

COMPARISON OF PROPORTION OF TEXAS CAMPUS COLLEGE, CAREER, AND  
MILITARY READINESS OF ALL STUDENTS TO THE PROPORTION OF TEXAS  
CAMPUS COLLEGE, CAREER, AND MILITARY READINESS BY  
ETHNICITY/RACE, GENDER, AND ECONOMIC STATUS: A TEXAS STATEWIDE  
STUDY

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The Faculty of the Department Educational Leadership  
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Doctor of Education

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by

Tessalyn Johnson

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## **DEDICATION**

This dissertation is dedicated to my Lord and Savior, Jesus Christ. Only through Him do all blessings flow. I thank Him for guiding my professors, cohort mates, colleagues, family, and friends who had influenced my achievements in this process.

To my children, who are no longer children, Jheidi, Tyler, Marlon, and Sasha, I thank them for their unconditional love and support. They are my motivation. I hope each of them knows that they can do anything they set their minds to. To my mother and sisters: I am grateful to them for always pushing me to be better and for always being my cheerleader when I needed one the most.

Last but not least, I dedicate and share this accomplishment with my husband and best friend, Mario. I want to thank him for always being by my side, supporting me, and encouraging me to be better. There were many dark days, but he remained constant in his support of me. His unconditional love and prayers were never taken for granted. I love him forever and always.

## ABSTRACT

Johnson, Tessalyn., *Comparison of Proportion of Campus College, Career, and Military Readiness of all Students to the Proportion of Campus College, Career, and Military Readiness by Ethnicity/Race, Gender, and Economic Status: A Texas Statewide Study* Doctor of Education (Higher Education Administration), December, 2020, Sam Houston State University, Huntsville, Texas.

### **Purpose**

The primary purpose of this journal-ready dissertation was to determine the degree to which differences might be present in the campus proportion of college, career, and military readiness for Texas high school graduates. In particular, the purpose of this study was to determine the extent to which the overall campus proportion of college, career, and military readiness differed between student ethnic groups (i.e., Hispanic, White, and Black) in categories (i.e., lowest proportion, below average proportion, above average proportion, highest proportion) established using means and standard deviations when compared to the overall campus proportion for all students in two school years. A second purpose was to determine the extent to which the campus proportion of college, career, and military ready students differed by gender compared to the overall campus proportion of college, career, and military ready students in two school years. The third and final purpose of this study was to determine the extent to which the campus proportion of college, career, and military ready students differed by student economic status when compared to the overall campus proportion of college, career, and military ready students in two school years. College, career, and military readiness rates are reported in the Texas Academic Performance Reports, and these data were analyzed for two school years: 2017-2018 and 2018-2019.

## **Method**

A non-experimental causal-comparative research design was employed for this investigation to determine the degree to which differences were present among college, career, and military ready students by ethnicity/race, gender, and economic status.

Archival data were obtained from the Texas Education Agency's Texas Academic Performance Reports (TAPR) for the 2017-2018 and 2018-2019 school years.

Participants were Texas high school students who graduated college, career, or military ready.

## **Findings**

In the first investigation, most of the results were statistically for all groups by ethnicity/race for both school years. The White student analysis for the 2018-2019 school years did not reveal a statistically significant result. Effect sizes for all statistically significant results were small or below small (Cohen, 1988). In the second study, gender did not prove a statistically significant difference for the 2017-2018 school years. However, the 2018-2019 school year's analysis was statistically significant, resulting in a below small effect size for male and female students. In the third and final investigation, results were definitive, revealing no statistically significant difference between the campus proportion of economically disadvantage and the overall campus proportion for both school years.

**KEY WORDS:** College readiness, Career readiness, Military readiness, Texas Academic Performance Reports, Ethnicity/Race, Black, White, Hispanic, Gender, Economically disadvantaged, Texas

## ACKNOWLEDGEMENTS

To the one and only Jesus Christ, my Lord and Savior who is omnipotent and omnipresent, I would not be who I am today without Him. The completion of this program and this dissertation's writing would not have been possible without my family and friends' constant support and encouragement. During this process, I was never alone, I knew they were always behind me. In particular, my husband, Mario, for being my biggest supporter during this process and praying for me when I was frustrated. I would not have started this program without your confidence in what I could achieve and would not have succeeded in this program. I will never forget your willingness to fill in for me around the house, being my sole audience member for presentations, and letting me spend countless hours writing during our time.

This dissertation's writing would not have been possible without the continuous support and guidance from my dissertation chair, Dr. George Moore. His guidance and support through the dissertation writing process has been nothing less than perfect. I never felt like I was alone, and now feel like I have gained a friend and colleague. His retirement will leave a substantial gap in the education of future scholars. Additionally, I want to recognize my dissertation committee members, Dr. Cynthia Martinez-Garcia and Dr. Matthew Fuller, for their feedback and contributions that made this work happen.

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## CHAPTER I

### INTRODUCTION

Higher education was developed with a foundation in European customs (Greenburg, 1991), and developed into a 2-year junior and 2-year senior program developed in conjunction with the University of Chicago in 1892 (Lieberman, 1988). Adelman (2006) found that “academic intensity” had a direct correlation to college success. Moreover, Conley (2008) defined college readiness as the ability to enroll in college without remediation, with literature determining that self-efficacy also correlated to college success (Bandura, 1986). The need for college readiness is of growing concern for k-12 administrators, and this journal-ready study would make an impact on the decision-making process for administrators and stakeholders.

This study will focus on the college, career, and military readiness rates of Texas high school students. Somewhat similar to college readiness, career readiness for the purposes of the study is referred to as student employment, possessing the skill necessary for employee success, or student enrollment in a 2-year degree or certificate program Gysbers (2013). Additionally, career readiness is explored through the literature with a focus on the changing educational needs in the labor market (Carnevale & Cheah, 2015; Carnevale, Strohl, & Melton, 2011). Military readiness revealed the necessity of the Armed Services Vocational Aptitude Battery (ASVAB) and the percentage of potential enlistees who meet the minimum requirements (The ASVAB test, 2020; Hoover, 2017). Moreover, research on ethnicity/race, gender, and economic status differences as it relates to college, career, and military readiness lacks in the literature. This journal-ready

dissertation will use a causal-comparative research design obtaining archival data from the Texas Education Agency's Texas Academic Performance Reports (Creswell, 2013).

### **Statement of the Problem**

According to the Bureau of Labor Statistics (2016), unemployment rates decrease with higher levels of educational attainment, people with higher-level degrees earn more. For example, in 2018, the employment rate for young adults with a bachelor's degree was 86%, while the employment rate for adults without a high school diploma was 59% (McFarland et al., 2018). In 2018, McFarland et al. through the The National Center for Education Statistics determined the median salary for those 25 to 34 years with a bachelor's degree was 62% higher than those with a high school diploma. Higher levels of educational attainment directly correlate to higher salary levels (College Board, 2017). In 2018, 90% of high school students graduated within four years (Texas Education Agency, 2019). Additionally, post-secondary graduation rates are 60% in 6 years and 41% in 4 years, respectively.

College readiness is necessary for career success and individual wealth beyond what is required for entrance because the definition also requires that a student both enter and enroll in classes without the need for remediation (Conley, 2008; Venezia & Jaeger, 2013). The need for remediation comes from lack of preparedness, which may or may not be correlated to the family's financial status, schools that serve minority and low socio-economic populations graduate students with only one-third graduate college-ready (Balfanz, 2009). Barnes and Slate (2014) found that there were racial differences in college readiness rates in the state of Texas, where White students outperformed Black and Hispanic students for three years.

A great number of studies have been conducted with a focus on college readiness (Conley, 2007; Hooker & Brand, 2009; Wiley et al., 2010; Venezia & Jaeger, 2013) and the level at which a high school graduate is prepared to succeed at a post-secondary institution. Some research exists regarding college readiness differences in achievement by gender (Combs et al., 2010; Strayhorn, 2015). Career readiness has gone undefined, making it difficult for stakeholders to develop solutions to the problem (NACE, 2019). Additionally, there is little research dedicated to the career and military readiness of students graduating high school. Much of the research is more than five years old. Therefore, the current findings related to the college, career, and military readiness of recent high school graduates warrants further investigation.

### **Purpose of the Study**

The major purpose of this journal-ready dissertation was to determine the degree to which differences might be present in the college, career, and military readiness rates for Texas high school graduates. In particular, the purpose of this study is to determine the extent to which the campus proportion of college, career, and military readiness differed between student ethnic groups (i.e., Hispanic, White, and Black) when compared to the overall campus proportion of college, career, and military ready students in two school years. A second purpose was to determine the extent to which the campus proportion of college career and military readiness rates differed between students by gender when compared to the overall campus proportion of college, career, and military ready students in two school years. The third and final purpose of this study was to determine the extent to which the campus proportion of college, career, and military readiness rates differed by student economic status when compared to the overall campus

proportion of college, career, and military students in two school years. Data used in the analysis for these studies were obtained from the Texas Education Agency's Texas Academic Performance Reports for the 2017-2018 and 2018-2019 school years.

### **Research Questions**

The following research questions were addressed in this journal-ready dissertation: (a) What is the difference in the campus proportion of college, career, and military readiness of all students compared to the proportion of college, career, and military readiness of Black students for the 2017-2018 and 2018-2019 school years?, (b) What is the difference in the campus proportion of college, career, and military readiness of all students by campus compared to the proportion of college, career, and military readiness of Hispanic students for the 2017-2018 and 2018-2019 school years?, (c) What is the difference in the campus proportion of college, career, and military readiness of all students compared to the proportion of college, career, and military readiness of White students for the 2017-2018 and 2018-2019 school years?, (d) What is the difference in the proportion of college, career, and military readiness of all students compared to the proportion of college, career, and military readiness of female students for the 2017-2018 and 2018-2019 school years?, (e) What is the difference in the proportion of college, career, and military readiness of all students by campus compared to the proportion of college, career, and military readiness of male students for the 2017-2018 and 2018-2019 school years?, and (f) What is the difference in the proportion of college, career, and military readiness of all students compared to the proportion of college, career, and military readiness of economically disadvantaged students for the 2017-2018 and 2018-2019 school years?

## **Significance of the Study**

Given the substantial amount of students who aspire to attend college and the college-going culture that permeates our high schools (Balfanz, 2009; Jackson & Kurlaender, 2014), we must analyze the data related to their success after high school. The *Brown v. Board of Education* decision in 1954 made an impact on the equality of education, but education today is not equal (Balfanz, 2009). Economically disadvantaged students are typically enrolled in poor schools with mostly minority students, graduating students who are less than one-third ready for college success (Balfanz, 2009). College readiness requirements are centered around entrance and enrollment without the need for remediation (Conley, 2008; Venezia & Jaeger, 2013). Conley (2009) goes on to explain that schools need to provide the tools necessary for college and career success. The college for all notion is most often not backed with the appropriate programming and tools necessary for students, especially for students who are first-generation (Balfanz, 2009; Jackson & Kurlaender, 2014).

Given the increased pressure for schools to graduate students who are college, career, and military ready, an investigation into the readiness rates is crucial for administrators assessing academic and non-academic programming. A considerable amount of research has been conducted related to the college readiness of students entering college and not being required to enroll in remedial coursework. Little research has been performed using these data collected by the State of Texas, combining college, career, and military readiness rates for the 2017-2018 and 2018-2019 school years. Additionally, a contribution to the body of knowledge related to college, career, and



military readiness could have some practical application for decision makers and stakeholders.

### **Definition of Terms**

The terms defined here are critical to an understanding of the three research studies detailed here in this journal-ready dissertation.

#### **Black**

The Texas Education Agency (2017a) defined Black as a person having any African racial background.

#### **College, Career, Military Readiness**

The Texas Education Agency defines college, career, and military readiness in points. The first five points are related to college readiness, the second five points are geared toward career readiness, and the final point is for military readiness. If a student has completed any of these points, they are deemed college, career, or military ready. All eleven points are; (a) meet TSI college readiness standards in ELA/reading and mathematics, (b) earn dual credit, (c) meet criterion score on AP or IB exam, (d) earn an associates degree, (e) earn an OnRamps course credit in any subject, (f) earn an industry based certificate, (g) complete an IEP and workforce readiness, (h) complete a CTE course aligned in an industry based certification, (i) special education student graduating with an advanced degree plan, (j) graduate with a level 1 or 2 certificate, and (k) enlist in the armed forces (Texas Education Agency, 2018)

**Economically Disadvantaged**

A student who is eligible for free or reduced lunch under the National School Lunch and Child Nutrition Program is deemed economically disadvantaged (Texas Education Agency, 2017)

**Ethnicity/Race**

The National Center for Education Statistics (1997) defined race as people who identify as one or more of the following groups (i.e., American Indian or Alaskan Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, White). Ethnicity is a designation between Hispanic/Latino or not Hispanic/Latino.

**Hispanic**

A Hispanic person is someone of Cuban, Mexican, Puerto Rican, South or Central American, or any other Spanish culture or origin (Texas Education Agency, 2017a).

