

DIFFERENCES IN SOCIAL STUDIES SKILLS AS A FUNCTION OF GENDER,
ECONOMIC STATUS, AND ETHNICITY/RACE OF TEXAS HIGH SCHOOL
STUDENTS: A MULTIYEAR STATEWIDE STUDY

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DEDICATION

I dedicate my dissertation to my three children, Wyatt, Bryce, and Addyson as a reminder that all things are possible with faith. I am so unbelievably proud to be their mother and I am so grateful for their patience and understanding as I completed this process. I am happy to say that I am officially done and that I will not repeat the word “dissertation” at home again.

Also, the completion of this dissertation would not be possible without my wonderful husband, Adam. I thank him for his countless encouragement, dedication, and patience. Since our marriage in 2005, we have always worked as a team to accomplish our goals. This was no exception. I thank him for the many sacrifices that he made to make this dream possible for me.

ABSTRACT

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Purpose

The purpose of this journal-ready dissertation was to examine the extent to which differences in social studies skills were present between boys and girls as a function of their economic status (i.e., Not Poor, Moderately Poor, and Extremely Poor), and of their ethnicity/race (i.e., Asian, White, Hispanic, and Black). The first purpose was to determine the extent to which differences were present in social studies skills between high school boys and girls. The second purpose was to determine the degree to which differences existed in social studies skills between high school students who were poor and who were Not Poor. Finally, a third purpose was to analyze the extent to which differences were present between four different ethnic/racial groups. Eight years of the Texas Assessment of Knowledge and Skills Social Studies assessment data were examined to determine the degree to which trends were present in social studies skills.

Method

A causal-comparative research design was used in this quantitative investigation. Exit Level TAKS Social Studies archival data were obtained from the Texas Education Agency Public Education Information Management System for the 2004-2005 through the 2011-2012 school years.

Findings

Inferential statistical analyses were conducted to address the research questions in the three articles in this journal-ready dissertation. With respect to the first article, boys had

statistically significant higher average scores than girls on all five TAKS Exit Level Social Studies Objectives across all 8 school years. Regarding economic status, students who were Moderately Poor and Extremely Poor had statistically significant lower average scores than students who were Not Poor on all five TAKS Exit Level Social Studies Objectives across all 8 school years. Concerning student ethnicity/race, a clear stair-step effect was present. Asian students had the highest average raw scores, followed by White students, Hispanic students, and then Black students in all 8 school years. Results were consistent with the existing literature regarding social studies performance as a function of gender, economic status, and ethnicity/race. Implications for policy and for practice, as well as recommendations for future research, were made.

KEYWORDS: Gender, Economic Status, Ethnicity/Race, Social Studies, Social Studies Skills, Texas Assessment of Knowledge and Skills

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CHAPTER I

INTRODUCTION/BRIEF REVIEW OF THE LITERATURE

According to the National Council for the Social Studies (1994), the purpose of learning social studies is to gain civic competence and to promote democratic values. The National Council for the Social Studies recognizes that students of the twentieth-first century will encounter, “rapid change, complex local, national, and global issues, cultural and religious conflicts, and the increasing interdependence of nations in a global economy” (2001, para 3). Since 1994, the National Council for the Social Studies encourages yearly activities to increase civic knowledge in an effort to create more effective members of a democracy.

In the State of Texas, Celebrate Freedom Week is a mandate in which social studies teachers in Grades 3 through 12 are required to provide instruction on the significance of the Declaration of Independence and the United States Constitution, including the Bill of Rights (Texas Essential Knowledge and Skills, 2010). Specifically, the instruction of the Declaration of Independence must include the “relationship of its ideas to the rich diversity of our people as a nation of immigrants, the American Revolution, the formulation of the United States Constitution, and the abolitionist movement, which led to the Emancipation Proclamation and the women’s suffrage movement” (Texas Essential Knowledge and Skills, 2010, Chapter §113.14 (a)(7)(A)). Although national and state standards promote the teaching of democratic values, social studies curriculum lacks a democratic approach because gender, ethnic/racial, and economic performance differences continue to be present.

Review of the Literature on Gender Differences in Social Studies

Debates about gender gaps in education have prompted educational leaders and researchers (e.g., Whitmire, 2010; Whitmire & Bailey, 2010) to evaluate academic opportunities offered to both boys and girls. The National Student Clearinghouse (2015) reported that bachelor degrees earned by women in science and engineering fields had decreased from 2004 to 2014. Further, researchers (e.g., Mo, Yang, Hu, Calaway, & Nickey, 2011; Moore, Combs, & Slate, 2012) have revealed that boys are more likely to pass national high stakes examinations in mathematics and science than are girls. Boys were more likely than girls to achieve passing scores on ACT mathematics and ACT science exams (Mo et al., 2011).

To understand these findings, researchers (e.g., Kurtz-Costes, Copping, Rowley, & Kinlaw, 2013; Kurtz-Costes, Rowley, Harris-Britt, & Woods, 2008) have suggested that gender stereotypes aligned with specific academic subjects encourage student course and career selections. Kurtz-Costes et al. (2013) evaluated gender stereotypes of students in Grades 4, 6, and 8 and determined that children often adopted gender stereotypes promoted by their parents or teachers. As a result, boys are encouraged more to take courses in mathematics and science whereas girls are encouraged more to take courses in humanities and social sciences. Student performance is often influenced by various sociocultural factors that influence stereotypical expectations for future success and the value given to achieving that success (Dania, 2014; Voyer & Voyer, 2014). Because girls have a low expectancy of achieving a profession in the field of mathematics, they do not perform as well in mathematics as they do in language arts. Such preconceived notions that boys are better in mathematics and science and girls are better at literature

and social studies begin to develop as students experience success and failure with these subjects at early ages.

Similar attention has been placed on the decreasing achievement of boys in academic areas (Moller, Stearns, Southworth, & Potochnick, 2013; Whitmire, 2010). Although boys outperform girls in standardized science and mathematics tests, girls are excelling in other areas of academic course taking. Duckworth and Seligman (2006) revealed that girls make higher grades in both primary and secondary schools, but boys score higher on aptitude tests. Furthermore, Duckworth and Seligman (2006) contended that girls make better grades because they are more self-disciplined than boys. Voyer and Voyer (2014) emphasized that girls tend to focus more on mastery to gain full understanding of concepts whereas boys focus more on task completion.

Ganzert (2012) established similar findings in dual credit courses, reporting that females with dual credit experiences in high school had higher grade point averages in college than males. Additionally, Ganzert (2012) determined that 33.1% of females who completed a dual credit course graduated from college compared to 25.5% of males who completed a dual credit course in high school. Similarly, Moller et al. (2013) established that girls who attended high schools with more Advanced Placement opportunities were more likely than boys to attend colleges with more stringent enrollment requirements. Moore and Slate (2008) documented that more girls had been enrolled in Advanced Placement courses than boys. According to Moller et al. (2013), girls excel in high schools in which more Advanced Placement courses are made available. Increased exposure to rigor benefits girls more than boys indicating that school context influences gender achievement (Moller et al., 2013).

Other researchers (e.g., Chapin, 2006; Dania, 2014), however, have argued that gender has no effect on social studies achievement. Dania (2014) contended that the method of instruction determines academic achievement in social studies. When students are provided with the same strategies and motivation, academic achievement in social studies is the same for boys and for girls. In contrast, however, other researchers (e.g., Bein, Hayes, & Jones, 2009; Weiss, Lutkus, Hildebrant, & Johnson 2002) have demonstrated that differences in social studies achievement do exist when measured by standardized test scores. Boys scored statistically significantly higher on the Advanced Placement United States History examination than girls (Moore, Combs, & Slate, 2012). Boys also had statistically significantly higher test scores than girls on the Advanced Placement World History, European History, Government Politics U.S., and Psychology examinations in 2007 and 2011 (Moore et al., 2012). In addition, Heafner and Fitchett (2015) analyzed the National Assessment of Educational Progress of United States History and established that Grade 12 boys had statistically significantly higher test scores than Grade 12 girls on standardized United States History exams. Lastly, researchers (Bein et al., 2009; Weiss et al., 2002) documented that boys had statistically significantly higher test scores on competency-based geography exams than girls.

Moller et al. (2012) indicated that school context and curriculum were essential for postsecondary outcomes. School context is designed to provide opportunities for student success and postsecondary readiness. By the time girls and boys reach college, however, stereotypes about professions have already formed (Morgan, Gelbgiser, & Weeden, 2013). Girls were less likely to enroll in economic courses due to academic predisposition and unsupportive classroom environments (Emerson, McGoldrick, &

Mumford, 2012). Curriculum is equally important in postsecondary outcomes. Evidence of male dominance and achievement in history is widespread in both state and national social studies curriculum (Crocco, Cramer, & Meier, 2008; Engebretson, 2014).

Engebretson (2014) revealed that a gender imbalance of discussed historical figures was prevalent in middle and high school grades. Further, Engebretson (2014) argued that women in social studies curriculum were included as supporting roles in history and, as such, were less valued than men. Because males were more likely to be involved in political or military history, an unequal gender balance has been maintained in social studies curricula (Crocco et al., 2008; Engebretson, 2014; Heafner & Fitchett, 2018). Fitchett et al. (2018) also argued that gender affects how students make meaning of concepts. Due to gender bias in social studies curriculum and textbooks, relationships between gender inequalities and social studies are evident (Heafner & Fitchett, 2018).

Regarding social studies professions, numerous employment opportunities exist. The field of social studies and social science includes a wide range of professions such as anthropologists, geographers, historians, psychologists, social workers, economic advisors, and museum curators. Because of these numerous employment prospects provided by the areas of social studies and social sciences, it is necessary to ensure that women have equal opportunity to these professions. Although women remain underrepresented in science, technology, engineering, and mathematics fields, research is limited and inconsistent with regard to a gender gap in social studies or social studies professions (Leaper, Farkas, & Brown, 2012).

Review of the Literature on Student Poverty and Social Studies

In the United States, 15 million children live in poverty (National Center for Children in Poverty, 2016). According to the National Center for Education Statistics (2017), poverty is an important risk factor that influences academic achievement. Since 1965, the federal government has made intentional efforts to decrease the academic disparities between the rich and poor. President Lyndon B. Johnson began to increase academic opportunities for students living in poverty with his War on Poverty. Federal funds were provided by the Elementary and Secondary Education Act to school districts that served students who were economically disadvantaged. Unfortunately, five decades of federal involvement have not eliminated the achievement gap between the rich and the poor.

Although the nationwide poverty rate has decreased from 2014 to 2016, poverty in Texas has been higher than the national average since the 1980's (Dietz, 2008; United States Census Bureau, 2016). According to the United States Census Bureau, 16.7% of people live below the poverty rate in Texas (United States Census Bureau, 2017). With respect to the student population in Texas, during the 2016-2017 school year, 59% of students in Texas were considered economically disadvantaged (Texas Education Agency Texas Academic Performance Report, 2017). Because of the negative influences of poverty on student achievement (Burney & Beilke, 2008), educators and stakeholders should be concerned with student performance in Texas.

Although education has been “envisioned as the great equalizer,” Coley and Baker (2013) revealed that “this promise is more myth than reality” (p. 3). Coley and Baker (2013) argued that the difference in achievement between the rich and poor is

twice as large as the difference in achievement between Black and White students. Too often, the manifestations of poverty severely limit educational opportunities and educational outcomes. Negative manifestations of poverty include the lack of nutritious food, parental involvement, health insurance, and steady employment (Coley & Baker, 2013). Jensen (2013) also emphasized that students living in poverty struggle with classroom engagement due to several factors. These factors include a lack of vocabulary, effort, and cognitive skills.

Researchers (Alford-Stephens, 2016; Dixon-Román, Everson, & McArdle, 2013; Lee & Slate, 2014; Wright, 2015; Wright & Slate, 2015) have been consistent in demonstrating that poverty negatively influences achievement, especially when achievement is measured by standardized test scores. Dixon-Román et al. (2013) determined that family income has a substantial influence on SAT achievement scores because students living in poverty lack social and educational opportunities. According to Lee and Slate (2014), students who were economically disadvantaged scored statistically lower than students who were not economically disadvantaged on the Texas Assessment of Knowledge and Skills (TAKS) English Language Arts and Mathematics exams.

Further, Wright and Slate (2015) revealed that students in Grades 6, 7, and 8 displayed statistically lower critical thinking skills on the Texas Assessment of Knowledge and Skills Reading assessment. Wright and Slate (2015) demonstrated that the effects of poverty statistically significantly influenced how students think critically on standardized exams. In a recent Texas, statewide investigation, Wright (2015) analyzed the reading performance of Texas high school students as a function of their economic

status on the TAKS Exit-Level English Language Arts Assessment for the 2004-2005 through the 2011-2012 school years. He documented that students who were economically disadvantaged had statistically significantly lower reading scores in all of the TAKS reading objectives than their peers who were not in poverty. According to Wright (2015), living in poverty clearly had negative effects on reading performance.

In another recent Texas statewide investigation, Alford-Stephens (2016) examined the mathematics performance of Texas high school students as a function of their economic status on the TAKS Exit-Level Mathematics assessment for the 2004-2005 through the 2011-2012 school years. She established the presence of statistically significant differences in mathematics performance by student economic status. In all eight school years, boys who were economically disadvantaged had statistically significantly lower mathematics test scores than boys who were not in poverty.

As a result of the No Child Left Behind Act (2002) and Every Student Succeeds Act (2015), much attention has been placed on reading and mathematics achievement, particularly at the elementary school levels (Grant & Horn, 2006). Grant and Horn (2006) explained that “not all testing counts the same at the national level,” emphasizing that “reading and mathematics have a clear preference as measures of student and school success” (p. 9). Similarly, Au (2009) referred to social studies as a disappearing subject because the No Child Left Behind Act (2002) has demanded so much emphasis on reading and mathematics performance. Yet, tracking historical understanding on social studies standardized assessments has not gone completely unnoticed.

Fitchett and Heafner (2017) analyzed the 2010 National Assessment of Educational Progress Grade 4 United States History Exam and determined that

achievement gaps were present for students living in poverty. Of the students eligible to receive free or reduced lunch (i.e., in poverty), only 6% were proficient and 45% were considered below proficient on the 2010 National Assessment of Educational Progress Grade 4 United States History Exam (Lord, Noel, & Slevin, 2016). Further, Fitchett and Heafner (2013) and Heafner and Fitchett (2017) revealed that economic status was a determinant of historical knowledge and understanding. Students who were in poverty scored statistically lower on the National Assessment of Educational Progress Grade 12 United States History Exam than students who were Not Poor (Heafner & Fitchett, 2015). In addition, students who were Not Poor were more likely to answer social issue questions and war questions correctly. For the Grade 4 civics assessment of the 2010 National Assessment of Educational Progress, 40% of students who were in poverty scored below basic (Lord et al., 2016). For the Grade 4 geography assessment of the 2010 National Assessment of Educational Progress, 38% of students who were in poverty scored below basic (Lord et al., 2016). Heafner and Fitchett (2015) contended that achievement on the National Assessment of Educational Progress was directly dependent on the level of instructional exposure. Thus, pedagogy has an extensive effect on historical understanding (Heafner & Fitchett, 2015).

Review of the Literature on Ethnic/Racial Differences in Social Studies

In 1966, James Coleman published a report commissioned as part of the Civil Rights Act of 1964 called *Equality of Educational Study* as an attempt to finally dismantle the segregation of public schools that had remained after the 1954 decision in *Brown v. Board of Education* (Alexander & Morgan, 2016). Although Coleman (1966) revealed that segregation still largely existed in the United States, he could not

substantiate that differences in school resources among White and non-White schools produced a large educational disparity. Further, Coleman (1966) contended that family background factors did have a large effect on academic achievement and that it is necessary to “examine the relation of these background factors to achievement to get a view of some of the family factors that predispose children to learn well or poorly in school” (p. 298). Although the Coleman report was viewed as controversial during the Civil Rights Movement, the necessity to measure ethnic/racial and societal differences using standardized tests has remained.

Since the revelations of the Coleman Report, educational policymakers have aimed to close the achievement gap by analyzing both academic and societal factors. As part of the Elementary and Secondary Education Act, school districts were required to use standardized exams to determine student achievement during the 1980’s (LeBouef & Slate, 2011). In 2001, the Elementary and Secondary Education Act was reauthorized as No Child Left Behind Act (2002). The No Child Left Behind Act (2002) required more state and local accountability using standardized exams to ensure that all students can be successful. More recently, the Elementary and Secondary Education Act was reauthorized again as Every Student Succeeds Act (2015) and focuses on providing equity to students who are disadvantaged (United States Department of Education, 2018). As with previous educational policies, Every Student Succeeds Act (2015) requires the same accountability measures. As a result of these accountability requirements, researchers (e.g., LeBouef & Slate, 2011) have demonstrated that achievement gaps have existed for decades.

According to the National Center for Education Statistics (2011a), Hispanic and Black student averages have increased since 1990 for Grade 4 and Grade 8 mathematics but the achievement gap between these ethnic/racial groups and White students remains. The National Center for Education Statistics (2011b) also provided similar outcomes in reading explaining that both Hispanic and Black student averages in Grade 4 and Grade 8 reading had increased since 1990 but remain statistically significantly lower than White student averages. With respect to the state of interest for this article, LeBouef and Slate (2011) conducted a 16-year analysis of Grade 5 reading and mathematics scores on the Texas Assessment of Academic Skills and Texas Assessment of Knowledge and Skills (TAKS) exams. LeBouef and Slate (2011) documented the presence of continuous achievement gaps between White and Hispanic students in both reading and mathematics.

In regard to academic experiences, many researchers (e.g., Corra, Carter, & Carter, 2011) have concluded that Black students have limited opportunities to take advanced classes. White students were enrolled in more Advanced Placement courses than Hispanic and Black students in the 2005-2006 and 2006-2007 school years (Clark, Moore, & Slate, 2012). White students also had the highest passing rates on Advanced Placement exams during the same years (Clark et al., 2012). Further, White and Asian students obtained more course credit for high school science and mathematics courses in Texas than Hispanic and Black students (Zeng & Poelzer, 2016).

Researchers (e.g., Daniels, 2011; Heafner & Fitchett, 2015) have documented the presence of racial/ethnic disparities in student achievement in social studies. Beginning in early childhood, a large achievement gap in social studies is apparent for ethnic/racial groups, especially for Black students (Chapin, 2006). Chapin (2006) examined the social

studies responses from the Early Childhood Longitudinal Study and determined that Black students who took the General Knowledge Test entering Kindergarten scored lower than White students. Chapin (2006) indicated that Black students entered kindergarten lacking social studies knowledge in comparison to White students. Researchers (e.g., Bein, Hayes, & Jones, 2009; Heafner & Fitchett, 2018) have also reported disparities on social studies achievement at the secondary level. Heafner and Fitchett (2018) analyzed the National Assessment of Educational Progress United States History Assessment and determined that Black students had the poorest performance of any ethnic/racial group, however, they performed statistically similar to White students on social history questions. Heafner and Fitchett (2018) revealed that social questions involving civil rights and race relations (i.e., *Brown v. Board of Education*, and the contributions of Booker T. Washington and W.E.B DuBois) were more likely to be answered correctly by Black students than by White students. Because history reflects society, “students are more likely to remember and process information that is both meaningful and reflective of their own experiences” (Heafner & Fitchett, 2018, p. 23).

Postsecondary differences in social studies skills have also been established. Bein et al. (2009) analyzed the National Council for Geographic Education Competency-Based Geography Test given to introductory geography students at 20 university campuses in Indiana. According to Bein et al. (2009), Black and Hispanic students had lower average scores on competency-based geography exams than White students. Such an achievement gap is attributed to a lack of Black and Hispanic student engagement in school. Bennett (2006) reported that the recognition and acceptance of racial/ethnic identity is an important factor to student engagement in school. Further, researchers

(Daniels, 2011; Heafner & Fitchett, 2015; Martell, 2013) have identified that social studies curriculum and instruction are two components that contribute to ethnic/racial disparities in social studies.

The opportunity for Black students to achieve success in social studies is limited due to the lack of ethnic/racial pedagogical practices and racial/ethnic awareness in the classroom (Daniels, 2011; Heafner & Fitchett, 2015; Zirkel, 2005). For example, Hispanic students had an increase in social studies achievement when it was introduced through a cultural connection. Ramirez (2012) noted that educators who provided culturally relevant instruction promoted the acceptance of a student's cultural background. Also, appropriate and meaningful resources that reflect and connect the ethnic/racial identity of students, enhances student engagement among racial/ethnic students (Daniels, 2011). For example, Daniels (2011) recommended the study of multiple perspective texts, bilingual books, and discussion topics of racial protest and discriminatory laws to reduce a commonly devalued and often misinterpreted Hispanic history found in many social studies instruction. Yet, ethnic/racial differences between teachers and students can generate uneasiness and uncertainty in discussing matters of race or race relations during class instruction. Zirkel (2005) reported that White teachers feel more confident in meeting the needs of White students rather than students of color. Pedagogy that includes multiple interpretations of history engages students of different backgrounds (Martell, 2013). Further, educators are recommended to include open discussion of racial differences within the classroom (Martell, 2013). Daniels (2011) contended that social studies educators have a responsibility to provide instruction that

includes the identity of people who are historically marginalized, especially when discussing ideas of democracy and civic engagement.

Statement of the Problem

In recent decades, national attention has been focused on the lack of women in science and mathematics professions, which has sparked a need for educational leaders to increase educational opportunities for girls in these subject areas in early elementary grades (Whitmire & Bailey, 2010). Therefore, a focus in recent school initiatives has been on providing a school context to decrease the gender gap in public education. According to the Department of Education (2006), boys and girls in kindergarten perform similarly on reading and mathematics assessments. By the third grade, however, boys score higher on mathematics and science assessments, whereas girls score higher on reading assessments (Department of Education, 2006). These disparities have prompted educational leaders to analyze school context as an effort to promote student achievement for all students. Although gender gaps are apparent in the areas of mathematics, reading, and science, few researchers addressed the extent to which similar gender gaps might exist in social studies courses.

To measure academic performance, criterion-based standardized testing has been a common method of evaluation used in the state of Texas for over 30 years (Clark, 2011). From 2003 to 2012, the criterion-based standardized exam used to measure academic performance of social studies was the Texas Assessment of Knowledge and Skills Social Studies exam which was administered during Grade 8, Grade 10, and Grade 11. In Grade 11, students took the Exit Level Texas Assessment of Knowledge and Skills Social Studies Exam as a requirement for graduation.

By Grade 11, students were assessed on knowledge attained from World Geography, World History, and United States History. Each Texas Assessment of Knowledge and Skills Social Studies Exam measured student performance of five objectives: history, geography, economics and social influences, political influences, and social studies skills. The purpose of assessing the Texas Assessment of Knowledge and Skills Social Studies Exam was to determine whether high school graduates had mastered the state curriculum and whether high school graduates had acquired the necessary skills needed for postsecondary education (Zabala, Minnici, McMurrer, & Briggs, 2008). Although researchers (e.g., Alford-Stephens, 2016; Wright, 2015) have examined similar gender differences in mathematics and reading, the focus of this study will be to determine whether gender differences exist in social studies.

