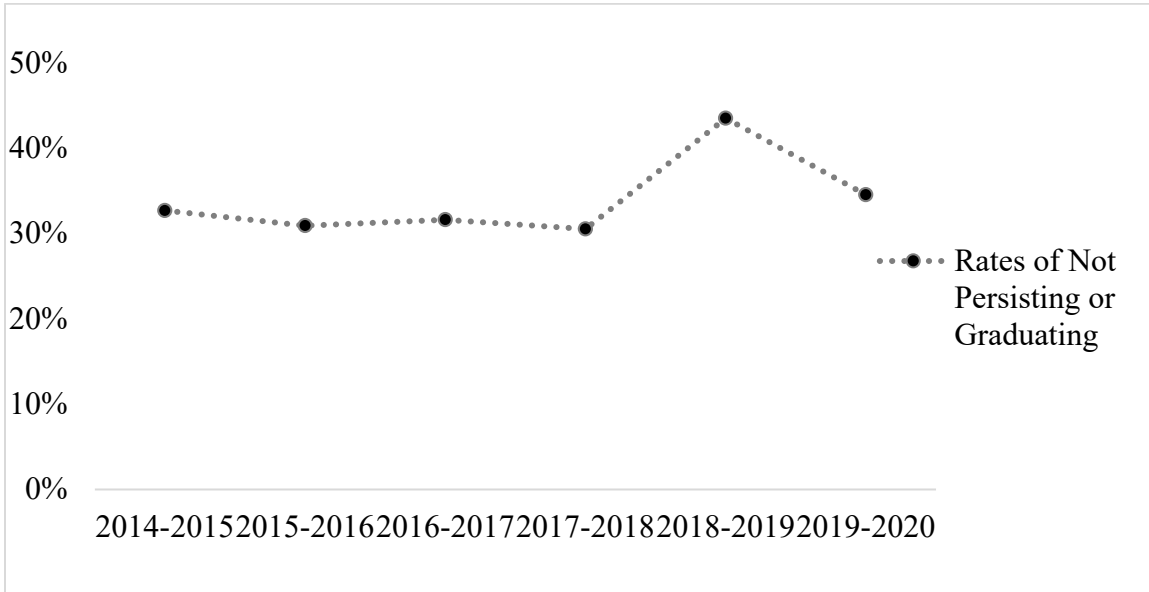
**Table 2.8**

*Descriptive Statistics for Asian First-Time in College Students with Full-Time Enrollment Status in Texas Community Colleges Who Did Not Persist or Graduate for the Beginning, Midpoint, and Most Recent Years Comparison*

Academic Year	<i>n</i> of community colleges	<i>M%</i>	<i>SD%</i>
Comparison			
Beginning to Midpoint			
2014-2015	35	23.06	15.25
2016-2017	28	25.80	12.63
Midpoint to Most Recent			
2017-2018	26	25.50	17.21
2019-2020	29	26.63	15.33
Beginning to Most Recent			
2014-2015	35	23.06	15.25
2019-2020	29	26.63	15.33

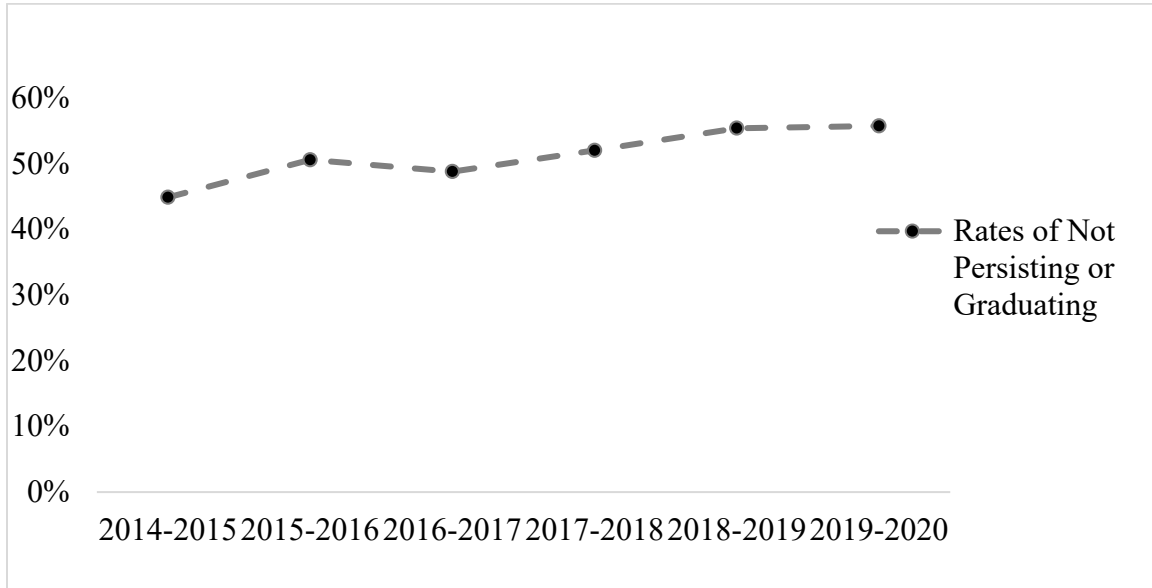
**Figure 2.1**

*Rates for Hispanic First-Time in College Students with Full-Time Enrollment Status Who Did Not Persist or Graduate at Texas Community Colleges by Academic Years*



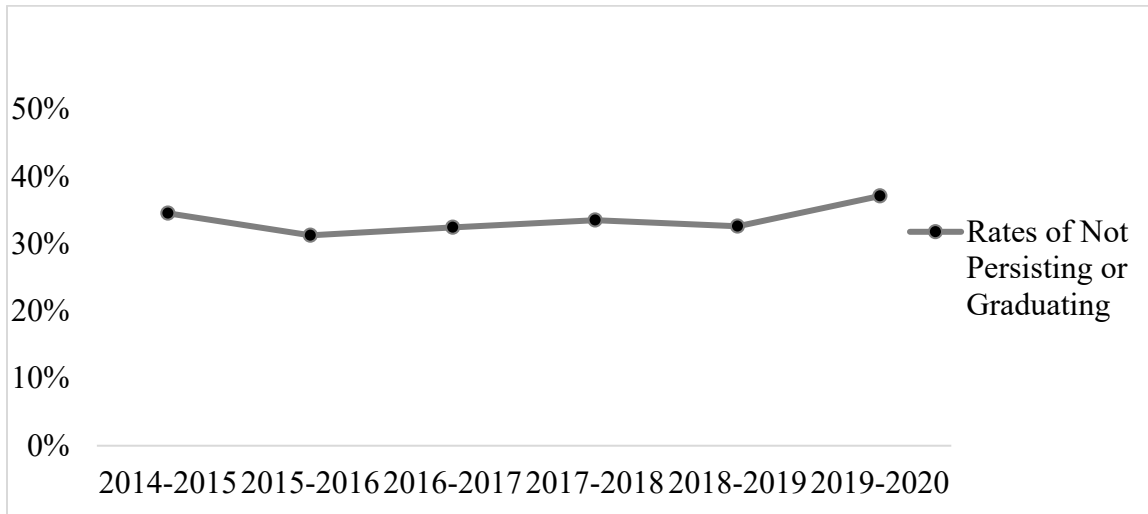
**Figure 2.2**

*Rates for Black First-Time in College Students with Full-Time Enrollment Status Who Did Not Persist or Graduate at Texas Community Colleges by Academic Years*



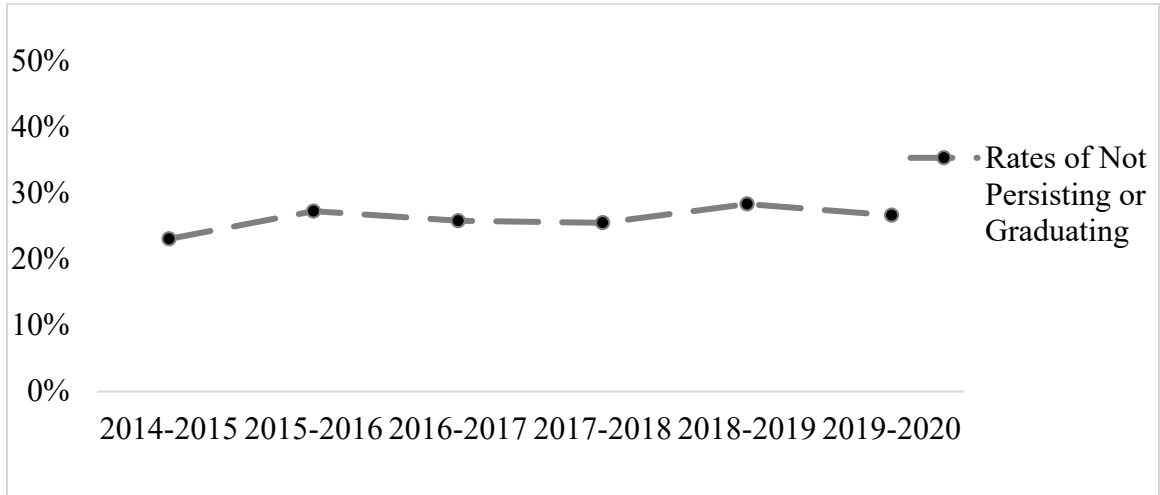
**Figure 2.3**

*Rates for White First-Time in College Students with Full-Time Enrollment Status Who Did Not Persist or Graduate at Texas Community Colleges by Academic Years*



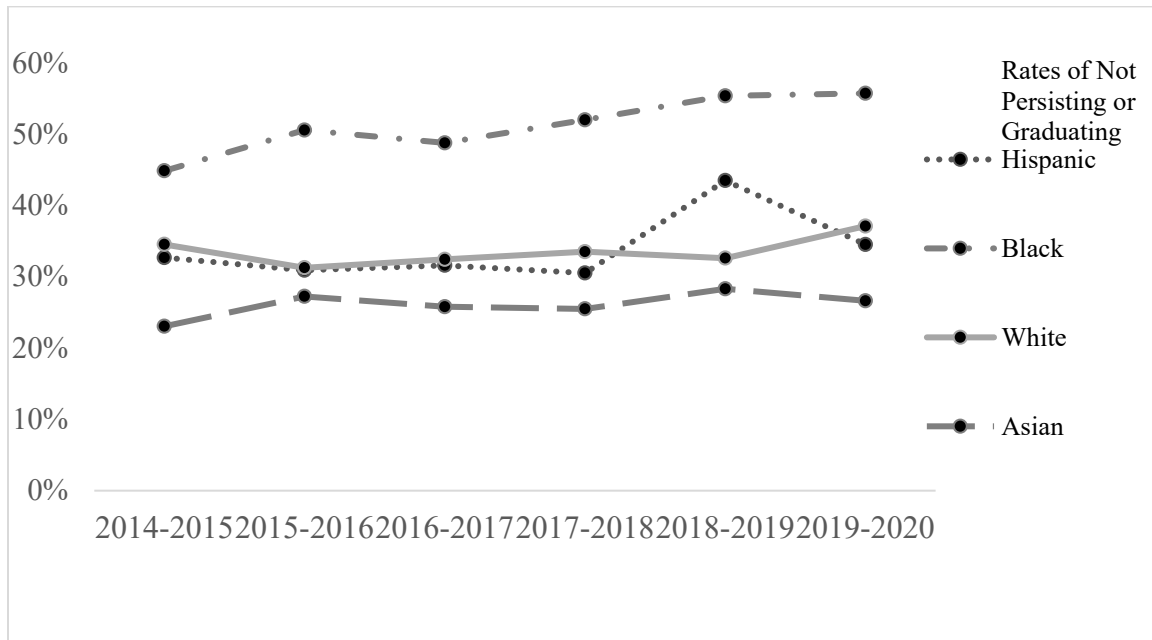
**Figure 2.4**

*Rates for Asian First-Time in College Students with Full-Time Enrollment Status Who Did Not Persist or Graduate at Texas Community Colleges by Academic Years*



**Figure 2.5**

*Rates for First-Time in College Students with Full-Time Enrollment Status Who Did Not Persist or Graduate at Texas Community Colleges by Academic Years and Ethnicity/Race*



**CHAPTER III**

DIFFERENCES IN RATES OF FIRST-TIME IN COLLEGE STUDENTS WHO DID  
NOT PERSIST OR GRADUATE BY ETHNICITY/RACE AND PART-TIME  
ENROLLMENT STATUS IN TEXAS COMMUNITY COLLEGES: A STATEWIDE,  
MULTIYEAR INVESTIGATION

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



### **Abstract**

The extent to which differences were present in the rates of first-time in college students who did not persist or graduate in Texas community colleges was investigated in this multi-year statewide empirical study by ethnicity/race and part-time enrollment status for six academic years (i.e., from 2014-2015 through 2019-2020). Statistically significant increases were documented in the rates of Hispanic and Black students who did not persist or graduate in Texas community colleges over the six years. Hispanic and Black first-time in college students with part-time enrollment status did not persist or graduate in Texas community colleges at rates of 44.27% and 49.25%, respectively, in the 2019-2020 academic year. Policymakers and educators should be concerned about the high rates of first-time college students who did not persist or graduate in Texas community colleges.

*Keywords:* Texas community colleges; First-time in college student; Part-time enrollment status; Ethnicity; Race; Persistence; Graduation

DIFFERENCES IN RATES OF FIRST-TIME IN COLLEGE STUDENTS WHO DID  
NOT PERSIST OR GRADUATE BY ETHNICITY/RACE AND PART-TIME  
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Community colleges in the United States are valued for offering programs for students in achieving academic goals and in developing skills for employment (American Association of Community Colleges, 2014). Community colleges support and influence the industrial sector of the United States by providing skillful employees (American Association of Community Colleges, 2014). The open-door enrollment policy of community colleges welcomes students from different academic and socioeconomic backgrounds. With respect to the state of interest for this article, the Texas Higher Education Coordinating Board established the 60X30 Plan to increase students' college access and graduation rates at the higher educational institutions in Texas (Texas Higher Education Coordinating Board, 2015). The 60X30 plan was defined by the Texas Higher Education Coordinating Board (2015) as "60 percent of the 25-to-34-year-old Texas population to hold a certificate or degree by 2030" (p. iv). Student enrollment at community colleges was 769,288 students for Fall 2019, where 76.9% of students were enrolled part-time (Texas Higher Education Coordinating Board, 2020).

The American Association of Community Colleges (2021) reported that 65% of community college students were enrolled part-time, with 6.8 million students enrolled in credit courses nationally at community colleges. Of importance is that Juskiewicz (2020) documented the presence of noticeable gaps in the persistence and graduation rates of students based on their enrollment status. Part-time students persist and graduate

at only about half of the rate of full-time students at community colleges (Juszkiewicz, 2020). Despite continued long-term enrollment, part-time community college students continue to struggle and are less likely to graduate with a degree (Juszkiewicz, 2020) than are full-time students.

Student enrollment at community colleges is regarded as being nontraditional in nature, where students change between full-time and part-time enrollment status and even often skip a term or two (Crosta, 2014). Students who attend community colleges are different from their counterparts at 4-year institutions in their academic goals, preparedness, and challenges (Yu, 2017). Working while attending a college was one of the challenges identified by Yu (2017) as a negative factor influencing student college persistence because working took time from students' study time. Additionally, Yu (2017) established that first-time in college part-time students were less likely to make academic progress than were their full-time peers. Crosta (2014) connected the part-time enrollment status of the first-time in college student persistence to factors such as ethnicity/race, socioeconomic status, and family status. Students who started college on a part-time enrollment status were slower in accruing college credits than full-time students. Crosta (2014) affirmed that completing a 2-year degree within the 2-year period was highly unlikely at community colleges with low full-time student enrollment. Community college student persistence and graduation success were attributed to the continuance of full-time enrollment instead of part-time enrollment with few breaks.

Of importance to this article, Lebron (2017) examined undergraduate student enrollment for first-time college students with a part-time enrollment status by their ethnicity/race at Texas community colleges. Statistically significant differences were

documented for Hispanic first-time in college with part-time enrollment status.

Enrollment percentages of Hispanic first-time in college community college students with part-time enrollment status increased from 24.20% in the 1999-2000 academic year to 43.59% in the 2014-2015 academic year (Lebron, 2017).

In contrast to increasing numbers of part-time enrollment status for first-time in college Hispanic students, the part-time enrollment rates of White first-time in college students was established as decreasing (Lebron, 2017). A notable decrease occurred in the enrollment percentages of White Texas community college students, from 60.97 % in the 1999-2000 academic year to 34.03% in the 2014-2015 academic year who were first-time college students with part-time enrollment status. In contrast, the part-time college enrollment rates of Black and Asian community college students remained constant. Lebron (2017) emphasized that even though noticeable improvements in the ethnic/racial diversity of Texas community college first-time in college students with part-time enrollment status, further investigations for generating ways to improve ethnic/racial diversity were needed.