**OnRamps**

In 2011, the University of Texas, the Lumina Foundation, and the National Science Foundation sought to provide learning experiences to high school students through dual enrollment programs. Partnering with 175 Texas school districts, the OnRamps program provides college courses to 33,105 students across Texas. Dual enrollment courses include STEM, arts, and humanities. Additionally, college credit from OnRamps is transferrable to any Texas public institution (University of Texas at Austin, 2020).

### **Texas Academic Performance Reports**

“An annual statistical report produced each fall that contains a wide range of information about student performance, school and district staffing, programs, and student demographics. Texas Academic Performance Reports replaced the Academic Excellence Indicator System (AEIS) report in the 2012-2013 school year” (Texas Education Agency, 2018).

### **Texas Education Agency**

This Texas agency provides leadership, guidance, and resources to help schools meet the educational needs of all students. An administrative unit for primary and secondary public education, this agency “manages the textbook adoption process, oversees the development of the statewide curriculum, administers the statewide assessment program, administers a data collection system on public school students, staff and finances, rates school districts under the statewide accountability system, operates research and information programs, monitors for compliance with federal guidelines and serves as a fiscal agent for the distribution of state and federal funds” (Texas Education Agency, 2018).

### **White**

A White person is defined by the Texas Education Agency (2017a) as a person of European, Middle Eastern, or North African descent.

### **Literature Review Search Procedures**

For this journal-ready dissertation, the literature related to college, career, and military readiness were reviewed. Phrases used in the search for literature relevant to this study were *college readiness*, *military recruitment*, and *career readiness*. The literature

review search was conducted using education databases, including Education Source and Educational Research Information Clearinghouse (ERIC). Additional resources used in this search included the United States Census Bureau, the Texas Education Agency, the Texas Academic Performance Reporting System, the U.S. Bureau of Labor Statistics, and the Texas Higher Education Coordinating Board. Some of these sources were used to provide relevant statistics and background related to this journal-ready dissertation.

The searches conducted included only full-text, peer-reviewed scholarly work published between 2000 and 2019 were considered. Keywords used in the education database searches included *college readiness, career readiness, college and career readiness, college entrance examinations, military readiness, military recruitment, military recruitment in high schools, and military requirements*. Finally, Boolean phrases, including the keywords, were also used to locate relevant literature.

### **Delimitations**

This journal-ready dissertation is comprised of three studies investigating the extent to which gender, ethnicity/race, and economic status may affect the college, career, and military readiness outcomes of Texas high school graduates. The data analyzed in this journal-ready dissertation were obtained from the Texas Education Agency's Texas Academic Performance Reports (Texas Education Agency, 2018). Data for this journal-ready dissertation were delimited to two school years (i.e., 2017-2018 and 2018-2019) due to college, career, and military readiness being a new collective initiative. Restricting this analysis to two school years reduced the extent to which the results of the analysis can be generalized. Additionally, this journal-ready dissertation is delimited to the public

high schools in the state of Texas, and results related to private and charter schools are unknown.

### **Limitations**

For this journal-ready dissertation, the college, career, and military readiness of Texas high school graduates as it relates to ethnicity/race, gender, and economic status were analyzed. As such, limitations were present related to the internal validity of this analysis. Johnson and Christensen (2017) defined internal validity as the “ability to infer that a causal relationship exists between two variables” (p.285). The threat to internal validity for this journal-ready dissertation is present in the accuracy of the data collected and reported to the Texas Education Agency. Due to the fact that data were self-reported by Texas public high schools, limitation existed in the extent to which data were reported accurately, and inaccurate data could influence the accuracy of the findings of these three articles included in this journal-ready dissertation. The limitation of school years is an additional threat to the internal validity; using the 2017-2018 and 2018-2019 for this study, quantitative data related to this topic is a very new initiative; therefore, no other data exist. The final limitation was the boundary of only being able to obtain data from one source (i.e., Texas Academic Performance Reports). Quantitative data provided by the Texas Education Agency are the only data used for this investigation; therefore, it cannot be generalized.

### **Assumptions**

For this journal-ready dissertation, the assumption is that the college, career, and military readiness data collected and reported to the Texas Education Agency Texas Academic Performance Reports by high schools were accurately and reliably reported. If there were errors in the report during data collection or entry, it could influence the finding in the journal-ready dissertation. Another assumption was that the ethnicity/race, gender, and economic status data reported by families and campus administrators were accurate. Additionally, the data gathered

and analyzed are assumed to have minimal errors due to the intensive auditing process conducted by the Texas Education Agency annually (Texas Education Agency, 2019). Any deviations from these assumptions may skew the results achieved in this journal-ready dissertation.

### **Procedures**

Once approval was received for the journal-ready dissertation by the dissertation committee, a request to conduct this study was submitted to the Sam Houston State University Institutional Review Board. Upon approval from the Institutional Review Board, the college, career, military readiness archival data for the 2017-2018 and 2018-2019 were downloaded and analyzed. The dataset was downloaded from the Texas Education Agency's website, where the Texas Academic Performance Reports publish this dataset and others for public access.

### **Organization of the Study**

Three research investigations were offered within this journal-ready dissertation. In the first article in this journal-ready dissertation, the research question addressed the extent to which differences were present in the college, career, and military readiness of Texas high school students by ethnicity/race during the 2017-2018 and 2018-2019 school years. The second study is an investigation of the degree to which gender affected the college, career, and military readiness rates of Texas high school graduates during the 2017-2018 and 2018-2019 school years. The third and final study was an analysis of the extent to which economic status had an effect on the college, career, and military readiness rates for the 2017-2018 and 2018-2019 school years.

This journal-ready dissertation proposal includes three different manuscripts, including four chapters. The first chapter will include an introduction, statement of the

problem, the purpose of the study, the significance of the study, definition of terms, the literature review search procedures, the delimitations, the limitations, and assumptions. The second chapter will address the extent to which differences may exist in the college, career, and military readiness rates of Texas high school students by ethnicity/race. In the third chapter, the extent to which differences may be present in the college, career, and military readiness rates of Texas high school students by gender were addressed. In Chapter IV, the degree to which difference may exist in the college, career, and military readiness rates of Texas high school students as a function of economic status is discussed. Finally, Chapter V is a discussion of the overall findings, implications, and recommendations as a result of this study.

## CHAPTER II

COMPARISON OF PROPORTION OF CAMPUS COLLEGE, CAREER, AND  
MILITARY READINESS OF ALL STUDENTS TO THE PROPORTION OF CAMPUS  
COLLEGE, CAREER, AND MILITARY READINESS BY ETHNICITY/RACE

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

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### **Abstract**

Analyzed in this investigation were the differences in the proportion of college, career, and military readiness for all campuses and a determination on whether there were any differences by ethnicity /race (i.e., Black, White, and Hispanic) for the 2017-2018 and 2018-2019 school years. Archival data were obtained from the Texas Education Agency, Texas Academic Performance Reports for the 2017-2018 and 2018-2019 school years. All comparisons were statistically significant except for the proportion of White students by campus when compared to the proportion of all campuses. Accordingly, the proportion of Black and Hispanic students by campus revealed a statistically significant difference by comparing to the overall proportion of students by campus. Effect sizes for these statistically significant differences results were below small and small. Implications for policy and practice and recommendations for future research are provided.

**Keywords:** College Readiness, Career Readiness, Military Readiness, Ethnicity /Race, Black, White, Hispanic

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COLLEGE, CAREER, AND MILITARY READINESS BY ETHNICITY/RACE

### **Introduction**

Higher education was developed with a foundation in European customs (Greenburg, 1991), and developed into a 2-year junior and 2-year senior program developed in conjunction with the University of Chicago in 1892 (Lieberman, 1988). Adelman (2006) found that “academic intensity” had a direct correlation to college success. Moreover, Conley (2008) defined college readiness as the ability to enroll in college without remediation, with literature determining that self-efficacy also correlated to college success (Bandura, 1986).

Career readiness for the purposes of the study is referred to as student employment, possessing the skill necessary for employee success, or enrolling in a 2-year degree or certificate program Gysbers (2013). Gysbers (2013) also noted that students found it essential to possess marketable skills for success in the workforce. The need for college readiness is of growing concern for k-12 administrators; this study would make an impact on the decision-making process by using a causal-comparative research design using archival data (Creswell, 2013) from the Texas Education Agency’s Texas Academic Performance Reporting system (Texas Education Agency, 2019b).

### **Background**

Offering advanced educational opportunities to students is not a new idea, but the idea took some time to develop after the American Revolution education began to develop at the collegiate and secondary level (Greenburg, 1991). Higher education was

developed with the use of European customs, with little control from the government (Greenburg, 1991). In the 1880s, states began to standardize college entrance requirements (Lieberman, 1988). The Committee of Ten was established to review the rigor and cohesiveness between secondary and post-secondary institutions (Lieberman, 1988). The Committee of Ten recommended secondary and post-secondary institutions that require the same amount of consistency so that students' necessary academic skills were developed (Lieberman, 1988).

The University of Chicago, in 1892, developed a 2-year junior and 2-year senior college program between colleges and high schools for advanced students (Lieberman, 1988). By enrolling in this program, students completed the first two years of college while in high school (Lieberman, 1988). Students who did not meet the advanced requirement could enroll after they completed Grade 11 (Lieberman, 1988).

Additionally, Scanlon (1957) reported that after World War II, the Ford Foundation Fund for the Advancement of Education was created out of the perceived need for more educated Americans. The Ford Foundation established the Southern Education Reporting Service after the 1954 Supreme Court decision on *Brown v. Board of Education* (Scanlon, 1957). Subsequently, the Southern Education Reporting Service played a pivotal role in the desegregation of schools, establishing a communication line at the state and local levels (Scanlon, 1957).

Moreover, Adelman (2006), affirmed that the "academic intensity" of high school curriculum directly correlated to student success in college (p. 27), and several programs have existed to assist in the transition for students between secondary and post-secondary education as well as retention and graduation rates (McFarland et al., 2018). Currently,

programs established to assist in the transition from secondary education include dual credit, early college high school, Advanced Placement, and International Baccalaureate programs. The dual credit, AP, and IB, and early college programs are defined as accelerated learning programs available to secondary education students by the Texas Education Agency (2019b).

**60x30TX and College Readiness.** The 60x30TX plan launched in 2015 by the state of Texas with an overarching goal of educating 60% of Texans (550,000) ages 25-34 with some type of post-secondary credential by the year 2030. The 60x30TX program does chaskills, and (c) decreasing student debt (THECB, 2017). Before launching 60x30TX, the state of Texas finalized the *Closing the Gaps* initiative that was initially launched in 2000 with a goal of increasing higher education enrollments by 2015. The state of Texas, however, fell short of reaching this goal by 25,000 students. Closing the Gaps was not a complete loss; the Department of Education reported a 6% increase in post-secondary enrollments of high school graduates for the fifteen-year period (THECB, 2017).

Finally, the completion goal to educate 550,000 Texans by the year 2030 has two benchmark years, with projections of 376,000 by 2020, and 455,000 by 2025 (THECB, 2017). These benchmark goals are on target for attainment with the usage of dual credit programs in every Texas high school, creating an abbreviated path to degree completion. This degree completion path is made available in part by HB 505, passed in 2015 by decreasing the restrictions for Grade 11 and Grade 12 students to enroll in dual credit courses (Miller et al., 2017). With the increased use of dual credit and early college high school programs, students are more likely to continue to degree completion at a 2-year or 4-year degree-granting institution (Miller et al., 2017).

These dual credit programs are only available to students who are deemed college-ready. The Texas Education Agency (2017) defined college and career readiness as the degree to which students have the skills necessary to complete college courses successfully. The Texas Education Agency (2017) also measured a student's level of college readiness in three ways, (a) reviewing the Texas Success Initiative scores, (b) completing and earning college credit through advanced placement or dual credit, and (c) enrolling in a series of career and technology education courses. Conley (2008) defined college readiness as the "level of preparation students need to enroll and succeed in college without remediation" (p. 24) and noted four factors that contributed to college readiness, "(a) content knowledge, (b) academic behaviors, (c) cognitive strategies, and (d) contextual skills" (Conley, 2008, p. 1). Conley failed to include some major reasons why students are not successful such as socio-economic status and family support.

Furthermore, Reid and Moore (2008) identified the importance of family and school support in academic success. School leaders and administrators must work to align K-12 curriculum with post-secondary schools to better prepare graduates (Reid & Moore, 2008). Creating a seamless process between high school and college through access to post-secondary credits had an influence on college readiness. Students who received college credits in high school were four times more likely than other high school students to enroll in college immediately after graduation (Karp, Calcagno, Hughes, Jeong, & Bailey, 2007).

The need for college readiness has been increasing and has been a growing concern for college administrators, faculty, and staff (Barnes & Slate, 2010; Bauerlein, 2009). The necessity to close achievement gaps were identified by Roderick, Nagaoka,

and Coca (2009), specifically for students of color and students in poverty. Moore et al. (2010) analyzed the achievement gaps in Texas during the 2006-2007 and 2007-2008 school years. White students were deemed college-ready in reading and mathematics at 50%, which was much higher than that of Black and Hispanic students at 20%.