A focus beginning with the No Child Left Behind Act (2002) and continued by the Every Student Succeeds Act (2015) is to reduce the achievement gap between different groups of students. Although race and ethnicity are necessary factors to consider, Burney and Beilke (2008) established that poverty is the most important indicator of student achievement. Although much attention has been placed on reading and mathematics achievement, analysis of social studies achievement is equally important, especially in areas concerning civic responsibility and promotion of democratic values (National Council for the Social Studies, 1994). To determine disparities in Texas, accountability has been assessed through standardized tests known as the Texas Assessment of Knowledge and Skills.

The goal of social studies curriculum is to encourage civic awareness and civic competence in a culturally diverse and democratic country (National Council for the

Social Studies, 1992). Yet, researchers (e.g., Daniels, 2011; Heafner & Fitchett, 2015; Martell, 2013) have indicated that Black and Hispanic students are not being adequately served by the current social studies curriculum and instructional methods. Researchers (e.g., Daniels, 2011; Heafner & Fitchett) have recommended more diversity training for social studies educators.

Purpose of the Study

The purpose of this journal-ready dissertation was to examine the extent to which differences in social studies skills were present between boys and girls as a function of their economic status (i.e., Not Poor, Moderately Poor, and Extremely Poor), and of their ethnicity/race (i.e., Asian, White, Hispanic, and Black). The first purpose was to determine the extent to which differences were present in social studies skills between high school boys and girls. The second purpose was to determine the degree to which differences existed in social studies skills between high school students who were poor and who were Not Poor. Finally, a third purpose was to analyze the extent to which differences were present between four different ethnic/racial groups. Eight years of the Texas Assessment of Knowledge and Skills Social Studies assessment data were examined to determine the degree to which trends were present in social studies skills.

Significance of the Study

Information regarding the degree to which differences in social studies skills were present between gender, economic status (i.e., Not Poor, Moderately Poor, and Extremely Poor), and ethnicity/race (i.e., Asian, White, Hispanic, and Black) added to the extant literature regarding social studies achievement. Based on the results of this multiyear investigation, educational leaders are provided with data and analyses related to the

presence of differences in social studies skills in Texas schools. Additional research could be beneficial regarding the variety of social studies skills and the effect that these differences have on these essential skills. Educators can use the conclusions of this study to help identify differences in social studies skills that may exist between boys and girls, by student economic status, and by ethnicity/races.

Definition of Terms

Terms that are important to this journal-ready dissertation are defined in this section.

Asian

A person who is Asian has origins in the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam (Texas Education Agency Appendix F, 2009, p. 5).

Black

A person of Black ethnicity is an individual who has origins in any of the Black racial groups of Africa (Texas Education Agency Appendix F, 2009, p. 5).

Economically Disadvantaged

According to the Texas Academic Performance Report (2015), economically disadvantaged students are “eligible for free or reduced-price lunch or eligible for other public assistance” (p. 10). The United States Department of Education (2015) outlined guidelines to determine eligibility for free or reduced lunch.

To determine eligibility for free lunch, the annual family income is below the 130 percent of the federal poverty guidelines. To determine eligibility for reduced

lunch, the annual family income is between 130 percent or at or below 185 percent of the federal poverty guidelines. (p. 10)

Ethnicity/Race

The United States Department of Education requires school districts to collect data on ethnicity and race for all students and staff for accountability reporting purposes (Texas Education Agency Appendix F, 2009, p. 5). In 2007, the Department of Education implemented new standards for reporting ethnicity and race that involves a two-part questioning system. The Texas Education Agency adopted the federal standards in 2010-2011 to provide better clarity on ethnicity and race. In this study, social studies achievement data from the ethnic/racial groups (i.e., Asian, White, Hispanic, and Black) of students in Texas will be analyzed.

Exit-Level Exam

Exit level exams in Texas consist of assessments designed to measure students' mastery of the curriculum in the areas of English Language Arts, Mathematics, Science, and Social Studies (Texas Education Agency, 2014). Students must meet a standard passing score on each assessment as a graduation requirement for a public school diploma in the state of Texas (Texas Education Agency, 2014). Exit level exams are administered to Grade 11 students and are provided multiple opportunities to meet the state standard during the Grade 11 and Grade 12 school year (Texas Education Agency, 2014).

Social Studies

According to the National Council for the Social Studies (1994), the academic subject of social studies encompasses disciplines of the humanities and the social

sciences. Social sciences integrated in social studies include archaeology, economics, geography, history, law, philosophy, political science, psychology, religion, and sociology (National Council for the Social Studies, 1994). The primary purpose of social studies is to provide civic competence by helping “young people make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world” (National Council for the Social Studies, 1994, p. 9).

Social Studies Objective 1

Objective 1 contains student expectations on issues and events in American history from the colonial era to the late twentieth century.

Examples of such issues and events include the establishment of the United States as an independent nation, the emergence of the United States as a world power during the late nineteenth century, and the role of the United States in World War I, World War II, and the Cold War. The student expectations in Objective 1 cover historical content that spans a long period of American history and therefore require a relatively large number of items per test (13) to measure fully. (TAKS Blueprint for Grade 11 Exit Level Social Studies, 2002, p. 1)

Social Studies Objective 2

The student will demonstrate an understanding of geographic influences on historical issues and events. Geography TEKS from world geography, world history, and U.S. history are addressed in Social Studies Objective 2. Nine items per test are required to measure both the content and skills within this objective (TAKS Blueprint for Grade 11 Exit Level Social Studies, 2002, p. 1).

Social Studies Objective 3

Objective 3 contains student expectations on economic and social issues in American history from the colonial era to the late 20th century.

Examples of such issues include the rapid growth of U.S. industry during the nineteenth and twentieth centuries, the causes and effects of the Great Depression, and the development of the Civil Rights movement during the twentieth century.

These student expectations cover content that spans a long period of American history and therefore require a relatively large number of items per test. (TAKS Blueprint for Grade 11 Exit Level Social Studies, 2002, p. 1)

Social Studies Objective 4

Objective 4 contains the development of representative government in the United States as well as on political influences in American history from the colonization era to the present. Because the development of representative government was addressed in Grade 8, fewer TEKS student expectations are present in this objective than in Objectives 1 and 3, nine items per test are provided to measure the content within this objective (TAKS Blueprint for Grade 11 Exit Level Social Studies, 2002, p. 1).

Social Studies Objective 5

Social studies skills are critical-thinking skills, which are included in the social studies curriculum beginning in kindergarten. If students can think critically, they will develop a greater capacity to understand the broad spectrum of social studies concepts and information necessary to become informed citizens. As a result, the number of items included under this objective is comparatively large (TAKS Blueprint for Grade 11 Exit

Level Social Studies, 2002, p. 1). For this study, social studies skills are measured using the objectives for the TAKS Exit Level Social Studies exam.

Hispanic

A person of Hispanic ethnicity is an individual who is of Cuban, Mexican, Puerto Rican, South or Central American descent, other Spanish culture or origin, regardless of race (Texas Education Agency Appendix F, 2009, p. 5).

Public Education Information Management System

The Texas Education Agency Public Education Information Management System is a collection of detailed demographic student data used to analyze student achievement and tracking. All data received and requested about public education by the Texas Education Agency are compiled using the Public Education Information Management System, including “student demographic and academic performance, personnel, financial, and organizational information” (Public Education Information Management System - Overview, 2015, para. 1).

Texas Assessment of Knowledge and Skills (TAKS)

The Texas Assessment of Knowledge and Skills assessments are “criterion-referenced achievement tests designed to measure the extent to which a student has learned and is able to apply the defined knowledge and skills at each tested grade level” (Texas Education Agency, 2011, para. 87).

Texas Education Agency

The Texas Education Agency is the agency that supervises and organizes public education in the state of Texas (Texas Education Agency About TEA, 2018, para. 1). The mission of the Texas Education Agency is to “provide leadership, guidance and

resources to help schools meet the educational needs of all students and prepare them for success in the global economy” (Texas Education Agency About TEA, 2018, para. 1).

White

A person of White ethnicity is an individual who has origins in any of the original peoples of Europe, the Middle East, or North Africa (Texas Education Agency Appendix F, 2009, p. 5).

Procedures

Approval to conduct this journal-ready dissertation was requested from the Sam Houston State University Institutional Review Board following approval by this researcher's dissertation committee. Once approval was received from both sources, data previously obtained from the Texas Education Agency Public Education Information Management System for the 2004-2005 through the 2011-2012 school years were analyzed. The dataset from the Texas Education Agency was obtained following submission of a Public Information Request form. Though the data have previously been analyzed with respect to reading (Wright, 2015) and mathematics (Alford-Stephens, 2016), the data specific to this journal-ready dissertation have not yet been analyzed. Variables specific to this journal ready dissertation that were analyzed were gender, economic status, ethnicity/race, and student TAKS Exit Level Social Studies scores on the five objectives.

Literature Review Search Procedures

For this journal-ready dissertation, the literature regarding student gender economic status, and ethnicity/race and the relationship of these variables to student academic achievement in social studies was examined. Phrases that were used in the

search for relevant literature were: *social studies*, *social studies skills*, *social studies assessments*, *history course*, *gender*, *economic disadvantage*, and *ethnicity*. All searches were conducted through the EBSCO Host database for academic journals that contained scholarly (peer reviewed) articles.

Key searches for “social studies” yielded 48,970 results. By narrowing the range from 2000 to 2018, the search was reduced to 19,197. A key word search for “social studies skills” for the same range yielded 12 results and a key word search for “social studies assessment” yielded 6 results. When “social studies” and “gender” were included in the same search it yielded 746 results. The number of results was reduced to 189 when “social studies” and “ethnicity” were searched. The results decreased to 2 when “social studies” and “economic disadvantage” were searched. When “history course” was used for the key word search, 386 articles from 2000 to 2018 were displayed. This number was reduced to 10 when “gender” was added to the search. By including the term “ethnicity” to “history course” the search rendered 4 results. Search for “history course” and “economically disadvantage” yielded no results. Relevant articles pertaining to high school students and social studies skills were reviewed for this study.

Delimitations

In this study, only student achievement in social studies was analyzed, as measured by the Texas Assessment of Knowledge and Skills Exit Level Social Studies exam taken by Texas high school students. Eight school years of data, from 2004-2005 through the 2011-2012 school years, were analyzed, delimitating the results to only these eight consecutive school years. Lastly, the focus of the ethnicity/race variable was on the

academic performance in social studies skills of only four ethnic/racial groups: Asian, White, Hispanic, and Black.

Beginning in the 2011-2012 school year, the State of Texas changed the assessment system from the TAKS to the STAAR (State of Texas Assessment of Academic Readiness). Students entering Grade 9 during the 2011-2012 school year were required to take the STAAR End-of-Course exams for specified courses in the four core areas in which they were enrolled. Students who were not in Grade 9 in the 2011-2012 school year continued to take the TAKS assessment. Initially, high school students were required to meet standard on 13 STAAR End-of-Course exams to be eligible to graduate (Texas Education Agency News, 2011). Those requirements changed in 2013 and the number of STAAR End-of-Course exams was reduced to five (Texas Education Agency News, 2013). Due to the overlapping transition and the changing and inconsistent assessment requirements imposed by the state of Texas, TAKS data were chosen over STAAR data for this study. Although similarities between the social studies skills assessed on the TAKS Exit Level Social Studies exam and the STAAR US History End-of-Course exam do exist, these social studies skills assessments should not be compared.

Limitations

For the purpose of this journal-ready dissertation, exit-level social studies achievement assessment quantitative data on Texas high school students in Grade 11 and Grade 12 were analyzed. Because of the causal-comparative nature of the study, the independent variables (i.e., economic status, gender, and ethnicity) and the dependent variable (i.e., academic achievement in social studies) were not controlled (Johnson &

Christensen, 2012). Accordingly, other variables may also contribute to any differences that may be obtained in social studies skills by economic status, gender, or ethnicity/race.

Assumptions

For this journal-ready dissertation, the assumption was made that the assessment data and the economic status, gender, and ethnicity/racial data in the Texas Education Agency Public Education Information Management System were accurately reported. Additionally, the consistency with which Texas high schools collect and report student data was assumed to be accurate and consistent statewide. A final assumption was that the validity and consistency in which the TAKS Exit Level Social Studies scores were collected from high schools across the state of Texas aligned with the stipulations proposed by the state of Texas. Therefore, any modifications to these assumptions may result in inaccurate data yielding contradictory findings.

Organization of the Study

In this journal-ready dissertation, three research investigations were conducted. In the first journal-ready dissertation article, the research questions that were addressed were on the extent to which gender differences were present on the TAKS Social Studies exam scores for the 2004-2005 through the 2011-2012 school years. In the second journal-ready dissertation article, the research questions that were addressed were on the degree to which differences existed on the TAKS Social Studies exam between students who were economically disadvantaged and students who were not economically disadvantaged for the 2004-2005 through the 2011-2012 school years. Finally, for the third journal-ready dissertation article, the research questions that were addressed were on the extent to which differences were present on the TAKS Social Studies exam among

four ethnic/racial groups (i.e., Asian, White, Hispanic, and Black) for the 2004-2005 through the 2011-2012 school years.

Five chapters comprise this journal-ready dissertation and three different manuscripts are present. Chapter I includes the background of the study, statement of the problem, purpose of the study, significance of the study, definition of terms, delimitations, limitations, assumptions, and outline of this journal-ready dissertation. In Chapter II is the research article on the degree to which gender differences might be present in social studies skill. Chapter III contains a discussion about social studies skills as related to student economic status. Chapter IV is an analysis of social studies skills as related to student ethnicity/race. Finally, in Chapter V is an overview of the results of all three studies. In addition, implications for future policy and practice with recommendations for future research were provided.

CHAPTER II

GENDER DIFFERENCES IN SOCIAL STUDIES SKILLS:

A TEXAS, MULTIYEAR STUDY

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

Abstract

In this investigation, the degree to which boys and girls differed in their social studies skills in Texas was addressed. Data were obtained from the Texas Education Agency Public Education Information Management System for all Texas high school students for the 2004-2005 to the 2011-2012 school years. Inferential statistical analyses revealed the presence of statistically significant differences in social studies skills between boys and girls. Girls had statistically lower average raw scores in all five social studies skills objectives than boys. Implications for policy and for practice were made, along with recommendations for future research.

Keywords: Gender, TAKS, Social Studies, Social Studies Skills, Gender

GENDER DIFFERENCES IN SOCIAL STUDIES SKILLS:

A TEXAS, MULTIYEAR STUDY

Debates about gender gaps in education have prompted educational leaders and researchers (e.g., Whitmire, 2010; Whitmire & Bailey, 2010) to evaluate academic opportunities offered to both boys and girls. The National Student Clearinghouse (2015) reported that bachelor degrees earned by women in science and engineering fields had decreased from 2004 to 2014. Further, researchers (e.g., Mo, Yang, Hu, Calaway, & Nickey, 2011; Moore, Combs, & Slate, 2012) have revealed that boys are more likely than girls to pass national high stakes examinations in mathematics and science. Boys were more likely than girls to achieve passing scores on ACT mathematics and ACT science exams (Mo et al., 2011).

To understand these findings, researchers (e.g., Kurtz-Costes, Copping, Rowley, & Kinlaw, 2014; Kurtz-Costes, Rowley, Harris-Britt, & Woods, 2008) have suggested that gender stereotypes aligned with specific academic subjects encourage student course and career selections. Kurtz-Costes et al. (2014) evaluated gender stereotypes of students in Grades 4, 6, and 8 and determined that children often adopted gender stereotypes promoted by their parents or teachers. As a result, boys are encouraged more to take courses in mathematics and science whereas girls are encouraged more to take courses in humanities and social sciences. Student performance is often influenced by various sociocultural factors that influence stereotypical expectations for future success and the value given to achieving that success (Dania, 2014; Voyer & Voyer, 2014). Because girls have a low expectancy of achieving a profession in the field of mathematics, they do not perform as well on mathematics as they do in language arts. Such preconceived

notions that boys are better in mathematics and science and girls are better at literature and social studies begin to develop as students experience success and failure with these subjects at early ages.

Similar attention has been placed on the decreasing achievement of boys in academic areas (Moller, Stearns, Southworth, & Potochnick, 2013; Whitmire, 2010). Although boys outperform girls in standardized science and mathematics tests, girls are excelling in other areas of academic course taking. Duckworth and Seligman (2006) revealed that girls make higher grades in both primary and secondary schools, but boys score higher on aptitude tests. Furthermore, Duckworth and Seligman (2006) contended that girls make better grades because they are more self-disciplined than boys. Voyer and Voyer (2014) emphasized that girls tend to focus more on mastery to gain full understanding of concepts whereas boys focus more on task completion.

Ganzert (2012) established the presence of similar findings in dual credit courses, reporting that females with dual credit experiences in high school had higher grade point averages in college than males. Additionally, Ganzert (2012) determined that 33.1% of females who completed a dual credit course graduated from college compared to 25.5% of males who completed a dual credit course in high school. Similarly, Moller et al. (2013) established that girls who attended high schools with more Advanced Placement opportunities were more likely than boys to attend colleges with more stringent enrollment requirements. Moore and Slate (2008) documented that more girls had been enrolled in Advanced Placement courses than boys. According to Moller et al. (2013), girls excel in high schools in which more Advanced Placement courses are made

available. Increased exposure to rigor benefits girls more than boys indicating that school context influences gender achievement (Moller et al., 2013).

Other researchers (e.g., Chapin, 2006; Dania, 2014), however, have argued that gender has no effect on social studies achievement. Dania (2014) contended that the method of instruction determines academic achievement in social studies. When students are provided with the same strategies and motivation, academic achievement in social studies is the same for boys and for girls. In contrast, however, other researchers (e.g., Bein, Hayes, & Jones, 2009; Weiss, Lutkus, Hildebrant, & Johnson, 2002) have demonstrated that differences in social studies achievement do exist when measured by standardized test scores. Boys scored statistically significantly higher on the Advanced Placement United States History examination than girls (Moore et al., 2012). Boys also had statistically significantly higher test scores than girls on the Advanced Placement World History, European History, Government Politics U.S., and Psychology examinations in 2007 and 2011 (Moore et al., 2012). In addition, Heafner and Fitchett (2015) analyzed the National Assessment of Educational Progress of United States History and established that Grade 12 boys had statistically significantly higher test scores than Grade 12 girls on standardized United States History exams. Lastly, researchers (Bein et al., 2009; Weiss et al., 2002) documented that boys had statistically significantly higher test scores on competency-based geography exams than girls.

Moller et al. (2013) indicated that school context and curriculum were essential for postsecondary outcomes. School context is designed to provide opportunities for student success and postsecondary readiness. By the time girls and boys reach college, however, stereotypes about professions have already formed (Morgan, Gelbgiser, &

Weeden, 2013). Girls were less likely to enroll in economic courses due to academic predisposition and unsupportive classroom environments (Emerson, McGoldrick, & Mumford, 2012). Curriculum is equally important in postsecondary outcomes. Evidence of male dominance and achievement in history is widespread in both state and national social studies curriculum (Crocco, Cramer, & Meier, 2008; Engebretson, 2014).

Engebretson (2014) revealed that a gender imbalance of discussed historical figures was prevalent in middle and high school grades. Further, Engebretson (2014) argued that women in social studies curriculum were included as supporting roles in history and, as such, were less valued than men. Because males were more likely to be involved in political or military history, an unequal gender balance has been maintained in social studies curricula (Crocco et al. 2008; Engebretson, 2014; Heafner & Fitchett, 2018).

Heafner and Fitchett (2018) also argued that gender affects how students make meaning of concepts. Due to gender bias in social studies curriculum and textbooks, relationships between gender inequalities and social studies are evident (Heafner & Fitchett, 2018).

Regarding social studies professions, numerous employment opportunities exist. The field of social studies and social science includes a wide range of professions such as anthropologists, geographers, historians, psychologists, social workers, economic advisors, and museum curators. Because of these numerous employment prospects provided by the areas of social studies and social sciences, it is necessary to ensure that women have equal opportunity to these professions. Although women remain underrepresented in science, technology, engineering, and mathematics fields, research is limited and inconsistent regarding a gender gap in social studies or social studies professions (Leaper, Farkas, & Brown, 2012).

Statement of the Problem

In recent decades, national attention has been focused on the lack of women in science and mathematics professions, which has sparked a need for educational leaders to increase educational opportunities for girls in these subject areas in early elementary grades (Whitmire & Bailey, 2010). Therefore, a focus in recent school initiatives has been on providing a school context to decrease the gender gap in public education. According to the United States Department of Education (2006), boys and girls in kindergarten perform similarly on reading and mathematics assessments. By the third grade, however, boys score higher on mathematics and science assessments, whereas girls score higher on reading assessments (United States Department of Education, 2006). These disparities have prompted educational leaders to analyze school context as an effort to promote student achievement for all students. Although gender gaps are apparent in the areas of mathematics, reading, and science, few researchers have addressed the extent to which similar gender gaps might exist in social studies courses.

To measure academic performance, criterion-based standardized testing has been a common method of evaluation used in the state of Texas for over 30 years (Clark, 2011). From 2003 to 2012, the criterion-based standardized exam used to measure academic performance of social studies was the Texas Assessment of Knowledge and Skills Social Studies exam which was administered in Grades 8, 10, and 11. In Grade 11, students took the Exit Level Texas Assessment of Knowledge and Skills Social Studies Exam as a requirement graduation.

By Grade 11, students were assessed on knowledge attained from World Geography, World History, and United States History. Each Texas Assessment of

Knowledge and Skills Social Studies Exam measured student performance of five objectives: history, geography, economics and social influences, political influences, and social studies skills. The purpose of assessing the Texas Assessment of Knowledge and Skills Social Studies Exam was to determine whether high school graduates had mastered the state curriculum and whether high school graduates had acquired the necessary skills needed for postsecondary education (Zabala, Minnici, McMurrer, & Briggs, 2008). Although researchers (e.g., Alford-Stephens, 2016; Wright, 2015) have examined similar gender differences in mathematics and reading, the focus of this study will be to determine the degree to which gender differences exist in social studies.

Purpose of the Study

The purpose of study was to examine the extent to which differences were present between Texas high school boys and girls in their social studies skills. Specifically, eight years of the Texas Assessment of Knowledge and Skills Social Studies assessment data were examined to determine the degree to which boys and girls differed in their social studies skills. By analyzing eight years of Texas statewide data, the extent to which a trend was present in the social studies skills of Texas boys and girls was determined.

Significance of the Study

Information regarding the degree to which Texas high school boys and girls differed on their social studies skills added to the extant literature regarding gender and social studies achievement. Based on the results of this multiyear investigation, educational leaders are provided with data and analyses related to the presence of gender gaps in social studies skills in Texas schools. Additional research could be beneficial regarding the variety of social studies skills and the effect that a difference in gender has

on these essential skills. Educators can use the conclusions of this study to help identify differences in social studies skills that may exist between boys and girls and their overall performance on high school state assessments.