In a recent study conducted in Texas, Maynard (2020) examined whether gender differences existed in the enrollment rates of first-time in college students in Texas community colleges over 16 years by the part-time enrollment status. Maynard (2020) established that the enrollment rates for male and female first-time in college students in Texas community colleges changed by 3.97 percentage points over the 16 academic years of data analyzed. Enrollment rates for female first-time in college students with part-time enrollment status in Texas community colleges fluctuated from 53.52% in the 2009-2010 academic year to 57.49% in the 2003-2004 academic year. Enrollment rates for first-time

in college male students with part-time enrollment status in Texas community colleges varied from 42.51% in the 2003-2004 academic year to 46.48% in the 2009-2010 academic years. Overall, enrollment rates for first-time in college students with part-time enrolment status at Texas community colleges averaged 44.82% for male students and 55.18% for female students over 16 academic years.

Students who held part-time enrollment status at the community colleges most likely face challenges balancing academic, work, and family responsibilities (Juszkiewicz, 2020), challenges that contribute toward low college persistence and graduation rates. Community college students are enrolled at postsecondary institutions on a part-time basis, usually while employed and after they started a family, and after they have assumed additional responsibilities (Lee, 2017). First-time in college, part-time students face a substantially higher risk in departing from college than their full-time counterparts. Lee (2017) examined the needs and challenges of part-time students at a large community college to find effective ways of enhancing academic and social experiences to increase part-time student persistence and graduation rates. Part-time student challenges were generalized under three overarching factors of “academic, personal, and financial” (Lee, 2017, p. 3) that pose barriers for college persistence and graduation. He reported that 56.10% of the part-time students in the study identified with more than one challenging factor, such as academic, personal, and financial, while attending a community college. A majority of the part-time students, about 82.9%, of the study expressed balancing school, work, and personal life as the most challenging factor influencing their academic success and college persistence, followed by the academic factor at 39.02% and the financial factor at 36.58%. Findings of the Lee study were

consistent with prior research results, and that the three overarching factors of challenges that part-time students encounter were still valid. Lee (2017) concluded that the part-time student population continues to grow in community colleges, and subsequently, the challenges that part-time students face growing with them.

Community colleges enroll almost one-half of the students nationwide and report the lowest persistence and graduation rates (Barnett, 2011). Furthermore, community college students are members of different ethnic/racial groups from low socioeconomic families with limited resources. Barnett (2011) explored connections with student academic integration in a college and intent to persisting and graduating from a college, considering differences in student demographics and faculty validations. Reported was that Hispanic and Black students would more likely articulate a wish for persisting and graduating from college because of faculty encouragement and validation than were their White counterparts. Faculty-student interactions that included academic motivation and approval from the faculty contributed to college persistence and graduation. Recommendations were made toward capitalizing on faculty-student interactions to improve student college persistence and graduation (Barnett, 2011).

Millea et al. (2018) determined that first-year in college student “persistence and graduation rates were higher for students who were academically prepared, received grants or scholarships, and were enrolled in a smaller class” (p. 309). They suggested that higher education institutions consider providing financial assistance and smaller classrooms to improve first-time in college student persistence and academic success at colleges. Juszkiwicz (2020) predicted an increase in part-time enrollment at the community colleges because of financial challenges faced by students and their families

due to the COVID-19 pandemic escalate. Juszkievicz (2020) drew attention to the gaps among ethnic/racial, sex, and age groups still exist in college completion despite the increasing persistence and graduation rates. Students who historically fell behind continue to face socioeconomic challenges and hardship, especially during the national pandemic year (Juszkievicz, 2020). In the efforts of targeting to increase the persistence and graduation rates, “equity will have to remain the bull’s eye” (Juszkievicz, 2020, p. 16).

Moss (2017) investigated the extent to which differences were present in graduation rates of Black and White students in Texas community colleges over nine academic years. Graduation rates of White students were statistically significantly higher than the graduation rates of Black students in Texas community colleges. Graduation rates for White students were highest at 46%, compared to Black students at 34% over nine academic years. White students were more likely to earn a college degree than were Black students. Moss (2017) contended that an immediate need was present to address the gap in graduation rates among ethnic/racial student groups and recommended community college leaders and government officials to decrease that gap.

Stagg (2017) examined the extent to which differences existed in the 1-year graduation rates by ethnicity/race (i.e., Hispanic and White) in Texas community colleges over seven academic years. Stagg (2017) documented the presence of statistically significant differences in graduation rates between Hispanic and White Texas community college students in the 2008-2009 through the 2012-2013 academic years. Graduation rates for Hispanic students were about 3% lower than the graduation rates for White

students at Texas community colleges in the 2008-2009 academic year through the 2012-2013 academic year.

In a similar study, but involving 4-year public universities in Texas, Ballinger (2018) explored the extent to which differences were present in the 1-year persistence rates of Hispanic and Black students by their institutional status (i.e., stayed or transferred) for 15 academic years. Statistically significant differences were reported in 1-year persistence rates of Hispanic students and Black students by their institutional status. Hispanic and Black students who stayed at the same Texas 4-year public university persisted at substantially higher rates than Hispanic and Black students who transferred from one 4-year university to another university. Ballinger (2018) stated that Hispanic and Black students who stayed at the same 4-year public university were more likely to graduate than their peers who transferred to another college.

Community colleges continue serving diverse, underrepresented student populations and supporting local economies, but they are continuously criticized for low persistence and graduation rates (Yu, 2017). Student persistence and graduation serve as a merit for evaluating the progress and measuring success for higher education institutions, usually using the first-time in college students as a subject for the study (Millea et al., 2018). Mertes and Jankoviak (2016) stated that the academic programs supporting college student persistence were of critical importance for public community colleges, but many community colleges lack funding for the educational support programs. Community college students failed to complete their studies, where Attewell et al. (2011) reported that 68% of first-time college students seeking a college degree did not earn one six years later. On average, community colleges have much lower student



persistence and graduation rates than 4-year colleges. Attewell et al. (2011) questioned whether community college low student persistence and graduation could be the result of the open-door policy of accepting all students despite their academic preparedness.

### **Statement of the Problem**

Almost one-half of the students nationwide were enrolled at community colleges, with reported lowest persistence and graduation rates (Barnett, 2011; Juskiewicz, 2020). Students who enrolled part-time at community colleges are 65% of community college enrollment (American Association of Community Colleges, 2021). Persistence and graduation rates are substantially lower for part-time students than for first-time college students who are enrolled full-time (Juskiewicz, 2020). First-time in college students who are enrolled part-time encounter challenges such as balancing school, work, and family life that sets barriers on their way to succeeding academically and graduating from college (Lee, 2017). Community college students are diverse, consisting of high percentages of students of color, students with low socioeconomic status, and students with limited resources. As such, they experience additional challenges in their college persistence and graduation (Barnett, 2011). Continued low persistence and graduation rates for first-time in college students who are enrolled part-time might have negative effects on local economies, as the demand for an educated and skilled workforce continues to grow over time as more jobs require some postsecondary education (Juskiewicz, 2020). The further examination of rates of first-time in college students who did not persist or graduate in Texas community colleges with a part-time enrollment status will inform the key stakeholders in establishing programs to support first-time college students' academic success and college graduation.

**Purpose of the Study**

The purpose of this research study was to determine the first-time in college students ethnic/racial diversity (i.e., Hispanic, Black, White, and Asian) by part-time enrollment status at Texas community colleges. Additionally, the extent to which difference were present in the rates of students who did not persist or graduate from the 2014-2015 academic year through the 2019-2020 academic year for first-time in college students by their ethnicity/race and part-time enrollment status in the Texas community colleges were investigated. Notably, the differences in rates of first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges were examined between the beginning year of data and the midpoint recent year of data, the midpoint year of data, and the most recent year of data, beginning year of data and the most recent year of data. Similarly, any trends that were present in rates of students who did not persist or graduate by their ethnicity/race and part-time enrollment status at Texas community colleges were determined.

**Significance of the Study**

The open-door policy of the community colleges encourages enrollment of students with a different academic and socioeconomic status where community colleges enroll one-half of the students nationwide (Barnett, 2011). Most students enrolled at a community college are first-time in college students who are enrolled on a part-time basis (American Association of Community Colleges, 2021). Lebron (2017) established the presence of statistically significant differences in part-time enrollment rates for first-time in college students by their ethnicity/race. He documented a noticeable increase in Hispanic student enrollment and a decrease for White student enrollment on a part-time

status at Texas community colleges. Part-time college enrollment rates for first-time in college Black and Asian students remained the same over 15 academic years (Lebron, 2017). First-time in college students who start their education at a community college with a part-time enrollment status earn college credits at lower rates than their counterparts with full-time enrollment status (Crosta, 2014).

First-time in college students who are enrolled part-time continue to struggle and are less likely to persist and graduate (Juszkiewicz, 2020). First-time in college students with part-time enrollment status encountered numerous challenges while at college (e.g., Barnett, 2011; Crosta, 2014; Lee, 2017), and the reported continuance growth in part-time enrollment status, especially for students with diverse backgrounds (e.g., American Association of Community Colleges, 2021; Lebron, 2017). Therefore, investigating the differences in rates of first-time in college students who did not persist or graduate by part-time enrollment status and ethnicity/race contributed to informant decisions for community college administrators and other key stakeholders in designing and implementing support programs for students with a part-time enrollment status.

### **Research Questions**

The following research questions were addressed in this multiyear investigation:

- (a) What is the difference in the rates of first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges between the beginning year of data and the midpoint recent year of data?;
- (b) What is the difference in the rates of first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges between the midpoint year of data and the most recent year of data?;
- (c) What is the difference in the rates of first-

time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges between the beginning year of data and the most recent year of data?; and (d) What trends are present in the ethnic/racial diversity of first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges? The first research question was repeated for the 2014-2015 academic year through the 2019-2020 academic year, whereas the second through the fourth research question involved comparisons of two years of data. The final research question, the trend question, involved all six academic years of data. Research questions were analyzed separately for Asian, Black, Hispanic, and White students.

## **Method**

### **Research Design**

The research design for this research study was a non-experimental causal-comparative design (Creswell & Creswell, 2018; Johnson & Christensen, 2020). In a non-experimental causal-comparative research examination, the independent variable cannot be changed or modified (Johnson & Christensen, 2020). Preexisting archival data from Texas Higher Education Coordinating Board Interactive Accountability System were obtained and analyzed for six academic years from 2014-2015 through 2019-2020 academic years. Data on rates of students who did not persist or graduate were acquired for first-time in college students at Texas community colleges by their ethnicity/race and by their enrollment status (i.e., part-time). Data were examined to determine the degree to which differences would be present in the rates of first-time in college students who did not persist or graduate by part-time enrollment status and by ethnicity/race.

## **Participants and Instrumentation**

Participants in this research study were students who were first-time in college students with part-time enrollment status between the 2014-2015 through 2019-2020 academic years at Texas community colleges. As a requirement, all higher education institutions in the state of Texas report data on persistence and graduation rates, enrollment status, and student ethnicity/race to the Texas Higher Education Coordinating Board. Texas Higher Education Coordinating Board accumulates and makes publicly available all the reported data by higher education institutions through the Texas Higher Education Coordinating Board Interactive Accountability System. The Texas Higher Education Coordinating Board Interactive Accountability System provided the data for this research study. Information from all Texas community colleges was included in the database for six academic years.

## **Results**

Before inferential statistical procedures were conducted to answer the research question, checks of their underlying assumptions were performed. Because the majority of the assumptions were met, parametric paired samples *t*-tests were calculated. Results are reported separately by ethnicity/race for each research question.

### **Results for Hispanic Students**

Descriptive statistics were calculated for each of the six academic years before addressing the research questions for Hispanic students. The rates of Hispanic first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges were relatively consistent. Their rates varied from a low of

32.74% in the 2018-2019 academic year to a high of 48.77% in the 2014-2015 academic year. Delineated in Table 3.1 are the results of this analysis.

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 Insert Table 3.1 about here  
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Regarding the beginning year comparison (i.e., 2014-2015) and the midpoint year comparison (i.e., 2016-2017), a statistically significant difference was revealed for Hispanic students,  $t(54) = 3.10$ ,  $p = .01$ , Cohen's  $d = 0.48$ , a small effect size (Cohen, 1988). The rates of Hispanic first-time in college students with part-time enrollment status who did not persist or graduate in these two academic years were statistically significantly higher, almost 5% higher, in the beginning year comparison than in the midpoint year comparison. Table 3.2 contains the descriptive statistics for these analyses.

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Concerning the midpoint year comparison (i.e., 2017-2018) and the most recent year comparison (i.e., 2019-2020), a statistically significant difference was yielded for Hispanic students,  $t(53) = -3.81$ ,  $p < .001$ , Cohen's  $d = 0.48$ , a small effect size (Cohen, 1988). Hispanic students did not persist or graduate at a statistically significantly higher rate, of almost 5% higher, in the most recent year comparison than in the midpoint year comparison. Descriptive statistics for this analysis are presented in Table 3.2.

With respect to the beginning year comparison (i.e., 2014-2015) and the most recent year comparison (i.e., 2019-2020), a statistically significant difference was not

revealed for Hispanic students,  $t(53) = 0.07, p = .94$ . The percentages of Hispanic students who were enrolled part-time and who did not persist or graduate were commensurate in these two academic years, 48.77% and 48.27%, respectively. Table 3.2 contains the descriptive statistics for this analysis.

### **Results for Black Students**

Prior to addressing the research questions for Black first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges, descriptive statistics were calculated for each of the six academic years. The rates of Black first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges noticeably fluctuated over the six-year period. Their percentages decreased by 15% from the 2014-2015 academic year to the 2015-2016 academic year; however, their rates increased by 6% in the 2016-2017 academic year. Revealed in Table 3.3 are the descriptive statistics for this analysis.

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Insert Table 3.3 about here  
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Concerning the beginning year comparison (i.e., 2014-2015) and the midpoint year comparison (i.e., 2016-2017), the parametric paired samples  $t$ -test revealed a statistically significant difference in the percentages of Black students who did not persist or graduate,  $t(45) = 4.32, p < .001$ , Cohen's  $d = 0.79$ , a near-large effect size (Cohen, 1988). The rates of Black first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges statistically significantly

increased from the beginning, academic year, by 9%, in comparison to the midpoint academic year. Presented in Table 3.4 are the descriptive statistics for this analysis.

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With respect to the midpoint year comparison (i.e., 2017-2018) and the most recent year comparison (i.e., 2019-2020), the parametric paired samples *t*-test did not yield a statistically significant difference for Black students,  $t(50) = -0.91, p = .37$ . The rates of Black first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges were commensurate in these two academic years, 47.34% and 49.25%, respectively. Descriptive statistics for this analysis are revealed in Table 3.4.

Regarding the beginning year comparison (i.e., 2014-2015) and the most recent year comparison (i.e., 2019-2020), a statistically significant difference was yielded for Black students,  $t(48) = 6.30, p < .001$ , Cohen's  $d = 1.12$ , a large effect size (Cohen, 1988). The rates of Black first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges were statistically significantly higher, 12% higher, in the beginning year comparison than in the most recent year comparison. Table 3.4 contains the descriptive statistics for this analysis.

### **Results for White Students**

Before addressing the research questions for White students, descriptive statistics were calculated for each of the six academic years. Relatively consistent rates across the six academic years were present for White first-time in college students with part-time



enrollment status who did not persist or graduate in Texas community colleges. White student rates varied from a high of 49.72% in the 2014-2015 academic year to a low of 45.33% in the 2017-2018 academic year. Revealed in Table 3.5 are the descriptive statistics for this analysis.

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Insert Table 3.5 about here  
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With respect to the beginning year comparison (i.e., 2014-2015) and the midpoint year comparison (i.e., 2016-2017), the parametric paired samples *t*-test revealed a statistically significant difference in the rates of White first-time in college students with part-time enrollment status who did not persist or graduate,  $t(56) = 2.29, p = .03$ , Cohen's  $d = 0.33$ , a small effect size (Cohen, 1988). The rates of White first-time in college students with part-time enrollment status who did not persist or graduate were 3% higher in the beginning year comparison than in the midpoint year comparison. Table 3.6 contains the descriptive statistics for this analysis.

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Insert Table 3.6 about here  
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Concerning the midpoint year comparison (i.e., 2017-2018) and the most recent year comparison (i.e., 2019-2020), a statistically significant difference was yielded for White first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges students,  $t(55) = -3.15, p = .01$ , Cohen's  $d = 0.42$ , a small effect size (Cohen, 1988). The rates of White first-time in college students

with part-time enrollment status who did not persist or graduate in Texas community colleges were at a statistically significantly lower rate, of almost 4% lower, in the midpoint year comparison than in the most recent year comparison. Delineated in Table 3.6 are the descriptive statistics for this analysis.

Regarding the beginning year comparison (i.e., 2014-2015) and the most recent year comparison (i.e., 2019-2020), a statistically significant difference were not revealed for White students,  $t(55) = 0.35, p = .73$ . The rates of White first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges were similar in these two academic years, 49.72% and 49.25%, respectively. Table 3.6 contains the descriptive statistics for this analysis.

### **Results for Asian Students**

Prior to addressing the research questions for Asian first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges, descriptive statistics were calculated for each of the six academic years. The percentage of Asian first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges stayed at a low of 30% over the six-year period. The rates of Asian first-time in college students with part-time enrollment status who did not persist or graduate fluctuated from a low of 23.16% in the 2018-2019 academic year to a high of 32.56% in the 2014-2015 academic year. Revealed in Table 3.7 are the descriptive statistics for this analysis.