In a similar study, Byrd and Macdonald (2005) surveyed eight first-generation college students over the age of 25 who were attending a university in the Pacific Northwest. Participants were nontraditional students who transferred from community colleges. Using a qualitative approach, Byrd and Macdonald (2005) conducted interviews and used a journal as a data analysis tool observing for themes and consistencies. Once completed, ten themes were identified from the interviews. Byrd and Macdonald (2005) concluded that life experiences influenced students' college success more than academic skills. Participants felt underprepared for college reading, noting inadequacies in a lack of vocabulary and with the amount of reading required. Based on the findings from this study, college readiness should include skills not measured by standardized examinations. Byrd and Macdonald (2005) revealed the presence of noncognitive resources, such as academic advising were imperative to college success. Life experiences, such as work experience, helped all students formulate goals and added motivation to complete college. Additionally, students noted a desire to contribute financially to their family and an ability to compete in their career field as contributing factors in their college success (Byrd & Macdonald, 2005).

Likewise, Barnes and Slate (2014) conducted a study focusing on the college readiness rates of Black, White, and Hispanic students enrolled at Texas public high schools. The 2006-2007 through the 2008 -2009 school years were examined, in

particular student achievement in reading, mathematics, and both subjects. Achievement gaps were present, revealing a statistically significant difference where White students were scoring higher than Black and Hispanic students. In most of the analyses conducted, large effect sizes were discovered, according to Cohen (1988). Although achievement gaps were present in Hispanic and Black students, they improved in their college readiness for each study year in reading, math, and in both subjects. White students grew at the same rate allowing them to maintain the “status quo” (Barnes & Slate, 2014, p.59). As the United States population continues to grow and become more diverse, the need to understand and improve achievement gaps will be necessary (Kao & Thompson, 2003).

**College Readiness and Self-Efficacy.** Bandura (1986) defined self-efficacy as a person’s belief in their ability to complete a task or achieve in certain situations. A student’s self-efficacy could be a determining factor in relation to college readiness. Moreover, Zajacova, Lynch, and Espenshade (2005) determined that stress had a negative influence on college success. However, low self-efficacy did not have an influence on students’ continued enrollment into the second year. Low self-efficacy increased the amounts of stress on college success (Zajacova et al., 2005). In another study, Melzer and Grant (2016) concluded that underprepared students had less guilt about failure than prepared students and were less likely to seek out help or assistance. Melzer and Grant (2016) concluded that faculty need to incorporate classroom strategies that foster self-efficacy, including a personality and learning-style inventory. First-year experience programs can encourage positive self-efficacy in students (Schrader & Brown, 2008).

Additionally, Strayhorn (2015) used a sample of 110 African American male students attending both historically black colleges and universities and predominantly White institutions; a majority of the sample (61%) surveyed were first-generation college students. Strayhorn (2015) determined that Black male students who believed in themselves and felt a sense of belonging and were more confident, and these Black male students tended to major in STEM fields.

**Cognitive Factors.** Martin (2013) investigated the cognitive and noncognitive college readiness of high school students participating in a concurrent enrollment program at a North Carolina community college. For this study, Martin (2013) collected GPA and college acceptance rates of 143 students, concurrently and non-concurrently enrolled during the 2008-2009 school year. Martin (2013) compared the grades of concurrently enrolled and non-concurrently enrolled students to traditional college freshmen.

Additionally, college acceptance rates were used to compare cognitive college readiness for concurrently and non-concurrently enrolled students. The researcher noted that concurrently enrolled students expressed higher levels of preparedness for college success when compared to students who were not concurrently enrolled. Additionally, students enrolled in early college high school programs were more prepared than traditional college students, both cognitively and non-cognitively. Martin (2013) concluded students, parents, and administrators should be confident in students who qualify for concurrent enrollment programs would be successful and prepared for college success.

**Career Readiness.** Gysbers (2013) defined career readiness as going to work, obtaining an apprenticeship, or selecting a certificate program at a 2-year or 4-year institution after



high school. Career ready students possess some the following skills and behaviors “(a) socially competency, (b) diversity skills, (c) positive work habits, (d) personal qualities, (e) personality and emotional states, and (f) entrepreneurship” (Gysbers & Lapan, 2009, p. 42). According to Gysbers (2013), career-ready students know the importance of graduating and possessing the appropriate skills for success in the workforce. Moreover, Gysbers argued that college and career readiness should not be separate but combined and referred to only as career readiness. Students who are career ready have the need to plan for their future, including lifelong learning. They have a “proactive, resilient, and adaptive style of interacting in the present and use that style to assertively move towards self-defined career futures that add meaning, purpose, and satisfaction to their lives” (Gysbers & Lapan, 2009, p. 23).

**Military Readiness.** The Texas Education Agency defined military readiness as a student who enlistment in the military. The U.S. Military requires students to pass an assessment before enlistment, the Armed Services Vocational Aptitude Battery (The ASVAB test, 2020). The ASVAB is an aptitude exam used for all branches of the military (The ASVAB test, 2020). According to the former Secretary of Defense Ash Carter,

only about half of the candidates for military service are able to meet the rigorous standards of the military entrance exam, coupled with an inability to meet physical fitness and character standards leave about one-third eligible for enlistment. (Hoover, 2017, p. 1)

**Texas Definitions.** The Texas Education Agency (TEA) will deem a student college, career, or military ready if they meet any one of 11 criteria (2018). The first five criteria

meet the TEA college readiness standard: (a) successful passing and meeting the Texas Success Initiative (TSI) college readiness standard for both ELA/reading and mathematics, (b) earning nine or more post-secondary or dual credit, (c) meeting criteria on an Advanced Placement (AP) or International Baccalaureate (IB) exam, (d) earning an associate degree while in high school, and (e) completing and receiving at least three credit hours of an OnRamps course in any subject area (TEA, 2018). The additional six requirements relate to a student being career or military ready: (a) attaining an industry-based certificate, (b) graduate with a complete individual education plan (IEP) and workforce readiness, (c) complete CTE coherent sequence coursework that has been aligned with industry-based certifications, (d) enlist in the armed forces, (e) a current special education student with advanced degree plans, and (f) graduate with a level I or II certificate (TEA 2018).

### **Statement of the Problem**

A great number of studies have been completed with a focus on college readiness (Barnes & Slate, 2010; Bauerlein, 2009; Byrd & McDonald, 2005; Conley, 2008; Karp et al., 2007; Reid & Moore, 2008) and the level at which a student is prepared to succeed after high school attending a post-secondary institution. Additionally, some research exists regarding the differences in achievement by ethnicity/race (Combs et al., 2010; Strayhorn, 2015). However, there is little research dedicated to the career and military readiness of students graduating high school. In addition, much of the research is more than five years old; therefore, current findings related to the college, career, and military readiness of recent high school graduates warrants further investigation.

### **Purpose of the Study**

The purpose of this study was to determine the extent to which college, career, and military readiness differed between student ethnic groups (i.e., Hispanic, White, and Black) in two school years. Specifically, this analysis was focused on the differences in the overall proportion of college, career, and military ready students at the campus and the proportion of students by ethnic/racial membership in categories (i.e., lowest proportion, below average proportion, above average proportion, highest proportion) established using means and standard deviations. College, career, and military readiness rates are reported in the Texas Academic Performance Reports, and these data were analyzed for two school years: 2017-2018 and 2018-2019.

### **Significance of the Study**

The Texas Education Agency determined student level of college readiness in three ways: (a) Texas Success Initiative scores, (b) completing and earning college credit through advanced placement or dual credit, and (c) enrolling in a series of career and technology education courses (2017). Additionally, The focus of this study was on the combined college, career, and military readiness data defined by the TEA. The TEA defined college, career, and military readiness using 11 elements, and if a student met any of the first five, they were considered college-ready, and six through 11, they were considered career and military ready.

A considerable amount of research has been conducted related to the college readiness of students entering college and not being required to enroll in remedial coursework. Little research has been performed using these data collected by the State of Texas and combining college, career, and military for the 2017-2018 and 2018-2019 school years. Additionally, a contribution to the body of knowledge related to college,

career, and military readiness could have some practical application for decision makers and stakeholders.

### **Research Questions**

The following research questions were addressed in this study: (a) What is the difference in the proportion of College, Career, and Military Readiness of all students compared to the proportion of College, Career, and Military Readiness of Black students for the 2017-2018 and 2018-2019 school years?, (b) What is the difference in the proportion of College, Career, and Military Readiness of all students by campus compared to the proportion of College, Career, and Military Readiness of Hispanic students for the 2017-2018 and 2018-2019 school years?, and (c) What is the difference in the proportion of College, Career, and Military Readiness of all students compared to the proportion of College, Career, and Military Readiness of White students for the 2017-2018 and 2018-2019 school years?

## **Method**

### **Research Design**

A non-experimental causal-comparative research design was used to complete this study (Creswell, 2013), using archival data from the Texas Education Agency's Texas Academic Performance Reports. A causal-comparative study is used when the researcher is investigating "the relationship between one or more categorical independent variables and one or more quantitative dependent variables" (Johnson & Christensen, 2017, p. 44). Archival data for this study occurred in the past; therefore, the independent and dependent variables could not be manipulated or changed (Johnson & Christensen, 2017). The data used in this study is assumed to be correct and free from errors this

assumption is due to the internal audit process that the Texas Education Agency uses to make sure all data collected from each high school is correct (Texas Education Agency, 2019a).

### **Participants and Instrumentation**

Participants in this study were recent high school graduates from Texas public high schools who were deemed college, career, or military ready during the 2017-2018 and 2018-2019 school years. The data were obtained through the Texas Education Agency, who is responsible for collecting and vetting data through the Texas Academic Performance Reporting system (Texas Education Agency, 2019a) from over 1200 public and charter schools. This focus of this study was the ethnicity/race (i.e., Hispanic, White, and Black) of students who were deemed college, career, or military ready for the 2017-2018 and 2018-2019 school years. The database that was used for this study is publicly available and audited annually (Texas Education Agency, 2019a).

### **Results**

An analysis of variance was used for this study, where the dependent variable is the campus proportion of college, career, and military readiness rates and is ratio data. The independent variable is the campus proportion converted to a categorical variable using means and standard deviations of students by ethnic group membership who achieved college, career, and military readiness. Therefore, CCMR data for each campus that were more than one standard deviation above the mean for Black, Hispanic, or White students were labeled the *highest proportion of CCMR campus*. Each campus that was between the mean for Black, Hispanic, or White students, and one standard deviation were placed in the *above average proportion CCMR campus* category. The other two

categories (i.e., *below average proportion CCMR campus* and *lowest proportion CCMR campus*) were labeled in the same way but reverse using the numbers one standard deviation below and between the mean and greater than one standard deviation below the mean.

Campus frequency data related to the below average and lowest campus proportion by ethnicity revealed that Black students have the largest proportion followed by Hispanic then White, creating a stair-step effect (Carpenter, Ramirez, & Severn, 2006) for both school years. Details of this finding are detailed in Tables 2.1 and 2.2. Additionally, campuses reporting for all students who were CCMR ready revealed a similar trend with Black students possessing the least amount overall of campuses reported, followed by White then Hispanic students for both school years.

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Insert Table 2.1 about here  
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Insert Table 2.2 about here  
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An underlying assumption for the use of a repeated-measures Analysis of Variance (ANOVA) procedure, the Levene's Test of Error Variance, was not met. Field (2009), however, contended that the parametric ANOVA is sufficiently robust that this violation can be withstood. Accordingly, the use of a parametric, repeated-measures ANOVA procedure was justified.

### Research Question 1

Regarding the extent to which differences were present in the campus proportion of college, career, and military readiness rates for all students compared to the campus proportion (i.e., Highest proportion, Above average proportion, Below average proportion, lowest proportion) of college, career, and military readiness rates of Black students, the repeated-measures ANOVA revealed a statistically significant difference for the 2017-2018 school year,  $F(3, 299) = 31.2, p < .001$ , partial  $\eta^2 = .24$ . The effect size for this statistically significant difference was small (Cohen, 1988). With this analysis, a Tukey and a Scheffe post hoc analysis were run, but the results with each grouping were statistically significant making it difficult to determine between which groupings the statistical difference existed. However, when looking at Table 2.3, a representation of the descriptive statistics for this analysis, readers will see the percentage of Black students in the lower and below average proportions were substantially higher than their peers in the two upper proportions.

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Insert Table 2.3 about here  
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With respect to the 2018-2019 analysis of differences in overall campus proportion of college, career, and military ready students and the campus proportion (i.e., Highest proportion, Above average proportion, Below average proportion, Low proportion) college, career, and military ready rates of Black students, the repeated measures ANOVA was again used,  $F(3, 429) = 22.82, p < .001$ , partial  $\eta^2 = .14$ , with a below small effect size according to Cohen (1988). Tukey and Scheffe' post hoc analysis

were run to determine where any statistically significant difference existed between the groupings, but the post hoc revealed that all of the groups were statistically significant. When looking at Table 2.4, a representation of the descriptive statistics for this analysis, readers will understand that the highest proportion of Black students are represented in the above average category.