Research Questions

The following overarching research question were addressed in this empirical investigation: What is the difference between Texas high school boys and girls in their overall social studies skills? Specific subquestions under this overarching research question were: (a) What is the difference between Texas high school boys and girls in their basic understanding of history?; (b) What is the difference between Texas high school boys and girls in their understanding of geography?; (c) What is the difference between Texas high school boys and girls in their understanding of economic and social influences?; (d) What is the difference between Texas high school boys and girls in their understanding of political influences?; (e) What is the difference between Texas high school boys and girls in their basic social studies skills?; and (f) What is the extent to which trends might be present in the social studies skills of Texas high school boys and girls for the 2004-2005 through the 2011-2012 school years? Each of the first five research questions was repeated for each of the 8 school years whereas the last research question, a trend question, was repeated for the five social studies objectives. Thus, a total of 45 research questions constituted this research investigation.

Method

Research Design

A non-experimental, causal-comparative research design (Johnson & Christensen, 2012) was used for this article. In this study, the independent variable had already

occurred, and extraneous variables were not controlled. The student archival data that were analyzed in this article represented past state assessment results. As such, the independent variable involved in this research article was gender and the dependent variables were the five TAKS Exit Level Social Studies Objectives for the 2004-2005 through the 2011-2012 school years.

Participants and Instrumentation

Archival data previously obtained for the 2004-2005 through the 2011-2012 school years through the submission and fulfillment of a Public Information Request form to the Texas Education Agency Public Education Information Management System were analyzed herein. The TAKS Exit Level Social Studies exam was a graduation requirement for the state of Texas and was used to measure social studies knowledge and skills of Grade 11 students. Beginning in 2012, the state of Texas applied a new standardized assessment, State of Texas Assessment of Academic Readiness (STAAR) to measure achievement in core content areas (Clark, 2011). For select courses in Grades 9-12, End-of-Course (EOC) exams are administered (Clark, 2011). Since 2012, the implementation and achievement measures for the STAAR and EOC have drastically changed. As a result, data from these assessments will not be included in this study.

The TAKS Exit Level Social Studies exam has five learning objectives that are supported by the Texas Essential Knowledge and Skills designed by the Texas Education Agency in 2000. The TAKS Exit Level Social Studies exam has 55 questions that are comprised of the five objectives. Thirteen questions are assessed from Objective 1 in which students are measured on their understanding of issues and events in U.S. history.

Nine questions are assessed from Objective 2 which measures student understanding of geographic influences on historical issues and events.

Thirteen questions are assessed from Objective 3 in which student understanding of economic and social influences on historical issues and events is assessed. Nine questions denote Objective 4 that assess student knowledge of political influences on historical issues and events. Lastly, 11 questions constitute Objective 5 in which critical-thinking skills to analyze social studies information are measured (Exit Level TAKS Social Studies Information Booklet, 2004, p. 5). Readers are directed to the Texas Education Agency website for information regarding the score validity and score reliability of this assessment.

Participants in this study were all students who took the Texas Assessment of Knowledge and Skills Exit Level Social Studies exam in the 2004-2005 through the 2011-2012 school years. The Public Information Request form that was previously submitted and fulfilled resulted in data that were analyzed by Wright (2015) in his dissertation on reading achievement and by Alford-Stephens (2016) in her dissertation on mathematics achievement. The data on the TAKS Social Studies test scores had not yet been analyzed.

Results

Prior to conducting a multivariate analysis of variance (MANOVA) procedure to address the research questions previously delineated its underlying assumptions were checked. Specifically examined were data normality, Box's Test of Equality of Covariance, and the Levene's Test of Equality of Error Variances. Although these assumptions were not met, the robustness of a MANOVA procedure made it appropriate

to use on the data in this study (Field, 2009). Results will be presented in chronological order beginning with the 2004-2005 school year and concluding with the 2011-2012 school year.

Overall Results for All Eight School Years

For the 2004-2005 school year, the MANOVA yielded a statistically significant difference in social studies performance between boys and girls, Wilks' $\Lambda = .98, p < .001$, partial $\eta^2 = .025$, small effect size (Cohen, 1988). With respect to the 2005-2006 school year, a statistically significant difference was present between boys and girls in their overall social studies performance, Wilks' $\Lambda = .98, p < .001$, partial $\eta^2 = .018$, small effect size (Cohen, 1988). Concerning the 2006-2007 school year, the MANOVA revealed a statistically significant difference in overall social studies performance between boys and girls, Wilks' $\Lambda = .98, p < .001$, partial $\eta^2 = .025$, small effect size (Cohen, 1988). Regarding the 2007-2008 school year, a statistically significant difference was present between boys and girls in their overall social studies performance, Wilks' $\Lambda = .97, p < .001$, partial $\eta^2 = .029$, small effect size (Cohen, 1988). For the 2008-2009 school year, a statistically significant difference was yielded in overall social studies performance between boys and girls, Wilks' $\Lambda = .98, p < .001$, partial $\eta^2 = .019$, small effect size (Cohen, 1988). With respect to the 2009-2010 school year, a statistically significant difference was present between boys and girls in their overall social studies performance, Wilks' $\Lambda = .98, p < .001$, partial $\eta^2 = .022$, small effect size (Cohen, 1988). Concerning the 2010-2011 school year, a statistically significant difference was revealed in overall social studies performance between boys and girls, Wilks' $\Lambda = .97, p < .001$, partial $\eta^2 = .034$, small effect size (Cohen, 1988). Regarding

the 2011-2012 school year, a statistically significant difference was present in overall social studies performance between boys and girls Wilks' $\Lambda = .98, p < .001$, partial $\eta^2 = .018$, small effect size (Cohen, 1988). Boys and girls statistically significantly differed in their overall social studies performance in each of the eight school years of data analyzed herein. Small effect sizes were present in all eight school years.

Results for Social Studies Objective 1 Across All Eight School Years

For each of the eight school years, univariate follow-up analysis of variance (ANOVA) procedures were calculated to determine the extent to which statistically significant differences were present between boys and girls on the TAKS Social Studies Objective 1. Concerning the 2004-2005 school year, a statistically significant difference was revealed, $F(1, 204630) = 187.88, p < .001$, partial $\eta^2 = .001$, below small effect size (Cohen, 1988). For the 2005-2006 school year, the ANOVA yielded a statistically significant difference, $F(1, 210742) = 371.22, p < .001$, partial $\eta^2 = .002$, below small effect size (Cohen, 1988). Regarding the 2006-2007 school year, a statistically significant difference was revealed, $F(1, 216567) = 596.84, p < .001$, partial $\eta^2 = .003$, below small effect size (Cohen, 1988). With respect to the 2007-2008 school year, a statistically significant difference was yielded, $F(1, 202320) = 3748.83, p < .001$, partial $\eta^2 = .018$, small effect size (Cohen, 1988). Regarding the 2008-2009 school year, the ANOVA revealed a statistically significant difference, $F(1, 142453) = 1509.18, p < .001$, partial $\eta^2 = .01$, small effect size (Cohen's 1988). For the 2009-2010 school year, a statistically significant difference was revealed, $F(1, 220214) = 3336.30, p < .001$, partial $\eta^2 = .015$, small effect size (Cohen, 1988). Concerning the 2010-2011 school year, a statistically significant difference was revealed, $F(1, 220577) = 3972.71, p < .001$, partial

$\eta^2 = .018$, small effect size (Cohen, 1988). Finally, for the 2011-2012 school year, a statistically significant difference was yielded between boys and girls, $F(1, 229217) = 2308.23, p < .001$, partial $\eta^2 = .01$, small effect size (Cohen, 1988). In all eight school years, boys and girls answered a statistically significant different number of items on the TAKS Social Studies Objective 1. Five of the effect sizes were small and three effect sizes were in the below small category.

With respect to the 2004-2005, 2005-2006, 2006-2007, and 2011-2012 school years, boys answered, on average, about one-half items more correctly than was answered correctly by girls. Boys answered, on average, about one more question correctly than girls in the 2007-2008, 2008-2009, 2009-2010, and 2010-2011 school years. Descriptive statistics for these school years for the TAKS Social Studies Objective 1 are contained in Table 2.1.

Insert Table 2.1 about here

Results for Social Studies Objective 2 Across All Eight School Years

For each of the eight school years, univariate ANOVA procedures were calculated to determine the extent to which statistically significant differences were present between boys and girls on the TAKS Social Studies Objective 2. Concerning the 2004-2005 school year, a statistically significant difference was revealed, $F(1, 204630) = 219.06, p < .001$, partial $\eta^2 = .001$, below small effect size (Cohen, 1988). With respect to the 2005-2006 school year, the ANOVA yielded a statistically significant difference, $F(1, 210742) = 32.99, p < .001$, partial $\eta^2 = .001$, below small effect size (Cohen, 1988). For the 2006-

2007 school year, a statistically significant difference was revealed, $F(1, 216567) = 362.97, p < .001$, partial $\eta^2 = .002$, below small effect size (Cohen, 1988). Regarding the 2007-2008 school year, a statistically significant difference was yielded, $F(1, 202320) = 935.57, p < .001$, partial $\eta^2 = .005$, below small effect size (Cohen, 1988). With respect to the 2008-2009 school year, the ANOVA revealed a statistically significant difference, $F(1, 142453) = 1185.19, p < .001$, partial $\eta^2 = .008$, below small effect size (Cohen's 1988). Concerning the 2009-2010 school year, a statistically significant difference was revealed, $F(1, 220214) = 1070.23, p < .001$, partial $\eta^2 = .005$, below small effect size (Cohen, 1988). Concerning the 2010-2011 school year, a statistically significant difference was revealed, $F(1, 220577) = 1037.37, p < .001$, partial $\eta^2 = .005$, below small effect size (Cohen, 1988). Finally, for the 2011-2012 school year, a statistically significant difference was yielded between boys and girls, $F(1, 229217) = 445.98, p < .001$, partial $\eta^2 = .002$, below small effect size (Cohen, 1988). In all eight school years, boys and girls statistically significantly differed in the number of items they answered correctly on the TAKS Social Studies Objective 2. In all eight school years, the differences were reflective of below small effect sizes.

Concerning the 2004-2005 and 2005-2006 school years, boys answered, on average, 0.18 and 0.07 more items correctly, respectively, than did girls. With respect to the 2006-2007 and 2007-2008 school years, boys answered, on average, 0.21 and 0.27 more items correctly, respectively, than did girls. Regarding the 2008-2009 school year, boys answered, on average, almost one half more items than girls. Concerning the 2010-2011 and 2011-2012 school years, boys answered, on average, 0.26 and 0.17 more items

correctly, respectively, than did girls. Delineated in Table 2.2 are the descriptive statistics for these eight school years.

 Insert Table 2.2 about here

Results for Social Studies Objective 3 Across All Eight School Years

For each of the eight school years, univariate ANOVA procedures were calculated to determine the extent to which statistically significant differences were present between boys and girls on the TAKS Social Studies Objective 3. Concerning the 2004-2005 school year, a statistically significant difference was revealed, $F(1, 204630) = 67.35, p < .001$, partial $\eta^2 = .001$, below small effect size (Cohen, 1988). Regarding the 2005-2006 school year, the ANOVA did not yield a statistically significant difference, $F(1, 210742) = 0.73, p = .39$. For the 2006-2007 school year, a statistically significant difference was not revealed, $F(1, 216567) = 0.16, p = .69$. With respect to the 2007-2008 school year, a statistically significant difference was yielded, $F(1, 202320) = 2329.37, p < .001$, partial $\eta^2 = .011$, small effect size (Cohen, 1988). Regarding the 2008-2009 school year, the ANOVA revealed a statistically significant difference, $F(1, 142453) = 508.58, p < .001$, partial $\eta^2 = .004$, below small effect size (Cohen's 1988). Concerning the 2009-2010 school year, a statistically significant difference was revealed, $F(1, 220214) = 1336.82, p < .001$, partial $\eta^2 = .006$, below small effect size (Cohen, 1988). With respect to the 2010-2011 school year, a statistically significant difference was revealed, $F(1, 220577) = 267.83, p < .001$, partial $\eta^2 = .001$, below small effect size (Cohen, 1988). Lastly, for the 2011-2012 school year, a statistically significant difference was yielded between boys

and girls, $F(1, 229217) = 517.38, p < .001$, partial $\eta^2 = .002$, below small effect size (Cohen, 1988). In two school years, 2005-2006 and 2006-2007, boys and girls did not differ in their social studies performance. For the remaining six school years, boys and girls answered a statistically significantly different number of items on the TAKS Social Studies Objective 3. One of these effect sizes was small and five effect sizes were in the below small category.

With respect to the 2004-2005 school year, girls answered, on average, 0.14 more items correctly than did boys. Boys answered, on average, 0.58 and 0.34 more items correctly than girls in the 2007-2008 and the 2008-2009 school years, respectively. With respect to the 2009-2010 and 2010-2011 school years, boys answered, on average, 0.43 and 0.19 more items correctly, respectively, than girls. Regarding the 2011-2012 school year, boys answered, on average, 0.26 more items correctly than did girls. Table 2.3 contains the descriptive statistics for these eight school years.

 Insert Table 2.3 about here

Results for Social Studies Objective 4 Across All Eight School Years

For each of the eight school years, univariate ANOVA procedures were calculated to determine the extent to which statistically significant differences were present between boys and girls on the TAKS Social Studies Objective 4. Concerning the 2004-2005 school year, a statistically significant difference was revealed, $F(1, 204630) = 232.05, p < .001$, partial $\eta^2 = .001$, below small effect size (Cohen, 1988). With respect to the 2005-2006 school year, the ANOVA yielded a statistically significant difference, $F(1, 210742)$

= 144.59, $p < .001$, partial $\eta^2 = .001$, below small effect size (Cohen, 1988). For the 2006-2007 school year, a statistically significant difference was revealed, $F(1, 216567) = 4.72$, $p = .03$, partial $\eta^2 = .001$, below small effect size (Cohen, 1988). Regarding the 2007-2008 school year, a statistically significant difference was yielded, $F(1, 202320) = 388.47$, $p < .001$, partial $\eta^2 = .002$, below small effect size (Cohen, 1988). With respect to the 2008-2009 school year, a statistically significant difference was yielded, $F(1, 142453) = 201.05$, $p < .001$, partial $\eta^2 = .001$, below small effect size (Cohen's 1988). Concerning the 2009-2010 school year, a statistically significant difference was revealed, $F(1, 220214) = 391.30$, $p < .001$, partial $\eta^2 = .002$, below small effect size (Cohen, 1988). Regarding the 2010-2011 school year, a statistically significant difference was revealed, $F(1, 220577) = 205.01$, $p < .001$, partial $\eta^2 = .001$, below small effect size (Cohen, 1988). Finally, for the 2011-2012 school year, a statistically significant difference was yielded between boys and girls, $F(1, 229217) = 462.24$, $p < .001$, partial $\eta^2 = .002$, below small effect size (Cohen, 1988). In all school years, boys and girls answered a statistically significant number of items on the TAKS Social Studies Objective 4. All eight of the effect sizes were in the below small category.

Regarding the 2004-2005 and the 2005-2006 school years, girls answered, on average, 0.18 and 0.15 more items correctly, respectively, than did boys. Concerning the 2006-2007 school year, girls answered, on average, 0.03 more items correctly than did boys. Boys answered, on average, 0.18 more items than girls in the 2007-2008 and 2011-2012 school year. With respect to the 2008-2009 school year, boys answered, on average, 0.15 more items than girls. Regarding the 2009-2010 and the 2010-2011 school

years, boys answered, on average, 0.17 and 0.12 more items correctly, respectively, than girls. Revealed in Table 2.4 are the descriptive statistics for these eight school years.

 Insert Table 2.4 about here

Results for Social Studies Objective 5 Across All Eight School Years

For each of the eight school years, univariate ANOVA procedures were calculated to determine the extent to which statistically significant differences were present between boys and girls on the TAKS Social Studies Objective 5. Concerning the 2004-2005 school year, a statistically significant difference was revealed, $F(1, 204630) = 8.34, p = .004$, partial $\eta^2 = .001$, below small effect size (Cohen, 1988). With respect to the 2005-2006 school year, the ANOVA yielded a statistically significant difference, $F(1, 210742) = 15.50, p < .001$, partial $\eta^2 = .001$, below small effect size (Cohen, 1988). For the 2006-2007 school year, a statistically significant difference was revealed, $F(1, 216567) = 43.64, p < .001$, partial $\eta^2 = .001$, below small effect size (Cohen, 1988). Regarding the 2007-2008 school year, a statistically significant difference was yielded, $F(1, 202320) = 711.31, p < .001$, partial $\eta^2 = .004$, below small effect size (Cohen, 1988). With respect to the 2008-2009 school year, the ANOVA revealed a statistically significant difference, $F(1, 142453) = 756.16, p < .001$, partial $\eta^2 = .005$, below small effect size (Cohen's 1988). For the 2009-2010 school year, a statistically significant difference was revealed, $F(1, 220214) = 364.01, p < .001$, partial $\eta^2 = .002$, below small effect size (Cohen, 1988). Concerning the 2010-2011 school year, a statistically significant difference was revealed, $F(1, 220577) = 417.36, p < .001$, partial $\eta^2 = .002$, below small effect size (Cohen, 1988).

Finally, for the 2011-2012 school year, a statistically significant difference was yielded between boys and girls, $F(1, 229217) = 46.01, p < .001$, partial $\eta^2 < .001$, a below small effect size (Cohen, 1988). In all school years, boys and girls answered a statistically significant different number of items on the TAKS Social Studies Objective 5. All eight of the effect sizes were in the below small category.

For the 2004-2005 school year, girls answered, on average, 0.04 more items correctly than did boys. Concerning the 2005-2006 school year, boys answered, on average, 0.06 more items correctly than did boys. Regarding the 2006-2007 school year, girls answered, on average, 0.08 more items correctly than boys. Boys answered, on average, 0.26 and 0.34 more items correctly than girls in the 2007-2008 and 2008-2009 school years, respectively. For the 2009-2010 and 2010-2011 school years, boys answered, on average, 0.18 and 0.19 more items correctly, respectively, than girls. Regarding the 2011-2012 school year, boys answered, on average, 0.06 more items correctly than did girls. Delineated in Table 2.5 are the descriptive statistics for these eight school years.

 Insert Table 2.5 about here

Discussion

The extent to which differences were present between Texas high school boys and girls in their social studies skills was analyzed in this study. Eight years of Texas statewide data on five TAKS Exit Level Social Studies Objectives were analyzed by gender. In each school year, statistically significant results were present. Following these

statistical analyses, the presence of trends for the five Social Studies objectives by gender was determined. Results will be summarized in the next section.

Social Studies Objective 1: History

Social Studies Objective 1 contained 13 questions on the TAKS Exit Level Social Studies assessment during each of the 2004-2005 through 2011-2012 school years. Boys had an average score that was 0.23 to 0.75 points higher on the TAKS Social Studies Objective 1 than girls in each of the eight school years of data analyzed. Boys answered an average of 0.23 to 0.39 more questions correctly on this objective than did girls in the 2004-2005 through the 2006-2007 school years. Beginning with the 2007-2008 school year and continuing through the 2011-2012 school year, boys increased the achievement gap as they correctly answered an average of 0.58 to 0.75 more questions than girls. To determine the magnitude of the difference between the average score for these two groups of students for each school year, a Cohen's d was calculated for each school year for the TAKS Social Studies Objective 1. The array of the Cohen's d calculations ranged from a low of 0.23, small effect size, to a high of 0.75, a moderate effect size. Across all eight school years, the average Cohen's d , or effect size, was 0.54, a moderate effect size. Readers are referred to Table 2.6 for the Cohen's d effect size calculations.

 Insert Table 2.6 about here

Social Studies Objective 2: Geography

Social Studies Objective 2 contained nine questions regarding student understanding of how geography influences historical issues and events. Boys had an

average score that was 0.07 to 0.37 points higher on Social Studies Objective 2 than girls for each of the eight school years of data examined. Boys answered an average of 0.21 to 0.37 more questions correctly on this objective than did girls in the 2006-2007 through the 2010-2011 school years, increasing the achievement gap. To determine the magnitude of the difference between the average score for these two groups of students for each school year, a Cohen's d was calculated for each school year for the Social Studies Objective 2. The array of the Cohen's d calculations ranged from a low of 0.07, small effect size, to a high of 0.37, a small effect size. Across all eight school years, the average Cohen's d , or effect size, was 0.23, a small effect size. Presented in Table 2.7 are the Cohen's d effect size calculations for Objective 2.

 Insert Table 2.7 about here

Social Studies Objective 3: Economics and Social Influences

Social Studies Objective 3 provided 13 questions on economic and social issues in American history from the colonial era to the late twentieth century. Boys had an average score that was higher on Social Studies Objective 3 than girls for five of the eight school years of data examined. Beginning with the 2007-2008 school year and continuing through the 2011-2012 school year, boys increased the achievement gap as they correctly answered an average of 0.19 to 0.58 more questions correctly than girls. Girls had an average score that was 0.02 to 0.14 points higher on Social Studies Objective 3 than boys for two school years, 2004-2005 and 2005-2006. For the 2006-2007 school year, boys and girls averaged about the same number of questions correctly.

To determine the magnitude of the difference between the average score for these two groups of students for each school year, a Cohen's d was calculated for each school year for the Social Studies Objective 3. The array of the Cohen's d calculations ranged from a low of 0.02, a below small effect size, to a high of 0.58, a moderate effect size. Across all eight school years, the average Cohen's d , or effect size, was 0.25, a small effect size. Table 2.8 contains the Cohen's d effect size calculations for Objective 3.

Insert Table 2.8 about here

Social Studies Objective 4: Political Influences

Social Studies Objective 4 contained nine questions on the development of representative government in the United States as well as on political influences in American history from the colonization era to the present. Boys had an average score that was higher on Social Studies Objective 4 than girls for five of the eight school years of data analyzed. Beginning with the 2007-2008 school year and continuing through the 2011-2012 school year, boys increased the achievement gap as they correctly answered an average of 0.12 to 0.18 more questions than girls. Girls had an average score that was 0.03 to 0.18 points higher on TAKS Social Studies Objective 3 than boys for three school years, 2004-2005 to 2006-2007. To determine the magnitude of the difference between the average score for these two groups of students for each school year, a Cohen's d was calculated for each school year for the TAKS Social Studies Objective 4. The array of the Cohen's d calculations ranged from a low of 0.03, a below small effect size, to a high of 0.18, a small effect size. Across all eight school years, the average Cohen's d , or

effect size, was 0.15, a small effect size. Readers are referred to Table 2.9 for the Cohen's *d* effect size calculations.

Insert Table 2.9 about here

Social Studies Objective 5: Social Studies Skills

For Social Studies Objective 5, students were given 11 questions that assessed critical thinking skills used to analyze social studies information. Boys had an average score that was 0.06 to 0.34 points higher on Social Studies Objective 5 than girls for six of the eight school years of data investigated. Girls had an average score that was 0.04 to 0.08 points higher on Social Studies Objective 5 than boys for two school years, 2004-2005 and 2006-2007. To determine the magnitude of the difference between the average score for these two groups of students for each school year, a Cohen's *d* was calculated for each school year for the TAKS Social Studies Objective 5. The array of the Cohen's *d* calculations ranged from a low of 0.04, a below small effect size, to a high of 0.34, a small effect size. Across all eight school years, the average Cohen's *d*, or effect size, was 0.15, a small effect size. Table 2.10 contains the Cohen's *d* effect size calculations for Objective 5.