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Regarding the beginning year comparison (i.e., 2014-2015) and the midpoint year comparison (i.e., 2016-2017), the parametric samples  $t$ -test did not reveal a statistically significant difference in the rates of Asian students who did not persist or graduate,  $t(12) = 0.80, p = .44$ . The rates of Asian first-time in college students with part-time enrollment status who did not persist or graduate at a similar rate were commensurate in these two academic years, 32.56% and 29.62%, respectively. Delineated in Table 3.8 are the descriptive statistics for these analyses.

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With respect to the midpoint year comparison (i.e., 2017-2018) and the most recent year comparison (i.e., 2019-2020), a statistically significant difference was not present for Asian first-time in college students with part-time enrollment status who did not persist or graduate in the Texas community colleges,  $t(20) = 0.25, p = .81$ . Their rates were commensurate in these two academic years, 28.21% and 29.13%, respectively. Table 3.8 contains the descriptive statistics for this analysis.

Concerning the beginning year comparison (i.e., 2014-2015) and the most recent year comparison (i.e., 2019-2020), the parametric paired samples  $t$ -test did not yield a statistically significant difference for Asian first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges,  $t(20) = 0.94, p = .36$ . The rates of Asian first-time in college students with part-time enrollment status who did not persist or graduate at a similar rate were commensurate in these two

academic years, 32.56% and 29.13%, respectively. Presented in Table 3.8 are the descriptive statistics for this analysis.

### **Discussion**

In this multiyear statewide study, the extent to which differences were present in the rates of the first-time in college students in Texas community colleges who did not persist or graduate was examined by ethnicity/race and part-time enrollment status.

Archival data from Texas Higher Education Coordinating Board Interactive Accountability System were obtained and analyzed for six academic years for all Texas community colleges that reported data for those years. The rates of first-time in college students with part-time enrollment status in Texas community colleges who did not persist or graduate by ethnicity/race fluctuated over the six academic years.

Concerning Hispanic first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges, their rates varied over the six academic years. The rates of Hispanic first-time in college students with part-time enrollment status who did not persist or graduate decreased from 48.77% in the 2014-2015 academic year to 32.74% in the 2018-2019 academic year. Their rates increased again to 48.27% in the 2019-2020 academic year. Hispanic first-time in college students with part-time enrollment status did not persist or graduate in Texas community colleges at a similar rate of almost 49%, in the beginning academic year of 2014-2015 and the most recent academic year of 2019-2020.

With respect to Black first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges, their rates decreased over the six academic years. The rates for Black first-time in college students with part-

time enrollment status who did not persist or graduate in Texas community colleges varied from a high of 61.28% in the 2014-2015 academic year to a low of 45.78% in the 2018-2019 academic year. The rates of Black first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges decreased by 12% between the beginning of the academic year of 2014-2015 and the in the end of 2019-2020.

Rates were relatively constant for White first-time in college students with part-time enrollment status. The rates for the White first-time in college students with part-time enrollment status who did not persist or graduate varied from a high of 49.72% in the 2014-2015 academic year to a low of 45.33 % in the 2017-2018 academic year. White first-time in college students with part-time enrollment status did not persist or graduate in Texas community colleges at a similar rate of about 49% at the beginning and the most recent academic years.

For Asian first-time in college students with part-time enrollment status who did not persist or graduate, their rates varied from a low of 23.15% in the 2018-2019 academic year to a high of 32.56% in the 2014-2015 academic year. Asian first-time in college students with part-time enrollment status did not persist or graduate in Texas community colleges at a lower rate than Hispanic and Black students. Displayed in Figures 3.1 through 3.5 are the results by ethnicity/race across all six years.

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Insert Figures 3.1 through 3.5 about here  
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## Connections to Existing Literature

Investigated in this multiyear statewide research study were the rates of first-time in college students who did not persist or graduate in Texas community colleges by their ethnicity/race and part-time enrollment status. Results of this investigation were commensurate with the findings of previous researchers (Lebron, 2017; Moss, 2017; Stagg, 2017; Juskiewicz, 2020) who documented the presence of substantial gaps in student persistence and graduation rates by enrollment status. First-time in college students with part-time enrollment status struggle with college persistence and graduation and depart college at a higher rate than their full-time counterparts (Lee, 2017; Juskiewicz, 2020).

In a prior investigation, Lebron (2017) documented statistically significant differences for Hispanic first-time in college students with part-time enrollment status. Lebron (2017) established that Hispanic first-time in college students' enrollment percentages with part-time enrollment status increased from 24.20% in the 1999-2000 academic year to 43.59% in the 2014-2015 academic year. Results in this investigation were similar in that the rates of Hispanic first-time part-time college students who did not persist or graduate at Texas community colleges increased from 32.74% in the 2018-2019 academic year to 48.27% in the 2019-2020 academic year.

Moss (2017) contended that an immediate need was present to address gaps in graduation rates among ethnic/racial student groups. Confirmed in this investigation was the presence of gaps in the rates of first-time part-time college students who did not persist or graduate in Texas community colleges by ethnicity/race. The rates of first-time in college students with part-time enrollment status who did not persist or graduate in

Texas community colleges were 48.77% for Hispanic students, 61.28% for Black students, 49.72% for White students, and 32.56% for Asian students in the beginning year of the 2014-2015 academic year. Similarly, gaps were present in the rates of first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges in 2019-2020. The rates of first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges were 48.27% for Hispanic students, 49.25% for Black students, 49.25% for White students, and 29.13% for Asian students in the 2019-2020 academic year.

Moss (2017) established the presence of higher graduation rates for White students at 46% compared to Black students at 34% over nine academic years. Black first-time in college students with part-time enrollment status did not persist or graduate in Texas community colleges at higher rates, from a high of 61.28% in the 2014-2015 academic year to a low of 45.78% in the 2018-2019 academic year. Rates for the White first-time in college students with part-time enrollment status who did not persist or graduate varied from a high of 49.72% in the 2014-2015 academic year to a low of 45.33% in the 2017-2018 academic year. Concurrent with Moss's (2017) results, Black first-time in college students with part-time enrollment status are still falling behind White students. An immediate need continues to be present to address gaps in graduation rates among ethnic/racial student groups (Moss, 2017).

### **Implications for Policy and Practice**

The rates for Hispanic and Black first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges increased over the years. As documented, Black first-time in college students with part-time

enrollment status continue to fall behind in college persistence and graduation than White and Asian students. Therefore, several implications for policy and practice are recommended based on the findings of this multi-year statewide study of the differences in rates of first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges.

Regarding policy, it is recommended that the Texas Higher Education Coordinating Board leaders explore initiatives and programs that target providing additional services and college knowledge for first-time in college students in Texas community colleges, as these students face multiple challenges that pose barriers for their college persistence and graduation. Furthermore, policymakers should review the Texas community college enrollments by ethnicity/race to provide additional funding to the colleges for student support services for Hispanic and Black first-time in college students with part-time enrollment status. Finally, the results of this multiyear statewide study could provide policymakers with benchmark data for college persistence and graduation during the Covid-19 pandemic year.

Concerning practice, Texas community college leaders are encouraged to review the current programs and initiatives that they have in place to make necessary changes to support first-time in college students. Hispanic and Black first-time in college students with part-time enrollment status persisted and graduated in Texas community colleges at lower rates than White and Asian students. Educational leaders are encouraged to implement faculty mentoring and coaching initiatives to support first-time in college Hispanic and Black students to increase their college persistence and graduation rates. Additionally, first-time college students may benefit from additional wrap-around support



programs that provide financial, food, and childcare support to these students while attending college to increase their college persistence and graduation.

### **Recommendations for Future Research**

Investigated in this statewide multiyear empirical study were the rates of first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges by ethnicity/race. Based on the results of this investigation, several recommendations can be made for future researchers. First, because all the data that were obtained were only from Texas community colleges, this investigation should be extended to 4-year universities in Texas. Second, first-time in college student persistence and graduation could be addressed in a qualitative study to obtain students' perspectives on student support programs and initiatives in Texas community colleges. Next, the recommendation for a qualitative study is to obtain students' perspectives on the barriers they face and some supports that may influence college persistence and graduation. Furthermore, researchers are encouraged to investigate the rates of first-time in college students who did not persist or graduate by full-time enrollment status and by ethnicity/race. The other recommendation is for the researchers to examine community college enrollment who did not persist or graduate by economic status. Also recommended is to explore the rates of first-time in college students who did not persist or graduate by their ethnicity/race regardless of enrollment status. Furthermore, extending this study to community colleges in other states is recommended to compare results for Texas and other states. Finally, researchers are encouraged to use this study's findings as benchmark data and extend this study for multiple years post-pandemic to explore changes that may occur.

## Conclusion

The purpose of this multiyear, statewide research study was to determine the extent to which differences were present in the rates of first-time in college students with part-time enrollment status who did not persist or graduate from Texas community colleges by ethnic/racial diversity for six academic years. First-time in college students with part-time enrollment status in Texas community colleges continue to struggle with their college persistence and graduation. Gaps continue to be present in college persistence and graduation rates among ethnic/racial student groups (Moss, 2017). Such gaps present an immediate need for policymakers and educators to review the current initiatives. The rates for Hispanic first-time in college students with part-time enrollment status who did not persist or graduate increased over the years, from 32.74% in the 2018-2019 academic year to 48.27% in the 2019-2020 academic year. Black first-time in college students with part-time enrollment status did not persist or graduate in Texas community colleges at almost 49.25% in the 2019-2020 academic year. Presented in this investigation were results that are cause for concern for policymakers and educators to investigate the current initiatives and make changes to reducing the gaps in college persistence and graduation for Hispanic and Black students.

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**Table 3.1**

*Descriptive Statistics for Hispanic First-Time in College Students with Part-Time Enrollment Status in Texas Community Colleges Who Did Not Persist or Graduate Between the 2014-2015 and 2019-2020 Academic Years*

Academic Year	<i>n</i> of community colleges	<i>M%</i>	<i>SD%</i>
2014-2015	56	48.77	8.54
2015-2016	56	45.13	8.40
2016-2017	57	44.56	9.32
2017-2018	55	43.82	8.91
2018-2019	59	32.74	9.72
2019-2020	57	48.27	10.01

**Table 3.2**

*Descriptive Statistics for Hispanic First-Time in College Students with Part-Time Enrollment Status in Texas Community Colleges Who Did Not Persist or Graduate for the Beginning, Midpoint, and Most Recent Years Comparison*

Academic Year	<i>n</i> of community colleges	<i>M%</i>	<i>SD%</i>
Comparison			
Beginning to Midpoint			
2014-2015	56	48.77	8.54
2016-2017	57	44.56	9.32
Midpoint to Most Recent			
2017-2018	55	43.82	8.91
2019-2020	57	48.27	10.01
Beginning to Most Recent			
2014-2015	56	48.77	8.54
2019-2020	57	48.27	10.01

**Table 3.3**

*Descriptive Statistics for Black First-Time in College Students with Part-Time Enrollment Status in Texas Community Colleges Who Did Not Persist or Graduate Between the 2014-2015 and 2019-2020 Academic Years*

Academic Year	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
2014-2015	50	61.28	10.13
2015-2016	51	46.94	10.33
2016-2017	51	52.43	13.26
2017-2018	53	47.34	12.55
2018-2019	54	45.78	11.32
2019-2020	53	49.25	10.75



**Table 3.4**

*Descriptive Statistics for Black First-Time in College Students with Part-Time Enrollment Status in Texas Community Colleges Who Did Not Persist or Graduate for the Beginning, Midpoint, and Most Recent Years Comparison*

Academic Year	<i>n</i> of community colleges	<i>M%</i>	<i>SD%</i>
Comparison			
Beginning to Midpoint			
2014-2015	50	61.28	10.13
2016-2017	51	52.43	13.26
Midpoint to Most Recent			
2017-2018	53	47.34	12.55
2019-2020	53	49.25	10.75
Beginning to Most Recent			
2014-2015	50	61.28	10.13
2019-2020	53	49.25	10.75

**Table 3.5**

*Descriptive Statistics for White First-Time in College Students with Part-Time Enrollment Status in Texas Community Colleges Who Did Not Persist or Graduate Between the 2014-2015 and 2019-2020 Academic Years*

Academic Year	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
2014-2015	57	49.72	9.33
2015-2016	57	46.80	8.40
2016-2017	57	46.72	9.13
2017-2018	59	45.33	10.09
2018-2019	59	45.70	8.52
2019-2020	59	49.25	9.29

**Table 3.6**

*Descriptive Statistics for White First-Time in College Students with Part-Time Enrollment Status in Texas Community Colleges Who Did Not Persist or Graduate for the Beginning, Midpoint, and Most Recent Years Comparison*

Academic Year	<i>n</i> of community colleges	<i>M%</i>	<i>SD%</i>
Comparison			
Beginning to Midpoint			
2014-2015	57	49.72	9.33
2016-2017	57	46.72	9.13
Midpoint to Most Recent			
2017-2018	53	47.34	12.55
2019-2020	58	49.25	9.29
Beginning to Most Recent			
2014-2015	57	49.72	9.33
2019-2020	59	49.25	9.29

**Table 3.7**

*Descriptive Statistics for Asian First-Time in College Students with Part-Time Enrollment Status in Texas Community Colleges Who Did Not Persist or Graduate Between the 2014-2015 and 2019-2020 Academic Years*

Academic Year	<i>n</i> of community colleges	<i>M%</i>	<i>SD%</i>
2014-2015	23	32.56	14.55
2015-2016	26	28.91	17.13
2016-2017	26	29.62	20.11
2017-2018	28	28.21	11.13
2018-2019	31	23.15	12.89
2019-2020	31	29.13	13.29

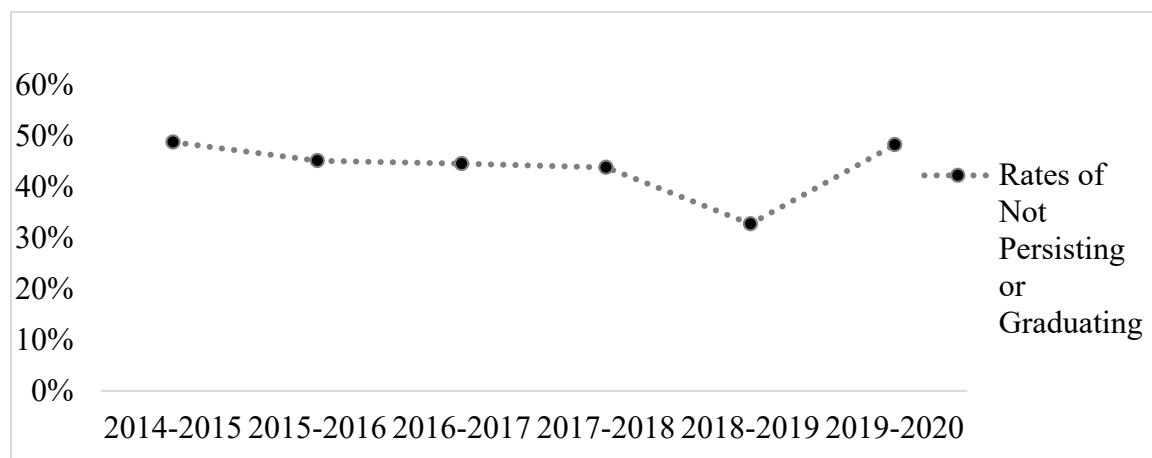
**Table 3.8**

*Descriptive Statistics for Asian First-Time in College Students with Part-Time Enrollment Status in Texas Community Colleges Who Did Not Persist or Graduate for the Beginning, Midpoint, and Most Recent Years Comparison*

Academic Year	<i>n</i> of community colleges	<i>M%</i>	<i>SD%</i>
Comparison			
Beginning to Midpoint			
2014-2015	23	32.56	14.55
2016-2017	26	29.62	20.11
Midpoint to Most Recent			
2017-2018	28	28.21	11.13
2019-2020	31	29.13	13.29
Beginning to Most Recent			
2014-2015	23	32.56	14.55
2019-2020	31	29.13	13.29

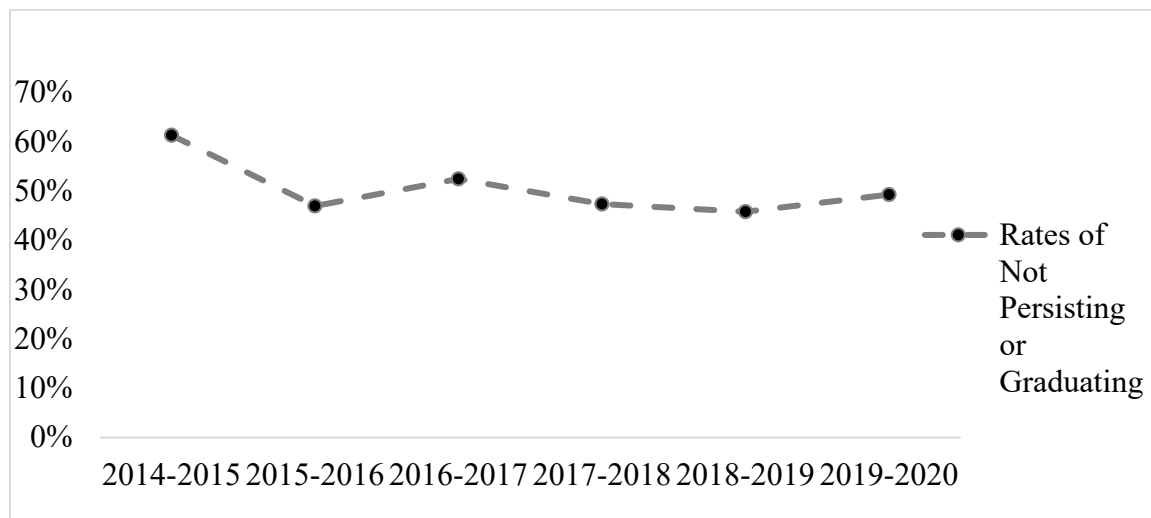
**Figure 3.1**

*Rates for Hispanic First-Time in College Students with Part-Time Enrollment Status Who Did Not Persist or Graduate at Texas Community Colleges by Academic Years*