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Insert Table 2.4 about here  
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### **Research Question 2**

Concerning the extent to which differences were present in the campus proportion of college, career, and military readiness rates for all students compared to the campus proportion (i.e., Highest proportion, Above average proportion, Below average proportion, lowest proportion) of college, career, and military readiness rates of Hispanic students, the repeated-measures ANOVA revealed a statistically significant difference for the 2017-2018 school year,  $F(3, 299) = 81.86, p < .001$ , partial  $\eta^2 = .45$ , the effect size for this difference was small according to Cohen (1988). Similar to the results for the previous research question, post hoc (i.e., Tukey and Scheffe') results were statistically significant in each category. Consequently, when examining Table 2.5, a representation of the descriptive statistics for this analysis, readers will see the percentage of Hispanic students in the lower and below average proportions were substantially higher than in the two upper proportions.



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Insert Table 2.5 about here  
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For the 2018-2019 school year, an analysis of the overall differences in the campus proportion of college, career, and military ready students and the campus proportion (i.e., Highest proportion, Above average proportion, Below average proportion, Low proportion) college, career, and military ready rates of Hispanic students, the repeated measures ANOVA revealed a statistically significant difference,  $F(3, 429) = 103.14, p < .001, \text{partial } \eta^2 = .42$ , a small effect size (Cohen, 1988). Similar to previous results the post hoc results were inconclusive. Descriptive statistics for this analysis are listed in Table 2.6. The highest percentage of Hispanic students are represented in the above average category and higher than the two lower categories combined.

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Insert Table 2.6 about here  
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### **Research Question 3**

In regard to the extent to which differences were present in the campus proportion of college, career, and military readiness rates for all students compared to the campus proportion (i.e., Highest proportion, Above average proportion, Below average proportion, lowest proportion) of college, career, and military readiness rates of White students, the repeated-measures ANOVA revealed a statistically significant difference for the 2017-2018 school year,  $F(3, 299) = 4.06, p = .008, \text{partial } \eta^2 = .04$ . This effect size

was below small (Cohen, 1988). Again, as with the other results, a Tukey and a Scheffe' post hoc analysis were run, but the results with each were inconclusive. A review of Table 2.7, details of the descriptive statistics for this analysis, readers will see the percentage of White students in the above average proportion was higher than their peers in the two lower proportions.

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 Insert Table 2.7 about here  
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Finally, the 2018-2019 analysis of differences in overall campus proportion of college, career, and military ready students and the campus proportion (i.e., Highest proportion, Above average proportion, Below average proportion, Low proportion) college, career, and military ready rates of White students, the repeated measures ANOVA revealed no statistical significance for this school year,  $F(3, 429) = 1.24, p = .293$ . Displayed in the table 2.8 are descriptive statistics for this analysis where almost one half of the campus proportion of White students were in the above average category.

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 Insert Table 2.8 about here  
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### **Discussion**

In this investigation, the degree to which differences might be present in the overall Texas high school campus proportions of college, career, and military readiness and the campus proportions of college, career, and military readiness of their Black, Hispanic, and White graduating students were determined. Using the state of Texas

archival dataset from the Texas Education Agency, data for the 2017-2018 and 2018-2019 school years were examined. Inferential statistical procedures were calculated to determine the extent to which any differences existed by their ethnicity/race. The results generated may not be generalizable to Black, White, and Hispanic graduating high school students or campuses.

In the 2017-2018 and 2018-2019 school years a repeated measures ANOVA revealed statistically significant differences were present for the campus proportion of all college, career, and military ready students in the state of Texas when compared to the campus proportion of Black students (i.e., Highest proportion, Above average proportion, Below average proportion, Lowest proportion). Based upon the results of this investigation, too few Black and Hispanic students are college, career, and military ready by campus compared to the proportion of all students. Additionally, a statistical significance was present for the proportion of White students for the 2017-2018 school year but not for the 2018-2019 school year. These findings may be due to the number of campuses reporting for both school years with an increase in the number of campuses (over 100) reporting data for White students during the 2018-2019 school year.

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

Based on the results of this investigation, several implications for policy and practice can be made. School administrators and educational leaders should analyze the data related to college, career, and military readiness; a gap exists in the achievement of Black and Hispanic students as it relates to the above average and highest proportion of schools. Educational leaders and administrators could use this information to determine what actions should be taken to provide better equity and access across campuses that are

low performing. Assessing the issue of equity at the campus level targeting those groups of students with the below average and lowest proportion of CCMR has the potential to help students through targeted intervention and support. Because college, career, and military readiness includes many areas, many deficiencies in this area could be intervened by a college and career counselor on the campus.

### **Recommendations for Future Research**

Many recommendations for future research can be made based on this investigation. Because this study was limited to campus level CCMR data for Black, Hispanic, and White students in Texas, future researchers are encouraged to analyze other ethnic/racial groups using this data. Another suggestion for future research would be for researchers to analyze the campus location, campus size, and other demographics related to student CCMR achievement. Qualitative studies are also recommended to obtain more rich data directly from students, parents, counselors, and administrators. A qualitative analysis would provide a higher level of understanding and nuance in addressing the equity and access issues for students. Finally, only two school years were used in the analysis due to this dataset being new for the State of Texas, beginning with the 2017-2018 school year. As such, researchers are encouraged to continue this analysis over time to determine the extent to which results may change.

### **Conclusion**

The purpose of this investigation was to find if any differences were present in the proportion of all campus college, career, and military readiness between Black, Hispanic, and White students by category for the same ethnicity/race (i.e., lowest proportion, below average proportion, above average proportion, and highest proportion) for the 2017-2018

and 2018-2019 school years. Inferential statistical procedures revealed a statistically significant difference for almost all of the groups except for White students during the 2018-2019 school year. Small and below small effect sizes were present in all instances, leaving a result that is less meaningful in useful relevance of college, career, and military readiness by campus as it relates to students on each campus by ethnicity/race. The TEA has defined CCMR readiness using an 11 point plan, and if a student completes as least one of these 11 points, they are deemed CCMR ready. This readiness measurements or benchmarks are all based on student achievement as it relates to dual credit and college access as well as student completion of CTE programs and military enlistment. A desire to join the military may be related to a well-developed and robust JROTC program or outside factors, like family history. These CCMR data points are an important measurement of student completion and a great predictor of career success post high school graduation. The need for college, career, and military readiness could and should be a place for school leaders and administrators to improve upon annually, creating and developing access points for all students.

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Table 2.1

*Descriptive Statistics for Campus Proportion of College, Career, and Military Readiness Rates by Ethnicity/Race for the 2017-2018 school year*

| Ethnicity/Race | Classification | Frequency | Percentage |
|----------------|----------------|-----------|------------|
| CCMR_ Hispanic | Lowest Prop.   | 284       | 21.4       |
|                | Below Avg.     | 578       | 43.6       |
|                | Above Avg..    | 325       | 24.5       |
|                | Highest Prop   | 140       | 10.6       |
| CCMR_ White    | Lowest Prop.   | 214       | 17.8       |
|                | Below Avg.     | 281       | 23.4       |
|                | Above Avg.     | 510       | 42.5       |
|                | Highest Prop.  | 194       | 16.2       |
| CCMR_ Black    | Lowest Prop.   | 172       | 23.1       |
|                | Below Avg.     | 344       | 46.2       |
|                | Above Avg..    | 177       | 23.8       |
|                | Highest Prop   | 52        | 7.0        |

Table 2.2

*Descriptive Statistics for Campus Proportion of College, Career, and Military Readiness Rates by Ethnicity/Race for the 2018-2019 school year*

| Ethnicity/Race | Classification | Frequency | Percentage |
|----------------|----------------|-----------|------------|
| CCMR_ Hispanic | Lowest Prop.   | 163       | 11.8       |
|                | Below Avg.     | 298       | 21.6       |
|                | Above Avg.     | 629       | 45.6       |
|                | Highest Prop.  | 288       | 20.9       |
| CCMR_ White    | Lowest Prop.   | 180       | 13.7       |
|                | Below Avg.     | 390       | 29.6       |
|                | Above Avg.     | 600       | 45.5       |
|                | Highest Prop.  | 148       | 11.2       |
| CCMR_ Black    | Lowest Prop.   | 70        | 9.1        |
|                | Below Avg.     | 187       | 24.3       |
|                | Above Avg.     | 419       | 54.4       |
|                | Highest Prop.  | 94        | 12.2       |

Table 2.3

*Campus Proportion of Students who Were College, Career, and Military Ready by Ethnicity for the 2017-2018 School Year*

| Campus Proportion of Black CCMR Students | Percentage |
|--|------------|
| Lowest Proportion                        | 23.1       |
| Below Average Proportion                 | 46.2       |
| Above Average Proportion                 | 23.8       |
| High Average Proportion                  | 7.0        |

Table 2.4

*Campus Proportion of Students who Were College, Career, and Military Ready by Ethnicity for the 2018-2019 School Year*

| Campus Proportion of Black CCMR Students | Percentage |
|--|------------|
| Lowest Proportion                        | 9.1        |
| Below Average Proportion                 | 24.3       |
| Above Average Proportion                 | 54.4       |
| High Average Proportion                  | 12.2       |

Table 2.5

*Campus Proportion of Students who Were College, Career, and Military Ready by Ethnicity for the 2017-2018 School Year*

| Campus Proportion of Hispanic CCMR Students | Percentage |
|---|------------|
| Lowest Proportion                           | 21.4       |
| Below Average Proportion                    | 43.6       |
| Above Average Proportion                    | 24.5       |
| High Average Proportion                     | 10.6       |

Table 2.6

*Campus Proportion of Students who Were College, Career, and Military Ready by Ethnicity for the 2018-2019 School Year*

| Campus Proportion of Hispanic CCMR Students | Percentage |
|---|------------|
| Lowest Proportion                           | 11.8       |
| Below Average Proportion                    | 21.6       |
| Above Average Proportion                    | 45.6       |
| High Average Proportion                     | 20.9       |



Table 2.7

*Campus Proportion of Students who Were College, Career, and Military Ready by Ethnicity for the 2017-2018 School Year*

| Campus Proportion of White CCMR Students | Percentage |
|--|------------|
| Lowest Proportion                        | 17.8       |
| Below Average Proportion                 | 23.4       |
| Above Average Proportion                 | 42.5       |
| High Average Proportion                  | 16.2       |

Table 2.8

*Campus Proportion of Students who Were College, Career, and Military Ready by Ethnicity for the 2018-2019 School Year*

| Campus Proportion of White CCMR Students | Percentage |
|--|------------|
| Lowest Proportion                        | 13.7       |
| Below Average Proportion                 | 29.6       |
| Above Average Proportion                 | 45.5       |
| High Average Proportion                  | 11.2       |

### CHAPTER III

COMPARISON OF PROPORTION OF CAMPUS COLLEGE, CAREER, AND  
MILITARY READINESS OF ALL STUDENTS TO THE PROPORTION OF CAMPUS  
COLLEGE, CAREER, AND MILITARY READINESS BY GENDER

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

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### **Abstract**

In this investigation, the degree to which differences were present in the overall proportion of college, career, and military readiness for all campuses and by gender in the proportion of college, career, and military readiness rates for the 2017-2018 and 2018-2019 school years. Archival data were obtained from the Texas Education Agency, Texas Academic Performance Reports for the 2017-2018 and 2018-2019 school years. The analysis for the 2017-2018 school year did not result in a statistically significant difference for both male and female students in the same year. The following school year's analysis resulted in a statistically significant difference for both male and female students. Effect sizes for these statistically significant differences results were below small. Implications for policy and practice and recommendations for future research are provided.

*Keywords:* College Readiness, Career Readiness, Military Readiness, Gender

COMPARISON OF PROPORTION OF CAMPUS COLLEGE, CAREER, AND  
MILITARY READINESS OF ALL STUDENTS TO THE PROPORTION OF CAMPUS  
COLLEGE, CAREER, AND MILITARY READINESS BY GENDER

College, career, and military readiness of Texas high school students was investigated by gender. The background for this study outlined a focus on defining college readiness (Conley, 2007; Hooker & Brand, 2009; Wiley et al., 2010; Venezia & Jaeger, 2013) as well as the college entrance exams needed for admission. Career readiness is explored through the literature with a focus on the changing educational needs in the labor market (Carnevale & Cheah, 2015; Carnevale, Strohl, & Melton, 2011). Military readiness revealed the necessity of the Armed Services Vocational Aptitude Battery (ASVAB) and the percentage of potential enlistees who meet the minimum requirements (The ASVAB test, 2020; Hoover, 2017). A causal-comparative research design since the data used is archival data from the Texas Education Agency's Texas Academic Performance Reports (Creswell, 2013).