Insert Table 2.10 about here

Connection with Existing Literature

Although some researchers have contended that gender is not related to social studies achievement, other researchers (e.g., Bein et al., 2009; Weiss et al., 2002) have established that differences in social studies achievement do exist when measured by standardized test scores. In this investigation, boys outperformed girls on the TAKS Exit Level Social Studies Exam for the 2004-2005 to 2011-2012 school years. These results were consistent with researchers (e.g., Heafner & Fitchett, 2015; Moore et al., 2012) who have also noted that boys have statistically higher scores on standardized exams in history. By analyzing each of the five objectives of the TAKS Exit Level Social Studies Exam, differences in social skills between boys and girls were also revealed. Boys have higher averages cores on all objectives but did overwhelmingly better on Objective 1 and Objective 2. Objective 1 contains questions that involve issues and events in United States History. Researchers (e.g., Heafner & Fitchett, 2015; Moore et al., 2012) have indicated that boys have outperformed girls on standardized United States History exams. Similarly, researchers (Bein et al., 2009; Weiss et al., 2002) have also demonstrated that boys have scored statistically significantly higher on competency-based geography exams than girls. Therefore, results of this study are consistent with the findings of other researchers (Bein et al., 2009; Heafner & Fitchett, 2015; Moore et al., 2012; Weiss et al., 2002) who have revealed differences in social studies achievement between boys and girls.

Implications for Policy and Practice

Based upon the results of this multiyear investigation, several implications are present for policy and for practice. With respect to policy, policymakers and educators

should be aware that gender bias may be present in social studies state standards, curriculum, and textbooks. Heafner and Fitchett (2018) noted that gender inequalities in social studies curriculum affects how students make sense of the concepts. Continued disregard for women in social studies curriculum will only exacerbate the gender gap evident in social studies performance (Crocco et al., 2008; Engebretson, 2014; Heafner & Fitchett, 2018). Therefore, it is necessary for policymakers to investigate social studies standards, curriculum, and textbooks to ensure that the role of women in history is equivalent in value to the role of men in history.

In regard to practice, educators need to be cognizant of how the role of women in social studies is being presented in the classroom. Moller et al. (2013) indicated that postsecondary outcomes are determined by school context and curriculum. Therefore, it is recommended that educators incorporate more female figures into their lessons so that girls feel more valued in social studies disciplines. Schools may need additional training on how to increase the role of women in their social studies curriculum.

Suggestions for Future Research

Based upon the results of this multiyear, statewide analysis, several suggestions for future research can be made. Analyzed in this study was the relationship between boys and girls and the social studies performance of each group on the TAKS Exit Level Social Studies exam. An extension of this investigation to other subject areas such as reading, mathematics, and science is highly recommended. Additionally, only the TAKS Exit Level Social Studies exam that was administered to Grade 11 students was examined in this article. Lower level grades could be investigated to determine the extent to which

differences might exist in social studies performance between boys and girls in Grades 3-10.

Further, research is limited and inconsistent with regard to gender differences in social studies performance (Leaper et al., 2012). This study was limited to the State of Texas. Accordingly, researchers are encouraged to extend this study to other states to determine whether the findings delineated herein would be generalizable to other states. A final recommendation for future research would be to analyze social studies performance as a function of other student demographic characteristics such as their ethnicity/race and economic status.

Conclusion

In this research study, the extent to which Texas high school boys and girls differed in their social studies achievement was addressed. After obtaining and analyzing eight school years of Texas statewide data, statistically significant differences were revealed between boys and girls in their social studies skills. Boys had statistically significantly higher average raw scores on all five Social Studies Objectives than did girls.

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Table 2.1

Descriptive Statistics for Boys and Girls on the TAKS Social Studies Objective 1 for the 2004 School Year through the 2012 School Year

School Year and Gender	<i>n</i>	<i>M</i>	<i>SD</i>
2004-2005			
Boys	102,430	8.24	4.05
Girls	102,202	8.01	3.44
2005-2006			
Boys	104,926	8.73	4.08
Girls	105,818	8.41	3.52
2006-2007			
Boys	106,978	9.05	3.87
Girls	109,591	8.66	3.43
2007-2008			
Boys	97,990	9.90	2.70
Girls	104,332	9.16	2.71
2008-2009			
Boys	69,930	10.23	3.03
Girls	72,525	9.61	3.03
2009-2010			
Boys	108,081	10.01	2.86
Girls	112,135	9.31	2.86
2010-2011			
Boys	108,344	10.34	2.78
Girls	112,235	9.59	2.80
2011-2012			
Boys	113,273	10.07	2.92
Girls	115,946	9.49	2.93

Table 2.2

Descriptive Statistics for Boys and Girls on the TAKS Social Studies Objective 2 for the 2004 School Year through the 2012 School Year

School Year and Gender	<i>n</i>	<i>M</i>	<i>SD</i>
2004-2005			
Boys	102,430	6.42	3.01
Girls	102,202	6.24	2.60
2005-2006			
Boys	104,926	6.49	2.88
Girls	105,818	6.42	2.52
2006-2007			
Boys	106,978	6.85	2.77
Girls	109,591	6.64	2.48
2007-2008			
Boys	97,990	7.43	1.99
Girls	104,332	7.16	2.00
2008-2009			
Boys	69,930	7.68	1.99
Girls	72,525	7.31	2.01
2009-2010			
Boys	108,081	7.43	1.95
Girls	112,135	7.16	1.92
2010-2011			
Boys	108,344	7.46	1.93
Girls	112,235	7.20	1.94
2011-2012			
Boys	113,273	7.84	1.91
Girls	115,946	7.67	1.92

Table 2.3

Descriptive Statistics for Boys and Girls on the TAKS Social Studies Objective 3 for the 2004 School Year through the 2012 School Year

School Year and Gender	<i>n</i>	<i>M</i>	<i>SD</i>
2004-2005			
Boys	102,430	8.75	4.13
Girls	102,202	8.89	3.60
2005-2006			
Boys	104,926	8.77	3.99
Girls	105,818	8.79	3.50
2006-2007			
Boys	106,978	9.56	3.99
Girls	109,591	9.56	3.54
2007-2008			
Boys	97,990	10.72	2.67
Girls	104,332	10.14	2.71
2008-2009			
Boys	69,930	10.96	2.80
Girls	72,525	10.62	2.76
2009-2010			
Boys	108,081	10.90	2.75
Girls	112,135	10.47	2.74
2010-2011			
Boys	108,344	10.99	2.68
Girls	112,235	10.80	2.66
2011-2012			
Boys	113,273	11.17	2.76
Girls	115,946	10.91	2.70

Table 2.4

Descriptive Statistics for Boys and Girls on the TAKS Social Studies Objective 4 for the 2004 School Year through the 2012 School Year

School Year and Gender	<i>n</i>	<i>M</i>	<i>SD</i>
2004-2005			
Boys	102,430	6.07	2.93
Girls	102,202	6.25	2.53
2005-2006			
Boys	104,926	6.13	2.96
Girls	105,818	6.28	2.64
2006-2007			
Boys	106,978	6.37	2.85
Girls	109,591	6.40	2.53
2007-2008			
Boys	97,990	7.29	1.97
Girls	104,332	7.11	1.94
2008-2009			
Boys	69,930	7.56	2.04
Girls	72,525	7.41	2.01
2009-2010			
Boys	108,081	7.51	2.02
Girls	112,135	7.34	1.99
2010-2011			
Boys	108,344	7.55	1.91
Girls	112,235	7.43	1.90
2011-2012			
Boys	113,273	7.76	1.96
Girls	115,946	7.58	1.96

Table 2.5

Descriptive Statistics for Boys and Girls on the TAKS Social Studies Objective 5 for the 2004 School Year through the 2012 School Year

School Year and Gender	<i>n</i>	<i>M</i>	<i>SD</i>
2004-2005			
Boys	102,430	8.10	3.65
Girls	102,202	8.14	3.11
2005-2006			
Boys	104,926	8.17	3.63
Girls	105,818	8.11	3.23
2006-2007			
Boys	106,978	8.42	3.28
Girls	109,591	8.50	2.85
2007-2008			
Boys	97,990	9.65	2.22
Girls	104,332	9.39	2.25
2008-2009			
Boys	69,930	9.58	2.33
Girls	72,525	9.24	2.33
2009-2010			
Boys	108,081	9.58	2.18
Girls	112,135	9.40	2.11
2010-2011			
Boys	108,344	9.74	2.17
Girls	112,235	9.55	2.18
2011-2012			
Boys	113,273	9.74	2.27
Girls	115,946	9.68	2.20

Table 2.6

*Summary of Social Studies Performance for Objective 1 of the TAKS Social Studies Exam
as a Function of Gender for the 2004-2005 through the 2011-2012 School Years*

School Year	Statistically Significant	Effect Size	Lowest Performing Group
2004-2005	Yes	Small	Girls
2005-2006	Yes	Moderate	Girls
2006-2007	Yes	Moderate	Girls
2007-2008	Yes	Large	Girls
2008-2009	Yes	Large	Girls
2009-2010	Yes	Large	Girls
2010-2011	Yes	Large	Girls
2011-2012	Yes	Large	Girls

Table 2.7

*Summary of Social Studies Performance for Objective 2 of the TAKS Social Studies Exam
as a Function of Gender for the 2004-2005 through the 2011-2012 School Years*

School Year	Statistically Significant	Effect Size	Lowest Performing Group
2004-2005	Yes	Small	Girls
2005-2006	Yes	Small	Girls
2006-2007	Yes	Moderate	Girls
2007-2008	Yes	Moderate	Girls
2008-2009	Yes	Moderate	Girls
2009-2010	Yes	Moderate	Girls
2010-2011	Yes	Moderate	Girls
2011-2012	Yes	Moderate	Girls

Table 2.8

*Summary of Social Studies Performance for Objective 3 of the TAKS Social Studies Exam
as a Function of Gender for the 2004-2005 through the 2011-2012 School Years*

School Year	Statistically Significant	Effect Size	Lowest Performing Group
2004-2005	Yes	Small	Boys
2005-2006	No	-	-
2006-2007	No	-	-
2007-2008	Yes	Large	Girls
2008-2009	Yes	Moderate	Girls
2009-2010	Yes	Moderate	Girls
2010-2011	Yes	Small	Girls
2011-2012	Yes	Moderate	Girls

Table 2.9

*Summary of Social Studies Performance for Objective 4 of the TAKS Social Studies Exam
as a Function of Gender for the 2004-2005 through the 2011-2012 School Years*

School Year	Statistically Significant	Effect Size	Lowest Performing Group
2004-2005	Yes	Small	Boys
2005-2006	Yes	Small	Boys
2006-2007	Yes	Small	Boys
2007-2008	Yes	Moderate	Girls
2008-2009	Yes	Small	Girls
2009-2010	Yes	Moderate	Girls
2010-2011	Yes	Small	Girls
2011-2012	Yes	Moderate	Girls

Table 2.10

*Summary of Social Studies Performance for Objective 5 of the TAKS Social Studies Exam
as a Function of Gender for the 2004-2005 through the 2011-2012 School Years*

School Year	Statistically Significant	Effect Size	Lowest Performing Group
2004-2005	Yes	Small	Boys
2005-2006	Yes	Small	Girls
2006-2007	Yes	Small	Boys
2007-2008	Yes	Moderate	Girls
2008-2009	Yes	Moderate	Girls
2009-2010	Yes	Moderate	Girls
2010-2011	Yes	Moderate	Girls
2011-2012	Yes	Small	Girls

CHAPTER III

DIFFERENCES IN SOCIAL STUDIES SKILLS BY THE ECONOMIC STATUS OF TEXAS HIGH SCHOOL STUDENTS: A STATEWIDE, MULTIYEAR STUDY

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

Abstract

Investigated in this study was the degree to which differences were present in social studies skills as a function of economic status (i.e., Not Poor, Moderately Poor, and Extremely Poor) of Texas high school students. Data were obtained from the Texas Education Agency Public Education Information Management System for all Texas high school students for the 2004-2005 to the 2011-2012 school years. In this study, statistically significant differences were present in the social studies skills by economic status. Students who were not economically disadvantaged had higher average social studies scores in all five objectives than did their peers who were Moderately Poor and their peers who were Extremely Poor. Moreover, students who were Moderately Poor outperformed students who were Extremely Poor in all five social studies objectives. In all 8 years across all analyses, a clear stair-step effect was present based upon student economic status. Suggestions for future research and implications for policy and practice were made.

Keywords: Economic Status, TAKS, Social Studies, Social Studies Skills

DIFFERENCES IN SOCIAL STUDIES SKILLS BY THE ECONOMIC STATUS OF TEXAS HIGH SCHOOL STUDENTS: A STATEWIDE, MULTIYEAR STUDY

In the United States, 15 million children live in poverty (National Center for Children in Poverty, 2016). According to the National Center for Education Statistics (2017), poverty is an important risk factor that influences academic achievement. Since 1965, the federal government has made intentional efforts to decrease the academic disparities between the rich and poor. President Lyndon B. Johnson began to increase academic opportunities for students living in poverty with his War on Poverty. Federal funds were provided by the Elementary and Secondary Education Act to school districts that served students who were economically disadvantaged. Unfortunately, five decades of federal involvement have not eliminated the achievement gap between the rich and the poor.

Although the nationwide poverty rate has decreased from 2014 to 2016, poverty in Texas has been higher than the national average since the 1980's (Dietz, 2008; United States Census Bureau, 2016). According to the United States Census Bureau, 16.7% of people live below the poverty rate in Texas (United States Census Bureau, 2017). With respect to the student population in Texas, during the 2016-2017 school year, 59% of students in Texas were considered economically disadvantaged (Texas Education Agency Texas Academic Performance Report, 2017). Because of the negative influences of poverty on student achievement (Burney & Beilke, 2008), educators and stakeholders should be concerned with student performance in Texas.

Although education has been “envisioned as the great equalizer,” Coley and Baker (2013) revealed that “this promise is more myth than reality” (p. 3). Coley and

Baker (2013) argued that the difference in achievement between the rich and poor is twice as large as the difference in achievement between Black and White students. Too often, the manifestations of poverty severely limit educational opportunities and educational outcomes. Negative manifestations of poverty include the lack of nutritious food, parental involvement, health insurance, and steady employment (Coley & Baker, 2013). Jensen (2013) also emphasized that students living in poverty struggle with classroom engagement due to several factors. These factors include a lack of vocabulary, effort, and cognitive skills.

Researchers (Alford-Stephens, 2016; Dixon-Román, Everson, & McArdle, 2013; Lee & Slate, 2014; Wright, 2015; Wright & Slate, 2015) have been consistent in demonstrating that poverty negatively influences achievement, especially when achievement is measured by standardized test scores. Dixon-Román et al. (2013) determined that family income has a substantial influence on SAT achievement scores because students living in poverty lack social and educational opportunities. According to Lee and Slate (2014), students who were economically disadvantaged scored statistically significantly lower than students who were not economically disadvantaged on the Texas Assessment of Knowledge and Skills (TAKS) English Language Arts and Mathematics exams.

Further, Wright and Slate (2015) revealed that students in Grades 6, 7, and 8 displayed statistically lower critical thinking skills on the Texas Assessment of Knowledge and Skills Reading assessment. Wright and Slate (2015) demonstrated that the effects of poverty statistically significantly influenced how students think critically on standardized exams. In a recent Texas, statewide investigation, Wright (2015) analyzed

the reading performance of Texas high school students as a function of their economic status on the TAKS Exit-Level English Language Arts Assessment for the 2004-2005 through the 2011-2012 school years. He documented that students who were economically disadvantaged had statistically significantly lower reading scores in all of the TAKS reading objectives than their peers who were not in poverty. According to Wright (2015), living in poverty clearly had negative effects on reading performance.

In another recent Texas statewide investigation, Alford-Stephens (2016) examined the mathematics performance of Texas high school students as a function of their economic status on the TAKS Exit-Level Mathematics Assessment for the 2004-2005 through the 2011-2012 school years. She established the presence of statistically significant differences in mathematics performance by student economic status. In all eight school years, boys who were economically disadvantaged had statistically significantly lower mathematics test scores than boys who were not in poverty.

As a result of the No Child Left Behind Act (2002) and the Every Student Succeeds Act (2015), much attention has been placed on reading and mathematics achievement, particularly at the elementary school levels (Grant & Horn, 2006). Grant and Horn (2006) explained that “not all testing counts the same at the national level,” emphasizing that “reading and mathematics have a clear preference as measures of student and school success” (p. 9). Similarly, Au (2009) referred to social studies as a disappearing subject because the No Child Left Behind Act (2002) has demanded so much emphasis on reading and mathematics performance. Yet, tracking historical understanding on social studies standardized assessments has not gone completely unnoticed. Fitchett and Heafner (2017) analyzed the 2010 National Assessment of

Educational Progress Grade 4 United States History Exam and determined that achievement gaps were present for students living in poverty. Of the students eligible to receive free or reduced lunch (i.e., in poverty), only 6% were proficient and 45% were considered below proficient on the 2010 National Assessment of Educational Progress Grade 4 United States History Exam (Lord, Noel, & Slevin, 2016). Further, Fitchett and Heafner (2013) and Heafner and Fitchett (2017) revealed that economic status was a determinant of historical knowledge and understanding. Students who were in poverty scored statistically lower on the National Assessment of Educational Progress Grade 12 United States History Exam than students who were Not Poor (Heafner & Fitchett, 2015). In addition, students who were Not Poor were more likely to answer social issue questions and war questions correctly. For the Grade 4 civics assessment of the 2010 National Assessment of Educational Progress, 40% of students who were in poverty scored below basic (Lord et al., 2016). For the Grade 4 geography assessment of the 2010 National Assessment of Educational Progress, 38% of students who were in poverty scored below basic (Lord et al., 2016). Heafner and Fitchett (2015) contended that achievement on the National Assessment of Educational Progress was directly dependent on the level of instructional exposure. Thus, pedagogy has an extensive effect on historical understanding (Heafner & Fitchett, 2015).

Statement of the Problem

A focus beginning with the No Child Left Behind (2002) Act and continued by the Every Student Succeeds Act (2015) is to reduce the achievement gap between different groups of students. Although race/ethnicity are important factors to consider, Burney and Beilke (2008) demonstrated that poverty was the most important indicator of

student achievement. Although much attention has been placed on reading and mathematics achievement, analysis of social studies achievement is equally important, especially in areas concerning civic responsibility and promotion of democratic values (National Council for the Social Studies, 1994). To determine disparities in Texas, accountability has been measured through standardized tests known as the Texas Assessment of Knowledge and Skills.

Purpose of the Study

The purpose of this article was to examine the extent to which differences were present in social studies skills as a function of the economic status (i.e., Not Poor, Moderately Poor, and Extremely Poor) of Texas high school students. Specifically, eight years of the Texas Assessment of Knowledge and Skills Social Studies assessment data were analyzed to determine whether differences were present in social studies skills as a function of student economic status. Finally, the extent to which a trend was present in social studies skills over this 8-year period by student economic status was ascertained.

Significance of the Study

Many researchers (e.g., Alford-Stephens, 2016; Wright, 2015; Wright & Slate, 2015) have highlighted academic achievement disparities by the economic status of students. Information regarding the degree to which Texas high school students who are economically disadvantaged will add to the literature regarding economic status and its effect on social studies achievement. Based on the results of this multiyear investigation, educational leaders will be provided with data and analyses related to the presence of achievement gaps in social studies skills in Texas schools. Additional research could be beneficial regarding the variety of social studies skills and the effect of economic status

on these essential skills. Educators can use the conclusions of this study to help them identify differences in social studies skills that may exist and develop better methods of instruction to increase the academic performance of students in poverty.

Research Questions

The following overarching research question was addressed in this empirical investigation: What is the difference in social studies skills as a function of the economic status (i.e., Not Poor, Moderately Poor, and Extremely Poor) of Texas high school students? Specific subquestions under this overarching research question were: (a) What is the difference in basic understanding of history as a function of the economic status of Texas high school students?; (b) What is the difference in understanding geography as a function of the economic status of Texas high school students?; (c) What is the difference in understanding economic and social influences as a function of the economic status of Texas high school students?; (d) What is the difference in understanding of political influences as a function of the economic status of Texas high school students?; (e) What is the difference in basic social studies skills as a function of the economic status of Texas high school students?; and (f) What is the extent to which trends might be present in social studies skills as a function of the economic status of Texas high school students in the 2004-2005 school year through the 2011-2012 school year? Each of the first five research questions was repeated for each of the 8 school years whereas the last research question, a trend question, was repeated for the five social studies objectives. Thus, a total of 45 research questions were present in this research investigation.

Method

Research Design

A non-experimental, causal-comparative research design (Johnson & Christensen, 2014) was present in this study. This non-experimental quantitative study constituted a causal-comparative design because the TAKS Social Studies assessments examined in this study had already occurred. Archival data were used to examine the degree to which social studies skills differed by the economic status (i.e., Not Poor, Moderately Poor, and Extremely Poor) of students for the 2004-2005 through the 2011-2012 school years. The independent variable in this investigation was student economic status and the dependent variables were the social studies skills assessed (i.e., the five TAKS Social Studies objectives).

Participants and Instrumentation

Archival data had previously been acquired for the 2004-2005 through the 2011-2012 school years through the submission and fulfillment of a Public Information Request form to the Texas Education Agency Public Education Information Management System. The TAKS Exit Level Social Studies exam was a graduation requirement for the state of Texas and was used to measure social studies knowledge and skills of Grade 11 students. Beginning in 2012, the State of Texas applied a new standardized assessment, State of Texas Assessment of Academic Readiness (STAAR) to measure achievement in core content areas (Clark, 2011). For select courses in Grades 9-12, End-of-Course (EOC) exams are administered (Clark, 2011). Since 2012, the implementation and achievement measures for the STAAR and EOC have drastically changed. As a result, data from these assessments were not included in this study.

The TAKS Exit Level Social Studies exam has five learning objectives that are supported by the Texas Essential Knowledge and Skills designed by the Texas Education Agency in 2000. The TAKS Exit Level Social Studies exam has 55 questions that are comprised of the five objectives. Examined in this study was the extent to which differences were present in social studies skills as a function of student economic status. Participants were evaluated on their performance on the Exit Level Texas Assessment of Knowledge Social Studies. The exit-level Texas Assessment of Knowledge and Skills Social Studies were taken at the end of Grade 11. In accordance with the Family Educational Rights and Privacy Act, The Texas Education Agency masks the performance data so that no specific individual student may be identified. With regard to economic status, economic disadvantage is defined as students who are eligible for free or reduced lunch by the Texas Education Agency. The United States Department of Agriculture (2015) outlined the eligibility requirements for acquiring free or reduced lunch.

The family-size income levels prescribed annually by the Secretary of Agriculture for determining eligibility for free and reduced-price meals and free milk. The free guidelines are at or below 130 percent of the federal poverty guidelines. The reduced-price guidelines are between 130 and at or below 185 percent of the Federal poverty guidelines. (p. 10)

Because students are reported as economically disadvantaged by their respective campus in the Public Education Information Management System with the Texas Education Agency, reliability and validity concepts are not applicable, and any errors that may result from the self-reported data are assumed to be minimal. For this study,

students who did not meet the eligibility requirements for either the reduced-price lunch or the free price lunch were in the Not-Poor group. Students who qualified for the reduced-price meals program were in the Moderately Poor group. Students who met the guidelines for the free lunch meal program were in the Extremely Poor group.