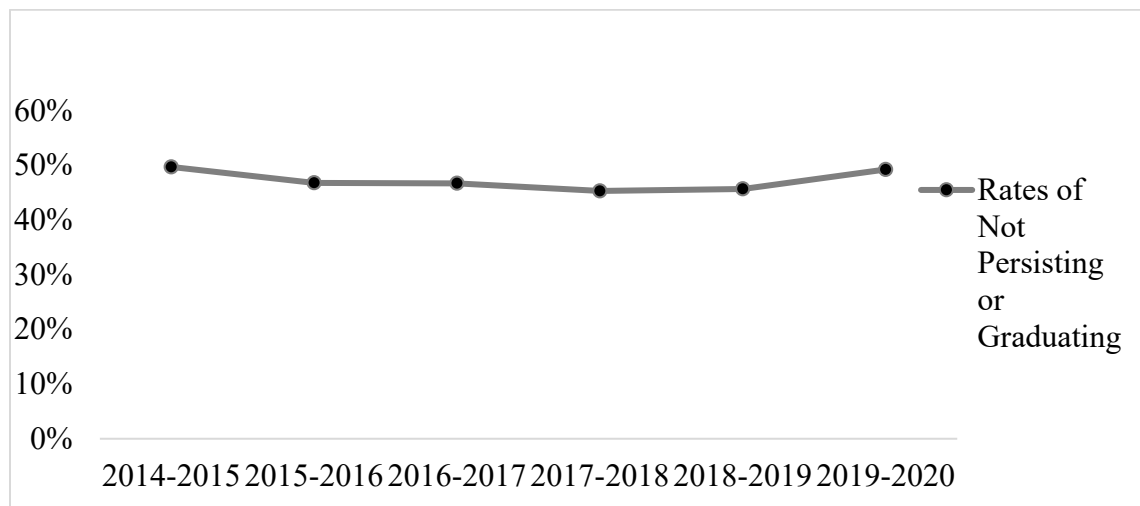
**Figure 3.2**

*Rates for Black First-Time in College Students with Part-Time Enrollment Status Who Did Not Persist or Graduate at Texas Community Colleges by Academic Years*



**Figure 3.3**

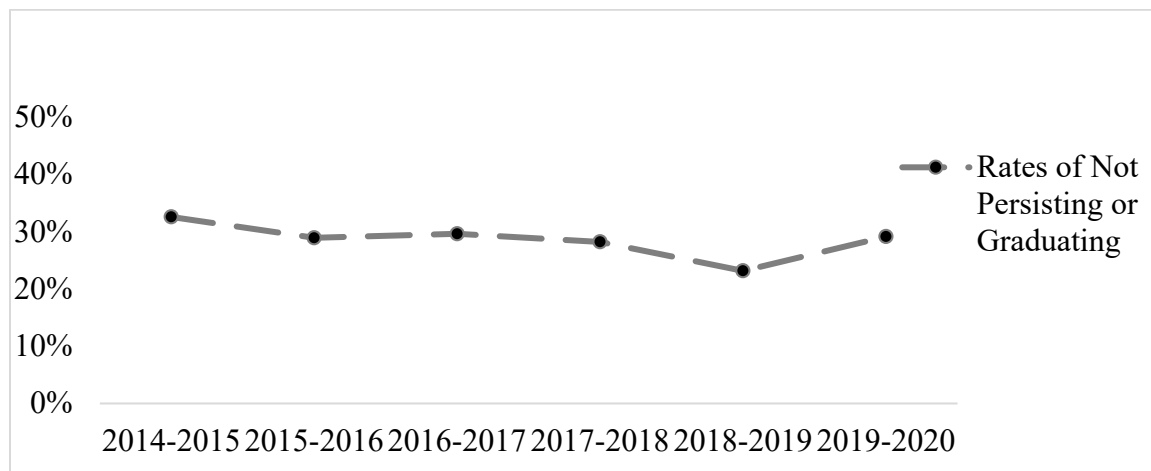
*Rates for White First-Time in College Students with Part-Time Enrollment Status Who Did Not Persist or Graduate at Texas Community Colleges by Academic Years*





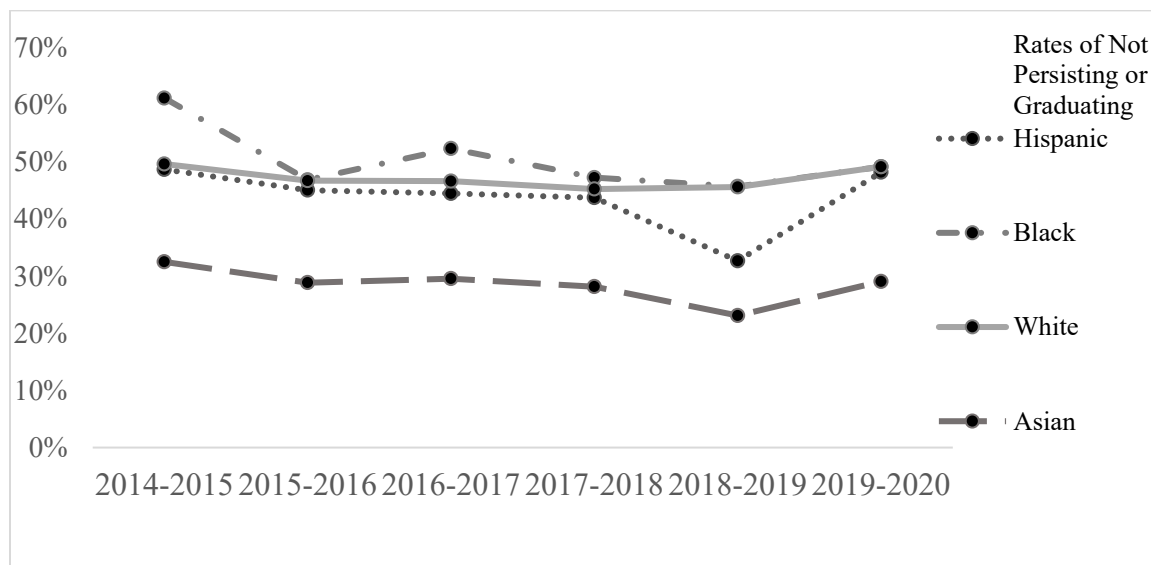
**Figure 3.4**

*Rates for Asian First-Time in College Students with Part-Time Enrollment Status Who Did Not Persist or Graduate at Texas Community Colleges by Academic Years*



**Figure 3.5**

*Rates for First-Time in College Students with Part-Time Enrollment Status Who Did Not Persist or Graduate at Texas Community Colleges by Academic Years and Ethnicity/Race*



**CHAPTER IV**

DIFFERENCES IN RATES OF FIRST-TIME IN COLLEGE STUDENTS WHO DID  
NOT PERSIST OR GRADUATE BY ETHNICITY/RACE IN TEXAS COMMUNITY  
COLLEGES: A STATEWIDE, MULTIYEAR INVESTIGATION

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

### **Abstract**

Examined in this multi-year statewide empirical study was the extent to which differences were present in the rates of first-time in college students in Texas community colleges who did not persist or graduate study by their ethnicity/race for six academic years (i.e., from 2014-2015 through 2019-2020). The rates of Hispanic and Black students who did not persist or graduate in Texas community colleges statistically significantly increased over the six years. Hispanic and Black first-time in college students did not persist or graduate in Texas community colleges at 41.35% and 52.43%, respectively, in the 2019-2020 academic year. The high rates of first-time in college students who did not persist or graduate in Texas community colleges should be a concern for educational leaders and policymakers in Texas.

*Keywords:* Texas Community colleges; First-time in college student; Ethnicity; Race; Persistence; Graduation; Hispanic students; Black students; Community college

DIFFERENCES IN RATES OF FIRST-TIME IN COLLEGE STUDENTS WHO DID NOT PERSIST OR GRADUATE BY ETHNICITY/RACE IN TEXAS COMMUNITY COLLEGES: A STATEWIDE, MULTIYEAR INVESTIGATION

Community colleges in the United States create values through degree and certificate programs that they offer for diverse student populations. As such, community colleges serve an important role in helping students to achieve academic goals and to acquire career training (American Association of Community Colleges, 2014). According to the American Association of Community Colleges (2021), in Fall 2019, 6.8 million students were enrolled in credit courses, and 5 million students were enrolled in noncredit courses at community colleges nationwide. First-time in college students represented 39% of the total student enrollment, where 16% were Asian, 44% were White, 13% were Black, and 27% were Hispanic. Community college enrollment is predicted to increase (Juszkiewicz, 2020) as the need for a well-educated and trained workforce continues to grow (American Association of Community Colleges, 2014).

As higher education continues to remain a key for providing social and economic mobility for many people (Texas Higher Education Coordinating Board, 2015b), several initiatives have been implemented in Texas in attempts to increase access to a college education for all people and to enhance college persistence and graduation in Texas higher education institutions. Following the *Closing the Gaps 2015* (Texas Higher Education Coordinating Board, 2015a) higher education plan, the 60X30 plan was established to foster an increase in college access and graduation rates at the higher education institutions statewide. The 60X30 plan was described by the Texas Higher Education Coordinating Board (2015b) as a plan where “60 percent of the 25-to-34-year-

old Texas population to hold a certificate or degree by 2030” (p. iv). Texas higher education stakeholders and policymakers recognized that demographic shifts in the state population were continuing and that postsecondary student enrollment and graduation rates represented the ethnic/diversity of the Texas state population (Texas Higher Education Coordinating Board, 2015b).

Total enrollment at Texas Community colleges was 769,288 students in Fall 2019 (Texas Higher Education Coordinating Board, 2020). Texas community colleges serve a diverse student population of 8.6% Asian, 30% White, 12.6% Black, and 46.8% Hispanic students (Texas Higher Education Coordinating Board, 2020). The Texas Higher Education Coordinating Board (2020) reported an 8% growth in student enrollment from the 2013-2014 academic year through the 2018-2019 academic year. Graduation rates at Texas community colleges vary by student ethnicity/race. For example, 7.1% of the 8.6% enrolled Asian students were awarded a degree or a certificate in Fall 2019 (Texas Higher Education Coordinating Board, 2020); 43.5% of the 46.8% enrolled Hispanic students graduated with a degree or a certificate; and 12.2% of the 12.6% enrolled Black students earned a degree or certificate (Texas Higher Education Coordinating Board, 2020). Although degree/certificate attainment rates were lower in comparison to the enrollment rates for Asian, Hispanic, and Black students, the difference between enrollment and degree attainment rates for White students at Texas community colleges was reported at 33.6%, 3.6% higher than the enrollment rate of 30% for Fall 2019 (Texas Higher Education Coordinating Board, 2020).

As documented above, the student population in Texas community colleges is diverse, not only with respect to ethnicity/race but also with respect to economic status

and academic backgrounds. Lebron (2017) addressed the extent to which changes had occurred in the racial/ethnic diversity of Texas community college students in a multiyear research study. He did not document any substantive changes in Black and Asian student enrollment at Texas community colleges and reported that their enrollment rates remained constant over 16 years. In contrast, Hispanic student enrollment rates steadily increased over the years, and the enrollment rates of White students substantially decreased. Lebron (2017) encouraged education leaders and researchers to evaluate the statewide initiatives and programs to improve the ethnic/racial diversity of the community college student population, especially drawing attention to Black and Asian student enrollment rates that have stayed constant over 16-years.

In another recent Texas investigation, Maynard (2020) examined, over a 16-year time period, the extent to which changes were present for male and female first-time in college students who were enrolled in Texas community colleges. Maynard (2020) established that enrollment rates for first-time in college male students in Texas community colleges slightly increased by 0.69 percentage points over the 16 academic years. In contrast, the enrollment rates for first-time in college female students in Texas community colleges slightly decreased by 0.69 percentage points. The average enrollment rates for the first-time in college male students at Texas community colleges averaged at 45.98%, and for female students at 54.02%. Maynard (2020) asserted that the findings of this investigation were concurrent with prior investigations where first-time in college female student enrollment rates were higher than male student enrollment rates at Texas community colleges.

Community colleges strive to address the changing academic needs of the diverse student population through academic support programs. Gaps in persistence and graduation rates, however, still exist for students of color (Moss, 2017). Moss (2017) investigated the degree to which differences were present in graduation rates between Black and White students in Texas community colleges over nine academic years. Moss (2017) established that statistically significant differences existed in graduation rates between Black and white students. Black students graduated at a lower rate of 31% compared to a rate of 44% for White students. Moss (2017) noted that Black students were falling behind in every step of the educational process and that Black students were less likely to graduate with a college degree than White students.

In a similar study, Stagg (2017) determined the extent to which differences were present in college graduation rates as a function of student ethnicity/race (i.e., Hispanic and White) in Texas community colleges over seven academic years was determined by Stagg (2017). Statistically significant differences were documented in graduation rates for Hispanic and White students in the 2008-2009 through the 2012-2013 academic years. Stagg (2017) established similar graduation rates for Hispanic students and for White students in the 2013-2014 and 2014-2015 academic years. Graduation rates for Hispanic students in Texas community colleges fluctuated from a low of 41% to a high of 43%, whereas the graduation rates for White students ranged from a low of 43% to a high of 46%. Stagg (2017) raised concerns that the graduation rates in Texas community colleges for Hispanic and White students were less than 50% and recommended further investigation of graduation rates of students by another ethnicity/racial groups.



In another recent Texas study, Ballinger (2018) investigated 1-year persistence rates in Texas 4-year public universities for Black and Hispanic students as a function of their institutional enrollment (i.e., stayed or transferred) in a multiyear study. Statistically significant differences were documented for Black and Hispanic student 1-year persistence in Texas 4-year public universities in the 1999-2000 through 2013-2014 academic years (Ballinger, 2018). The 1-year persistence rates for Black students who stayed at the same Texas 4-year public university varied from a low of 52% to a high of 60%. In contrast, the 1-year persistence rates for Black students who transferred to another Texas 4-year public university ranged from a low of 10% to a high of 17%.

Similarly, 1-year persistence rates for the Hispanic students who stayed at the same university fluctuated from a low of 55% to a high of 62%. The 1-year persistence rates for Hispanic students who transferred to another Texas 4-year university ranged from a low of 12% to a high of 17%. Ballinger (2018) concluded that Hispanic and Black students who stayed at the same Texas 4-year university were more likely to persist and to graduate with a degree than were Hispanic and Black students who transferred to another university.

The ethnic/racial membership of the student population at institutions of higher education has changed over the last decade. Research investigations into postsecondary issues have changed as well where the ethnic/racial differences in educational experiences, challenges, and college persistence were accounted for in developed theories (Diehl et al., 2019). Diehl et al. (2019) addressed Black and White persistence and factors that contributed toward decisions of dropping out of college or not. An important difference that Diehl et al. (2019) noted was that White students associated with the

general sense of belonging within a college in consideration of persisting in a college or not, whereas Black students associated their decisions of dropping out of a college or not with the diversity of campus climate. Many higher education institutions set goals to increase student persistence and graduation rates. Diehl et al. (2019) recommended that higher education leaders consider the needs of diverse students regarding institutional connection in achieving that goal.

Different factors influence first-time in college students' college persistence and graduation (DeNicco et al., 2015). DeNicco et al. (2015) explored persistence and graduation in connection to student demographics for first-time in college students at a state community college. In comparison, ethnicity/race was documented as a statistically significant predictor of college persistence for first-time college students. DeNicco et al. (2015) established that Hispanic students were less likely to persist in the first year at college than were White students. Black students were second in low persistence rates in first-year college persistence. DeNicco et al. (2015) concluded that student performance in the first year at a college was the most substantial predictor of whether the student would persist and graduate or depart from the college.

Enrollment of students of color in postsecondary settings has increased over the last decade, especially the enrollment increased of Hispanic students (Clayton et al., 2019). Clayton et al. (2019) noted that most students of color attending college were first-time college first-generation students who faced challenges and barriers once they enrolled in college. Furthermore, first-time in college first-generation students lacked access to academic and social networks that posed an obstacle toward their college persistence and graduation. Clayton et al. (2019) reported that some of the Hispanic

participants in their study were better integrated into the campus and community in the alignment of Tinto's (1975) model, which the researchers predicted would contribute toward increasing the likelihood of Hispanic participant's college persistence.