### **Background**

Acceptance in a 4-year public or private university in Texas is weighted heavily on student class rank, SAT, or ACT exam. In Texas, a student qualifies for automatic acceptance to a public university if they are ranked in the top 10% of their graduating class at a recognized Texas public or private high school at the end of junior year (THECB, 2020). The ACT and SAT are standardized tests that are required by students entering a 4-year university to be admitted unless they are in the top 10% of their graduating class. In 2019, 52% or 1.78 million, of U.S. high school graduates took the ACT exam (ACT, 2020). Additionally, of the 52% of high school students who took the

ACT exam, only 37% met ACT's college-ready benchmarks in three or four subject areas (ACT, 2020). The national composite score was 20.7, down one-tenth a percentage point from 2018. Moreover, the number of students who met the college readiness benchmarks in reading, English, mathematics, and science have all decreased since 2015. The ACT (2019) reported that the most significant decline in college readiness benchmarks was in English and mathematics. In Texas, the number of high school graduates taking the ACT exam was 39% or 136,061, significantly lower than the national average of 52%. Texas high school graduates who met three or more college readiness benchmarks defined by ACT were 36%, one percentage point higher than in 2018 at 35% (ACT, 2020). Moreover, Black students met college readiness benchmarks at 16%, lower than White students who met the standard at 69%, and 22% of Hispanic students, respectively.

**Gender and Ethnicity/Race Implications on College Preparedness.** Combs et al.

(2010) evaluated the differences in college-ready performance by gender in the areas of reading and mathematics. Combs et al. (2010) examined data collected from 1,105 Texas high schools for the 2005-2006 and 2006-2007 school years. Combs et al. (2010) discovered that 31% of high school graduates were ready for college in reading and mathematics in Texas. Female seniors were 51.01% college-ready, whereas 38.76% of male seniors were deemed college-ready in reading. Additionally, on mathematics examination results, boys' college readiness was 52.57% compared to a smaller percentage of girls at 44.12%. Combs et al. (2010) noted that a higher rate of girls take the SAT or ACT, given that this exam is voluntary, and gender differences might be due to parental expectations.

Strayhorn (2015) examined the college readiness of Black male students pursuing science, technology, engineering, or mathematics majors. Strayhorn (2015) used a mixed methods analysis to identify the qualities that influenced Black male students' preparation and success in science, technology, engineering, and math majors. Black male students who believed in themselves and were confident tended to major in science, technology, engineering, and math fields. A sense of belonging mattered significantly as it related to students' success in college (Strayhorn, 2015).

**Every Student Succeeds Act.** In 2016, the Texas Education Agency adopted a comprehensive education plan that set priorities to prepare all children for college, career, or military success, and the Every Student Succeeds Act (ESSA). The ESSA is a strategic plan creating a foundation of technical support and assistance for 1,207 school districts and charter schools in Texas. The ESSA (2015), a federal initiated new creation of the No Child Left Behind Act (U.S. Department of Education, 2004). The ESSA, much like the No Child Left Behind Act, set rigorous standards and equitable outcomes across all socio-economic groups providing funding and support for low-performing campuses whom the state of Texas regarded as their most vulnerable (TEA, 2017). However, the ESSA marked a change in performance reporting for state agencies with a renewed focus on preparing students for college and career success (ESSA, 2016).

**Defining college readiness.** For the purposes of this study, college readiness is defined as the level of preparation a student possesses to enroll and succeed in a post-secondary institution without remediation (Conley, 2007; Hooker & Brand, 2009; Wiley et al., 2010; Venezia & Jaeger, 2013). First-generation students most often have minimal information about the college experience (Jackson & Kurlaender, 2014). Moreover, Hu

and Wolniak (2010) stated, “An abundance of research has shown that activities related to student development in academic and social dimensions are fundamental to student persistence and retention (p. 753). Additionally, a post-secondary institution is defined as an educational institution a student can enroll in post-high school graduation, including 2-year and 4-year schools as well as technical or trade schools (Conley, 2007; Hooker & Brand, 2009; Wiley et al., 2010).

The central part of this definition of college readiness is the lack of need for remediation; students who are college-ready will register and complete college-level coursework. Failing to meet the college-level coursework requirement or an incomplete entry-level course will have negative consequences on a student’s degree completion (Wiley et al., 2010 & Conley, 2007). Additionally, Chen (2016) through the National Center for Educational Statistics reported that during the 2011-2012 school year, approximately one-third of all new first and second-year students reported taking at least one remedial course. Fewer students are graduating high school prepared for collegiate-level coursework (Jackson & Kurlaender, 2014; Royster, Gross, & Hochbein, 2015). A tighter focus on college readiness by state and government agencies requires a “focused view at how we measure, define, and improve the college readiness of high school students” (Wiley et al., 2010, p. 2). Numerous studies have challenged the notion that traditional means for measuring college readiness such as high school rank, GPA, and test scores do not reveal the entire picture of how ready a student is for college (Adelman, 2006; Conley, 2007, & Maruyama, 2012). Many studies have been completed to gain a deeper understanding of what other parts of a student’s life contribute to their success in college (Reid & Moore, 2008; Adelman, 2006; Conley, 2007; Yamamura et



al., 2010). Yamamura et al. (2010) published a qualitative study investigating the need for college readiness and the stakeholder's responsibility. The stakeholders included in this study were school administrators, families, and students. All of the stakeholders documented a need for more college readiness programs and resources, and also cited that college does not only mean 4-year institutions but also 2-year and technical or trade schools. This study revealed that the need for college readiness is not only cognitive but required support and education on the accessibility of post-secondary education (Yamamura et al., 2010).

**Career Readiness.** The link between post-secondary education and career readiness and success is of growing importance. Career readiness has gone undefined for some time, making it difficult for stakeholders to be effective in supporting career readiness initiatives (NACE, 2019). When surveyed, employers cite that most often, students are not prepared for the workforce; therefore, they have an investment in the future of their career readiness (Bangser, 2008). According to research conducted by the National Association of Colleges and Employers (NACE), employers have identified the top four attributes they want in future employees, (a) critical thinking/problem solving, (b) teamwork/collaboration, (c) professionalism/work ethic, and (d) oral/written communications (2019).

Carnevale et al. (2013) reported that 72% percent of jobs in 1973 were available for people with a high school diploma or less compared to 44% in 1992 and 41% in 2007. Moreover, the Bureau of Labor Statistics reported, "Occupations that typically require postsecondary education for entry gained 5.3 million jobs from May 2007 to May 2016" (2016). The state and national focus on college and career readiness are tied to the need

for making sure students can earn better pay and gainful employment (Bureau of Labor Statistics, 2016).

Accordingly, college graduates earn twice as much in their lifetime than those with a high school diploma only (Carnevale & Cheah, 2015; Carnevale, Strohl, & Melton, 2011). The nation's population, 25-year-olds and older with a bachelor's degree or higher, was at 32.5% in 2015 (Ryan & Bauman, 2016).

**Military Readiness.** The Texas Education Agency defines military readiness as student enlistment in the military. The U.S. Military requires students to pass an assessment before enlistment, the Armed Services Vocational Aptitude Battery (The ASVAB test, 2020). The ASVAB is an aptitude exam used for all branches of the military (The ASVAB test, 2020). Former Secretary of Defense Ash Carter stated that “only about half of the eligible candidates for military service can meet the rigorous standards of the military entrance exam, coupled with an inability to meet physical fitness and character standards leaves about one-third eligible for enlistment” (Hoover, 2017, p.1). A study conducted by Theokas (2010), reported that a little more than 22% of all recent high school graduates were ineligible for enlistment due to their ASVAB score.

Furthermore, the achievement gaps among race/ethnicity groups are immense, with Black students having the largest percentage of ineligibility at 38.7%, Hispanic students at 29.1%, and White students with the lowest percentage at 16.4%, respectively (Theokas, 2010). The state of Texas' ineligibility rates by ethnicity/race are similar to national averages reported.

**Texas Definitions.** Definitions for college, career, and military readiness are set by the Texas Education Agency (TEA) using 11 criteria (2018). The first five criteria meet the

TEA college readiness standard are (a) successful passing and meeting the Texas Success Initiative (TSI) college readiness standard for both ELA/reading and mathematics, (b) earning nine or more post-secondary or dual credit, (c) meeting criteria on advanced placement (AP) or International Baccalaureate (IB) exam, (d) earning an associates degree while in high school, and (e) completing and receiving at least three credit hours of an OnRamps course in any subject area (TEA, 2018). Six additional requirements correspond to a student being career or military ready, they are (a) attaining an industry-based certificate, (b) graduate with a complete individual education plan (IEP) and workforce readiness, (c) complete CTE coherent sequence coursework that has been aligned with industry-based certifications, (d) enlist in the armed forces, (e) a current special education student with advanced degree plans, and (f) graduate with a level I or II certificates (TEA 2018).

### **Statement of the Problem**

A great number of studies have been conducted with a focus on college readiness (Conley, 2007; Hooker & Brand, 2009; Wiley et al., 2010; Venezia & Jaeger, 2013) and the level at which a student is prepared to succeed after high school attending a post-secondary institution. Some research exists regarding college readiness differences in achievement by gender (Combs et al., 2010; Strayhorn, 2015). Career readiness has gone undefined, making it difficult for stakeholders to develop solutions to the problem (NACE, 2019). Additionally, there is very little research dedicated to the career and military readiness of students graduating high school. Much of the research is more than five years old. Therefore, the current findings related to the college, career, and military readiness of recent high school graduates warrants further investigation.

**Purpose of the Study**

The purpose of this study was to determine the extent to which college career and military readiness rates differed by between students by gender in two school years. Specifically, this analysis was focused on the differences in the overall proportion of college, career, and military readiness of female students compared to the overall campus proportion for the 2017-2018 and 2018-2019 school years. The second purpose of this study is to determine differences in the overall campus proportion of college, career, and military ready students compared to the overall campus proportion of college, career, and military readiness of male students for the 2017-2018 and 2018-2019 school years. The data analyzed in this study were obtained from the Texas Education Agency's Texas Academic Performance Reports.

**Significance of the Study**

The TEA defines college, career, and military readiness using 11 elements, if a student meets any of the first five, they are college-ready and six through 11, they are career and military ready (TEA, 2018). The majority of these 11 elements apply to college and career readiness. A considerable amount of research has been dedicated to the exploration of college readiness (Conley, 2007; Hooker & Brand, 2009; Wiley et al., 2010; Venezia & Jaeger, 2013). Additionally, career readiness, sometimes groups with college readiness in education research, has no clear definition (NACE, 2019). Moreover, little research has been conducted pertaining to the military readiness of high school students. This study will focus on the college, career, and military readiness of Texas high school students by gender for the 2017-2018 and 2018-2019 school years. An

investigation using this data would contribute to the body of knowledge and have some practical application for stakeholders and decision makers.

### **Research Questions**

The following research questions were addressed in this study: (a) What is the difference in the proportion of College, Career, and Military Readiness of all students compared to the proportion of College, Career, and Military Readiness of female students for the 2017-2018 and 2018-2019 school years?, and (b) What is the difference in the proportion of College, Career, and Military Readiness of all students by campus compared to the proportion of College, Career, and Military Readiness of male students for the 2017-2018 and 2018-2019 school years?

### **Method**

#### **Research Design**

A non-experimental causal-comparative research design was used to complete this study (Creswell, 2013), using archival data from the Texas Education Agency's Texas Academic Performance Reports. A causal-comparative study is used when the researcher is investigating "the relationship between one or more categorical independent variables and one or more quantitative dependent variables" (Johnson & Christensen, 2017, p. 44). Archival data for this study occurred in the past; therefore, the independent and dependent variables could not be manipulated or changed (Johnson & Christensen, 2017). The data used in this study was assumed to be correct and free from errors; this is due to the internal audit process that the Texas Education Agency uses to make sure all data collected from each high school is correct (Texas Education Agency, 2019a).

## Participants and Instrumentation

Participants in this study were recent high school graduates from Texas public high schools who were deemed college, career, or military ready during the 2017-2018 and 2018-2019 school years. The data were obtained through the Texas Education Agency, who is responsible for collecting and vetting data through the Texas Academic Performance Reporting system (Texas Education Agency, 2019b) from over 1200 public and charter schools. This study investigated the gender of students who were deemed college, career, or military ready for the 2017-2018 and 2018-2019 school years. The database that was used for this study is publicly available and audited annually (Texas Education Agency, 2019a).

## Results

An analysis of variance was used for this study, where the dependent variable is the campus proportion of college, career, and military readiness rates and is ratio data. The independent variable is the campus proportion converted to a categorical variable using means and standard deviations of students by gender who achieved college, career, and military readiness. Therefore, CCMR data for each campus that were more than one standard deviation above the mean for female and male students were labeled the *highest proportion of CCMR campus*. Each campus that was between the mean for male and female students, and one standard deviation were placed in the *above average proportion CCMR campus* category. The other two categories (i.e., *below average proportion CCMR campus* and *lowest proportion CCMR campus*) were labeled in the same way but reverse using the numbers one standard deviation below and between the mean and greater than one standard deviation below the mean.

An underlying assumption for the use of a repeated-measures Analysis of Variance (ANOVA) procedure, the Levene's Test of Error Variance, was not met. Field (2009), however, contended that the parametric ANOVA is sufficiently robust that this violation can be withstood. Accordingly, the use of a parametric, repeated-measures ANOVA procedure was justified.