Results

Prior to conducting a multivariate analysis of variance (MANOVA) procedure to address the research questions previously delineated its underlying assumptions were checked. Specifically examined were data normality, Box's Test of Equality of Covariance, and the Levene's Test of Equality of Error Variances. Although these assumptions were not met, the robustness of a MANOVA procedure made it appropriate to use on the data in this study (Field, 2009). Results will be presented in chronological order beginning with the 2004-2005 school year and concluding with the 2011-2012 school year.

Overall Results for All Eight School Years

With respect to the 2004-2005 school year, the MANOVA yielded a statistically significant difference in social studies performance as a function of student economic status, Wilks' $\Lambda = .90, p < .001$, partial $\eta^2 = .054$, small effect size (Cohen, 1988). For the 2005-2006 school year, a statistically significant difference was present as a function of student economic status in their overall social studies performance, Wilks' $\Lambda = .90, p < .001$, partial $\eta^2 = .051$, small effect size (Cohen, 1988). Concerning the 2006-2007 school year, a statistically significant difference was yielded, Wilks' $\Lambda = .91, p < .001$, partial $\eta^2 = .047$, small effect size (Cohen, 1988). Regarding the 2007-2008 school year, a statistically significant difference was present, Wilks' $\Lambda = .93, p < .001$, partial $\eta^2 =$

.035, small effect size (Cohen, 1988). For the 2008-2009 school year, a statistically significant difference was again yielded, Wilks' $\Lambda = .94$, $p < .001$, partial $\eta^2 = .033$, small effect size (Cohen, 1988). With respect to the 2009-2010 school year, a statistically significant difference was revealed, Wilks' $\Lambda = .93$, $p < .001$, partial $\eta^2 = .036$, small effect size (Cohen, 1988). Concerning the 2010-2011 school year, a statistically significant difference was revealed, Wilks' $\Lambda = .95$, $p < .001$, partial $\eta^2 = .026$, small effect size (Cohen, 1988). For the 2011-2012 school year, a statistically significant difference was present, Wilks' $\Lambda = .95$, $p < .001$, partial $\eta^2 = .027$, small effect size (Cohen, 1988). In all eight school years, statistically significant differences were revealed in social studies performance by student economic status. Small effect sizes were present in all eight school years.

Results for Social Studies Objective 1 Across All Eight School Years

Following the analyses of overall social studies performance, univariate analysis of variance (ANOVA) procedures were calculated for each specific TAKS Social Studies Objective. Concerning the 2004-2005 school year, a statistically significant difference was revealed, $F(1, 198300) = 7961.30$, $p < .001$, partial $\eta^2 = .074$, moderate effect size (Cohen, 1988). For the 2005-2006 school year, the ANOVA yielded a statistically significant difference, $F(1, 202501) = 9281.00$, $p < .001$, partial $\eta^2 = .084$, moderate effect size (Cohen, 1988). Regarding the 2006-2007 school year, a statistically significant difference was revealed, $F(1, 206606) = 9379.50$, $p < .001$, partial $\eta^2 = .083$, moderate effect size (Cohen, 1988). With respect to the 2007-2008 school year, a statistically significant difference was yielded, $F(1, 193067) = 5511.78$, $p < .001$, partial $\eta^2 = .054$, small effect size (Cohen, 1988). Concerning the 2008-2009 school year, the

ANOVA revealed a statistically significant difference, $F(1, 132412) = 4414.25, p < .001$, partial $\eta^2 = .063$, moderate effect size (Cohen's 1988). For the 2009-2010 school year, a statistically significant difference was revealed, $F(1, 206109) = 6560.08, p < .001$, partial $\eta^2 = .06$, moderate effect size (Cohen, 1988). Regarding the 2010-2011 school year, a statistically significant difference was revealed, $F(1, 204766) = 4397.75, p < .001$, partial $\eta^2 = .041$, small effect size (Cohen, 1988). Finally, for the 2011-2012 school year, a statistically significant difference was yielded by student economic status, $F(1, 212091) = 5366.10, p < .001$, partial $\eta^2 = .048$, small effect size (Cohen, 1988). In all eight school years, statistically significant differences were present on the TAKS Social Studies Objective 1 by student economic status. Three of the effect sizes were small and five effect sizes were in the moderate category.

Following the univariate ANOVAs, post hoc procedures, specifically Scheffé post hoc procedures, were calculated to determine which economic status pairwise comparisons were statistically significantly different. Regarding the 2004-2005 school year, students who were Not Poor answered, on average, about two more items correctly than students who were Moderately Poor and students who were Extremely Poor. For the 2005-2006 school year, students who were Not Poor answered, on average, 2.37 more items correctly than students who were Moderately Poor and 2.40 more items correctly than students who were Extremely Poor. Concerning the 2006-2007 school year, students who were Not Poor answered, on average, 2.11 more items correctly than students who were Moderately Poor and 2.30 more items correctly than students who were Extremely Poor. Students who were Not Poor answered, on average, 0.95 more items than students who were Moderately Poor and 1.42 more items than students who

were Extremely Poor in the 2007-2008 school year. With respect to the 2008-2009 school year, students who were Not Poor answered, on average, 0.94 more items correctly than students who were Moderately Poor and 1.64 more items correctly than students who were Extremely Poor. Regarding the 2009-2010 school year, students who were Not Poor answered, on average, 0.87 more items correctly than students who were Moderately Poor and 1.49 more items correctly than students who were Extremely Poor. Students who were Not Poor answered, on average, 0.70 more items than students who were Moderately Poor and 1.19 more items than students who were Extremely Poor in the 2010-2011 school year. For the 2011-2012 school year, students who were Not Poor answered, on average, 0.72 more items correctly than students who were Moderately Poor and 1.35 more items correctly than students who were Extremely Poor. Revealed in Table 3.1 are the descriptive statistics for these eight school years.

Insert Table 3.1 about here

Results for Social Studies Objective 2 Across All Eight School Years

Regarding the 2004-2005 school year, a statistically significant difference was revealed in student performance on the TAKS Social Studies Objective 2, $F(1, 198300) = 10730.97, p < .001$, partial $\eta^2 = .098$, moderate effect size (Cohen, 1988). Concerning the 2005-2006 school year, the ANOVA yielded a statistically significant difference, $F(1, 202501) = 8762.99, p < .001$, partial $\eta^2 = .08$, moderate effect size (Cohen, 1988). With respect to the 2006-2007 school year, a statistically significant difference was revealed, $F(1, 206606) = 9683.17, p < .001$, partial $\eta^2 = .086$, moderate effect size (Cohen, 1988).

For the 2007-2008 school year, a statistically significant difference was yielded, $F(1, 193067) = 6304.86, p < .001$, partial $\eta^2 = .061$, moderate effect size (Cohen, 1988). Regarding the 2008-2009 school year, the ANOVA revealed a statistically significant difference, $F(1, 132412) = 3323.30, p < .001$, partial $\eta^2 = .048$, small effect size (Cohen's 1988). Concerning the 2009-2010 school year, a statistically significant difference was revealed, $F(1, 206109) = 5736.55, p < .001$, partial $\eta^2 = .053$, small effect size (Cohen, 1988). With respect to the 2010-2011 school year, a statistically significant difference was revealed, $F(1, 204766) = 4199.10, p < .001$, partial $\eta^2 = .039$, small effect size (Cohen, 1988). Finally, for the 2011-2012 school year, a statistically significant difference was yielded by student economic status, $F(1, 212091) = 4334.71, p < .001$, partial $\eta^2 = .039$, small effect size (Cohen, 1988). In all eight school years, statistically significant differences were present on the TAKS Social Studies Objective 2 by student economic status. Four of the effect sizes were small and four of the effect sizes were in the moderate category.

Following the univariate ANOVAs, Scheffé post hoc procedures were calculated to determine which economic status pairwise comparisons were statistically significantly different. For the 2004-2005 school year, students who were Not Poor answered, on average, almost two more items correctly than students who were Moderately Poor and students who were Extremely Poor. Concerning the 2005-2006 school year, students who were Not Poor answered, on average, 1.65 more items correctly than students who were Moderately Poor and students who were Extremely Poor. With respect to the 2006-2007 school year, students who were Not Poor answered, on average, 1.53 more items correctly than students who were Moderately Poor and 1.68 more items correctly than

students who were Extremely Poor. Students who were Not Poor answered, on average, 0.73 more items than students who were Moderately Poor and 1.11 more items than students who were Extremely Poor in the 2007-2008 school year. Regarding the 2008-2009 school year, students who were Not Poor answered, on average, 0.52 more items correctly than students who were Moderately Poor and 0.95 more items correctly than students who were Extremely Poor. For the 2009-2010 school year, students who were Not Poor answered, on average, 0.50 more items correctly than students who were Moderately Poor and 0.94 more items correctly than students who Extremely Poor were. Students who were Not Poor answered, on average, 0.46 more items than students who were Moderately Poor and 0.81 more items than students who were Extremely Poor in the 2010-2011 school year. For the 2011-2012 school year, students who were Not Poor answered, on average, 0.44 more items correctly than students who were Moderately Poor and 0.79 more items correctly than students who were Extremely Poor. Table 3.2 contains the descriptive statistics for these eight school years.

 Insert Table 3.2 about here

Results for Social Studies Objective 3 Across All Eight School Years

With respect to the 2004-2005 school year, a statistically significant difference was revealed on the TAKS Social Studies Objective 3, $F(1, 198300) = 10369.41, p < .001$, partial $\eta^2 = .095$, moderate effect size (Cohen, 1988). Concerning the 2005-2006 school year, the ANOVA yielded a statistically significant difference, $F(1, 202501) = 8993.07, p < .001$, partial $\eta^2 = .082$, moderate effect size (Cohen, 1988). Regarding the

2006-2007 school year, a statistically significant difference was revealed, $F(1, 206606) = 8411.63, p < .001$, partial $\eta^2 = .075$, moderate effect size (Cohen, 1988). Concerning the 2007-2008 school year, a statistically significant difference was yielded, $F(1, 193067) = 5439.47, p < .001$, partial $\eta^2 = .053$, small effect size (Cohen, 1988). For the 2008-2009 school year, the ANOVA revealed a statistically significant difference, $F(1, 132412) = 3289.17, p < .001$, partial $\eta^2 = .047$, small effect size (Cohen's 1988). Regarding the 2009-2010 school year, a statistically significant difference was revealed, $F(1, 206109) = 6583.75, p < .001$, partial $\eta^2 = .06$, moderate effect size (Cohen, 1988). With respect to the 2010-2011 school year, a statistically significant difference was revealed, $F(1, 204766) = 4966.98, p < .001$, partial $\eta^2 = .046$, small effect size (Cohen, 1988). Finally, for the 2011-2012 school year, a statistically significant difference was yielded by student economic status, $F(1, 212091) = 4642.42, p < .001$, partial $\eta^2 = .042$, small effect size (Cohen, 1988). In all eight school years, statistically significant differences were yielded on the TAKS Social Studies Objective 3 by student economic status. Four of the effect sizes were small and four of the effect sizes were in the moderate category.

Following the univariate ANOVAs, Scheffé post hoc procedures were calculated to determine which economic status pairwise comparisons were statistically significantly different. For the 2004-2005 school year, students who were Not Poor answered, on average, two and a half more items correctly than students who were Moderately Poor and students who were Extremely Poor. Students who were Not Poor answered, on average, two more items correctly than students who were Moderately Poor and students who were Extremely Poor for the 2005-2006 and 2006-2007 school year. With respect to the 2007-2008 school year, students who were Not Poor answered, on average, 0.90 more

items correctly than students who were Moderately Poor and 1.39 more items correctly than students who were Extremely Poor. Regarding the 2008-2009 school year, students who were Not Poor answered, on average, 0.76 more items correctly than students who were Moderately Poor and 1.31 more items correctly than students who were Extremely Poor. For the 2009-2010 school year, students who were Not Poor answered, on average, 0.81 more items correctly than students who were Moderately Poor and 1.42 more items correctly than students who were Extremely Poor. Students who were Not Poor answered, on average, 0.70 more items than students who were Moderately Poor and 1.19 more items than students who were Extremely Poor in the 2010-2011 school year. Concerning the 2011-2012 school year, students who were Not Poor answered, on average, 0.61 more items correctly than students who were Moderately Poor and 1.16 more items correctly than students who were Extremely Poor. Revealed in Table 3.3 are the descriptive statistics for these eight school years.

 Insert Table 3.3 about here

Results for Social Studies Objective 4 Across All Eight School Years

Concerning the 2004-2005 school year, a statistically significant difference was revealed on the TAKS Social Studies Objective 4, $F(1, 198300) = 7602.18, p < .001$, partial $\eta^2 = .071$, moderate effect size (Cohen, 1988). With respect to the 2005-2006 school year, the ANOVA yielded a statistically significant difference, $F(1, 202501) = 9711.12, p < .001$, partial $\eta^2 = .088$, moderate effect size (Cohen, 1988). For the 2006-2007 school year, a statistically significant difference was revealed, $F(1, 206606) =$

8293.57, $p < .001$, partial $\eta^2 = .074$, moderate effect size (Cohen, 1988). Regarding the 2007-2008 school year, a statistically significant difference was yielded, $F(1, 193067) = 3913.75$, $p < .001$, partial $\eta^2 = .039$, small effect size (Cohen, 1988). Concerning the 2008-2009 school year, the ANOVA revealed a statistically significant difference, $F(1, 132412) = 2696.60$, $p < .001$, partial $\eta^2 = .039$, small effect size (Cohen's 1988). With respect to the 2009-2010 school year, a statistically significant difference was revealed, $F(1, 206109) = 4699.38$, $p < .001$, partial $\eta^2 = .044$, small effect size (Cohen, 1988). For the 2010-2011 school year, a statistically significant difference was revealed, $F(1, 204766) = 3125.74$, $p < .001$, partial $\eta^2 = .03$, small effect size (Cohen, 1988). Finally, for the 2011-2012 school year, a statistically significant difference was yielded by student economic status, $F(1, 212091) = 3119.83$, $p < .001$, partial $\eta^2 = .029$, small effect size (Cohen, 1988). In all eight school years, statistically significant differences were revealed on the TAKS Social Studies Objective 3 by student economic status. Five of the effect sizes were small and three of the effect sizes were in the moderate category.

Following the univariate ANOVAs, Scheffé post hoc procedures were calculated to determine which economic status pairwise comparisons were statistically significantly different. For the 2004-2005, 2005-2006, and 2006-2007 school years, students who were Not Poor answered, on average, about one and a half more items correctly than students who were Moderately Poor and students who were Extremely Poor. With respect to the 2007-2008 school year, students who were Not Poor answered, on average, 0.50 more items correctly than students who were Moderately Poor and 0.87 more items correctly than students who were Extremely Poor. Students who were Not Poor answered, on average, 0.46 more items than students who were Moderately Poor and 0.86

more items than students who were Extremely Poor in the 2008-2009 school year. For the 2009-2010 school year, students who were Not Poor answered, on average, 0.45 more items correctly than students who were Moderately Poor and 0.89 more items correctly than students who were Extremely Poor. Students who were Not Poor answered, on average, 0.37 more items than students who were Moderately Poor and 0.68 more items than students who were Extremely Poor in the 2010-2011 school year. Regarding the 2011-2012 school year, students who were Not Poor answered, on average, 0.31 more items correctly than students who were Moderately Poor and 0.69 more items correctly than students who were Extremely Poor. Delineated in Table 3.4 are the descriptive statistics for these eight school years.

 Insert Table 3.4 about here

Results for Social Studies Objective 5 Across All Eight School Years

For the 2004-2005 school year, a statistically significant difference was revealed on the TAKS Social Studies Objective 5, $F(1, 198300) = 9557.79, p < .001$, partial $\eta^2 = .088$, moderate effect size (Cohen, 1988). Regarding the 2005-2006 school year, the ANOVA yielded a statistically significant difference, $F(1, 202501) = 10819.72, p < .001$, partial $\eta^2 = .097$, moderate effect size (Cohen, 1988). Concerning the 2006-2007 school year, a statistically significant difference was revealed, $F(1, 206606) = 7887.80, p < .001$, partial $\eta^2 = .071$, moderate effect size (Cohen, 1988). With respect to the 2007-2008 school year, a statistically significant difference was yielded, $F(1, 193067) = 4801.94, p < .001$, partial $\eta^2 = .047$, small effect size (Cohen, 1988). For the 2008-2009 school year,

the ANOVA revealed a statistically significant difference, $F(1, 132412) = 3144.40, p < .001$, partial $\eta^2 = .045$, small effect size (Cohen's 1988). Concerning the 2009-2010 school year, a statistically significant difference was revealed, $F(1, 206109) = 4073.53, p < .001$, partial $\eta^2 = .038$, small effect size (Cohen, 1988). Regarding the 2010-2011 school year, a statistically significant difference was revealed, $F(1, 204766) = 3749.02, p < .001$, partial $\eta^2 = .035$, small effect size (Cohen, 1988). Finally, for the 2011-2012 school year, a statistically significant difference was yielded by student economic status, $F(1, 212091) = 3572.24, p < .001$, partial $\eta^2 = .033$, small effect size (Cohen, 1988). In all eight school years, statistically significant differences were revealed on the TAKS Social Studies Objective 5 by student economic status. Five of the effect sizes were small and three of the effect sizes were in the moderate category.

Following the univariate ANOVAs, Scheffé post hoc procedures were calculated to determine which economic status pairwise comparisons were statistically significantly different. For the 2004-2005 and 2005-2006 school year, students who were Not Poor answered, on average, about two more items correctly than students who were Moderately Poor and students who were Extremely Poor. Regarding the 2006-2007 school year, students who were Not Poor answered, on average, about one and a half more items correctly than students who were Moderately Poor and Extremely Poor. With respect to the 2007-2008 school year, students who were Not Poor answered, on average, 0.66 more items correctly than students who were Moderately Poor and 1.09 more items correctly than students who were Extremely Poor. Students who were Not Poor answered, on average, 0.66 more items than students who were Moderately Poor and 1.08 more items than students who were Extremely Poor in the 2008-2009 school year. For

the 2009-2010 school year, students who were Not Poor answered, on average, 0.49 more items correctly than students who were Moderately Poor and 0.89 more items correctly than students who were Extremely Poor. Students who were Not Poor answered, on average, 0.53 more items than students who were Moderately Poor and 0.85 more items than students who were Extremely Poor in the 2010-2011 school year. Regarding the 2011-2012 school year, students who were Not Poor answered, on average, 0.42 more items correctly than students who were Moderately Poor and 0.84 more items correctly than students who were Extremely Poor. Presented in Table 3.5 are the descriptive statistics for these eight school years.

 Insert Table 3.5 about here

Discussion

The extent to which differences were present in the social studies skills of Texas high school students as a function of their economic status (i.e. Not Poor, Moderately Poor, and Extremely Poor) was analyzed in this study. Eight years of statewide data on five TAKS Exit Level Social Studies Objectives were analyzed by economic status. In each school year, statistically significant results were present. Following these statistical analyses, the presence of trends for the five Social Studies objectives by economic status was determined. Results will be summarized in the next section.

Social Studies Objective 1: History

Social Studies Objective 1 contained 13 questions on understanding issues and events in United States History. Students who were Not Poor had an average score that

was 0.70 to 2.37 points higher on Social Studies Objective 1 than students who were Moderately Poor and 1.19 to 2.40 points higher than students who were Extremely Poor for each of the eight school years of data analyzed. During each school year examined, students who were Not Poor performed better than students who were Moderately Poor and Extremely Poor. Similarly, in each school year, students who were Moderately Poor performed better than students who were Extremely Poor. A stair-step effect was present for each year analyzed for Social Studies Objective 1. Presented in Table 3.6 is a summary of the effect size calculations for Objective 1.

 Insert Table 3.6 about here

Social Studies Objective 2: Geography

Social Studies Objective 2 contained nine questions regarding student understanding of geography and its influences historical issues and events. Students who were Not Poor had an average score that was 0.44 to 1.82 points higher on Social Studies Objective 2 than students who were Moderately Poor and 0.79 to 1.94 points higher than students who were Extremely Poor for each of the eight school years of data examined. During each school year analyzed, students who were Not Poor performed better than students who were Moderately Poor and Extremely Poor and students who were Moderately Poor performed better than students who were extremely poor. As such, a clear stair-step was present, based on student economic status. Delineated in Table 3.7 are the effect size calculations for Objective 2.

Insert Table 3.7 about here

Social Studies Objective 3: Economics and Social Influences

Social Studies Objective 3 provided 13 questions on economic and social issues in American history. Students who were Not Poor had an average score that was 0.61 to 2.53 points higher on Social Studies Objective 3 than students who were Moderately Poor and 1.16 to 2.61 points higher than students who were Extremely Poor for each of the eight school years of data examined. During each school year analyzed, students who were Not Poor performed better than students who were Moderately Poor and Extremely Poor and students who were Moderately Poor performed better than students who were Extremely Poor. A clear stair-step effect was present for this objective based upon student economic status. Table 3.8 contains the partial eta square ranges, or effect size information, for Objective 3.

Insert Table 3.8 about here

Social Studies Objective 4: Political Influences

Social Studies Objective 4 contained nine questions on the development of representative government in the United States as well as on political influences in American history from the colonization era to the present. Students who were Not Poor had an average score that was 0.31 to 1.59 points higher on Social Studies Objective 4 than students who were Moderately Poor and 0.68 to 1.80 points higher than students

who were Extremely Poor for each of the eight school years of data examined. During each school year analyzed, students who were Not Poor performed better than students who were Moderately Poor and Extremely Poor and students who were Moderately Poor performed better than students who were Extremely Poor. Readers are directed to Table 3.9 for a summary of effect size calculations for the Social Studies Objective 4.

Insert Table 3.9 about here

Social Studies Objective 5: Social Studies Skills

Social Studies Objective 5 contained 11 questions on the TAKS Exit Level Social Studies assessment. Students who were Not Poor had an average score that was 0.37 to 2.20 points higher on Social Studies Objective 5 than students who were Moderately Poor and 0.68 to 2.32 points higher than students who were Extremely Poor for each of the eight school years of data. During each school year examined, students who were Not Poor performed better than students who were Moderately Poor and Extremely Poor and students who were Moderately Poor performed better than students who were Extremely Poor. Similar to the other four objectives, a clear stair-step effect was present based upon student economic status. Table 3.10 contains a summary of the effect size calculations for Objective 5.

Insert Table 3.10 about here

Connection with Existing Literature

Researchers (Alford-Stephens, 2016; Dixon-Román, Everson, & McArdle, 2013; Lee & Slate, 2014; Wright, 2015; Wright & Slate, 2015) have been consistent in demonstrating that poverty negatively influences achievement, especially when achievement is measured by standardized test scores. In this investigation, statistically significant differences were present in social studies achievement by student economic status. Students who were Not Poor had higher average social studies scores in all five objectives than students who were Moderately Poor and Extremely Poor. In addition, students who were Moderately Poor performed better than students who were Extremely Poor in all five social studies objectives. Results of this research investigation were similar with the results of other researchers (Alford-Stephens, 2016; Dixon-Román, Everson, & McArdle, 2013; Lee & Slate, 2014; Wright, 2015; Wright & Slate, 2015) who demonstrated that students who are economically disadvantaged have lower achievement scores than students who are not economically disadvantaged.