Researchers (e.g., Clayton et al., 2019; DeNicco et al., 2015; Spangler & Slate, 2015) have documented the presence of relationships between student ethnicity/race to their persistence and college graduation. Spangler and Slate (2015) investigated the persistence and graduation rates of Texas community college students by ethnicity/race (i.e., Hispanic, Black, White, and Asian). They documented statistically significant differences in student persistence and graduation rates by student ethnicity/race over a 10-year time period at Texas community colleges. A substantive significant increase was established, from 31.52% to 41.30%, in Hispanic students' persistence and graduation rates over 10 years. Similarly, Black students' persistence and graduation rates increased as well from 22.80% to 31.07% for the same 10-year period. The persistence and graduation rates also increased for White students from 36.30% to 44.75%, and for Asian students from 37.29% to 48.89%. Persistence and graduation rates increased for all four groups of students. Asian student persistence and graduation rates increased the most, and Black student persistence and graduation rates increased the least. Spangler and Slate (2015) asserted that based on the results of their study, the *Closing the Gaps 2015* (Texas Higher Education Coordinating Board, 2015a) higher education plan achieved some success in community college student success. They recommended for the policymakers and key stakeholders to develop goals and targets measuring student success that directly addresses community college concerns.

Though opportunities in pursuing a college degree have increased in the past several decades, student graduation rates remain low (Ingram et al., 2019). In a recent Texas statewide analysis, Ingram et al. (2019) addressed the extent to which differences were present in graduation rates between Black students compared to White, Hispanic, and Asian students for the 2007-2008 through the 2015-2016 academic years in Texas community colleges. Statistically significant differences were reported for all comparisons. The graduation rates of Black students in Texas community colleges were nine times lower than the graduation rates of White students, five times lower than the graduation rates for Hispanic students, and 10 times lower than the graduation rates of Asian students. Graduation rates of Black students in Texas community colleges were consistent over the nine academic years at 31.86%, compared to 44.65% for White students, 42.02% for Hispanic students, and 46.60% for Asian students (Ingram et al., 2019). The persistence and graduation rates of Black students did not show an improvement in comparison to other ethnic/racial groups in Texas community colleges, primarily as the statewide initiative of the *Closing the Gaps 2015* (Texas Higher Education Coordinating Board, 2015a) was implemented, that concentrated efforts toward improving student persistence and graduation rates at postsecondary institutions (Ingram et al., 2019).

Similarly, Cox et al. (2011) reported that the persistence and graduation rates for Hispanic students in Texas community colleges were unsuccessful in keeping up with the rapid Hispanic population growth and were lower than other ethnic/racial groups. Cox et al. (2011) stated that Hispanic students get stuck or drop out at different stages of their educational journey. The college persistence and graduation rates will continue to stay

the same without thorough guidance on navigating the college, college curricula, and student support services (Cox et al., 2011). Educational policymakers were encouraged to reevaluate the existing initiatives to include plans that would increase the persistence and graduation rates for students of different ethnic/racial groups (Ingram et al., 2019).

### **Statement of the Problem**

Community college students represent a diverse student population who are first-time in college students, nontraditional students, and students with low socioeconomic status (Nevarez et al., 2013). Researchers (e.g., Clayton et al., 2019; Nevarez et al., 2013; Texas Higher Education Coordinating Board, 2020) stated that the student population for ethnic/racial groups increased at higher education institutions increased over the last decade. The access to earning a college degree also increased over the years community colleges implement an open-door policy for college enrollment, but the graduation rates continue to remain low, especially for students from different ethnic/racial groups (e.g., Clayton et al., 2019; Ingram et al., 2019; Lebron, 2017). The diverse student population in Texas community colleges was comprised of 8.6% Asian, 30% White, 12.6 % Black, and 46.8 % Hispanic students in Fall 2019 (Texas Higher Education Coordinating Board, 2020). The persistence and graduation rate of college students in Texas community colleges varied by ethnicity/race. The degree attainment for students enrolled in Fall 2019 in Texas community colleges was reported at 12.2%, Asian students at 7.1%, White students at 33.6%, and Hispanic students at 43.5% (Texas Higher Education Coordinating Board, 2020). Even though initiatives like the *Closing the Gaps 2015* (Texas Higher Education Coordinating Board, 2015a) and *60X30 plan* (Texas Higher Education Coordinating Board, 2015b) achieved some success in community college student

success, the persistence and graduation rates continue staying constant without an increase (Cox et al., 2011; Lebron, 2017; Spangler & Slate, 2015).

### **Purpose of the Study**

The purpose of this research study was to examine the ethnic/racial diversity (i.e., Hispanic, Black, White, and Asian) of first-time in college students in Texas community colleges. Furthermore, the rates of students who did not persist or graduate in Texas community colleges were investigated to determine any differences present for first-time in college students by their ethnicity/race. The rates of students who did not persist or graduate for first-time in college students in Texas community colleges were examined by ethnicity/race from the 2014-2015 academic year through the 2019-2020 academic year. Furthermore, any trends in rates of students who did not persist or graduate that were present were reported for first-time in college students in Texas community colleges by ethnicity/race through this research study.

### **Significance of the Study**

The enrollment at community colleges is predicted to increase (Juskiewicz, 2020) as the demand for an educated and trained workforce continues to grow (American Association of Community Colleges, 2014). Community colleges implement an open-door enrollment policy that attracts first-time in college students from different diversity/race groups (Nevarez et al., 2013). Researchers (e.g., Clayton et al., 2019; Lebron, 2017; Spangler & Slate, 2015) investigated the community college persistence and graduation rates by ethnicity/race and reported significant differences in student persistence and graduation rates at Texas community colleges. DeNicco et al. (2015) reported that ethnicity/race was a significant predictor of college persistence for first-time

in college students. The Texas Higher Education Coordinating Board (2015b) 60X30 plan was implemented to foster an increase in college access and graduation rates at the higher education institutions in Texas. Information from this research study may be helpful to community college administrators and other key stakeholders on how first-time in college students who did not persist or graduate over time by ethnicity/race aided in designing new programs to support student success.

### **Research Questions**

The following research questions were addressed in this multiyear investigation:

(a) What is the difference in rates of first-time in college Hispanic students who did not persist or graduate in Texas community colleges between the beginning year of data and the midpoint recent year of data, between midpoint year of data and recent year data, and between the beginning year of data and most recent point of data?; (b) What is the difference in rates of first-time in college Black students who did not persist or graduate in Texas community colleges between the beginning year of data and the midpoint recent year of data, between midpoint year of data and recent year data, and between the beginning year of data and most recent point of data?; (c) What is the difference in rates of first-time in college White students who did not persist or graduate in Texas community colleges between the beginning year of data and the midpoint recent year of data, between midpoint year of data and recent year data, and between the beginning year of data and most recent point of data?; (d) What is the difference in rates of first-time in college Asian students who did not persist or graduate in Texas community colleges between the beginning year of data and the midpoint recent year of data, between midpoint year of data and recent year data, and between the beginning year of data and

most recent point of data?; and (e) What trends are present in the ethnic/racial diversity of first-time in college students who did not persist or graduate in Texas community colleges? The first research question was repeated for the 2014-2015 academic year through the 2019-2020 academic year, whereas the second through the fourth research question involved comparisons of two years of data. The final research question, the trend question, involved all six academic years of data.

## **Method**

### **Research Design**

A non-experimental causal-comparative design (Creswell & Creswell, 2018; Johnson & Christensen, 2020) was used for the research design of this study. The dependent variable could not be manipulated in a non-experimental causal-comparative research investigation (Johnson & Christensen, 2020). Data that were archival and publicly available were obtained and analyzed for six academic years from 2014-2015 through 2019-2020 academic years from Texas Higher Education Coordinating Board Interactive Accountability System. Data were acquired on first-time in college students who did not persist or graduate by ethnicity/race (i.e., Hispanic, Black, White, and Asian). The primary focus of this investigation was examining to what extent differences were present in rates of first-time in college students who did not persist or graduate by ethnicity/race and any existent trends.

### **Participants**

First-time in college students in Texas community colleges who were enrolled during the 2014-2020 academic years were participants of this research study. Preexisting archival data from Texas Higher Education Coordinating Board Interactive



Accountability System were obtained on all community colleges in Texas from 2014-2015 through 2019-2020 academic years. Texas Higher Education Coordinating Board requires all higher education institutions to report various data, including student demographic information and persistence and graduation rates. Texas community colleges that reported data for 2014-2015 through 2019-2020 academic years were also participants of this research study.

## **Results**

Checks of their underlying assumptions were performed before inferential statistical procedures were conducted to answer the research question. The majority of the assumptions were met; therefore, parametric paired samples *t*-tests were calculated. Results are reported separately by ethnicity/race for each research question.

### **Results for Hispanic Students**

Prior to addressing the research questions for Hispanic first-time in college students, descriptive statistics were calculated for each of the six academic years. The rates of Hispanic first-time in college students who did not persist or graduate in Texas community colleges were relatively consistent. Their rates varied from a low of 36.94% in the 2017-2018 academic year to a high of 41.35% in the 2019-2020 academic year.

Table 4.1 contains the results of this analysis.

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Insert Table 4.1 about here  
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Regarding the beginning year comparison (i.e., 2014-2015) and the midpoint year comparison (i.e., 2016-2017), a statistically significant difference was revealed for

Hispanic students,  $t(56) = 2.92, p = .01$ , Cohen's  $d = 0.22$ , a small effect size (Cohen, 1988). Hispanic first-time in college students did not persist or graduate at a statistically significantly higher rate, almost 3% higher, in the beginning year comparison than in the midpoint year comparison. Delineated in Table 4.2 are the descriptive statistics for these analyses.

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Insert Table 4.2 about here  
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Concerning the midpoint year comparison (i.e., 2017-2018) and the most recent year comparison (i.e., 2019-2020), a statistically significant difference was yielded for Hispanic students,  $t(55) = -5.62, p < .001$ , Cohen's  $d = 0.41$ , a small effect size (Cohen, 1988). The rate for Hispanic first-time in college students who did not persist or graduate was statistically significantly higher, almost 5% higher, in the most recent year comparison than in the midpoint year comparison. Descriptive statistics for this analysis are presented in Table 4.2.

With respect to the beginning year comparison (i.e., 2014-2015) and the most recent year comparison (i.e., 2019-2020), a statistically significant difference was not present for Hispanic students,  $t(55) = -0.85, p = .40$ . The percentages of first-time in college Hispanic students who did not persist or graduate were commensurate in these two academic years, 40.66% and 41.35%, respectively. Table 4.2 contains the descriptive statistics for this analysis.

## Results for Black Students

Descriptive statistics were calculated for each of the six academic years before addressing the research questions for Black first-time in college students who did not persist or graduate in Texas community colleges. The rates of Black first-time in college students who did not persist or graduate in Texas community colleges stayed consistent at almost 50% for the six academic years. Their rates fluctuated from a low of 48.71% in the 2015-2016 academic year to a high of 52.92% in the 2014-2015 academic year. Revealed in Table 4.3 are the descriptive statistics for this analysis.

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 Insert Table 4.3 about here  
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Concerning the beginning year comparison (i.e., 2014-2015) and the midpoint year comparison (i.e., 2016-2017), the parametric paired samples *t*-test did not reveal a statistically significant difference in the rates of Black first-time in college students who did not persist or graduate,  $t(47) = 1.42, p = .16$ . Rates were commensurate in these two academic years, 52.92% and 50.59%, respectively. Presented in Table 4.4 are the descriptive statistics for this analysis.

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 Insert Table 4.4 about here  
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With respect to the midpoint year comparison (i.e., 2017-2018) and the most recent year comparison (i.e., 2019-2020), a statistically significant difference as yielded for first-time in college Black students,  $t(49) = -2.05, p = .04$ , Cohen's  $d = 0.23$ , a small

effect size (Cohen, 1988). Black first-time in college students did not persist or graduate in Texas community colleges at a statistically significantly higher rate, almost 3% higher, in the most recent comparison than in the midpoint year comparison. Delineated in Table 4.4 are the descriptive statistics for this analysis.

Regarding the beginning year comparison (i.e., 2014-2015) and the most recent year comparison (i.e., 2019-2020), a statistically significant difference was not yielded for Black students,  $t(47) = 0.58, p = .56$ . The rates of Black first-time in college students who did not persist or graduate in Texas community colleges were commensurate in these two academic years, 52.92% and 52.43%, respectively. Table 4.4 contains the descriptive statistics for this analysis.

### **Results for White Students**

Before addressing the research questions for White students, descriptive statistics were calculated for each of the six academic years. White first-time in college students did not persist or graduate in Texas community colleges at relatively consistent rates across the six academic years. White student rates fluctuated from a high of 42.14% in the 2014-2015 academic year to a low of 39.03% in the 2015-2016 academic year. Table 4.5 contains the descriptive statistics for this analysis.

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Insert Table 4.5 about here  
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With respect to the beginning year comparison (i.e., 2014-2015) and the midpoint year comparison (i.e., 2016-2017), the parametric paired samples  $t$ -test revealed a statistically significant difference in the rates of White first-time in college students who

did not persist or graduate,  $t(57) = 2.64, p = .01$ , Cohen's  $d = 0.22$ , a small effect size (Cohen, 1988). The rates of White first-time in college students who did not persist or graduate were 3% lower in the midpoint year comparison than in the beginning year comparison. Revealed in Table 4.6 are the descriptive statistics for this analysis.

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Insert Table 4.6 about here  
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Concerning the midpoint year comparison (i.e., 2017-2018) and the most recent year comparison (i.e., 2019-2020), a statistically significant difference was yielded for White first-time in college students who did not persist or graduate in Texas community colleges students,  $t(56) = -3.04, p = .01$ , Cohen's  $d = 0.24$ , a small effect size (Cohen, 1988). The rates of White first-time in college students who did not persist or graduate in Texas community colleges were at a statistically significantly higher rate, of almost 3% higher, in the most recent year comparison than in the midpoint year comparison. Delineated in Table 4.6 are the descriptive statistics for this analysis.

Regarding the beginning year comparison (i.e., 2014-2015) and the most recent year comparison (i.e., 2019-2020), the parametric paired samples  $t$ -test did not yield statistically significant differences for White students,  $t(56) = 0.14, p = .89$ . The rates of White first-time in college students who did not persist or graduate in Texas community colleges were similar in these two academic years, 42.14% and 42.13%, respectively. Presented in Table 4.6 are the descriptive statistics for this analysis.

## Results for Asian Students

Prior to addressing the research questions for Asian first-time in college students who did not persist or graduate in Texas community colleges, descriptive statistics were calculated for each of the six academic years. The percentage of Asian first-time in college students who did not persist or graduate in Texas community colleges stayed at about 25% over the six-year period. Asian first-time in college students did not persist or graduate in Texas community colleges at fluctuated rates from a low of 25.65% in the 2018-2019 academic year to a high of 28.01% in the 2015-2016 academic year. Delineated in Table 4.7 are the descriptive statistics for this analysis.

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Insert Table 4.7 about here  
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Regarding the beginning year comparison (i.e., 2014-2015) and the midpoint year comparison (i.e., 2016-2017), a statistically significant difference was not revealed in the rates of Asian students who did not persist or graduate in Texas community colleges,  $t(15) = 0.99, p = .33$ . The rates of Asian first-time in college students who did not persist or graduate at a similar rate were commensurate in these two academic years, 26.83% and 27.64%, respectively. Table 4.8 contains the descriptive statistics for these analyses.

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Insert Table 4.8 about here  
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With respect to the midpoint year comparison (i.e., 2017-2018) and the most recent year comparison (i.e., 2019-2020), the parametric samples  $t$ -test did not reveal a

statistically significant difference for Asian first-time in college students who did not persist or graduate,  $t(17) = -0.69, p = .49$ . Their rates were commensurate in these two academic years, 26.91% and 27.92%, respectively. Table 4.8 contains the descriptive statistics for this analysis.

Concerning the beginning year comparison (i.e., 2014-2015) and the most recent year comparison (i.e., 2019-2020), a statistically significant difference was not present for Asian first-time in college students who did not persist or graduate in Texas community colleges,  $t(22) = -0.35, p = .73$ . The rates of Asian first-time in college students who did not persist or graduate at a similar rate were commensurate in these two academic years, 26.83% and 27.92%, respectively. Presented in Table 4.8 are the descriptive statistics for this analysis.

### **Discussion**

In this multiyear empirical investigation, the extent to which differences were present in the rates of first-time in college students in Texas community colleges who did not persist or graduate by their ethnicity/race was addressed. Data were obtained and analyzed from the Texas Higher Education Coordinating Board Interactive Accountability System. Examined in this article were archival data from all Texas community colleges for six academic years (i.e., 2014-2015 through 2019-2020).

Concerning Hispanic first-time in college students in Texas community colleges who did not persist or graduate, their rates varied over six academic years. Hispanic first-time in college students in Texas community colleges did not persist or graduate at a statistically significantly higher rate of 5% in 2017-2018 academic year than in the 2018-2019 academic year. Hispanic first-time in college students in Texas community colleges

did not persist or graduate at a rate of about 40% which increased slightly to 41.35% in the 2019-2020 academic year.

For Black first-time in college students who did not persist or graduate in Texas community colleges, their rates varied from the low of 50.49% to a high of 52.92% in these six academic years. The rates for Black first-time in college students in Texas community colleges who did not persist or graduate fluctuated over this time period. Notably, the rates for Black first-time in college students who did not persist or graduate in Texas community colleges remained at about 50% over the six academic years to almost 52.43% in the most recent 2019-2020 academic year.