### **Research Question 1**

Regarding the extent to which differences were present in the campus proportion of college, career, and military readiness rates for all students compared to the campus proportion (i.e., Highest proportion, Above average proportion, Below average proportion, lowest proportion) of college, career, and military readiness rates of female students, a statistically significant difference was not determined using the repeated-measures ANOVA for the 2017-2018 school year,  $F(3, 299) = .327, p = .806$ . The reader is directed to Table 3.1 for a representation of the descriptive statistics for this analysis, where they will see that the campus proportion of female students were almost equally spread amongst the categories with most females being in the above average category.

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 Insert Table 3.1 about here  
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With respect to the 2018-2019 analysis of differences in overall campus proportion of college, career, and military ready students and the campus proportion (i.e., Highest proportion, Above average proportion, Below average proportion, Low proportion) college, career, and military ready rates of female students, the repeated measures ANOVA revealed a statistically significant difference,  $F(3, 429) = 22.82, p =$

.006, partial  $\eta^2 = .03$ , revealing a below small effect size according to Cohen (1988).

With this analysis, a Tukey and a Scheffe' post hoc analysis were run, but the results with each were all statistically significant making it difficult to determine between which female categories (i.e., lowest proportion, below average proportion, above average proportion, highest proportion) the statistical difference existed. However, when looking at Table 3.2, a representation of the descriptive statistics for this analysis, readers will see the largest percentage of female students in the above average proportion.

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 Insert Table 3.2 about here  
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### **Research Question 2**

With regard to the extent to which differences were present in the campus proportion of college, career, and military readiness rates for all students compared to the campus proportion (i.e., Highest proportion, Above average proportion, Below average proportion, Lowest proportion) of college, career, and military readiness rates of male students, the repeated-measures ANOVA did not reveal a statistically significant difference for the 2017-2018 school year,  $F(3, 299) = .913, p = .435$ . The highest campus proportion of female students were represents in the above average campus category, delineated in Table 3.3 is a representation of the descriptive statistics for this analysis.

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 Insert Table 3.3 about here  
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Lastly, the 2018-2019 analysis of differences in overall campus proportion of college, career, and military ready students and the campus proportion (i.e., Highest proportion, Above average proportion, Below average proportion, Low proportion) college, career, and military ready rates of male students, the repeated measures ANOVA revealed a statistically significant difference for this school year,  $F(3, 429) = 2.68, p = .047$ , partial  $\eta^2 = .02$ , revealing a below small effect size according to Cohen (1988). A Tukey and a Scheffe' post hoc analysis were run, but the results inconclusive. Consequently, when reviewing Table 3.4, a representation of the descriptive statistics for this analysis, readers will see the percentage of male students in the above and below average proportions were substantially higher than in the highest and lowest proportions.

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 Insert Table 3.4 about here  
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### **Discussion**

In this article, the degree to which differences might be present in the college, career, and military readiness between male and female students for the 2017-2018 and 2018-2019 school years were determined. The use of a statewide dataset from the Texas Education Agency's Texas Academic Performance Reports was used for this study. No attempt was made to generalize to gender in the state of Texas because of the limitations of the use of an archived dataset.

In the 2017-2018 and 2018-2019 school years, a repeated measures ANOVA revealed statistically significant differences were present for the campus proportion of all college, career, and military ready students in the state of Texas when compared to the

campus proportion of male and female students (i.e., Highest proportion, Above average proportion, Below average proportion, Lowest proportion). Based upon the results of this investigation, statistically significant results related to the college, career, and military readiness by campus compared to the proportion of all students were not revealed for the 2017-2018. Alternatively, statistically significant results were revealed for the 2018-2019 school year for both male and female students. Additionally, based on the statistically significant finding, a below small effect size was revealed for the 2018-2019 school year. These findings may be due to the number of campuses reporting for both school years with an increase in the number of campuses reporting data for the 2018-2019 school year, an increase of 3.1 percentage points for male students, and 4.5 percentage points for female students.

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

Based upon the results of this investigation, several implications for policy and practice can be made. School administrators and educational leaders should analyze the data related to college, career, and military readiness; there is a gap in the achievement of male and female students as it relates to the lower performing school and those that are included in the above average and highest proportion of schools. Educational leaders and administrators could use this information to determine what actions should be taken to provide better equity and access across campuses that are low performing. Gender gaps may be present in the types of programs available through CTE, and these data could inform the school leaders and administrators on possible areas for development. For example, cosmetology is typically is a female student enrolling program, versus welding that may be more male student leaning. Additionally, an individual campus analysis

related to this could help reveal campuses that have more programs that tend to lean towards one gender over the other and makes changes accordingly so that all students are served.

### **Recommendations for Future Research**

There are many recommendations for future research that can be made based on this investigation. Because this study was limited to campus level CCMR data for male and female students in Texas, researchers are encouraged to analyze gender differences by ethnic/racial group membership. Another suggestion for future research would be for researchers to analyze the campus location, campus size, and/or other demographics related to student CCMR achievement. Additionally, a detailed campus analysis of CTE and ROTC programs could reveal some detail on access to these types of programs by gender.

Finally, a qualitative or case study analysis is also recommended to obtain more rich data directly from students, parents, counselors, and administrators. The qualitative analysis would provide a higher level of understanding and nuance in addressing the equity and access issues for students. Finally, only two school years were used in the analysis due to this dataset being new for the State of Texas, beginning with the 2017-2018 school year. As such, researchers are encouraged to continue this analysis over time to determine the extent to which similar results might change.

### **Conclusion**

The purpose of this investigation was to find if any differences were present in the proportion of all campus college, career, and military readiness between male and female students by category for the same ethnicity/race (i.e. lowest proportion, below average

proportion, above average proportion, and highest proportion) for the 2017-2018 and 2018-2019 school years. Inferential statistical procedures revealed a statistically significant difference for the 2018-2019 school year only for male and female students. A below small effect size was present in both instances, leaving a result that is less meaningful in useful relevance for college, career, and military readiness by campus as it relates to students on each campus by gender.

College, career, and military readiness is a vital baseline measurement or indicator for postsecondary or workforce success for recent Texas high school graduates. According to Young et al. (2013), female students enroll in dual credit courses at 3% higher rate than male students. The 11 points of completion that are related to this CCMR designation are available to both male and female students. However, it is essential to note that the career portion that is student serving through CTE programs may appeal to one sex over the other. Additionally, military or JROTC programs tend to support the enlistment of male students more than female students. Although the enlistment of females has grown from 2% in 1973 to 14% in 2011, the military is still a male-dominated government entity (Patten & Parker, 2011). This study is just the beginning of future research to uncover the intricacies related to each campus and school district and the outcomes they hope to achieve.

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Table 3.1

*Campus Proportion of Students who Were College, Career, and Military Ready by Ethnicity for the 2017-2018 School Year*

| Campus Proportion of Female CCMR Students | Frequency | Percentage |
|---|-----------|------------|
| Lowest Proportion                         | 315       | 19.0       |
| Below Average Proportion                  | 418       | 25.2       |
| Above Average Proportion                  | 639       | 38.4       |
| High Average Proportion                   | 290       | 17.4       |

Table 3.2

*Campus Proportion of Students who Were College, Career, and Military Ready by Ethnicity for the 2018-2019 School Year*

| Campus Proportion of Female CCMR Students | Frequency | Percentage |
|---|-----------|------------|
| Lowest Proportion                         | 241       | 13.8       |
| Below Average Proportion                  | 588       | 33.8       |
| Above Average Proportion                  | 716       | 41.1       |
| High Average Proportion                   | 196       | 11.3       |

Table 3.3

*Campus Proportion of Students who Were College, Career, and Military Ready by Ethnicity for the 2017-2018 School Year*

| Campus Proportion of Male CCMR Students | Frequency | Percentage |
|---|-----------|------------|
| Lowest Proportion                       | 317       | 19.0       |
| Below Average Proportion                | 429       | 25.7       |
| Above Average Proportion                | 609       | 36.5       |
| High Average Proportion                 | 315       | 18.9       |

Table 3.4

*Campus Proportion of Students who Were College, Career, and Military Ready by Ethnicity for the 2018-2019 School Year*

| Campus Proportion of Male CCMR Students | Frequency | Percentage |
|---|-----------|------------|
| Lowest Proportion                       | 212       | 12.3       |
| Below Average Proportion                | 610       | 35.4       |
| Above Average Proportion                | 671       | 38.9       |
| High Average Proportion                 | 230       | 13.3       |

## CHAPTER IV

COMPARISON OF PROPORTION OF CAMPUS COLLEGE, CAREER, AND  
MILITARY READINESS OF ALL STUDENTS TO THE PROPORTION OF CAMPUS  
COLLEGE, CAREER, AND MILITARY READINESS BY ECONOMIC STATUS

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

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### **Abstract**

In this multiyear investigation, the degree to which differences were present in the overall proportion of college, career, and military readiness for all campuses and the campus proportion of college, career, and military readiness rates by economic status for the 2017-2018 and 2018-2019 school years. Archival data were obtained from the Texas Education Agency, Texas Academic Performance Reports for the 2017-2018 and 2018-2019 school years. The results of the analysis for the 2017-2018 and 2018-2019 school year did not result in a statistically significant difference. Implications for policy and practice and recommendations for future research are provided.

**Keywords:** College Readiness, Career Readiness, Military Readiness, Economically Disadvantaged

COMPARISON OF PROPORTION OF CAMPUS COLLEGE, CAREER, AND  
MILITARY READINESS OF ALL STUDENTS TO THE PROPORTION OF CAMPUS  
COLLEGE, CAREER, AND MILITARY READINESS BY ECONOMIC STATUS

The Texas Education Agency began collecting the college, career, and military readiness data in the 2017-2018 school year in order to connect the outcomes from multiple data points. This data point is an additional measurement to determine if graduating seniors have the necessary skills for post high school success. College, career, and military readiness rates of Texas high school students by economic status was the focus of this study, and the background for this study is connected to college and career readiness for impoverished students as well as the military readiness and recruitment in high schools. A causal-comparative research design was used after obtaining archival data from the Texas Education Agency's Texas Academic Performance Reports (Creswell, 2013). Participants in this study were high school graduates who were indicated to be college, career, and military ready for the 2017-2018 and 2018-2019 school years.

**Background**

There is a substantial amount of academic inquiry surrounding issues related to schools enrolling impoverished students. The family economic status is a remarkable predictor of student success than school characteristics (Jargowsky, Wood, Anglum, & Karp, 2016). Interventions are needed in poor neighborhoods to improve inner-city schools despite the economic status of the families who live there (Jargowsky et al., 2016). Atanasov, Dudnytska, Estes, and Marsh (2013) stated that the areas that contribute



to the challenges facing most first-generation college students were “insufficient academic preparation in high school, low socio-economic status, and lack of knowledge concerning college education” (p. 24). Moreover, research conducted by Welton and Williams (2015) found multiple factors that contributed to a culture of failure and academic decline in inner-city high schools that enroll a higher percentage of minority students: (a) shift in demographic change, (b) high staff turnover, (c) low academic expectations, (d) culture of test intervention and not academic instruction, (e) lack of rigor in advanced courses, and (f) lack of college preparedness and district-wide interventions. Balfanz (2009) documented additional barriers faced by public school systems with a high percentage of impoverished students,

Minority students are much more likely than white students to attend a high school that confronts the challenges of concentrated poverty. In predominantly white affluent suburban school districts, nearly every student arrives ready for high school work then graduates. In all minority and inner-city schools in high poverty neighborhoods, most entering students lack a good middle school education and only one half to two-thirds graduate. (p.17)

The need for transformational change in the public school system as it relates to the impoverished is apparent. Access and success in college is a growing concern for low socio-economic status and minority students (Roderick, Nagaoka, & Coca, 2009).

College access is a barrier for the impoverished student beyond the qualifications, navigating the financial aid process and the complex structure

**College and Career Readiness.** For many years, college readiness has been defined as the level of preparation a student must possess for college entrance and enrollment

without the need for remediation (Conley, 2009; Venezia & Jaeger, 2013). College readiness is closely connected to workforce or career readiness due to the close connection between the skills necessary to be successful in work and life (Cline, Bissell, Hafner & Katz, 2007). Moreover, the Texas Education Agency has defined college readiness using five identifiers, if a student has completed one, they are deemed college ready: (a) successful passing and meeting the Texas Success Initiative (TSI) college readiness standard for both ELA/reading and mathematics, (b) earning nine or more post-secondary or dual credit, (c) meeting criteria on an advanced placement (AP) or International Baccalaureate (IB) exam, (d) earning an associate degree while in high school, and (e) completing and receiving at least three credit hours of an OnRamps course in any subject area (2018). Additionally, the Texas Education Agency has defined career readiness with five very different identifiers (a) attaining an industry-based certificate, (b) graduate with a complete individual education plan (IEP) and workforce readiness, (c) complete CTE coherent sequence coursework that has been aligned with industry-based certifications, (d) a current special education student with advanced degree plans, and (e) graduate with a level I or II certificate (2018).