Implications for Policy and Practice

In this study, statistically significant differences were present in social studies achievement by economic status. For each level of poverty examined in this study, students who were Not Poor had the highest level of social studies achievement. The achievement gap on the TAKS Exit Level Social Studies Exam between students who were economically disadvantaged and students who were not economically disadvantaged is consistent with similar gaps on the TAKS Exit Level Mathematics exam (Alford-Stephens, 2016) and the TAKS Exit Level Reading exam (Wright, 2015). As

such, results from this investigation could serve as another example that more support is needed to assist schools with educating students in poverty.

Suggestions for Future Research

Examined in this study was the extent to which differences were present in the social studies achievement of Texas high school students as a function of economic status. This investigation was an extension of studies previously analyzed with respect to reading (Wright, 2015) and mathematics (Alford-Stephens, 2016). A recommendation for future research would be to extend this study to other academic areas such as science and writing. The degree to which the results delineated herein on social studies would be generalizable to science and writing is not known.

Texas has changed its state-mandated assessment from the TAKS to a new assessment, State of Texas Assessments of Academic Readiness (STAAR). Researchers are encouraged to analyze data from this new state-mandated assessment to ascertain whether the findings discussed herein on the TAKS would be generalizable to the STAAR. A final recommendation for future research would be to examine whether other student demographic characteristics are also related to student social studies performance. These characteristics could include, but would not be limited to, student ethnicity/race, gender, English Language Learner status, and at-risk status.

Conclusion

In this multiyear, statewide investigation, the extent to which differences were present in the Social Studies achievement of Texas high school students as a function of their economic status. Students who were Extremely Poor had the poorest social studies achievement in comparison to their peers who were Moderately Poor and to their peers

who were Not Poor. Economic status was clearly related to student social studies performance.

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Table 3.1

Descriptive Statistics by Student Economic Status on the TAKS Social Studies Objective 1 for the 2004 School Year Through the 2012 School Year

School Year and Economic Status	<i>n</i>	<i>M</i>	<i>SD</i>
2004-2005			
Not Poor	139,377	8.83	3.41
Moderately Poor	6,911	6.65	4.30
Extremely Poor	52,015	6.58	3.99
2005-2006			
Not Poor	140,420	9.35	3.46
Moderately Poor	7,205	6.98	4.24
Extremely Poor	54,879	6.95	4.00
2006-2007			
Not Poor	142,727	9.62	3.31
Moderately Poor	7,483	7.51	4.09
Extremely Poor	56,399	7.32	3.86
2007-2008			
Not Poor	134,462	9.98	2.56
Moderately Poor	7,001	9.03	2.87
Extremely Poor	51,607	8.56	2.84
2008-2009			
Not Poor	85,954	10.54	2.77
Moderately Poor	5,688	9.60	3.09
Extremely Poor	40,773	8.90	3.22
2009-2010			
Not Poor	130,262	10.25	2.63
Moderately Poor	8,032	9.38	2.96
Extremely Poor	67,818	8.76	3.00
2010-2011			
Not Poor	126,291	10.47	2.61
Moderately Poor	6,663	9.77	2.93
Extremely Poor	71,815	9.28	2.93
2011-2012			
Not Poor	126,659	10.37	2.71
Moderately Poor	7,939	9.65	2.96
Extremely Poor	77,496	9.02	3.05

Table 3.2

*Descriptive Statistics by Student Economic Status on the TAKS Social Studies Objective 2
for the 2004 School Year Through the 2012 School Year*

School Year and Economic Status	<i>n</i>	<i>M</i>	<i>SD</i>
2004-2005			
Not Poor	139,377	6.94	2.48
Moderately Poor	6,911	5.12	3.26
Extremely Poor	52,015	5.00	3.03
2005-2006			
Not Poor	140,420	6.99	2.39
Moderately Poor	7,205	5.34	3.14
Extremely Poor	54,879	5.34	2.96
2006-2007			
Not Poor	142,727	7.30	2.32
Moderately Poor	7,483	5.77	3.03
Extremely Poor	56,399	5.62	2.86
2007-2008			
Not Poor	134,462	7.65	1.80
Moderately Poor	7,001	6.92	2.15
Extremely Poor	51,607	6.54	2.18
2008-2009			
Not Poor	85,954	7.86	1.78
Moderately Poor	5,688	7.34	2.10
Extremely Poor	40,773	6.91	2.23
2009-2010			
Not Poor	130,262	7.66	1.70
Moderately Poor	8,032	7.16	2.02
Extremely Poor	67,818	6.72	2.14
2010-2011			
Not Poor	126,291	7.67	1.76
Moderately Poor	6,663	7.21	2.06
Extremely Poor	71,815	6.86	2.08
2011-2012			
Not Poor	126,659	8.10	1.71
Moderately Poor	7,939	7.66	2.00
Extremely Poor	77,496	7.31	2.08

Table 3.3

*Descriptive Statistics by Student Economic Status on the TAKS Social Studies Objective 3
for the 2004 School Year Through the 2012 School Year*

School Year and Economic Status	<i>n</i>	<i>M</i>	<i>SD</i>
2004-2005			
Not Poor	139,377	9.64	3.45
Moderately Poor	6,911	7.11	4.49
Extremely Poor	52,015	7.03	4.13
2005-2006			
Not Poor	140,420	9.54	3.36
Moderately Poor	7,205	7.26	4.29
Extremely Poor	54,879	7.21	4.03
2006-2007			
Not Poor	142,727	10.30	3.35
Moderately Poor	7,483	8.25	4.38
Extremely Poor	56,399	8.05	4.13
2007-2008			
Not Poor	134,462	10.86	2.45
Moderately Poor	7,001	9.96	2.94
Extremely Poor	51,607	9.47	2.97
2008-2009			
Not Poor	85,954	11.29	2.46
Moderately Poor	5,688	10.53	2.94
Extremely Poor	40,773	9.98	3.10
2009-2010			
Not Poor	130,262	11.25	2.41
Moderately Poor	8,032	10.44	2.87
Extremely Poor	67,818	9.83	3.01
2010-2011			
Not Poor	126,291	11.41	2.40
Moderately Poor	6,663	10.71	2.83
Extremely Poor	71,815	10.22	2.85
2011-2012			
Not Poor	126,659	11.54	2.44
Moderately Poor	7,939	10.93	2.82
Extremely Poor	77,496	10.38	2.95

Table 3.4

Descriptive Statistics by Student Economic Status on the TAKS Social Studies Objective 4 for the 2004 School Year Through the 2012 School Year

School Year and Economic Status	<i>n</i>	<i>M</i>	<i>SD</i>
2004-2005			
Not Poor	139,377	6.66	2.46
Moderately Poor	6,911	5.07	3.20
Extremely Poor	52,015	5.06	2.98
2005-2006			
Not Poor	140,420	6.79	2.51
Moderately Poor	7,205	5.04	3.14
Extremely Poor	54,879	4.99	2.97
2006-2007			
Not Poor	142,727	6.91	2.44
Moderately Poor	7,483	5.45	3.04
Extremely Poor	56,399	5.31	2.86
2007-2008			
Not Poor	134,462	7.47	1.80
Moderately Poor	7,001	6.97	2.12
Extremely Poor	51,607	6.60	2.15
2008-2009			
Not Poor	85,954	7.81	1.81
Moderately Poor	5,688	7.35	2.12
Extremely Poor	40,773	6.95	2.25
2009-2010			
Not Poor	130,262	7.77	1.78
Moderately Poor	8,032	7.32	2.10
Extremely Poor	67,818	6.88	2.20
2010-2011			
Not Poor	126,291	7.78	1.74
Moderately Poor	6,663	7.41	2.04
Extremely Poor	71,815	7.10	2.05
2011-2012			
Not Poor	126,659	7.97	1.78
Moderately Poor	7,939	7.66	2.03
Extremely Poor	77,496	7.28	2.12

Table 3.5

Descriptive Statistics by Student Economic Status on the TAKS Social Studies Objective 5 for the 2004 School Year Through the 2012 School Year

School Year and Economic Status	<i>n</i>	<i>M</i>	<i>SD</i>
2004-2005			
Not Poor	139,377	8.81	2.97
Moderately Poor	6,911	6.66	4.06
Extremely Poor	52,015	6.61	3.73
2005-2006			
Not Poor	140,420	8.90	2.99
Moderately Poor	7,205	6.70	3.97
Extremely Poor	54,879	6.58	3.75
2006-2007			
Not Poor	142,727	9.04	2.70
Moderately Poor	7,483	7.36	3.67
Extremely Poor	56,399	7.27	3.42
2007-2008			
Not Poor	134,462	9.86	2.00
Moderately Poor	7,001	9.20	2.51
Extremely Poor	51,607	8.77	2.54
2008-2009			
Not Poor	85,954	9.82	2.07
Moderately Poor	5,688	9.16	2.48
Extremely Poor	40,773	8.74	2.61
2009-2010			
Not Poor	130,262	9.84	1.90
Moderately Poor	8,032	9.35	2.30
Extremely Poor	67,818	8.95	2.39
2010-2011			
Not Poor	126,291	10.01	1.95
Moderately Poor	6,663	9.48	2.36
Extremely Poor	71,815	9.16	2.36
2011-2012			
Not Poor	126,659	10.08	2.34
Moderately Poor	7,939	9.66	2.45
Extremely Poor	77,496	9.24	2.22

Table 3.6

*Summary of Social Studies Performance for Objective 1 of the TAKS Social Studies Exam
as a Function of Economic Status for the 2004-2005 through the 2011-2012 School Years*

School Year	Statistically Significant	Effect Size	Lowest Performing Group
2004-2005	Yes	Moderate	Extremely Poor
2005-2006	Yes	Moderate	Extremely Poor
2006-2007	Yes	Moderate	Extremely Poor
2007-2008	Yes	Small	Extremely Poor
2008-2009	Yes	Moderate	Extremely Poor
2009-2010	Yes	Moderate	Extremely Poor
2010-2011	Yes	Small	Extremely Poor
2011-2012	Yes	Small	Extremely Poor

Table 3.7

*Summary of Social Studies Performance for Objective 2 of the TAKS Social Studies Exam
as a Function of Economic Status for the 2004-2005 through the 2011-2012 School Years*

School Year	Statistically Significant	Effect Size	Lowest Performing Group
2004-2005	Yes	Moderate	Extremely Poor
2005-2006	Yes	Moderate	Extremely Poor
2006-2007	Yes	Moderate	Extremely Poor
2007-2008	Yes	Moderate	Extremely Poor
2008-2009	Yes	Small	Extremely Poor
2009-2010	Yes	Small	Extremely Poor
2010-2011	Yes	Small	Extremely Poor
2011-2012	Yes	Small	Extremely Poor

Table 3.8

*Summary of Social Studies Performance for Objective 3 of the TAKS Social Studies Exam
as a Function of Economic Status for the 2004-2005 through the 2011-2012 School Years*

School Year	Statistically Significant	Effect Size	Lowest Performing Group
2004-2005	Yes	Moderate	Extremely Poor
2005-2006	Yes	Moderate	Extremely Poor
2006-2007	Yes	Moderate	Extremely Poor
2007-2008	Yes	Small	Extremely Poor
2008-2009	Yes	Small	Extremely Poor
2009-2010	Yes	Moderate	Extremely Poor
2010-2011	Yes	Small	Extremely Poor
2011-2012	Yes	Small	Extremely Poor

Table 3.9

*Summary of Social Studies Performance for Objective 4 of the TAKS Social Studies Exam
as a Function of Economic Status for the 2004-2005 through the 2011-2012 School Years*

School Year	Statistically Significant	Effect Size	Lowest Performing Group
2004-2005	Yes	Moderate	Extremely Poor
2005-2006	Yes	Moderate	Extremely Poor
2006-2007	Yes	Moderate	Extremely Poor
2007-2008	Yes	Small	Extremely Poor
2008-2009	Yes	Small	Extremely Poor
2009-2010	Yes	Small	Extremely Poor
2010-2011	Yes	Small	Extremely Poor
2011-2012	Yes	Small	Extremely Poor

Table 3.10

*Summary of Social Studies Performance for Objective 5 of the TAKS Social Studies Exam
as a Function of Economic Status for the 2004-2005 through the 2011-2012 School Years*

School Year	Statistically Significant	Effect Size	Lowest Performing Group
2004-2005	Yes	Moderate	Extremely Poor
2005-2006	Yes	Moderate	Extremely Poor
2006-2007	Yes	Moderate	Extremely Poor
2007-2008	Yes	Small	Extremely Poor
2008-2009	Yes	Small	Extremely Poor
2009-2010	Yes	Small	Extremely Poor
2010-2011	Yes	Small	Extremely Poor
2011-2012	Yes	Small	Extremely Poor

CHAPTER IV

DIFFERENCES IN SOCIAL STUDIES SKILLS AS A FUNCTION OF THE ETHNICITY/RACE OF TEXAS HIGH SCHOOL STUDENTS: A MULTIYEAR, STATEWIDE ANALYSIS

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

Abstract

Investigated in this study was the degree to which differences were present in social studies skills as a function of ethnicity/race (i.e., Asian, White, Hispanic, and Black) of Texas high school students. Data were obtained from the Texas Education Agency Public Education Information Management System for all Texas high school students for the 2004-2005 to the 2011-2012 school years. In this study, statistically significant differences were present in the social studies skills by student ethnicity/race. Asian students had statistically higher average raw scores in four of the five social studies skills objectives examined than White students. Additionally, White students had statistically significantly higher average raw scores than Hispanic students, and Hispanic students had statistically significantly higher average raw scores than Black students for the eight years of data examined. A clear stair-step effect was present by student ethnicity/race in social studies performance. Suggestions for policy and for practice were made, along with recommendations for future research.

Keywords: Ethnicity/Race, TAKS, Social Studies, Social Studies Skills

DIFFERENCES IN SOCIAL STUDIES SKILLS AS A FUNCTION OF THE
ETHNICITY/RACE OF TEXAS HIGH SCHOOL STUDENTS: A MULTIYEAR,
STATEWIDE ANALYSIS

In 1966, James Coleman published a report commissioned as part of the Civil Rights Act of 1964 called *Equality of Educational Study* as an attempt to finally dismantle the segregation of public schools that had remained after the 1954 decision in *Brown v. Board of Education* (Alexander & Morgan, 2016). Although Coleman (1966) revealed that segregation still largely existed in the United States, he could not substantiate that differences in school resources among White and non-White schools produced a large educational disparity. Further, Coleman (1966) contended that family background factors did have a large effect on academic achievement and that it is necessary to “examine the relation of these background factors to achievement to get a view of some of the family factors that predispose children to learn well or poorly in school” (p. 298). Although the Coleman report was viewed as controversial during the Civil Rights Movement, the necessity to measure ethnic/racial and societal differences using standardized tests has remained.

Since the revelations of the Coleman Report, educational policymakers have aimed to close the achievement gap by analyzing both academic and societal factors. As part of the Elementary and Secondary Education Act, school districts were required to use standardized exams to determine student achievement during the 1980’s (LeBouef & Slate, 2011). In 2001, the Elementary and Secondary Education Act was reauthorized as the No Child Left Behind Act (2002). The No Child Left Behind Act (2002) required more state and local accountability using standardized exams to ensure that all students

have the opportunity to be successful. More recently, the Elementary and Secondary Education Act was reauthorized again as Every Student Succeeds Act (2015) and focuses on providing equity to students who are disadvantaged (United States Department of Education, 2018). As with previous educational policies, Every Student Succeeds Act (2015) requires the same accountability measures. As a result of these accountability requirements, researchers (e.g., LeBouef & Slate, 2011) have demonstrated that achievement gaps have existed for decades.

According to the National Center for Education Statistics (2011a), Hispanic and Black student averages have increased since 1990 for Grade 4 and Grade 8 mathematics but the achievement gap between these ethnic/racial groups and White students remains. The National Center for Education Statistics (2011b) also provided similar outcomes in reading explaining that both Hispanic and Black student averages in Grade 4 and Grade 8 reading had increased since 1990 but remain statistically significantly lower than White student averages. With respect to the state of interest for this article, LeBouef and Slate (2011) conducted a 16-year analysis of Grade 5 reading and mathematics scores on the Texas Assessment of Academic Skills and Texas Assessment of Knowledge and Skills (TAKS) exams. LeBouef and Slate (2011) documented the presence of continuous achievement gaps between White and Hispanic students in both reading and mathematics.

In regard to academic experiences, many researchers (e.g., Corra, Carter, & Carter, 2011) have concluded that Black students have limited opportunities to take advanced classes. White students were enrolled in more Advanced Placement courses than Hispanic and Black students in the 2005-2006 and 2006-2007 school years (Clark, Moore, & Slate, 2012). White students also had the highest passing rates on Advanced

Placement exams during the same years (Clark et al., 2012). Further, White and Asian students obtained more course credit for high school science and mathematics courses in Texas than Hispanic and Black students (Zeng & Poelzer, 2016).

Researchers (e.g., Daniels, 2011; Heafner & Fitchett, 2015) have documented the presence of racial/ethnic disparities in student achievement in social studies. Beginning in early childhood, a large achievement gap in social studies is apparent for ethnic/racial groups, especially for Black students (Chapin, 2006). Chapin (2006) examined the social studies responses from the Early Childhood Longitudinal Study and determined that Black students who took the General Knowledge Test entering Kindergarten scored lower than White students. Chapin (2006) indicated that Black students entered kindergarten lacking social studies knowledge in comparison to White students.

Researchers (e.g., Bein, Hayes, & Jones, 2009; Heafner & Fitchett, 2018) have also reported disparities on social studies achievement at the secondary level. Heafner and Fitchett (2018) analyzed the National Assessment of Educational Progress United States History Assessment and determined that Black students had the poorest performance of any ethnic/racial group, however, they performed statistically similar to White students on social history questions. Heafner and Fitchett (2018) revealed that social questions involving civil rights and race relations (i.e., *Brown v. Board of Education*, and the contributions of Booker T. Washington and W.E.B DuBois) were more likely to be answered correctly by Black students than by White students. Because history reflects society, “students are more likely to remember and process information that is both meaningful and reflective of their own experiences” (Heafner & Fitchett, 2018, p. 23).

Postsecondary differences in social studies skills have also been established. Bein et al. (2009) analyzed the National Council for Geographic Education Competency-Based Geography Test given to introductory geography students at 20 university campuses in Indiana. According to Bein et al. (2009), Black and Hispanic students had lower average scores on competency-based geography exams than White students. Such an achievement gap is attributed to a lack of Black and Hispanic student engagement in school. Bennett (2006) reported that the recognition and acceptance of racial/ethnic identity is an important factor to student engagement in school. Further, researchers (Daniels, 2011; Heafner & Fitchett, 2015; Martell, 2013) have identified that social studies curriculum and instruction are two components that contribute to ethnic/racial disparities in social studies.

Social Studies Skills

The opportunity for Black students to achieve success in social studies is limited due to the lack of ethnic/racial pedagogical practices and racial/ethnic awareness in the classroom (Daniels, 2011; Heafner & Fitchett, 2015; Zirkel, 2005). For example, Hispanic students had an increase in social studies achievement when it was introduced through a cultural connection. Ramirez (2012) noted that educators who provided culturally relevant instruction promoted the acceptance of a student's cultural background. Also, appropriate and meaningful resources that reflect and connect the ethnic/racial identity of students, enhances student engagement among racial/ethnic students (Daniels, 2011). For example, Daniels (2011) recommended the study of multiple perspective texts, bilingual books, and discussion topics of racial protest and discriminatory laws to reduce a commonly devalued and often misinterpreted Hispanic

history found in many social studies instruction. Yet, ethnic/racial differences between teachers and students can generate uneasiness and uncertainty in discussing matters of race or race relations during class instruction. Zirkel (2005) reported that White teachers feel more confident in meeting the needs of White students rather than students of color. Pedagogy that includes multiple interpretations of history engages students of different backgrounds (Martell, 2013). Further, educators are recommended to include open discussion of racial differences within the classroom (Martell, 2013). Daniels (2011) contended that social studies educators have a responsibility to provide instruction that includes the identity of people who are historically marginalized, especially when discussing ideas of democracy and civic engagement.

Statement of the Problem

The goal of social studies curriculum is to encourage civic awareness and civic competence in a culturally diverse and democratic country (National Council for the Social Studies, 1994). Yet, researchers (e.g., Daniels, 2011; Heafner & Fitchett, 2015; Martell, 2013) have indicated that Black and Hispanic students are not being adequately served by the current social studies curriculum and instructional methods. Researchers (e.g., Daniels, 2011; Heafner & Fitchett, 2015) have recommended more diversity training for social studies educators.

Purpose of the Study

The purpose of this study was to examine the extent to which differences existed in social studies skills among Texas high school students as a function of their ethnicity/race (i.e., Asian, White, Hispanic, and Black). Specifically, eight years of the Texas Assessment of Knowledge and Skills Exit Level Social Studies assessment data

were analyzed to determine whether differences were present in social studies skills among four ethnic/racial groups. Through analyzing eight years of Texas statewide data, the extent to which a trend existed in social studies skills by student ethnicity/race was ascertained.

Significance of the Study

Through this study, essential information will be provided about the degree to which differences might be present in social studies skills by student ethnicity/race (i.e., Asian, White, Hispanic, and Black). Research results obtained in this study may provide educators with a better understanding into the social studies achievement of students. Ideally, these research findings could promote local and state educators to review social studies standards and instructional pedagogy, to ensure students of ethnic/racial backgrounds are being provided with the same opportunities of success.

Research Questions

The following overarching research question was addressed in this empirical investigation: What is the difference in the social studies skills of Texas high school students as a function of their ethnicity/race (i.e., Asian, White, Hispanic, and Black)? Specific subquestions under this overarching research question were: (a) What is the difference in basic understanding of history of Texas high school students as a function of their ethnicity/race?; (b) What is the difference in understanding geography of Texas high school students as a function of their ethnicity/race?; (c) What is the difference in understanding economic and social influences of Texas high school students as a function of their ethnicity/race?; (d) What is the difference in understanding of political influences of Texas high school students as a function of their ethnicity/race?; (e) What is the

difference in basic social studies skills of Texas high school students as a function of their ethnicity/race?; and (f) What is the extent to which trends are present in the social studies skills of Texas high school students as a function of their ethnicity/race in the 2004-2005 school year through the 2011-2012 school year? Each of the first five research questions was repeated for each of the 8 school years whereas the last research question, a trend question, was repeated for the five social studies objectives. Thus, a total of 45 research questions constituted this research investigation.

Method

Research Design

A non-experimental, causal-comparative research design (Johnson & Christensen, 2012) was used for this article. In this study, the independent variables had already occurred, and extraneous variables were not controlled. The student archival data that were analyzed in this article represent past state assessment results. As such, the independent variable involved in this research article was ethnicity/race (i.e., Asian, White, Hispanic, and Black) and the dependent variables were the TAKS Exit Level Social Studies scores in the five social studies objectives for the 2004-2005 through the 2011-2012 school years.