With respect to White first-time in college students who did not persist or graduate in Texas community colleges, their rates varied from a low of 39.03% in the 2015-2016 academic year to a high of 42.13% in the 2019-2020 academic year. The rates of White first-time in college students who did not persist or graduate were at their highest, at 42.13%, in the 2019-2020 academic year. Rates of White students who did not persist or graduate in Texas community colleges stayed at about 40% over six academic years and were similar to the rates for Hispanic students.

The rates for Asian first-time in college students in Texas community colleges who did not persist or graduate were relatively constant. The rates of Asian first-time in college students who did not persist or graduate in Texas community colleges were at about 28% over the six academic years and were lower than the rates for Black and Hispanic students. Readers are directed to Figures 4.1 through 4.5 for the visual depiction of results by ethnicity/race across all six years.



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Insert Figures 4.1 through 4.5 about here  
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### **Connections to Existing Literature**

The rates of first-time in college students who did not persist or graduate in Texas community colleges by ethnicity/race were examined in this statewide, multiyear empirical study. The rates of first-time in college students in Texas community colleges who did not persist or graduate fluctuated. Results of this investigation were congruent with the findings of other researchers (Moss, 2017; Spangler & Slate 2015; Stagg, 2017).

In a multiyear investigation, Stagg (2017) documented statistically significant differences in graduation and persistence rates for Hispanic and White students in 2008-2009 through the 2012-2013 academic years. Stagg (2017) established similar graduation rates for Hispanic students and for White students in the 2013-2014 and 2014-2015 academic years. Similarly, documented in the results of this investigation were comparable rates of first-time in college students who did not persist or graduate in Texas community colleges at about 40% for Hispanic and White students. Hispanic first-time in college students did not persist or graduate in Texas community colleges at a high 41.35% in the 2019-2020 academic year. The rate of White first-time in college students who did not persist or graduate in Texas community colleges was 42.13% in the 2019-2020 academic year.

In a prior investigation, Moss (2017) established statistically significant differences in graduation rates between Black and White students. Black students in Texas community colleges graduated at a lower rate of 31% compared to 44% for White

students. Similarly, revealed in this investigation was that Black first-time in college students in Texas community colleges did not persist or graduate at higher rates, from a high of 52.92% in the 2014-2015 academic year to a low of 48.71% in the 2015-2016 academic year. The rates of Black first-time in college students who did not persist or graduate in Texas community colleges remained at about 50% over the six academic years, the highest compared to 40% for White students. Moss (2017) asserted that Black students were less successful in their accomplishments in higher education. Moss (2017) noted that Black students were less likely to graduate with a college degree than White students also revealed in this investigation.

Spangler and Slate (2015) documented statistically significant differences by student ethnicity/race in persistence and graduation rates in Texas community colleges over 10 years. A significant substantive increase was documented in persistence and graduation rates of Hispanic students from 31.52% to 41.30%, Black students from 22.80% to 31.07%, White students from 36.30% to 44.75%, and Asian students from 37.29% to 48.89% (Spangler & Slate, 2015). As established in this multi-year investigation results, Hispanic first-time in college students did not persist or graduate at about 40%, Black students at about 50%, White students at about 40%, and Asian students at about 30% over six academic years (i.e., 2014-2015 through 2019-2020). Concurrently with prior researchers' findings (Moss, 2017; Spangler & Slate, 2015; Stagg, 2017), first-time in college students in Texas community colleges continue to struggle with college persistence and graduation.

### **Implications for Policy and Practice**

Examined in this multi-year empirical study were the rates of first-time in college students in Texas community colleges who did not persist or graduate by their ethnicity/race. Findings of this multiyear investigation were commensurate with the findings of previous researchers who determined that Hispanic, Black, and White first-time in college students are persisting and graduating in Texas community colleges at lower rates than are Asian students. As such, several implications for practice and policy are present.

Concerning practice, the results of this multiyear, statewide investigation can provide information to leaders in Texas community colleges to examine and design student support programs to aid first-time in college students with their college persistence and graduation. First-time in college students' college persistence and graduation are influenced by different factors, such as a sense of belonging at a college (DeNicco et al., 2015). Educational leaders in Texas community colleges are encouraged to explore initiatives in connecting and guiding first-time in college students with their peers and the institution of higher education to increase their sense of belonging and college persistence.

Regarding policy, Texas state educational leaders are encouraged to evaluate the current 60X30 Plan (Texas Higher Education Coordinating Board, 2015b) to include new programs and initiatives that support first-time in college Hispanic and Black students considering their needs and challenges faced with college persistence and graduation. Furthermore, Texas Higher Education Coordinating Board leaders should review the ethnic/racial diversity of the Texas community college students in closing the gap in

college persistence and graduation. Finally, the findings of this multiyear empirical investigation can provide benchmark data for policymakers of rates of first-time in college students in Texas community colleges who did not persist or graduate by ethnicity/race prior to and during the nationwide Covid-19 pandemic.

### **Recommendations for Future Research**

The rates of first-time in college students who did not persist or graduate by their ethnicity/race were investigated in this multiyear statewide research study in Texas community colleges over six academic years. Several recommendations can be made from the results of this study. Future researchers are encouraged to investigate the rates of first-time in college students who did not persist or graduate by their ethnicity/race and part-time enrollment status in Texas community colleges. Also recommended is to investigate the first-time in college student persistence and graduation in a qualitative study through a student's perspective of their needs in academic success. Furthermore, the rates of first-time college students who did not persist or graduate in Texas community colleges should be investigated by ethnicity/race and full-time enrollment status. Next, researchers are encouraged to extend this study to 4-year institutions of higher education in Texas. Furthermore, investigating the rates of first-time in college students who did not persist or graduate by ethnicity/race in community colleges in other states is encouraged to determine the differences in Texas's results with other states. Finally, researchers should use the results of this study as benchmark data and extend this investigation for multiple academic years after the COVID-19 pandemic to record any persistence and graduation rates changes.

## Conclusion

The focus of this statewide multiyear investigation was on the rates of first-time in college students who did not persist or graduate in Texas community colleges. With a prediction of an increase in community college enrollment in the upcoming years (Juszkiewicz, 2020), researchers (e.g., Clayton et al., 2019; Lebron, 2017; Moss, 2017; Spangler & Slate, 2015; Stagg, 2017) raised concerns and drew attention toward student persistence and graduation rates in Texas community colleges.

Moss (2017) asserted that Black and Hispanic students continue to persist and graduate at a rate of 50% (Stagg, 2017) that is a cause for concern. The results of this investigation confirmed that Hispanic and Black first-time in college students did not persist or graduate in Texas community colleges at about 40% and 50%, respectively. Researchers (e.g., Clayton et al., 2019; DeNicco et al., 2015; Spangler & Slate, 2015) documented a relationship between student college persistence and graduation and their ethnicity/race. Therefore, attention should be focused on establishing statewide educational initiatives that provide academic support and wrap-around assistance programs to first-time in college Hispanic and Black students so that they can be successful in postsecondary settings.

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**Table 4.1**

*Descriptive Statistics for Hispanic First-Time in College Students in Texas Community*

*Colleges Who Did Not Persist or Graduate Between the 2014-2015 and 2019-2020*

*Academic Years*

Academic Year	<i>n</i> of community colleges	<i>M%</i>	<i>SD%</i>
2014-2015	57	40.66	11.22
2015-2016	56	38.03	10.53
2016-2017	59	37.97	11.31
2017-2018	59	36.94	10.40
2018-2019	59	38.03	10.65
2019-2020	58	41.35	11.67

**Table 4.2**

*Descriptive Statistics for Hispanic First-Time in College Students in Texas Community Colleges Who Did Not Persist or Graduate for the Beginning, Midpoint, and Most Recent Years Comparison*

Academic Year Comparison	<i>n</i> of community colleges	<i>M%</i>	<i>SD%</i>
Beginning to Midpoint			
2014-2015	57	40.66	11.22
2016-2017	59	37.97	11.31
Midpoint to Most Recent			
2017-2018	59	36.94	10.40
2019-2020	58	41.35	11.67
Beginning to Most Recent			
2014-2015	57	40.66	11.22
2019-2020	58	41.35	11.67

**Table 4.3**

*Descriptive Statistics for Black First-Time in College Students in Texas Community Colleges Who Did Not Persist or Graduate Between the 2014-2015 and 2019-2020 Academic Years*

Academic Year	<i>n</i> of community colleges	<i>M%</i>	<i>SD%</i>
2014-2015	52	52.92	13.85
2015-2016	51	48.71	13.23
2016-2017	52	50.59	12.98
2017-2018	53	49.62	13.67
2018-2019	54	50.49	13.40
2019-2020	53	52.43	12.90

**Table 4.4**

*Descriptive Statistics for Black First-Time in College Students in Texas Community Colleges Who Did Not Persist or Graduate for the Beginning, Midpoint, and Most Recent Years Comparison*

Academic Year	<i>n</i> of community colleges	<i>M%</i>	<i>SD%</i>
Comparison			
Beginning to Midpoint			
2014-2015	52	52.92	13.85
2016-2017	52	50.59	12.98
Midpoint to Most Recent			
2017-2018	53	49.62	13.67
2019-2020	53	52.43	12.90
Beginning to Most Recent			
2014-2015	52	52.92	13.85
2019-2020	53	52.43	12.90

**Table 4.5**

*Descriptive Statistics for White First-Time in College Students in Texas Community Colleges Who Did Not Persist or Graduate Between the 2014-2015 and 2019-2020 Academic Years*

Academic Year	<i>n</i> of community colleges	<i>M</i> %	<i>SD</i> %
2014-2015	57	42.14	11.68
2015-2016	57	39.03	10.35
2016-2017	57	39.59	11.39
2017-2018	59	39.43	10.91
2018-2019	59	39.16	10.29
2019-2020	59	42.13	11.52

**Table 4.6**

*Descriptive Statistics for White First-Time in College Students in Texas Community*

*Colleges Who Did Not Persist or Graduate for the Beginning, Midpoint, and Most Recent Years Comparison*

Academic Year	<i>n</i> of community colleges	<i>M%</i>	<i>SD%</i>
Comparison			
Beginning to Midpoint			
2014-2015	57	42.14	11.68
2016-2017	57	39.03	10.35
Midpoint to Most Recent			
2017-2018	59	39.43	10.91
2019-2020	59	42.13	11.52
Beginning to Most Recent			
2014-2015	57	42.14	11.68
2019-2020	59	42.13	11.52

**Table 4.7**

*Descriptive Statistics for Asian First-Time in College Students in Texas Community Colleges Who Did Not Persist or Graduate Between the 2014-2015 and 2019-2020 Academic Years*

Academic Year	<i>n</i> of community colleges	<i>M%</i>	<i>SD%</i>
2014-2015	35	26.83	15.57
2015-2016	31	28.01	15.81
2016-2017	28	27.64	16.61
2017-2018	28	26.91	14.31
2018-2019	31	25.65	13.96
2019-2020	31	27.92	14.25



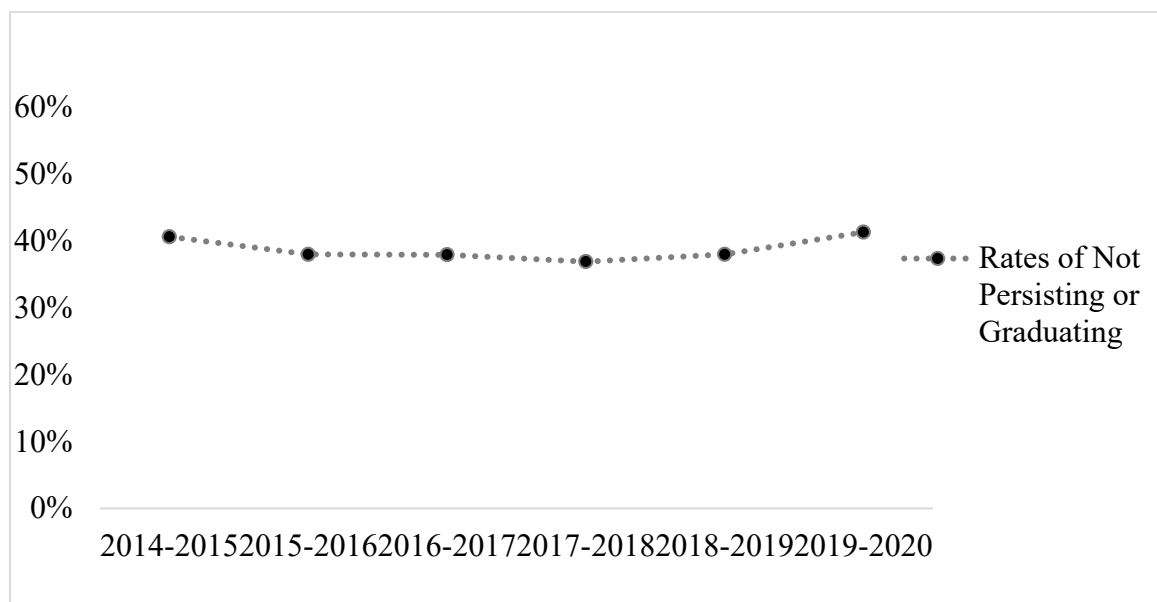
**Table 4.8**

*Descriptive Statistics for Asian First-Time in College Students in Texas Community Colleges Who Did Not Persist or Graduate for the Beginning, Midpoint, and the Most Recent Years Comparison*

Academic Year Comparison	<i>n</i> of community colleges	<i>M%</i>	<i>SD%</i>
<b>Beginning to Midpoint</b>			
2014-2015	35	26.83	15.57
2016-2017	28	27.64	16.61
<b>Midpoint to Most Recent</b>			
2017-2018	28	26.91	14.31
2019-2020	31	27.92	14.25
<b>Beginning to Most Recent</b>			
2014-2015	35	26.83	15.57
2019-2020	31	27.92	14.25

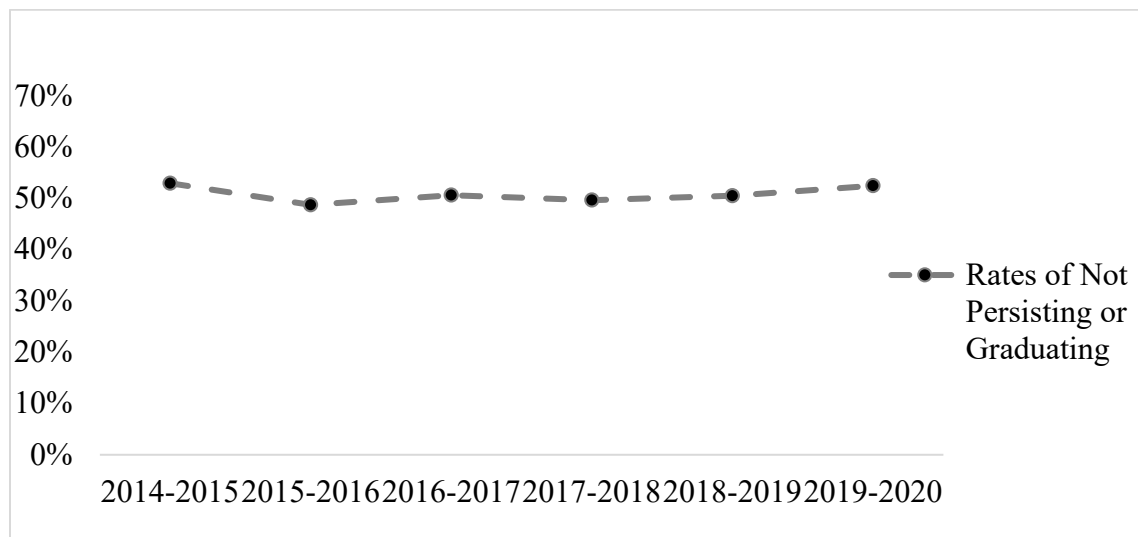
**Figure 4.1**

*Rates for Hispanic First-Time in College Students Who Did Not Persist or Graduate at Texas Community Colleges by Academic Years*