The high school experience across the nation is very similar for most students. It is a culture rooted in the notion that college is for everyone without much information on what the experience will be like, especially for first-generation students (Balfanz, 2009; Jackson & Kurlaender, 2014). Too few students who graduate from high school are prepared for college; this lack of readiness is especially troubling with more and more jobs requiring education beyond a high school diploma (Roster, Gross, & Hochbein,

2015). In 2007, 41% of jobs required a high school diploma or less education; this change is a significant shift from 72% in 1973 (Carnevale et al., 2013).

High schools have made many advancements towards an equal education for all since the *Brown v. Board of Education* decision in 1954 (Balfanz, 2009). Education is still very “separate and unequal” (p. 20); only about one fifth of high school students attend a campus where the racial demographic reflects that of the United States. Balfanz (2009) found that students most often attend a high school campus that is predominantly White or minority. Additionally, one third of high school students in low socio-economic or urban schools graduate ready for post-secondary success (Balfanz, 2009). The need for transformative change for the neediest schools has led to the creation of federal and philanthropic investments in education.

Barnes and Slate (2014) conducted a study comparing the college-readiness rates of Black, Hispanic, and White students in reading, mathematics, and in both subjects for three school years. This investigation used college readiness data from the Texas Education Agency’s Academic Excellence Indicator System. This three-year analysis revealed an improved overall college readiness rate, from 31% to 39% based on the Texas Education Agency college readiness indicators. The researchers discovered college readiness performance in reading, math, and in both subjects, for White students performed better than Hispanic and Black students over three years (Barnes & Slate, 2014). Additionally, Hispanic students performed better than Black students in reading, mathematics, and in both subjects.

Holland and Farmer-Hinton (2009) investigated student perceptions of access to college, between small schools and larger schools in a district. Students attending smaller

schools indicated a deeper understanding and connection to post-secondary education. The findings of this study did not correlate to the literature review because most of the students at smaller schools were from impoverished and minority communities (Holland & Farmer-Hinton, 2009). Additionally, the overarching findings and recommendations were for the creation of smaller communities within the larger schools to duplicate the findings of smaller schools.

**Military readiness.** The U.S. military draft ended in 1973, allowing for a volunteer only enlistment model after the Vietnam war (Moskos, 1977). With no draft, the government had to make changes to remain competitive with the public sector, allowing for increases in pay for enlistees (Moskos, 1977). For example, from 1964 to 1974, the U.S. earning increased by 52%, compared to military pay at 76%. The U.S. military, minus the draft, was required to make some changes in order to attract potential enlistees; specifically, those looking for financial advancement, not just “duty to country” (Mariscal, 2007). Subsequently, the elimination of the draft and increased pay has allowed for those seeking gainful employment to view it as a means of financial support for themselves and their families, due to this, the term “poverty draft” has been established (Mariscal, 2007).

The No Child Left Behind Act (NCLB) of 2001 and the National Defense Authorization Act for the fiscal year 2001 drastically changed the level of access military groups had the high school-aged children. The NCLB and the National Defense Authorization Act for the fiscal year 2001 required high schools to provide military groups the same level of access as to students as college and universities, pulling them from classes and providing directory information from school records (Holm, 2007; Feder, 2008; Nava, 2010). An estimated 95% of schools across the nation are complying

with the mandate or risk losing their federal funding (Feder, 2008). Schools can obtain parent's permission for providing directory information by any means the district determines. Most often, parents do not realize they are giving consent either due to a lack of transparency or clarity in the language used on the forms. Parents, however, have the ability to opt-out of this directory information (Holm, 2007). With access to students and the promise of competitive pay, the impoverished high school student population is often a target for recruitment and more likely to enlist (Nava, 2011).

A military presence within high schools has been a long-standing mode of recruitment for the U.S. military. Recruitment is indeed the beginning; however, students must be prepared academically to enlist. The U.S. military requires all potential members to take the Armed Services Vocational Aptitude Battery (ASVAB), a time multi-aptitude examination (The ASVAB test, 2020). The ASVAB requires students to meet a minimum score in order to enlist, and the score varies depending on the branch of the military they choose. Students are encouraged to take the examination seriously and prepare (The ASVAB test, 2020). This minimum examination score information is of particular importance for this study due to the way the Texas Education Agency has defined military readiness, as the student enlistment in any branch.

### **Statement of the Problem**

As previously discussed, family economic status is a more significant predictor of student success than their school's demographic and financial characteristics (Jargowsky et al., 2016). The need for interventions for schools despite the family's financial position is of greater concern; schools should focus on preparing students academically

for college and career success by developing effective programming (Atanasov et al., 2013) and knowing that college access and success is a concern for impoverished students, going beyond entrance qualifications (Roderick et al., 2009).

College readiness is necessary beyond what is required for entrance because the definition also requires that a student both enter and enroll in classes without the need for remediation (Conley, 2008; Venezia & Jaeger, 2013). The need for remediation comes from lack of preparedness, which may or may not be correlated to the family's financial status, schools that serve minority and low socio-economic populations graduate students with only one third graduate college-ready (Balfanz, 2009). Barnes and Slate (2014) found that there were racial differences in college readiness rates in the state of Texas, where White students outperformed Black and Hispanic students for three years.

Military presence in high school became necessary after the draft ended (Moskos, 1977). The NCLB Act of 2001 and the National Defense Authorization Act for the fiscal year 2001 gave military groups the same level of access to high school student information as colleges and universities (Feder, 2008; Holm, 2007; Nava, 2010). Almost all schools have complied with this level of access to student directory information (Feder, 2008). Although military recruitment in high school increased, not all students are ready academically to meet the enlistment requirements. According to the former Secretary of Defense Ash Carter, only about 50% of candidates meet the minimum testing (Hoover, 2017). Therefore, by analyzing college, career, and military readiness of high requirement school students in the state of Texas over two years focusing on economic status, educational administrators and researchers can establish the effectiveness of current measures to assist and promote the programming available.

### **Purpose of the Study**

The purpose of this study was to determine the extent to which college, career, and military readiness differed between student economic status in two school years. Specifically, this analysis was focused on the campus proportion of college, career, and military readiness of students by economic status compared to the overall campus proportion of college, career, and military readiness rates for all students. College, career, and military readiness rates were obtained from the Texas Education Agency's Texas Academic Preparedness Reports for the 2017-2018 and 2018-2019 school years.

### **Significance of the Study**

Given the substantial amount of students who aspire to attend college and the college-going culture that permeates our high schools (Balfanz, 2009; Jackson & Kurlaender, 2014), we must analyze the data related to their success after high school. The *Brown v. Board of Education* decision in 1954 made an impact on the equality of education, but education today is not equal (Balfanz, 2009). Economically disadvantaged students are typically enrolled in poor schools with mostly minority students, graduating students who are less than one-third ready for college success (Balfanz, 2009). College readiness requirements are centered around entrance and enrollment without the need for remediation (Conley, 2008; Venezia & Jaeger, 2013). Conley (2009) explained that schools need to provide the tools necessary for college and career success. The college, for all notions is most often not backed with the appropriate programming and tools necessary for students, especially those who are first-generation (Balfanz, 2009; Jackson & Kurlaender, 2014).

After the draft ended, a new level of military recruitment in high school emerged, focusing on poor and minority students with financial stability in mind, coining the term “poverty draft” (Mariscal, 2007). Additionally, military readiness is a form of career readiness that requires a level of academic and physical preparedness. With less than 50% of students meeting the minimum score on the ASVAB exam (Hoover, 2017), an analysis of exam requirements coupled with school resources, is necessary. Given the increased pressure for schools to graduate students who are college, career, and military ready and investigation into the readiness rates is crucial for administrators assessing academic and non-academic programming.

### **Research Question**

The following research question was addressed in this study: (a) What is the difference in the proportion of College, Career, and Military Readiness of all students compared to the proportion of College, Career, and Military Readiness of economically disadvantaged students for the 2017-2018 and 2018-2019 school years?

### **Method**

#### **Research Design**

A non-experimental causal-comparative research design was used to complete this study (Creswell, 2013), using archival data from the Texas Education Agency’s Texas Academic Performance Reports. A causal-comparative study is used when the researcher is investigating “the relationship between one or more categorical independent variables and one or more quantitative dependent variables” (Johnson & Christensen, 2017, p. 44). Archival data for this study occurred in the past; therefore, the independent and dependent variables could not be manipulated or changed (Johnson & Christensen,



2017). The data used in this study is assumed to be correct and free from errors; this is due to the internal audit process that the Texas Education Agency uses to make sure all data collected from each high school is correct (Texas Education Agency, 2019a).

### **Participants and Instrumentation**

Participants in this study are students who were indicated to be college, career, and military ready in Texas public high schools for the 2017-2018 and 2018-2019 school years. The data were obtained through the Texas Education Agency, who is responsible for collecting and vetting data through the Texas Academic Performance Reporting system (Texas Education Agency, 2019b) from over 1,200 public and charter schools. This study investigated the economic status of students who were deemed college, career, or military ready for the 2017-2018 and 2018-2019 school years. The database that was used for this study is publicly available and audited annually (Texas Education Agency, 2019a).

### **Results**

An analysis of variance was used for this study, where the dependent variable is the campus proportion of college, career, and military readiness rates and is ratio data. The independent variable is the campus proportion converted to a categorical variable using means and standard deviations of students by gender who achieved college, career, and military readiness. Therefore, CCMR data for each campus that were more than one standard deviation above the mean for female and male students were labeled the *highest proportion of CCMR campus*. Each campus that was between the mean for economically disadvantaged students, and one standard deviation was placed in the *above average proportion CCMR campus* category. The other two categories (i.e., *below average*

*proportion CCMR campus*, and *lowest proportion CCMR campus*) were labeled in the same way but reverse using the numbers one standard deviation below and between the mean and greater than one standard deviation below the mean.

An underlying assumption for the use of a repeated-measures Analysis of Variance (ANOVA) procedure, the Levene's Test of Error Variance, was not met. Field (2009), however, contended that the parametric ANOVA is sufficiently robust that this violation can be withstood. Accordingly, the use of a parametric, repeated-measures ANOVA procedure was justified.

### **Research Question 1**

In reference to the extent to which differences were present in the campus proportion of college, career, and military readiness rates for all students compared to the campus proportion (i.e., Highest proportion, Above average proportion, Below average proportion, Lowest proportion) of college, career, and military readiness rates of economically disadvantaged students, the repeated-measures ANOVA did not reveal a statistically significant difference,  $F(3, 299) = .257, p = .856$ . Revealed in table 4.1 is a representation of the descriptive statistics for this analysis depicting that a majority of economically disadvantaged students were in the above and below average proportion category.

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 Insert Table 4.1 about here  
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With respect to the 2018-2019 analysis of differences in overall campus proportion of college, career, and military ready students and the campus proportion (i.e.,

Highest proportion, Above average proportion, Below average proportion, Low proportion) college, career, and military ready rates of economically disadvantaged students, the repeated measures ANOVA for the 2018-2019 school year did not reveal a statistically significant difference,  $F(3, 429) = 1.320, p = .267$ . Again, like the first result, a majority of economically disadvantaged students were in the above and below average proportion category; descriptive statistics for this analysis are presented in table 4.2.

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Insert Table 4.2 about here  
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## **Discussion**

The purpose of this research analysis was to determine the degree to which differences might be present in the overall campus proportion of college, career, and military readiness between students compared to the campus proportion of economically disadvantaged students. The extent to which college, career, and military readiness rates might change over time were determined for the 2017-2018 and 2018-2019 school years. Because of the use of a statewide dataset from the Texas Education Agency's Texas Academic Performance Reports, I did not attempt to generalize any results to the overall population of Texas high school graduates.

## **Implications for Policy and Practice**

In this analysis, the campus proportion of college, career, and military readiness by economic status were analyzed. In the 2017- 2018 and 2018-2019 school years, economically disadvantaged students were analyzed, and no statistically significant

difference was revealed. These results could inform stakeholders and educational leaders in two ways, there are a great number of students graduating Texas high schools CCMR ready with financial need, and resources available to this student population is appropriately dispersed amongst the State of Texas. These results could be due to the use of TRIO programs in the state of Texas; these programs have a goal to increase a college preparedness pathway for disadvantaged high school student populations (Cowan Pitre & Pitre, 2009). Additionally, there are over 200 early college high schools in Texas, initiated in 2002 as an avenue for low-income first-generation college students and other underrepresented populations in higher education (Nodine, 2011). An ongoing evaluation and assessment of programs like these will address any equity or access issues for students in poverty, supporting the development of necessary skills and a concentrated intervention to support their success.

### **Recommendations for Future Research**

In this investigation, many suggestions can be made for future research. This study was limited to Texas public schools; a recommendation for research is to extend this student to schools in other states. Second, researchers should include charter schools to replicate this study. Additionally, an investigation focusing on differences at the intersection of ethnicity/race (e.g., Black, White, and Hispanic) and economic status is encouraged for future researchers. This investigation would reveal a more nuanced result, giving researchers an understanding of equity and access issues for students living in poverty. Lastly, a qualitative study is recommended for researchers who want a closer look at the experiences of students, faculty, families, and administrators.