Participants and Instrumentation

For the purposes of this study, archival data had previously been for the 2004-2005 through the 2011-2012 school years through the submission and fulfillment of a Public Information Request form to the Texas Education Agency Public Education Information Management System. The TAKS Exit Level Social Studies exam was a graduation requirement for the state of Texas and is used to measure social studies

knowledge and skills of Grade 11 students. Beginning in 2012, the State of Texas applied a new standardized assessment, State of Texas Assessment of Academic Readiness (STAAR) to measure achievement in core content areas (Clark, 2011). For select courses in Grades 9-12, End-of-Course (EOC) exams are administered. Since 2012, the implementation and achievement measures for the STAAR and EOC have drastically changed. As a result, data from these assessments will not be included in this study.

The TAKS Exit Level Social Studies exam has five learning objectives that are supported by the Texas Essential Knowledge and Skills designed by the Texas Education Agency in 2000. The TAKS Exit Level Social Studies exam has 55 questions that are comprised of the five objectives. Thirteen questions are assessed from Objective 1 in which students are measured on their understanding of issues and events in U.S. history. Nine questions are assessed from Objective 2 which measures student understanding of geographic influences on historical issues and events. Thirteen questions are assessed from Objective 3 which determines student understanding of economic and social influences on historical issues and events. Nine questions denote Objective 4 that assesses student knowledge of political influences on historical issues and events. Lastly, 11 questions assess Objective 5 that measures student critical-thinking skills to analyze social studies information (Exit Level TAKS Social Studies Information Booklet, 2004, p. 5). Readers are directed to the Texas Education Agency website for information regarding the score validity and score reliability of this assessment.

Results

Prior to conducting a multivariate analysis of variance (MANOVA) procedure to address the research questions previously delineated its underlying assumptions were checked. Specifically examined were data normality, Box's Test of Equality of Covariance, and the Levene's Test of Equality of Error Variances. Although these assumptions were not met, the robustness of a MANOVA procedure made it appropriate to use on the data in this study (Field, 2009). Results will be presented in chronological order beginning with the 2004-2005 school year and concluding with the 2011-2012 school year.

Overall Results for All Eight School Years

With respect to the 2004-2005 school year, the MANOVA yielded a statistically significant difference in social studies performance as a function of student ethnicity/race, Wilks' $\Lambda = .91, p < .001$, partial $\eta^2 = .031$, small effect size (Cohen, 1988). Regarding the 2005-2006 school year, a statistically significant difference was present as a function of student economic status in their overall social studies performance, Wilks' $\Lambda = .92, p < .001$, partial $\eta^2 = .027$, small effect size (Cohen, 1988). Concerning the 2006-2007 school year, a statistically significant difference was yielded, Wilks' $\Lambda = .92, p < .001$, partial $\eta^2 = .028$, small effect size (Cohen, 1988). For the 2007-2008 school year, a statistically significant difference was present, Wilks' $\Lambda = .92, p < .001$, partial $\eta^2 = .026$, small effect size (Cohen, 1988). With respect to the 2008-2009 school year, a statistically significant difference was again yielded, Wilks' $\Lambda = .93, p < .001$, partial $\eta^2 = .025$, small effect size (Cohen, 1988). Regarding the 2009-2010 school year, a statistically significant difference was revealed, Wilks' $\Lambda = .93, p < .001$, partial $\eta^2 =$

.025, small effect size (Cohen, 1988). Concerning the 2010-2011 school year, a statistically significant difference was revealed, Wilks' $\Lambda = .95, p < .001$, partial $\eta^2 = .017$, small effect size (Cohen, 1988). For the 2011-2012 school year, a statistically significant difference was present, Wilks' $\Lambda = .95, p < .001$, partial $\eta^2 = .018$, small effect size (Cohen, 1988). In all eight school years, statistically significant differences were revealed in social studies performance by student ethnicity/race. Small effect sizes were present in all eight school years.

Results for Social Studies Objective 1 Across All Eight School Years

Following the analyses of overall social studies performance, univariate analysis of variance (ANOVA) procedures were calculated for each specific TAKS Social Studies Objective. Regarding the 2004-2005 school year, a statistically significant difference was revealed, $F(1, 204475) = 3993.57, p < .001$, partial $\eta^2 = .055$, small effect size (Cohen, 1988). For the 2005-2006 school year, the ANOVA yielded a statistically significant difference, $F(1, 210556) = 4540.56, p < .001$, partial $\eta^2 = .061$, moderate effect size (Cohen, 1988). Concerning the 2006-2007 school year, a statistically significant difference was revealed, $F(1, 216386) = 5067.01, p < .001$, partial $\eta^2 = .066$, moderate effect size (Cohen, 1988). With respect to the 2007-2008 school year, a statistically significant difference was yielded, $F(1, 202244) = 3784.18, p < .001$, partial $\eta^2 = .053$, small effect size (Cohen, 1988). Regarding the 2008-2009 school year, the ANOVA revealed a statistically significant difference, $F(1, 142421) = 3187.37, p < .001$, partial $\eta^2 = .063$, moderate effect size (Cohen's 1988). For the 2009-2010 school year, a statistically significant difference was revealed, $F(1, 220142) = 4516.44, p < .001$, partial $\eta^2 = .058$, small effect size (Cohen, 1988). Concerning the 2010-2011 school year, a

statistically significant difference was revealed, $F(1, 219275) = 2685.02, p < .001$, partial $\eta^2 = .035$, small effect size (Cohen, 1988). Finally, for the 2011-2012 school year, a statistically significant difference was yielded by student economic status, $F(1, 227849) = 3331.87, p < .001$, partial $\eta^2 = .042$, small effect size (Cohen, 1988). In all eight school years, statistically significant differences were present on the TAKS Social Studies Objective 1 by student ethnicity/race. Three of the effect sizes were moderate and five effect sizes were in the small category.

Following the univariate ANOVAs, post hoc procedures, specifically Scheffé post hoc procedures, were calculated to determine which student ethnicity/race pairwise comparisons were statistically significantly different. Regarding the 2004-2005 and 2005-2006 school years, Asian students answered, on average, about 1 more item correctly than White students, about 2 more items correctly than Hispanic students, and about three more items correctly than Black students. Concerning the 2006-2007 school year, Asian students answered on average, 0.49 more items correctly than White students, 2.17 more items than Hispanic students, and 2.66 more items correctly than Black students. Asian students answered, on average, 0.41 more items than White students, 1.62 more items than Hispanic students, and 1.71 more items than Black students in the 2007-2008 school year. With respect to the 2008-2009 school year, Asian students answered, on average, 0.45 more items correctly than White students, 1.91 more items correctly than Hispanic students, and 2.11 more items correctly than Black students. Concerning the 2009-2010 school year, Asian students answered, on average, 0.33 more items correctly than White students, 1.66 more items correctly than Hispanic students, and 1.82 more items correctly than Black students. Asian Students answered, on average,

0.24 more items than White students, 1.24 more items correctly than Hispanic students, and 1.45 more items than Black students in the 2010-2011 school year. Finally, for the 2011-2012 school year, Asian students answered, on average, 0.26 more items correctly than White students, 1.41 more items correctly than Hispanic students, and 1.64 more items correctly than Black students. Revealed in Table 4.1 are the descriptive statistics for these eight school years.

 Insert Table 4.1 about here

Results for Social Studies Objective 2 Across All Eight School Years

Following the analyses of overall social studies performance, univariate analysis of variance (ANOVA) procedures were calculated for each specific TAKS Social Studies Objective. Concerning the 2004-2005 school year, a statistically significant difference was revealed, $F(1, 204475) = 5568.98, p < .001$, partial $\eta^2 = .076$, moderate effect size (Cohen, 1988). For the 2005-2006 school year, the ANOVA yielded a statistically significant difference, $F(1, 210556) = 4040.72, p < .001$, partial $\eta^2 = .054$, small effect size (Cohen, 1988). Regarding the 2006-2007 school year, a statistically significant difference was revealed, $F(1, 216386) = 5580.75, p < .001$, partial $\eta^2 = .072$, moderate effect size (Cohen, 1988). With respect to the 2007-2008 school year, a statistically significant difference was yielded, $F(1, 202244) = 4373.52, p < .001$, partial $\eta^2 = .061$, moderate effect size (Cohen, 1988). For the 2008-2009 school year, the ANOVA revealed a statistically significant difference, $F(1, 142421) = 2356.09, p < .001$, partial $\eta^2 = .047$, small effect size (Cohen's 1988). For the 2009-2010 school year, a statistically

significant difference was revealed, $F(1, 220142) = 3607.86, p < .001$, partial $\eta^2 = .047$, small effect size (Cohen, 1988). Concerning the 2010-2011 school year, a statistically significant difference was revealed, $F(1, 219275) = 2258.30, p < .001$, partial $\eta^2 = .030$, small effect size (Cohen, 1988). Finally, for the 2011-2012 school year, a statistically significant difference was yielded by student economic status, $F(1, 227849) = 2525.64, p < .001$, partial $\eta^2 = .032$, small effect size (Cohen, 1988). In all eight school years, statistically significant differences were present on the TAKS Social Studies Objective 2 by student ethnicity/race. Three of the effect sizes were moderate and five effect sizes were in the small category.

Following the univariate ANOVAs, post hoc procedures, specifically Scheffé post hoc procedures, were calculated to determine which student ethnicity/race pairwise comparisons were statistically significantly different. For the 2004-2005 school year, Asian students answered on average, 0.12 more items correctly than White students, 1.52 more items than Hispanic students, and 1.96 more items correctly than Black students. Concerning the 2005-2006 school years, Asian students answered, on average, 0.11 more item correctly than White students, 1.51 more items correctly than Hispanic students, and 1.66 more items correctly than Black students. With respect to the 2006-2007 school year, Asian students answered on average, 0.02 more items correctly than White students, 1.24 more items than Hispanic students, and 1.78 more items correctly than Black students. Asian students answered, on average, 0.07 more items than White students, 1.05 more items than Black students, and 1.06 more items than Hispanic students in the 2007-2008 school year. Regarding the 2008-2009 school year, Asian students answered, on average, 0.05 more items correctly than White students, 0.86 more items correctly

than Hispanic students, and 1.10 more items correctly than Black students. Concerning the 2009-2010 school year, Asian students answered, on average, 0.01 more items correctly than White students, 0.80 more items correctly than Hispanic students, and 1.01 more items correctly than Black students. Asian Students answered, on average, 0.04 more items than White students, 0.70 more items correctly than Hispanic students, and 0.79 more items than Black students in the 2010-2011 school year. Finally, for the 2011-2012 school year, Asian students answered, on average, 0.03 more items correctly than White students, 0.66 more items correctly than Hispanic students, and 0.91 more items correctly than Black students. Delineated in Table 4.2 are the descriptive statistics for these eight school years.

 Insert Table 4.2 about here

Results for Social Studies Objective 3 Across All Eight School Years

Following the analyses of overall social studies performance, univariate analysis of variance (ANOVA) procedures were calculated for each specific TAKS Social Studies Objective. Regarding the 2004-2005 school year, a statistically significant difference was revealed, $F(1, 204475) = 4747.84, p < .001$, partial $\eta^2 = .065$, moderate effect size (Cohen, 1988). Concerning the 2005-2006 school year, the ANOVA yielded a statistically significant difference, $F(1, 210556) = 4248.75, p < .001$, partial $\eta^2 = .057$, small effect size (Cohen, 1988). For the 2006-2007 school year, a statistically significant difference was revealed, $F(1, 216386) = 4401.61, p < .001$, partial $\eta^2 = .058$, small effect size (Cohen, 1988). With respect to the 2007-2008 school year, a statistically significant

difference was yielded, $F(1, 202244) = 3678.96, p < .001$, partial $\eta^2 = .052$, small effect size (Cohen, 1988). Regarding the 2008-2009 school year, the ANOVA revealed a statistically significant difference, $F(1, 142421) = 2048.19, p < .001$, partial $\eta^2 = .041$, small effect size (Cohen's 1988). With respect to the 2009-2010 school year, a statistically significant difference was revealed, $F(1, 220142) = 4099.01, p < .001$, partial $\eta^2 = .053$, small effect size (Cohen, 1988). For the 2010-2011 school year, a statistically significant difference was revealed, $F(1, 219275) = 2624.55, p < .001$, partial $\eta^2 = .035$, small effect size (Cohen, 1988). Finally, for the 2011-2012 school year, a statistically significant difference was yielded by student economic status, $F(1, 227849) = 2422.03, p < .001$, partial $\eta^2 = .031$, small effect size (Cohen, 1988). In all eight school years, statistically significant differences were present on the TAKS Social Studies Objective 3 by student ethnicity/race. One of the effect sizes was moderate and seven effect sizes were in the small category.

Following the univariate ANOVAs, post hoc procedures, specifically Scheffé post hoc procedures, were calculated to determine which student ethnicity/race pairwise comparisons were statistically significantly different. With respect to the 2004-2005 school year, Asian students answered on average, 0.39 more items correctly than White students, 2.28 more items than Hispanic students, and 2.51 more items correctly than Black students. Regarding the 2005-2006 school years, Asian students answered, on average, 0.40 more item correctly than White students, 1.89 more items correctly than Hispanic students, and 2.67 more items correctly than Black students. For the 2006-2007 school year, Asian students answered on average, 0.27 more items correctly than White students, 1.84 more items than Hispanic students, and 2.50 more items correctly than

Black students. Asian students answered, on average, 0.09 more items than White students, 1.28 more items than Hispanic students, and 1.41 more items than Black students in the 2007-2008 school year. With respect to the 2008-2009 school year, Asian students answered, on average, 0.06 more items correctly than White students, 1.17 more items correctly than Hispanic students, and 1.30 more items correctly than Black students. Concerning the 2009-2010 school year, Asian students answered, on average, 0.13 more items correctly than White students, 1.39 more items correctly than Hispanic students, and 1.44 more items correctly than Black students. White students answered, on average, 0.05 more items than Asian students, 1 more item correctly than Hispanic students, and 1.06 more items than Black students in the 2010-2011 school year. Finally, for the 2011-2012 school year, Asian students answered, on average, 0.03 more items correctly than White students, 0.95 more items correctly than Hispanic students, and 1.16 more items correctly than Black students. Depicted in Table 4.3 are the descriptive statistics for these eight school years.

 Insert Table 4.3 about here

Results for Social Studies Objective 4 Across All Eight School Years

Following the analyses of overall social studies performance, univariate analysis of variance (ANOVA) procedures were calculated for each specific TAKS Social Studies Objective. Regarding the 2004-2005 school year, a statistically significant difference was revealed, $F(1, 204475) = 3349.74, p < .001$, partial $\eta^2 = .047$, small effect size (Cohen, 1988). Concerning the 2005-2006 school year, the ANOVA yielded a

statistically significant difference, $F(1, 210556) = 4077.09, p < .001$, partial $\eta^2 = .055$, small effect size (Cohen, 1988). For the 2006-2007 school year, a statistically significant difference was revealed, $F(1, 216386) = 3867.54, p < .001$, partial $\eta^2 = .051$, small effect size (Cohen, 1988). With respect to the 2007-2008 school year, a statistically significant difference was yielded, $F(1, 202244) = 2218.22, p < .001$, partial $\eta^2 = .032$, small effect size (Cohen, 1988). Regarding the 2008-2009 school year, the ANOVA revealed a statistically significant difference, $F(1, 142421) = 1620.47, p < .001$, partial $\eta^2 = .033$, small effect size (Cohen's 1988). With respect to the 2009-2010 school year, a statistically significant difference was revealed, $F(1, 220142) = 2533.69, p < .001$, partial $\eta^2 = .033$, small effect size (Cohen, 1988). For the 2010-2011 school year, a statistically significant difference was revealed, $F(1, 219275) = 1428.25, p < .001$, partial $\eta^2 = .019$, small effect size (Cohen, 1988). Finally, for the 2011-2012 school year, a statistically significant difference was yielded by student economic status, $F(1, 227849) = 1327.94, p < .001$, partial $\eta^2 = .017$, small effect size (Cohen, 1988). In all eight school years, statistically significant differences were present on the TAKS Social Studies Objective 4 by student ethnicity/race. All the effect sizes were in the small category.

Following the univariate ANOVAs, post hoc procedures, specifically Scheffé post hoc procedures, were calculated to determine which student ethnicity/race pairwise comparisons were statistically significantly different. For the 2004-2005 school year, Asian students answered on average, 0.40 more items correctly than White students, 1.44 more items than Hispanic students, and 1.79 more items correctly than Black students. Regarding the 2005-2006 school years, Asian students answered, on average, 0.28 more item correctly than White students, 1.52 more items correctly than Hispanic students, and

1.70 more items correctly than Black students. For the 2006-2007 school year, Asian students answered on average, 0.37 more items correctly than White students, 1.47 more items than Hispanic students, and 1.74 more items correctly than Black students. Asian students answered, on average, 0.19 more items than White students, 0.81 more items than Black students, and 0.90 more items than Hispanic students in the 2007-2008 school year. With respect to the 2008-2009 school year, Asian students answered, on average, 0.17 more items correctly than White students, 0.89 more items correctly than Hispanic students, and 0.94 more items correctly than Black students. Concerning the 2009-2010 school year, Asian students answered, on average, 0.13 more items correctly than White students, 0.83 more items correctly than Black students, and 0.86 more items correctly than Hispanic students. Asian students answered, on average, 0.09 more items than White students, 0.56 more item correctly than Black students, and 1.06 more items than Hispanic students in the 2010-2011 school year. Finally, for the 2011-2012 school year, Asian students answered, on average, 0.13 more items correctly than White students, 0.63 more items correctly than Hispanic students, and 0.65 more items correctly than Black students. Revealed in Table 4.4 are the descriptive statistics for these eight school years.

 Insert Table 4.4 about here

Results for Social Studies Objective 5 Across All Eight School Years

Following the analyses of overall social studies performance, univariate analysis of variance (ANOVA) procedures were calculated for each specific TAKS Social Studies Objective. Regarding the 2004-2005 school year, a statistically significant difference

was revealed, $F(1, 204475) = 4575.09, p < .001$, partial $\eta^2 = .063$, moderate effect size (Cohen, 1988). Concerning the 2005-2006 school year, the ANOVA yielded a statistically significant difference, $F(1, 210556) = 5072.23, p < .001$, partial $\eta^2 = .067$, moderate effect size (Cohen, 1988). For the 2006-2007 school year, a statistically significant difference was revealed, $F(1, 216386) = 3780.53, p < .001$, partial $\eta^2 = .050$, small effect size (Cohen, 1988). With respect to the 2007-2008 school year, a statistically significant difference was yielded, $F(1, 202244) = 3160.78, p < .001$, partial $\eta^2 = .045$, small effect size (Cohen, 1988). Regarding the 2008-2009 school year, the ANOVA revealed a statistically significant difference, $F(1, 142421) = 2207.27, p < .001$, partial $\eta^2 = .044$, small effect size (Cohen's 1988). With respect to the 2009-2010 school year, a statistically significant difference was revealed, $F(1, 220142) = 2318.47, p < .001$, partial $\eta^2 = .031$, small effect size (Cohen, 1988). For the 2010-2011 school year, a statistically significant difference was revealed, $F(1, 219275) = 2132.96, p < .001$, partial $\eta^2 = .028$, small effect size (Cohen, 1988). Finally, for the 2011-2012 school year, a statistically significant difference was yielded by student economic status, $F(1, 227849) = 1682.87, p < .001$, partial $\eta^2 = .022$, small effect size (Cohen, 1988). In all eight school years, statistically significant differences were present on the TAKS Social Studies Objective 4 by student ethnicity/race. Two of the effect sizes were moderate and six of the effect sizes were in the small category.

Following the univariate ANOVAs, post hoc procedures, specifically Scheffé post hoc procedures, were calculated to determine which student ethnicity/race pairwise comparisons were statistically significantly different. Concerning the 2004-2005 school year, Asian students answered on average, 0.18 more items correctly than White students,

1.66 more items than Hispanic students, and 2.27 more items correctly than Black students. Regarding the 2005-2006 school years, Asian students answered, on average, 0.15 more item correctly than White students, 1.71 more items correctly than Hispanic students, and 2.33 more items correctly than Black students. Concerning the 2006-2007 school year, Asian students answered on average, 0.06 more items correctly than White students, 1.25 more items than Hispanic students, and 1.76 more items correctly than Black students. White students answered, on average, 0.16 more items than Asian students, 0.89 more items than Hispanic students, and 1.10 more items than Black students in the 2007-2008 school year. With respect to the 2008-2009 school year, Asian students and White students answered, on average, about the same number of items correctly. These two groups answered, on average, 0.90 more items correctly than Hispanic students, and 1.24 more items correctly than Black students. Concerning the 2009-2010 school year, White students answered, on average, 0.02 more items correctly than White students, 0.68 more items correctly than Hispanic students, and 0.93 more items correctly than Black students. White students answered, on average, 0.15 more items than Asian students, 0.69 more item correctly than Hispanic students, and 0.91 more items than Black students in the 2010-2011 school year. Finally, for the 2011-2012 school year, White students answered, on average, 0.12 more items correctly than Asian students, 0.64 more items correctly than Hispanic students, and 0.79 more items correctly than Black students. Delineated in Table 4.5 are the descriptive statistics for these eight school years.

Insert Table 4.5 about here

Discussion

The extent to which differences were present in the social studies skills of Texas high school students as a function of their ethnicity/race (i.e. Asian, White, Hispanic and Black) was addressed in this study. Eight years of statewide data on five TAKS Exit Level Social Studies Objectives were analyzed to ascertain the effect of ethnicity/race on student performance. In each school year, statistically significant results were present. Following these statistical analyses, the presence of trends for the five Social Studies objectives by ethnicity/race was determined. Results will be summarized in the next section.

Social Studies Objective 1: History

Social Studies Objective 1 contained 13 questions on understanding issues and events in United States History. Asian students had an average score that was 0.03 to 0.40 points higher on Social Studies Objective 1 than White students, 0.95 to 2.28 points higher than Hispanic students and 1.06 to 2.67 points higher than Black students for each of the eight school years of data analyzed. During each school year examined, Asian students performed better than White, Hispanic, and Black students. Similarly, in each school year, White students performed better than Hispanic students, and Hispanic students performed better than Black students. Presented in Table 4.6 is a summary of the previously mentioned effect size calculations for Objective 1.

Insert Table 4.6 about here

Social Studies Objective 2: Geography

Social Studies Objective 2 contained nine questions regarding student understanding of geography and its influences historical issues and events. Asian students had an average score that was 0.01 to 0.12 points higher on Social Studies Objective 2 than White students, 0.66 to 1.52 points higher than Hispanic students and 0.79 to 1.96 points higher than Black students for each of the eight school years of data analyzed. During each school year examined, Asian students performed better than White, Hispanic, and Black students. Similarly, in each school year, White students performed better than Hispanic students. Hispanic students performed better than Black students except for the 2007-2008 school year. A summary of the partial eta squares, the effect sizes, is presented in Table 4.7.