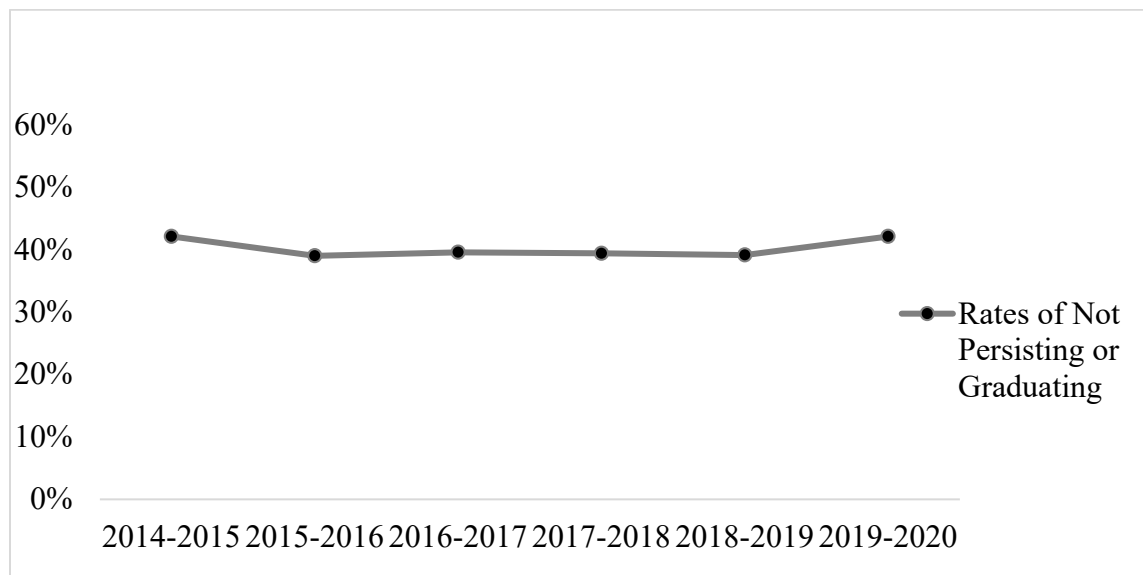
**Figure 4.2**

*Rates for Black First-Time in College Students Who Did Not Persist or Graduate at Texas Community Colleges by Academic Years*



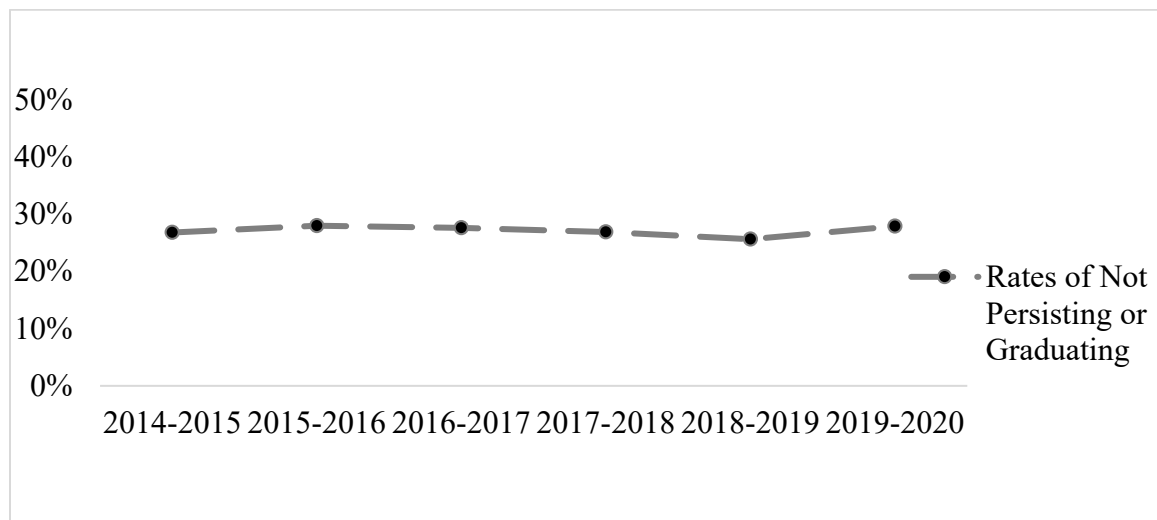
**Figure 4.3**

*Rates for White First-Time in College Students Who Did Not Persist or Graduate at Texas Community Colleges by Academic Years*



**Figure 4.4**

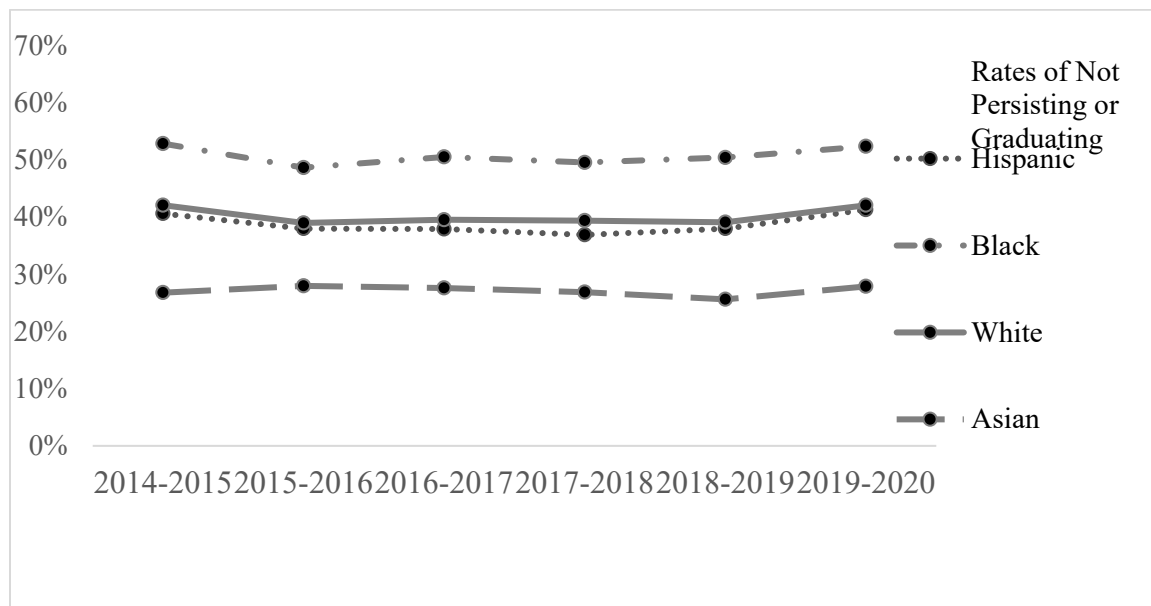
*Rates for Asian First-Time in College Students Who Did Not Persist or Graduate at Texas Community Colleges by Academic Years*



**Figure 4.5**

*Rates for First-Time in College Students Who Did Not Persist or Graduate at Texas*

*Community Colleges by Academic Year and Ethnicity/Race*



## **CHAPTER V**

### **DISCUSSION**

Community colleges have been viewed as means for upward mobility and career development in the United States (American Association of Community Colleges, 2014). The open-door policy of community colleges has contributed to an increase of students from different socioeconomic and academic backgrounds. Community college students, however, struggle with college persistence and graduation (e.g., Juszkiwicz, 2020; Lebron, 2017). First-time in college students encounter many challenges with academic success and college persistence and graduation in community colleges (Longwell-Grice et al., 2016). As such, investigated in the three studies of this journal-ready dissertation were the rates of first-time in college students who did not persist or graduate in Texas community colleges by their ethnicity/race and enrollment status for six academic years.

#### **Purpose of the Study**

The purpose of this journal-ready dissertation was to determine the degree to which the rates of students who did not persist or graduate had changed from the 2014-2015 academic year through the 2019-2020 academic year for first-time in college students by their ethnicity/race (i.e., Hispanic, Black, White, and Asian) and enrollment status (i.e., full-time and part-time) in Texas community colleges. Specifically, the rates of first-time in college students who did not persist or graduate in Texas community colleges were examined by ethnicity/race and enrollment status between the beginning year of data and the midpoint recent year of data, the midpoint year of data, and the most recent year of data, beginning year of data and the most recent year of data. Any trends that were present in the rates of first-time in college students who did not persist or graduate in

Texas community college students by their ethnicity/race and enrollment status were determined.

### **Summary of Article One Results**

In the first article of this journal-ready dissertation, the rates of first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges was investigated by ethnicity/race for the 2014-2015 academic year through the 2019-2020 academic year. Six years of archival data from the Texas Higher Education Coordinating Board Interactive Accountability System were obtained and analyzed. Overall, the rates of first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges fluctuated by ethnicity/race over six academic years.

With respect to the beginning year comparison (i.e., 2014-2015) and the midpoint year comparison (i.e., 2016-2017), a statistically significant difference was not revealed for Hispanic, Black, White, and Asian students. Hispanic first-time in college students with full-time enrollment status did not persist or graduate in Texas community colleges at 32.69% in the beginning year and 31.61% in the midpoint year comparison. The rates of Black first-time in college students with full-time enrollment status who did not persist or graduate were the highest in the beginning year and midpoint year comparison at 44.87%, and 48.79%, respectfully. In these two academic years, rates were commensurate for White first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges at 34.55% and 32.45%, respectively. Rates were similar for Asian first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges in these



two academic years at 23.06% and 25.80%, respectively. Delineated in Table 5.1 are the descriptive statistics for this analysis.

**Table 5.1**

*Summary Results for First-Time in College Students with Full-Time Enrollment Status in Texas Community Colleges Who Did Not Persist or Graduate by Ethnicity/Race for the Beginning and Midpoint Years Comparison*

Academic Year and Ethnicity/Race	M%	SD%
Beginning Year 2014-2015		
Hispanic	32.69	7.05
Black	44.87	12.11
White	34.55	8.42
Asian	23.06	15.25
Midpoint Year 2016-2017		
Hispanic	31.61	9.27
Black	48.79	12.57
White	32.45	8.69
Asian	25.80	12.63

Regarding the midpoint year comparison (i.e., 2017-2018) and the most recent year comparison (i.e., 2019-2020), statistically significant differences were present only for Hispanic and Black first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges. The rates of Hispanic first-time in college students with full-time enrollment status who did not persist or graduate were

statistically significantly higher, almost 4% higher, in the most recent year comparison than in the midpoint year comparison. Black first-time in college students with full-time enrollment status did not persist or graduate in Texas community colleges at a statistically significant higher rate of 55.74% in the most recent year comparison than in the midpoint year comparison at 52.02%. The percentages of White and Asian first-time in college students with full-time enrollment status who did not persist or graduate in were commensurate in these two academic years (see Table 5.2).

**Table 5.2**

*Summary Results for First-Time in College Students with Full-Time Enrollment Status in Texas Community Colleges Who Did Not Persist or Graduate by Ethnicity/Race for the Midpoint and Most Recent Years Comparison*

Academic Year and Ethnicity/Race	<i>M%</i>	<i>SD%</i>
Midpoint Year 2017-2018		
Hispanic	30.53	7.08
Black	52.02	14.50
White	33.53	8.20
Asian	25.50	17.21
Most Recent Year 2019-2020		
Hispanic	34.54	8.88
Black	55.74	14.17
White	37.12	8.93
Asian	26.63	15.33

Concerning the beginning year comparison (i.e., 2014-2015) and the most recent year comparison (i.e., 2019-2020), a statistically significant difference was present only for Black first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges. The rates of Black first-time in college students with full-time enrollment status who did not persist or graduate were statistically significantly higher, almost 10.87% higher, in the most recent year comparison than in the beginning year comparison. Statistically significant differences were not documented for Hispanic, White, and Asian first-time in college students with full-time enrollment status in this two academic years comparison. Hispanic first-time in college students with full-time enrollment status did not persist or graduate in Texas community colleges at similar rates of 32.69% and 34.54%, respectively. White first-time in college students with full-time enrollment status did not persist or graduate in Texas community colleges at 34.55% and 37.12%, respectively. Rates were similar for Asian first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges in these two academic years at 23.06% and 26.63%, respectively. Contained in Table 5.3 are the descriptive statistics for this analysis.

**Table 5.3**

*Summary Results for First-Time in College Students with Full-Time Enrollment Status in Texas Community Colleges Who Did Not Persist or Graduate by Ethnicity/Race for the Beginning and Most Recent Years Comparison*

Academic Year and Ethnicity/Race	<i>M%</i>	<i>SD%</i>
Beginning Year 2014-2015		
Hispanic	32.69	7.05
Black	44.87	12.11
White	34.55	8.42
Asian	23.06	15.25
Most Recent Year 2019-2020		
Hispanic	34.54	8.88
Black	55.74	14.17
White	37.12	8.93
Asian	26.63	15.33

### **Summary of Article Two Results**

Investigated in the second article of this journal-ready dissertation were the rates of first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges by ethnicity/race for the 2014-2015 academic year through the 2019-2020 academic year. For six academic years, archival data from the Texas Higher Education Coordinating Board Interactive Accountability System were

obtained and analyzed. Rates of first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges varied by ethnicity/race over six academic years.

Concerning the beginning year comparison (i.e., 2014-2015) and the midpoint year comparison (i.e., 2016-2017), a statistically significant difference was revealed for Hispanic, Black, and White students. The rates of Hispanic first-time in college students with part-time enrollment status who did not persist or graduate were statistically significantly higher at 48.77% in the beginning year comparison than at 44.56% in the midpoint year comparison. Black first-time in college students with part-time enrollment status did not persist or graduate in Texas community colleges at the statistically significantly highest rates of 61.28% in the beginning year and 52.43% in the midpoint year comparison. White first-time in college students with part-time enrollment status did not persist or graduate in Texas community colleges at a statistically significant higher rate of 49.72% in the beginning year than at 46.72% in the midpoint year comparison. In these two academic years, the rates were similar for Asian first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges at 32.56% and 29.62%, respectively. Presented in Table 5.5 are the descriptive statistics for this analysis.

**Table 5.4**

*Summary Results for First-Time in College Students with Part-Time Enrollment Status in Texas Community Colleges Who Did Not Persist or Graduate by Ethnicity/Race for the Beginning and Midpoint Years Comparison*

Academic Year and Ethnicity/Race	<i>M%</i>	<i>SD%</i>
Beginning Year 2014-2015		
Hispanic	48.77	8.54
Black	61.28	10.13
White	49.72	9.33
Asian	32.56	14.55
Midpoint Year 2016-2017		
Hispanic	44.56	9.32
Black	52.43	13.26
White	46.72	9.13
Asian	29.62	20.11

With respect to the midpoint year comparison (i.e., 2017-2018) and the most recent year comparison (i.e., 2019-2020), statistically significant differences were present only for Hispanic and White first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges. Hispanic first-time in college students with part-time enrollment status did not persist or graduate at a statistically significantly higher rate, almost 5% higher, in the most recent year comparison than in the midpoint year comparison. The rates of White first-time in college

students with part-time enrollment status who did not persist or graduate in Texas community colleges were statistically significantly higher at 49.25% in the most recent year comparison than in the midpoint year comparison at 45.33%. The percentages of Black and Asian first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges were commensurate in these two academic years. Delineated in Table 5.5 contains the descriptive statistics for this analysis.

**Table 5.5**

*Summary Results for First-Time in College Students with Part-Time Enrollment Status in Texas Community Colleges Who Did Not Persist or Graduate by Ethnicity/Race for the Midpoint and Most Recent Years Comparison*

Academic Year and Ethnicity/Race	M%	SD%
Midpoint Year 2017-2018		
Hispanic	43.82	8.91
Black	47.34	12.55
White	45.33	10.09
Asian	28.21	11.13
Most Recent Year 2019-2020		
Hispanic	48.27	10.01
Black	49.25	10.75
White	49.25	9.29
Asian	29.13	13.29

Regarding the beginning year comparison (i.e., 2014-2015) and the most recent year comparison (i.e., 2019-2020), a statistically significant difference was present only for Black first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges. The rates of Black first-time in college students with part-time enrollment status who did not persist or graduate were statistically significantly higher, almost 12.03% higher, in the beginning year comparison than in the most recent year comparison. Statistically significant differences were not documented for Hispanic, White, and Asian first-time in college students with part-time enrollment status in this two academic years comparison. The rates of Hispanic first-time in college students with part-time enrollment status who did not persist or graduate in Texas community colleges were commensurate at 48.77% and 48.27%, respectively. White first-time in college students with part-time enrollment status did not persist or graduate in Texas community colleges at commensurate rates of 49.72% and 49.25%, respectively. Rates were similar for Asian first-time in college students with part-time enrollment status who persist or graduate in Texas community colleges in these two academic years at 32.56% and 29.13%, respectively. Table 5.6 contains the descriptive statistics for this analysis.



**Table 5.6**

*Summary Results for First-Time in College Students with Part-Time Enrollment Status in Texas Community Colleges Who Did Not Persist or Graduate by Ethnicity/Race for the Beginning and Most Recent Years Comparison*

Academic Year and Ethnicity/Race	<i>M%</i>	<i>SD%</i>
Beginning Year 2014-2015		
Hispanic	48.77	8.54
Black	61.28	10.13
White	49.72	9.33
Asian	32.56	14.55
Most Recent Year 2019-2020		
Hispanic	48.27	10.01
Black	49.25	10.75
White	49.25	9.29
Asian	29.13	13.29

### **Summary of Article Three Results**

Analyzed in the third article of this journal-ready dissertation were the rates of first-time in college students who did not persist or graduate in Texas community colleges by ethnicity/race for the 2014-2015 academic year through the 2019-2020 academic year. Six academic years of archival data were obtained and analyzed from the Texas Higher Education Coordinating Board Interactive Accountability System. Rates of

first-time in college students who did not persist or graduate in Texas community colleges fluctuated by ethnicity/race over six academic years.

Regarding the beginning year comparison (i.e., 2014-2015) and the midpoint year comparison (i.e., 2016-2017), statistically significant differences were present for Hispanic and White students only. The rates of Hispanic first-time in college students who did not persist or graduate were statistically significantly higher, almost 3% higher, in the beginning year comparison than in the midpoint year comparison. White first-time in college students did not persist or graduate in Texas community colleges at a statistically significant higher rate of 42.14% in the beginning year than at 39.59% in the midpoint year comparison. Black first-time in college students did not persist or graduate in Texas community colleges at similar rates of 52.92% in the beginning year and 50.59% in the midpoint year comparison. In these two academic years, the rates were commensurate for Asian first-time in college students who did not persist or graduate in Texas community colleges at 26.83% and 27.64%, respectively. Table 5.7 contains the descriptive statistics for this analysis.