## Conclusion

There's a need to stress the importance of this type of research related to the population of economically disadvantaged students and their need for college and career advancement. Revealed in this study was no statistically significant difference in the proportion of poor students compared to the total population; however, there are differences in the CCMR programs available at each campus. These differences include but are not limited to the amount of monies that students and parents are responsible for when it comes to continuous enrollment in dual credit and CTE programs. The fiscal responsibility of these programs are related to the values and culture in the campus community, both internally and externally (O'Connor & Justice, 2008). Hopefully, this research is just the beginning of future research related to economic status and college, career, and military readiness. A granular look at the campus and the economic status of the student body as it relates to these outcomes is important since campuses are very different and the student needs are different as well. Districts and campuses have a duty to develop early interventions, "emphasize rigor" in career and technology education, and coordinate with postsecondary institutions and future employers to make sure students are progressing towards postsecondary success (Bangser, 2008).

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Table 4.1

*Campus Proportion of Students who Were College, Career, and Military Ready by  
Economic Status for the 2017-2018 School Year*

| Campus Proportion of Eco. Dis. CCMR Students | Frequency | Percentage |
|--|-----------|------------|
| Lowest Proportion                            | 324       | 19.8       |
| Below Average Proportion                     | 476       | 29.2       |
| Above Average Proportion                     | 525       | 32.1       |
| High Average Proportion                      | 309       | 18.9       |

Table 4.2

*Campus Proportion of Students who Were College, Career, and Military Ready by  
Economic Status for the 2018-2019 School Year*

| Campus Proportion of Eco. Dis. CCMR Students | Frequency | Percentage |
|--|-----------|------------|
| Lowest Proportion                            | 232       | 13.5       |
| Below Average Proportion                     | 672       | 39.0       |
| Above Average Proportion                     | 594       | 34.5       |
| High Average Proportion                      | 224       | 13.0       |

## **CHAPTER V**

### **IMPLICATIONS AND RECOMMENDATIONS**

The purpose of this journal-ready dissertation was to examine the differences present in the overall campus proportion of college, career, and military readiness and the campus proportions by ethnicity/race, gender, and economic status for the 2017-2018 and 2018-2019 school years. The first investigation analyzed the extent to which ethnic/racial (i.e., Black, White, and Hispanic) differences were present in relation to the overall proportion of campus college, career, and military readiness. Concerning the second investigation, differences in the overall campus proportion of college, career, and military readiness rates were compared to the campus proportion by gender. Regarding the third investigation, the differences in the overall campus proportion of college, career, and military readiness and the proportion of students by economic status by campus were ascertained. In each of these three investigations, data for the 2017-2018 and 2018-2019 school years were analyzed. In this final chapter, V is a discussion of the results for each of the three investigations, implications for policies and practice, and recommendations for future research.

#### **Summary of Study One Results**

In this investigation, the differences in the overall campus proportion of college, career, and military readiness and the campus proportion by ethnicity/race (i.e., Black, White, and Hispanic) were examined. Two school years of archival data from the Texas Education Agency, Texas Academic Performance reports were obtained and analyzed to determine if any differences were present by ethnicity/race. The college, career and military readiness proportions by the campus for Black, Hispanic, and White students

were analyzed for the 2017-2018 and 2018-2019 school years. This analysis for both school years revealed a statistically significant result for most of the analyses. However, the difference in the overall campus proportion of White students for the 2018-2019 school year did not reveal a statistically significant result when compared to the overall campus proportion for all students. The majority of the statistical significance was small or below small, according to Cohen (1988).

### **Summary of Study Two Results**

In the second article, differences were examined in the overall campus proportion of college, career, and military readiness of students and the campus proportion of students by gender. Two school years of archival data were obtained from the Texas Education Agency, Texas Academic Performance reports and analyzed to determine if any differences were present by gender. A statistically significant difference was not determined for the 2017-2018 school year for both genders. However, a statistically significant difference was revealed in the 2018-2019 school year for both male and female students. Using Cohen's recommendations, most of the statistical significance was below small.

### **Summary of Study Three Results**

Presented in the third research study was an investigation comparing the extent to which differences are present in the overall campus proportion of college, career, and military readiness of students and the campus proportion of college, career, and military readiness by economic status. Two school years of archival data from the Texas Education Agency, Texas Academic Performance reports were obtained and analyzed to determine if any differences were present by economic status. For the two years of data

that were analyzed, statistically significant differences were not present for both school years.

### **Connections with Existing Literature**

In this journal-ready dissertation, the findings of all three articles have corresponded with existing literature. As delineated in the first article, a statistically significant difference was present for the campus proportion of White students when compared to the overall campus proportion. White students received a larger number of college, career, and military readiness designations than Black or Hispanic students for the 2017-2018 school year. These results are consistent with results obtained by other investigators (Barnes & Slate, 2014; Kao & Thompson, 2003) who noted the necessity to close the college readiness achievement gaps between Black, Hispanic, and White students. Regarding the college, career, and military readiness of Texas public high school students by gender, the second study revealed statistically significant differences in the 2018-2019 school year. These findings are congruent with the findings revealed in a study conducted by Combs et al. (2010), where the differences in college-ready performance by gender in the areas of reading and mathematics were evaluated. After examining data collected from 1,105 Texas high schools for the 2005-2006 and 2006-2007 school years. Female seniors were 51.01% college-ready, whereas 38.76% of male seniors were deemed college-ready in reading. Additionally, on mathematics examination results, boys' college readiness was 52.57% compared to a smaller percentage of girls at 44.12%. Combs et al. (2010) noted that a higher rate of girls take the SAT or ACT, given that this exam is voluntary, and gender differences might be due to parental expectations. For the third article, the campus proportion of college, career,

military readiness rates were examined by economic status for the 2017-2018 and 2018-2019 school year. The analysis resulted in no statistically significant findings for both school years. These results are congruent with the results of a study conducted by Jargowsky, Wood, Anglum, and Karp (2016). Researchers noted family economic status as a predictor of student success and the need for interventions in poor neighborhoods in order to improve the schools despite the economic status of the families. Additionally, Roderick, Ngaoka, and Coca (2009) the need to help low-income students navigate the college application and financial aid process due to the complex nature.

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

Based on the results of the three investigations in this journal-ready dissertation, several implications for policy and practice can be made. Based on the results revealed in the first study, school administrators and educational leaders should analyze the data related to college, career, and military readiness where there are gaps in the achievement of Black and Hispanic students as it relates to the above average and highest proportion of schools. Educational leaders and administrators could use this information to determine what action should be taken to provide better equity and access across campuses that are low performing. Assessing the issue of equity at the campus level targeting those groups with the below average and lowest proportion of CCMR has the potential to help students through targeted intervention and support. Because college, career, and military readiness includes many areas, deficiencies in these areas could be intervened by a college and career counselor on the campus.

Additionally, based on the results of this investigation related to gender, several implications for policy and practice can be made. School administrators and educational

leaders should analyze the data related to college, career, and military readiness, where there is a gap in the achievement of male and female students as it relates to the lower performing school and those that are included in the above average and the highest proportion of schools. Educational leaders and administrators could use this information to determine what actions should be taken at the campus level, providing better equity and access across campuses that are low performing. According to Bangser (2008) successful transitions beyond high school require rigor in academics, relevance, and engagement in high school curriculum.

Gender gaps are present in the types of programs available through CTE, and these data could inform the school leaders and administrators on possible areas for development. For example, cosmetology is typically is a female student enrolling program, versus welding that may be more male student leaning. Additionally, an individual campus analysis related to this could help reveal campuses that have more programs that tend to lean towards one sex over the other and makes changes accordingly so that all students are served.

Lastly, the final analysis where the campus proportion of college, career, and military readiness by economic status were analyzed findings were not substantial. In the 2017-2018 and 2018-2019 school years, economically disadvantaged students were analyzed, and no statistically significant differences were revealed. These results could inform stakeholders and educational leaders in a couple of ways. Based on these findings, it is safe to assume a substantial number of poor students in the state of Texas are taking advantage of college, career, and military readiness programs. Moreover, these students with financial needs must graduate from Texas high schools college,



career, and military ready; therefore, they must have the necessary resources and support available.. Additionally, these results could be due to the use of TRIO programs in the state of Texas; traditionally, these programs have the main goal of increasing the college preparedness pathway for disadvantaged high school student populations (Cowan Pitre & Pitre, 2009). Lastly, there are over 200 early college high schools in Texas, initiated in 2002 as an avenue for low-income first-generation college students and other underrepresented populations in higher education (Nodine, 2011). An ongoing evaluation and assessment of programs like these will address any equity or access issues for students in poverty, supporting the development of necessary skills and a concentrated intervention to support their success.

### **Recommendations for Future Research**

There are many recommendations for future research that can be made based on the findings in this journal ready dissertation. Because the first study was limited to campus-level CCMR data for Black, Hispanic, and White students in Texas, future researchers are encouraged to analyze other ethnic/racial groups using this data. Another suggestion for future research would be for researchers to analyze the campus location, campus size, and other indicators that may be related to student CCMR achievement. Qualitative studies are also recommended to obtain rich data directly from students, parents, counselors, and administrators. A Qualitative analysis would provide a higher level of understanding and nuance in addressing the equity and access issues for students.

In regards to the second study, data were limited to campus-level CCMR data for male and female students in Texas, researchers are encouraged to analyze gender differences by ethnic/racial groups membership. A detailed campus analysis of CTE and

ROTC programs could reveal some measures on access to these types of programs by gender. This type of analysis would be beneficial due to the tendency for some CTE programs to be gender-specific; there should be an equal share of these programs available for the student body. Additionally, an investigation focusing on differences at the intersection of ethnicity/race (e.g., Black, White, and Hispanic) and economic status is encouraged for future researchers. This investigation would reveal a more nuanced result, giving researchers an understanding of equity and access issues for students living in poverty.

A qualitative or case study analysis is also recommended to obtain more rich data directly from students, parents, counselors, and administrators. The qualitative analysis would provide a higher level of understanding and nuance in addressing the equity and access issues for students. Finally, only two school years were used in the analysis due to this dataset being new for the State of Texas, beginning with the 2017-2018 school year. As such, researchers are encouraged to continue this analysis over time to determine the extent to which similar results might change.

### **Conclusion**

In this journal-ready dissertation, three multi-year analysis of college, career, and military readiness data of Texas students were performed. The results of the three studies were comparable to outcomes revealed in other studies conducted by researchers on college readiness (Barnes & Slate, 2014; Combs et al., 2010; Kao & Thompson, 2003; Jargowsky, Wood, Anglum, & Karp, 2016; Roderick, Ngaoka, & Coca, 2009). Established in the studies that are a part of this journal-ready dissertation were gaps in the equity and access of Texas college, career, and military ready high school students both

directly and indirectly. The gaps are present by ethnicity/race, gender, and economic status; these inequities are indicative of equity issues related to the level of preparation Texas high school students receive regarding postsecondary education and readiness for career success. With the launch of 60x30tx in 2015 and its focus on post-secondary credit completion as well as marketable skills (THECB, 2017), coupled with the collection of college, career, and military readiness data by the Texas Education Agency, stakeholders and administrators will continue to have pressure to meet the postsecondary needs of their students. In order for all students to be successful academically and be prepared for a career and college, including the military, school administrators and policymakers must work to bridge gaps in equity related to gender, poverty, and ethnicity/race.

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## APPENDIX



Date: Aug 3, 2020 12:19 PM CDT

TO: Tessalyn Johnson George Moore

FROM: SHSU IRB

PROJECT TITLE: Differences in Texas Students' College, Career, and Military Readiness Rates as a Function of Ethnicity/Race, Gender, and Economic Status

PROTOCOL #: IRB-2020-184

SUBMISSION TYPE: Initial

ACTION: Exempt

DECISION DATE: August 3, 2020

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.

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

Tess Johnson

### Education

Doctor of Education- Educational Leadership, December 2020

*Sam Houston State University, Huntsville, TX*

Dissertation: Comparison of Proportion of Campus College, Career, and Military Readiness of all Students to the Proportion of Campus College, Career, and Military Readiness by Ethnicity/Race, Gender, and Economic Status

Master of Education- Instructional Leadership, August 2005

*Sam Houston State University, Huntsville, TX*

Bachelor of Arts- Human Sciences

*Our Lady of the Lake University, San Antonio, Texas.*

### Professional Experiences

2019- Present Director of Medical Student Affairs

2014-2019 Director of CJ Student Services & Marketing Sam Houston State University

2009-2014 Director of CJ eLearning Sam Houston State University

2006-2009 Marketing Coordinator Sam Houston State University

2005-2017 Adjunct Faculty- Academic Affairs Sam Houston State University

2001-2006 Academic Advisor Sam Houston State University

1997-2001 Financial Aid Advisor North Harris College

### Presentations

Johnson, T. (2015, March) *Help, I hate my coworker*, Presented at the SHSU Staff Council Professional Development Day

Johnson, T. (2019, February) *Differences in postsecondary credit completion as a function of ethnicity/race in Texas schools*. Paper presented at the Southwest Educational Research Association (SERA) annual meeting, San Antonio, TX.

### Honors and Awards

2016 "Leading the Sam Way"