**Table 5.7**

*Summary Results for First-Time in College Texas Community College Students Who Did Not Persist or Graduate by Ethnicity/Race for the Beginning and Midpoint Years Comparison*

Academic Year and Ethnicity/Race	<i>M%</i>	<i>SD%</i>
Beginning Year 2014-2015		
Hispanic	40.66	11.22
Black	52.92	13.85
White	42.14	11.68
Asian	26.83	15.57
Midpoint Year 2016-2017		
Hispanic	37.97	11.31
Black	50.59	12.98
White	39.59	11.39
Asian	27.64	16.61

With respect to the midpoint year comparison (i.e., 2017-2018) and the most recent year comparison (i.e., 2019-2020), statistically significant differences were yielded only for Hispanic, Black, and White first-time in college students who did not persist or graduate. The rates of Hispanic first-time in college students who did not persist or graduate were statistically significantly higher at 41.35% in the most recent year comparison than at 36.94% in the midpoint year comparison. The percentages of Black

first-time in college students who did not persist or graduate were statistically significantly higher, almost 3% higher, in the most recent comparison than in the midpoint year comparison. White first-time in college students did not persist or graduate at a statistically significant higher rate of 42.13% in the most recent year comparison than in the midpoint year comparison at 39.43%. Rates of Asian first-time in college students who did not persist or graduate were commensurate at 26.91% and 27.92%, respectively. Table 5.8 contains the descriptive statistics for this analysis.

**Table 5.8**

*Summary Results for First-Time in College Texas Community College Students Who Did Not Persist or Graduate by Ethnicity/Race for the Midpoint and Most Recent Years Comparison*

Academic Year and Ethnicity/Race	<i>M%</i>	<i>SD%</i>
Midpoint Year 2017-2018		
Hispanic	36.94	10.40
Black	49.62	13.67
White	39.43	10.91
Asian	26.91	14.31
Most Recent Year 2019-2020		
Hispanic	41.35	11.67
Black	52.43	12.90
White	42.13	11.52
Asian	27.92	14.25

Concerning the beginning year comparison (i.e., 2014-2015) and the most recent year comparison (i.e., 2019-2020), statistically significant differences were not present for first-time in college students who did not persist or graduate in Texas community colleges by ethnicity/race. The rates of Hispanic first-time in college students who did not persist or graduate in Texas community colleges were commensurate at 40.66% and 41.35%, respectively. Black first-time in college students did not persist or graduate at a similar rate of 52.92% and 52.43%, respectively. The rates of White first-time in college students who did not persist or graduate in Texas community colleges were commensurate at 42.14% and 42.13%, respectively. Rates were similar for Asian first-time in college students who did not persist or graduate in Texas community colleges in these two academic years at 26.83% and 27.92%, respectively. Revealed in Table 5.9 are the descriptive statistics for this analysis.

**Table 5.9**

*Summary Results for First-Time in College Texas Community College Students Who Did Not Persist or Graduate by Ethnicity/Race for the Beginning and Most Recent Years Comparison*

Academic Year and Ethnicity/Race	<i>M%</i>	<i>SD%</i>
Midpoint Year 2014-2015		
Hispanic	40.66	11.22
Black	52.92	13.85
White	42.14	11.68
Asian	26.83	15.57
Most Recent Year 2019-2020		
Hispanic	41.35	11.67
Black	52.43	12.90
White	42.13	11.52
Asian	27.92	14.25

### **Connections to Existing Literature**

In this journal-ready dissertation, the results of all three empirical studies were commensurate with the findings of previous researchers (Lebron, 2017; Longwell-Grice et al., 2016; Moss, 2017; Spangler & Slate 2015; Stagg, 2017). As delineated in the first study, the rates for White first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges were lower than for Black

students. These results were similar to Moss (2017) who documented that graduation rates were statistically higher for White students at 46% compared to Black students at 34%, respectively. Also established in the first article were similar results to Longwell-Grice et al. (2016) and Stagg (2017), where the rates of Hispanic first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges statistically significantly increased over six academic years (i.e., 2014-2015 through 2019-2020). Concerning Asian students, results in the first article were congruent with Lebron (2017), who determined that the percentage of Asian students who were first-time in college students with a full-time enrollment status remained consistent.

Regarding the second article, findings were similar to Lebron (2017) who determined that the rates of Hispanic first-time part-time college students who did not persist or graduate at Texas community colleges increased from 32.74% in the 2018-2019 academic year to 48.27% in the 2019-2020 academic year. Moss (2017) established the presence of higher graduation rates for White students at 46%, compared to Black students at 34% over nine academic years. Similarly, Black first-time in college students with part-time enrollment status did not persist or graduate in Texas community colleges at higher rates, from a high of 61.28% in the 2014-2015 academic year to a low of 45.78% in the 2018-2019 academic year. The rates of first-time in college students with part-time enrollment status who did not persist or graduate were 48.27% for Hispanic students, 49.25% for Black students, 49.72% for White students, and 32.56% for Asian students who did not persist or graduate in the Texas community colleges in the beginning year of the 2014-2015 academic year. Moss (2017) contended that an

immediate need was present to address gaps in graduation rates among ethnic/racial student groups. Confirmed in this investigation was the presence of gaps in the rates of first-time part-time college students who did not persist or graduate in Texas community colleges by ethnicity/race.

With respect to the third article, statistically significant differences were documented for the rates of Hispanic first-time in college students did not persist or graduate at about 40%, Black students at about 50%, White students at about 40%, and Asian students at about 30% over six academic years (i.e., 2014-2015 through 2019-2020). These findings were commensurate with Spangler and Slate (2015) who documented statistically significant differences by student ethnicity/race in persistence and graduation rates in Texas community colleges over 10 years. Concurrently with prior researchers (Moss, 2017; Spangler & Slate, 2015; Stagg, 2017), first-time in college students in Texas community colleges continue to struggle with college persistence and graduation.

### **Connections to Theoretical Framework**

Tinto's (1975) theory of student departure was the theoretical framework used in this journal-ready dissertation. Tinto (1975) framed the theory of student departure around student integration, and the feeling of connectedness within a college would contribute to student academic success and college graduation. Furthermore, suggested in this theory is that college students undergo an integration process with a college campus, and the feeling of connectedness within the college influences the student's persistence or departure. Several connections can be made between the results of the three articles in this journal-ready dissertation and Tinto's theory of student departure.



Tinto (1975) emphasized that students come to institutions of higher education with a range of individual characteristics such as sex, race, social status, family background, and prior educational experiences, all of which influence the student's college persistence and graduation. Documented in the results of this journal-ready dissertation were statistically significant differences in rates of Hispanic and Black first-time in college students who did not persist or graduate in Texas community colleges over six academic years. On the other hand, the rates of White and Asian first-time in college students who did not persist or graduate in Texas community colleges were lower than those of Hispanic and Black students. In connection with Tinto's theory of student departure, student ethnicity/race influenced their college persistence and graduation.

Tinto's (1975) theory revolves around the idea of social and academic integration and its connection with whether a student will fail or succeed in earning a college degree. Documented in the results of this study were a higher rate of not persisting or graduating from a community college for first-time in college students with part-time enrollment status than with full-time enrollment status. Community college students with part-time enrollment status most likely face challenges balancing academic, work, and family responsibilities (Juszkiewicz, 2020), which influence their college social and academic integration. In connection to Tinto's (1975) theory of student departure, the social and academic integration challenges of first-time in college students with part-time enrollment status in Texas community colleges contribute to low college persistence and graduation rates.

Established in Tinto's student departure theory is a connection between college persistence and graduation to academic and social integration into college. Documented

in the results of this journal-ready dissertation were continued low persistence and graduation rates of Hispanic and Black first-time in college students in Texas community colleges. First-time in college students with part-time enrollment status were less likely to succeed academically at a college than were their full-time peers (Yu, 2017). Crosta (2014) has attributed community college student persistence and graduation to the continuance of full-time enrollment status. Students with full-time enrollment status will spend more time on a college campus, time that will contribute to more possibilities of social and academic integration and contribute to their college persistence and graduation. As such, the ethnic/racial background of students and their enrollment status play an important role in college persistence and graduation.

### **Implications for Policy and Practice**

Investigated in the three multiyear empirical studies of this journal-ready dissertation were the rates of first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges by ethnicity/race and enrollment status. Based upon the findings in these three articles, several implications are present for policy and practice.

With respect to policy, the Texas Higher Education Coordinating Board is encouraged to review the initiatives and programs that support the 60X30 Plan to include support service programs that target first-time in college Hispanic and Black students' unique needs to aid their college persistence and graduation. Moreover, policymakers should review past and current measures of first-time in college student persistence to determine factors that would influence increasing community college persistence and graduation. Furthermore, the Texas Higher Education Coordinating Board should review

the ethnic/racial diversity of Texas community college students in closing the gap in college persistence and graduation. Results of the three studies in this journal-ready dissertation can serve as benchmark data for policymakers of the rates of first-time in college students with full-time enrollment status who did not persist or graduate before and during the Covid-19 pandemic.

Regarding practice, the results of these multi-year investigations can provide information to community college leaders to design student support initiatives to support first-time in college student persistence and graduation. Community college first-time in college students face many academic challenges and fall behind their peers in college persistence and graduation rates (Longwell-Grice et al., 2016). Educational leaders are encouraged to implement faculty mentoring and coaching initiatives to support first-time in college Hispanic and Black students to increase their college persistence and graduation. Texas community college leaders should explore implementing coaching initiatives in guiding first-time in college students through their studies and navigating the academic support services that they may benefit from in support of college persistence and graduation.

### **Recommendations for Future Research**

Investigated in these three statewide multiyear empirical studies were the rates of first-time in college students who did not persist or graduate in Texas community colleges by ethnicity/race and enrollment status. Based on the findings of these three investigations, several recommendations can be made for future researchers. First, because all the data analyzed and obtained were only on Texas community colleges, this investigation should be extended to 4-year universities in Texas. Additionally, this

investigation might be duplicated for 4-year universities in other states to determine the degree to which results delineated herein would be generalizable to other states.

Furthermore, extending this study to community colleges in other states is recommended to compare results for Texas and other states.

Another recommendation is for the researchers to analyze data on specific community colleges in Texas to identify any similarities or differences in rates of first-time in college students who did not persist or graduate among different community colleges. Researchers are encouraged to examine other student demographic characteristics such as gender and socioeconomic level to determine the extent to which those characteristics are related to student persistence and graduation rates. Moreover, researchers should explore first-time in college student persistence and graduation in a qualitative study to obtain students' perspectives on student support programs and initiatives in Texas community colleges that influence college persistence and graduation.

Another recommendation for future research would be to explore the rates of first-generation college students who did not persist or graduate in Texas community colleges by ethnicity/race and enrollment status. Investigation of first-time college students' enrollment rates in Texas community colleges is another recommendation for drawing parallels with how the student enrollment compares to student college persistence and graduation. Finally, researchers are encouraged to use this study's findings as benchmark data and develop this study for multiple years post-pandemic to explore any changes that may occur.

## Conclusion

The purpose of this multiyear, statewide journal-ready dissertation was to determine the extent to which differences were present in the rates of students who did not persist or graduate from the 2014-2015 academic year through the 2019-2020 academic year for first-time in college students by their ethnicity/race and enrollment status in Texas community colleges. Archival data from the Texas Higher Education Coordinating Board Interactive Accountability System were obtained and analyzed for six academic years. The rates of Hispanic and Black first-time in college students with full-time enrollment status who did not persist or graduate in Texas community colleges statistically significantly increased over six academic years. Rates were relatively constant for White and Asian first-time in college students with full-time enrollment status.

Regarding the rates of Hispanic and Black first-time in college students with part-time enrollment status who did not persist or graduate varied over the years at about 30% and 50%, respectively. The results of this investigation were that Hispanic and Black first-time in college students did not persist or graduate in Texas community colleges at about 40% and 50%, respectively, regardless of their enrollment status. Overall, the rates of Hispanic, Black, White, and Asian students were highest in the 2019-2020 academic year at 41.35%, 52.43%, 42.13%, 27.92%, respectively.

The findings of all three articles of this journal-ready dissertation were commensurate with prior researcher's finding (Moss, 2017; Spangler & Slate, 2015; Stagg, 2017), where first-time in college students in Texas community colleges continue to struggle with college persistence and graduation. Given the results of this journal-

ready dissertation, changes may be needed of the current 60X30 Plan (Texas Higher Education Coordinating Board, 2015b) to include new programs and initiatives that support first-time in college Hispanic and Black students considering their needs and challenges faced with college persistence and graduation. The findings of this investigation can provide benchmark data for policymakers of rates of first-time in college students in Texas community colleges who did not persist or graduate by ethnicity/race and enrollment status prior to and during the nationwide Covid-19 pandemic to make informed decisions and implement much-needed changes.

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**APPENDIX**

Date: Oct 4, 2021 11:17:25 AM CDT

TO: Alisa McLendon John Slate FROM: SHSU IRB

PROJECT TITLE: Differences in 1-Year Persistence and Graduation Rates of First-Time in College Students by Ethnicity/Race and Enrollment Status in Texas Community Colleges: A Multiyear, Statewide Study \*

\*FYI ~ the title should not be formatted in ALL CAPS, so I corrected this for you.

PROTOCOL #: IRB-2021-271 SUBMISSION TYPE: Initial

ACTION: Exempt

DECISION DATE: October 4, 2021

EXEMPT REVIEW CATEGORY: Category 4. Secondary research for which consent is not required: Secondary research uses of identifiable private information or identifiable biospecimens, if at least one of the following criteria is met:

- (i) The identifiable private information or identifiable biospecimens are publicly available;
- (ii) Information, which may include information about biospecimens, is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained directly or through identifiers linked to the subjects, the investigator does not contact the subjects, and the investigator will not re-identify subjects;
- (iii) The research involves only information collection and analysis involving the investigator's use of identifiable health information when that use is regulated under 45 CFR parts 160 and 164, subparts A and E, for the purposes of "health care operations" or "research" as those terms are defined at 45 CFR 164.501 or for "public health activities and purposes" as described under 45 CFR 164.512(b); or
- (iv) The research is conducted by, or on behalf of, a Federal department or agency using government-generated or government-collected information obtained for nonresearch activities, if the research generates identifiable private information that is or will be maintained on information technology that is subject to and in compliance with section 208(b) of the E-Government Act of 2002, 44 U.S.C. 3501 note, if all of the identifiable private information collected, used, or generated as part of the activity will be maintained in systems of records subject to the Privacy Act of 1974, 5 U.S.C. 552a, and, if applicable, the information used in the research was collected subject to the Paperwork Reduction Act of 1995, 44 U.S.C. 3501 et seq.

**OPPORTUNITY TO PROVIDE FEEDBACK:** To access the survey, click [here](#). It only takes 10 minutes of your time and is voluntary. The results will be used internally to make improvements to the IRB application and/or process. Thank you for your time.  
Greetings,

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

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](mailto:irb@shsu.edu). Please include your project title and protocol number in all correspondence with this committee.

Sincerely,

Chase Young, Ph.D. Chair, IRB  
Hannah R. Gerber, Ph.D. Co-Chair, IRB

## VITA

**Alisa M. McLendon**

### ***Educational History***

Doctor of Education in Higher Education Leadership, May 2022

*Sam Houston State University, Huntsville, Texas*

*Differences in rates of first-time in college students who did not persist or graduate by ethnicity/race and enrollment status in Texas community colleges: A multiyear, statewide study.*

Master of Education in Instructional Leadership, May 2013

*Sam Houston State University, Huntsville, Texas*

Bachelor of Arts in Languages, May 1997

Magna Cum Laude, *Armenian State Engineering University-Yerevan, Armenia*

### ***Certifications***

Certification in Second Language Instruction, May 2013

*Sam Houston State University, Huntsville, Texas*

Certification in Instructional Leadership Development, May 2011

*Sam Houston State University, Huntsville, Texas*

### ***Professional Experiences***

Analyst II, Grant Management & Compliance, October 2014-Present

*Lone Star College Resource Development & Administration, Houston, Texas*

Program Manager, College Credit for Heroes II Grant, July 2013-August 2014

*Lone Star College Veteran Affairs & Services at University Park, Houston, Texas*

### ***Publications & Presentations***

McLendon, A. M., & Slate, J. R. (2021). Differences in persistence and graduation rates over time for Texas community college students. In S. J. Hewitt (Ed.), *Academic achievements: Perspectives, gender differences, and outcomes* (pp. 189-204). Nova Science Publishers.

McLendon, A. (2021). Host-Student “Labeling” Does this practice promote racist ideology? “Brave Spaces in Community Colleges.” Building the Anti-Racist College & University, *Podcast Mini-Series*.

McLendon, A. (2021, February). Academic Experiences: A Phenomenological Examination of Gender and Persistence in Texas Community Colleges-Research Proposal Presentation: *Curriculum Camp, Louisiana State University*.