Insert Table 4.7 about here

Social Studies Objective 3: Economics and Social Influences

Social Studies Objective 3 provided 13 questions on economic and social issues in American history from the colonial era to the late twentieth century. Asian students had an average score that was 0.03 to 0.39 points higher on Social Studies Objective 3 than White students, 0.95 to 2.28 points higher than Hispanic students and 1.06 to 2.67 points higher than Black students for each of the eight school years of data analyzed. During all

but one school year examined, Asian students performed better than White students. In addition, White students performed better than Hispanic students, and Hispanic students performed better than Black students during all school years analyzed. Table 4.8 contains a summary of the effect sizes for these statistically significant differences.

 Insert Table 4.8 about here

Social Studies Objective 4: Political Influences

Social Studies Objective 4 contained nine questions on the development of representative government in the United States as well as on political influences in American history from the colonization era to the present. Asian students had an average score that was 0.09 to 0.40 points higher on Social Studies Objective 4 than White students, 0.63 to 1.52 points higher than Hispanic students and 0.56 to 1.79 points higher than Black students for each of the eight school years of data analyzed. During each school year examined, Asian students performed better than White, Hispanic, and Black students. Similarly, in each school year, White students performed better than Hispanic students and Black students. In the 2007-2008, 2009-2010, and the 2010-2011 school years, Black students performed better than Hispanic students. A summary of the effect sizes for these statistically significant differences is delineated in Table 4.9.

 Insert Table 4.9 about here

Social Studies Objective 5: Social Studies Skills

Social Studies Objective 5 contained 11 questions on the TAKS Exit Level Social Studies assessment. For the 2004-2005, 2005-2006, and 2006-2007 school years, Asian students had an average score that was 0.06 to 0.18 points higher on Social Studies Objective 5 than White students, 1.25 to 1.66 points higher than Hispanic students and 1.76 to 2.33 points higher than Black students. For the 2007-2008, 2009-2010, 2010-2011 and 2011-2012 school years, White students had an average score that was 0.02 to 0.16 points higher on Social Studies Objective 5 than Asian students, 0.64 to 0.90 points higher than Hispanic students and 0.79 to 1.24 points higher than Black students. In the 2008-2009 school year, Asian and White students performed, on average, about the same. During each school year examined, Asian and White students performed better than Hispanic and Black students. Similarly, in each school year, Hispanic students performed better than Black students. Revealed in Table 4.10 is a summary of the effect size calculations for Objective 5.

 Insert Table 4.10 about here

Connection with Existing Literature

Researchers (Bein et al., 2009; Chapin, 2006; Daniels, 2011; Heafner & Fitchett, 2015; Heafner & Fitchett, 2018) have documented the presence of ethnic/racial differences in social studies. In this investigation, statistically significant differences were also present in social studies achievement by ethnicity/race. Asian and White students had statistically significantly higher average scores on all five TAKS Exit Level

Social Studies Objectives than their Hispanic and Black peers. Of the five social studies objectives measured on the TAKS Exit Level Social Studies exam, Black students had the lowest performance. Researchers (Bein et al., 2009; Chapin, 2006; Heafner & Fitchett, 2018) have demonstrated disparities in Black student performance in social studies beginning in early childhood and continuing to the secondary level. Further, Bein et al. (2009) indicated that Hispanic and Black students have lower average scores on competency-based geography exams than White students. Hispanic and Black students performed the lowest on Objective 2 of the TAKS Exit Level Social Studies exam which contains questions regarding geography. Results of this investigation are congruent with the findings of other researchers (Bein et al., 2009; Daniels, 2011; Heafner & Fitchett, 2015; Heafner & Fitchett, 2018) who have established the presence of gaps in social studies achievement as a function of ethnicity/race.

Implications for Policy and Practice

Based upon the results of this multiyear investigation, several implications are revealed for policy and for practice. Overall, Asian and White students outperformed Hispanic and Black students on all five social studies objectives examined in this investigation. With respect to policy, policymakers and educators should be aware that racial/ethnic disparities are present in social studies performance. Researchers (Chapin, 2006; Bein et al., 2009; Daniels, 2011; Heafner & Fitchett, 2015; Heafner & Fitchett, 2018) have indicated ethnic/racial disparities in social studies achievement is present at the primary and secondary levels. Researchers (Daniels, 2011; Heafner & Fitchett, 2015; Martell, 2013) have also addressed that social studies curriculum and instructional delivery are two components that contributes to racial/ethnic differences in social studies

performance. Therefore, it is necessary for policymakers to investigate social studies textbooks, curriculum, and state standards to guarantee that different ethnic/racial groups are properly represented in social studies curricula.

Further, educators need to include ethnic/racial pedagogical practices and promote ethnic/racial awareness in the classroom. Martell (2013) recommended that teachers include pedagogy that includes diverse interpretations of history and is representative of different backgrounds. In addition, diversity training is recommended to ensure teacher instruction is culturally inclusive (Daniels, 2011; Heafner & Fitchett, 2015).

Suggestions for Future Research

Based upon the results of this multiyear, statewide analysis, several suggestions for future research can be made. Analyzed in this study was the relationship between student ethnicity/race groups and their performance on the TAKS Exit Level Social Studies exam. An extension of this investigation to other subject areas such as reading, mathematics, and science is highly recommended. Additionally, only the TAKS Exit Level Social Studies exam that was administered to Grade 11 students was examined in this article. Lower level grades could be investigated to determine the extent to which differences might exist in social studies performance between different ethnic/racial groups in Grades 3-10.

This study was limited to the state of Texas. Researchers are encouraged to extend this study to other states to determine whether the findings presented herein would be comparable to other states. A final recommendation for future research would be to analyze social studies performance as a function of other student demographic characteristics such as their gender and economic status.

Conclusion

In this research study, the social studies performance of Texas high school students was addressed as a function of their ethnicity/race. Inferential statistical analyses were conducted of eight years of Texas statewide data and revealed the presence of a clear stair-step effect across all five TAKS Social Studies Objectives. Asian students had the best performance, followed by White students, then Hispanic students, and then by Black students. These findings were consistent across all eight school years and across all five Social Studies Objectives.

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Table 4.1

*Descriptive Statistics by Student Ethnicity/Race on the TAKS Social Studies Objective 1
for the 2004 School Year through the 2012 School Year*

School Year and Ethnicity/Race	<i>n</i>	<i>M</i>	<i>SD</i>
2004-2005			
Asian	5,684	9.65	3.57
White	100,536	8.91	3.51
Hispanic	72,203	7.42	3.71
Black	26,056	6.78	3.98
2005-2006			
Asian	5,988	10.12	3.66
White	100,104	9.45	3.58
Hispanic	75,877	7.82	3.73
Black	28,591	7.23	3.99
2006-2007			
Asian	5,919	10.26	3.56
White	100,067	9.77	3.36
Hispanic	81,097	8.09	3.62
Black	29,307	7.60	3.85
2007-2008			
Asian	6,013	10.56	2.95
White	91,110	10.15	2.53
Hispanic	79,456	8.94	2.73
Black	25,669	8.85	2.80
2008-2009			
Asian	5,179	11.25	2.83
White	52,158	10.80	2.69
Hispanic	64,741	9.34	3.08
Black	20,347	9.14	3.16
2009-2010			
Asian	6,965	10.74	2.84
White	89,548	10.41	2.61
Hispanic	95,185	9.08	2.91
Black	28,448	8.92	2.94
2010-2011			
Asian	6,443	10.80	3.12
White	84,762	10.56	2.63
Hispanic	102,063	9.56	2.82
Black	26,011	9.35	2.85
2011-2012			
Asian	7,202	10.74	2.97
White	84,186	10.48	2.72
Hispanic	109,647	9.33	2.94
Black	26,818	9.10	3.03

Table 4.2

*Descriptive Statistics by Student Ethnicity/Race on the TAKS Social Studies Objective 2
for the 2004 School Year through the 2012 School Year*

School Year and Ethnicity/Race	<i>n</i>	<i>M</i>	<i>SD</i>
2004-2005			
Asian	5,684	9.65	3.57
White	100,536	8.91	3.51
Hispanic	72,203	7.42	3.71
Black	26,056	6.78	3.98
2005-2006			
Asian	5,988	7.17	2.52
White	100,104	7.06	2.48
Hispanic	75,877	5.96	2.69
Black	28,591	5.51	2.94
2006-2007			
Asian	5,919	7.46	2.52
White	100,067	7.44	2.35
Hispanic	81,097	6.22	2.63
Black	29,307	5.68	2.83
2007-2008			
Asian	6,013	7.87	2.12
White	91,110	7.80	1.74
Hispanic	79,456	6.81	2.07
Black	25,669	6.82	2.12
2008-2009			
Asian	5,179	8.06	1.92
White	52,158	8.01	1.72
Hispanic	64,741	7.20	2.08
Black	20,347	6.96	2.16
2009-2010			
Asian	6,965	7.77	1.90
White	89,548	7.76	1.67
Hispanic	95,185	6.97	2.02
Black	28,448	6.76	2.09
2010-2011			
Asian	6,443	7.76	2.17
White	84,762	7.72	1.77
Hispanic	102,063	7.06	1.97
Black	26,011	6.97	2.05
2011-2012			
Asian	7,202	8.19	2.00
White	84,186	8.16	1.73
Hispanic	109,647	7.53	1.94
Black	26,818	7.28	2.08

Table 4.3

*Descriptive Statistics by Student Ethnicity/Race on the TAKS Social Studies Objective 3
for the 2004 School Year through the 2012 School Year*

School Year and Ethnicity/Race	<i>n</i>	<i>M</i>	<i>SD</i>
2004-2005			
Asian	5,684	9.65	3.57
White	100,536	8.91	3.51
Hispanic	72,203	7.42	3.71
Black	26,056	6.78	3.98
2005-2006			
Asian	5,988	10.02	3.59
White	100,104	9.62	3.48
Hispanic	75,877	8.13	3.71
Black	28,591	7.35	3.99
2006-2007			
Asian	5,919	10.72	3.60
White	100,067	10.45	3.40
Hispanic	81,097	8.88	3.80
Black	29,307	8.22	4.09
2007-2008			
Asian	6,013	11.14	2.95
White	91,110	11.05	2.38
Hispanic	79,456	9.86	2.80
Black	25,669	9.73	2.87
2008-2009			
Asian	5,179	11.53	2.73
White	52,158	11.47	2.39
Hispanic	64,741	10.36	2.89
Black	20,347	10.23	2.99
2009-2010			
Asian	6,965	11.52	2.75
White	89,548	11.39	2.39
Hispanic	95,185	10.03	2.86
Black	28,448	10.08	2.88
2010-2011			
Asian	6,443	11.44	3.09
White	84,762	11.49	2.43
Hispanic	102,063	10.49	2.68
Black	26,011	10.43	2.80
2011-2012			
Asian	7,202	11.64	2.89
White	84,186	11.61	2.48
Hispanic	109,647	10.69	2.76
Black	26,818	10.48	2.93

Table 4.4

*Descriptive Statistics by Student Ethnicity/Race on the TAKS Social Studies Objective 4
for the 2004 School Year through the 2012 School Year*

School Year and Ethnicity/Race	<i>n</i>	<i>M</i>	<i>SD</i>
2004-2005			
Asian	5,684	9.65	3.57
White	100,536	8.91	3.51
Hispanic	72,203	7.42	3.71
Black	26,056	6.78	3.98
2005-2006			
Asian	5,988	7.12	2.61
White	100,104	6.84	2.60
Hispanic	75,877	5.60	2.77
Black	28,591	5.42	3.03
2006-2007			
Asian	5,919	7.35	2.57
White	100,067	6.98	2.48
Hispanic	81,097	5.88	2.68
Black	29,307	5.61	2.92
2007-2008			
Asian	6,013	7.74	2.10
White	91,110	7.55	1.76
Hispanic	79,456	6.84	2.03
Black	25,669	6.93	2.05
2008-2009			
Asian	5,179	8.09	1.94
White	52,158	7.92	1.77
Hispanic	64,741	7.20	2.10
Black	20,347	7.15	2.17
2009-2010			
Asian	6,965	7.96	1.96
White	89,548	7.83	1.78
Hispanic	95,185	7.10	2.10
Black	28,448	7.13	2.11
2010-2011			
Asian	6,443	7.89	2.16
White	84,762	7.80	1.76
Hispanic	102,063	7.26	1.93
Black	26,011	7.33	1.98
2011-2012			
Asian	7,202	8.10	2.03
White	84,186	7.97	1.81
Hispanic	109,647	7.47	2.00
Black	26,818	7.45	2.06

Table 4.5

*Descriptive Statistics by Student Ethnicity/Race on the TAKS Social Studies Objective 5
for the 2004 School Year through the 2012 School Year*

School Year and Ethnicity/Race	<i>n</i>	<i>M</i>	<i>SD</i>
2004-2005			
Asian	5,684	9.65	3.57
White	100,536	8.91	3.51
Hispanic	72,203	7.42	3.71
Black	26,056	6.78	3.98
2005-2006			
Asian	5,988	9.15	3.12
White	100,104	9.00	3.09
Hispanic	75,877	7.44	3.44
Black	28,591	6.82	3.71
2006-2007			
Asian	5,919	9.20	3.00
White	100,067	9.14	2.78
Hispanic	81,097	7.95	3.08
Black	29,307	7.44	3.41
2007-2008			
Asian	6,013	9.85	2.49
White	91,110	10.01	1.92
Hispanic	79,456	9.12	2.34
Black	25,669	8.91	2.47
2008-2009			
Asian	5,179	10.00	2.30
White	52,158	10.00	2.00
Hispanic	64,741	9.10	2.40
Black	20,347	8.76	2.55
2009-2010			
Asian	6,965	9.89	2.28
White	89,548	9.91	1.91
Hispanic	95,185	9.23	2.21
Black	28,448	8.98	2.33
2010-2011			
Asian	6,443	9.93	2.61
White	84,762	10.08	1.98
Hispanic	102,063	9.39	2.18
Black	26,011	9.17	2.34
2011-2012			
Asian	7,202	10.00	2.46
White	84,186	10.12	2.03
Hispanic	109,647	9.48	2.26
Black	26,818	9.33	2.42

Table 4.6

*Summary of Social Studies Performance for Objective 1 of the TAKS Social Studies Exam
as a Function of Ethnicity/Race for the 2004-2005 through the 2011-2012 School Year*

School Year	Statistically Significant	Effect Size	Lowest Performing Group
2004-2005	Yes	Small	Black Students
2005-2006	Yes	Moderate	Black Students
2006-2007	Yes	Moderate	Black Students
2007-2008	Yes	Small	Black Students
2008-2009	Yes	Moderate	Black Students
2009-2010	Yes	Small	Black Students
2010-2011	Yes	Small	Black Students
2011-2012	Yes	Small	Black Students

Table 4.7

*Summary of Social Studies Performance for Objective 2 of the TAKS Social Studies Exam
as a Function of Ethnicity/Race for the 2004-2005 through the 2011-2012 School Year*

School Year	Statistically Significant	Effect Size	Lowest Performing Group
2004-2005	Yes	Moderate	Black Students
2005-2006	Yes	Small	Black Students
2006-2007	Yes	Moderate	Black Students
2007-2008	Yes	Moderate	Hispanic Students
2008-2009	Yes	Small	Black Students
2009-2010	Yes	Small	Black Students
2010-2011	Yes	Small	Black Students
2011-2012	Yes	Small	Black Students

Table 4.8

*Summary of Social Studies Performance for Objective 3 of the TAKS Social Studies Exam
as a Function of Ethnicity/Race for the 2004-2005 through the 2011-2012 School Year*

School Year	Statistically Significant	Effect Size	Lowest Performing Group
2004-2005	Yes	Moderate	Black Students
2005-2006	Yes	Small	Black Students
2006-2007	Yes	Small	Black Students
2007-2008	Yes	Small	Black Students
2008-2009	Yes	Small	Black Students
2009-2010	Yes	Small	Black Students
2010-2011	Yes	Small	Black Students
2011-2012	Yes	Small	Black Students

Table 4.9

*Summary of Social Studies Performance for Objective 4 of the TAKS Social Studies Exam
as a Function of Ethnicity/Race for the 2004-2005 through the 2011-2012 School Year*

School Year	Statistically Significant	Effect Size	Lowest Performing Group
2004-2005	Yes	Small	Black Students
2005-2006	Yes	Small	Black Students
2006-2007	Yes	Small	Black Students
2007-2008	Yes	Small	Hispanic Students
2008-2009	Yes	Small	Black Students
2009-2010	Yes	Small	Hispanic Students
2010-2011	Yes	Small	Hispanic Students
2011-2012	Yes	Small	Black Students

Table 4.10

*Summary of Social Studies Performance for Objective 5 of the TAKS Social Studies Exam
as a Function of Ethnicity/Race for the 2004-2005 through the 2011-2012 School Year*

School Year	Statistically Significant	Effect Size	Lowest Performing Group
2004-2005	Yes	Moderate	Black Students
2005-2006	Yes	Moderate	Black Students
2006-2007	Yes	Small	Black Students
2007-2008	Yes	Small	Black Students
2008-2009	Yes	Small	Black Students
2009-2010	Yes	Small	Black Students
2010-2011	Yes	Small	Black Students
2011-2012	Yes	Small	Black Students

CHAPTER V

DISCUSSION

As a result of No Child Left Behind (2002) and Every Student Succeeds Act (2015), recent educational policy and practice has been focused on reducing the achievement gap in reading and mathematics. This investigation revealed the presence of similar disparities in social studies achievement among Texas high school students as a function of gender, economic status, and ethnicity/race. Boys had higher average scores than girls on all five TAKS Exit Level Social Studies Objectives. Further, students who were Moderately Poor and Extremely Poor had lower average scores than students who were Not Poor on all five TAKS Exit Level Social Studies Objectives. Concerning student ethnicity/race, a clear stair-step effect was present. Asian students had the highest average raw scores, followed by White students, Hispanic students, and then Black students. Results were consistent with the existing literature regarding social studies performance as a function of gender, economic status, and ethnicity/race.

Discussion of Results for Gender

Previously revealed in Tables 2.1 through 2.10 were the results of the statistical analyses for Texas high school students by gender for the 2004-2005 through the 2011-2012 school years. Inferential statistical analyses revealed the presence of statistically significant differences in social studies skills between boys and girls. Girls had statistically lower average raw scores in all five social studies skills objectives than boys.

Although some researchers have contended that gender is not related to social studies achievement, other researchers (e.g., Bein et al., 2009; Weiss et al., 2002) have established that differences in social studies achievement do exist when measured by standardized test scores. In this investigation, boys outperformed girls on the TAKS Exit

Level Social Studies Exam for the 2004-2005 to 2011-2012 school years. These results were consistent with researchers (e.g., Heafner & Fitchett, 2015; Moore et al., 2012) who have also noted that boys have statistically higher scores on standardized exams in history. By analyzing each of the five objectives of the TAKS Exit Level Social Studies Exam, differences in social skills between boys and girls were also revealed. Boys have higher averages cores on all objectives but did overwhelmingly better on Objective 1 and Objective 2. Objective 1 contains questions that involve issues and events in United States History. Researchers (e.g., Heafner & Fitchett, 2015; Moore et al., 2012) have indicated that boys have outperformed girls on standardized United States History exams. Similarly, researchers (Bein et al., 2009; Weiss et al., 2002) have also demonstrated that boys have scored statistically significantly higher on competency-based geography exams than girls. Therefore, results of this study are consistent with the findings of other researchers (Bein et al., 2009; Heafner & Fitchett, 2015; Moore et al., 2012; Weiss et al., 2002) who have revealed differences in social studies achievement between boys and girls.

Discussion of Results for Economic Status

Previously presented in Tables 3.1 through 3.10 were the results of the statistical analyses for Texas high school students by their economic status for the 2004-2005 through the 2011-2012 school years. All of the analyses revealed statistically significant results, with effect sizes ranging from small to large, for the TAKS Exit Social Studies scores by economic status. Students who were Not Poor scored higher than students who were Moderately Poor and Extremely Poor for each of the five Social Studies Objectives across each of the eight school years. Students who were Moderately Poor performed better than students who were Extremely Poor.

Researchers (Alford-Stephens, 2016; Dixon-Román, Everson, & McArdle, 2013; Lee & Slate, 2014; Wright, 2015; Wright & Slate, 2015) have been consistent in demonstrating that poverty negatively influences achievement, especially when achievement is measured by standardized test scores. In this investigation, statistically significant differences were present in social studies achievement by student economic status. Students who were Not Poor had higher average social studies scores in all five objectives than students who were Moderately Poor and Extremely Poor. In addition, students who were Moderately Poor performed better than students who were Extremely Poor in all five social studies objectives. Results of this research investigation were similar with the results of other researchers (Alford-Stephens, 2016; Dixon-Román, Everson, & McArdle, 2013; Lee & Slate, 2014; Wright, 2015; Wright & Slate, 2015) who demonstrated that students who are economically disadvantaged have lower achievement scores than students who are not economically disadvantaged.

Discussion of Results for Ethnicity/Race

Previously delineated in Tables 4.1 through 4.10 were the results of the statistical analyses for Texas high school students by their ethnicity/race for the 2004-2005 school year through the 2010-2011 school year. In this study, statistically significant differences were present in the social studies skills by ethnicity/race. Asian students had statistically higher average raw scores in four of the five social studies skills objectives examined. Additionally, White students had statistically significantly higher average raw scores than Hispanic students, and Hispanic students had statistically significantly higher average raw scores than Black students for the eight years of data examined. A clear stair-step effect was present by student ethnicity/race in social studies performance. Researchers (Bein et al., 2009; Chapin, 2006; Daniels, 2011; Heafner & Fitchett, 2015; Heafner &

Fitchett, 2018) have documented the presence of ethnic/racial differences in social studies. In this investigation, statistically significant differences were also present in social studies achievement by ethnicity/race. Asian and White students had statistically significantly higher average scores on all five TAKS Exit Level Social Studies Objectives than their Hispanic and Black peers. Of the five social studies objectives measured on the TAKS Exit Level Social Studies exam, Black students had the lowest performance. Researchers (Bein et al., 2009; Chapin, 2006; Heafner & Fitchett, 2018) have demonstrated disparities in Black student performance in social studies beginning in early childhood and continuing to the secondary level. Further, Bein et al. (2009) indicated that Hispanic and Black students have lower average scores on competency-based geography exams than White students. Hispanic and Black students performed the lowest on Objective 2 of the TAKS Exit Level Social Studies exam which contains questions regarding geography. Results of this investigation are congruent with the findings of other researchers (Bein et al., 2009; Daniels, 2011; Heafner & Fitchett, 2015; Heafner & Fitchett, 2018) who have established the presence of gaps in social studies achievement as a function of ethnicity/race.

Summary of Results

Although some researchers have contended that gender is not related to social studies achievement, other researchers (e.g., Bein et al., 2009; Weiss et al., 2002) have established that differences in social studies achievement do exist when measured by standardized test scores. In this investigation, boys outperformed girls on the TAKS Exit Level Social Studies Exam for the 2004-2005 to 2011-2012 school years. These results were consistent with researchers (e.g., Heafner & Fitchett, 2015; Moore et al., 2012) who

have also noted that boys have statistically higher scores on standardized exams in history.

Researchers (Alford-Stephens, 2016; Dixon-Román, Everson, & McArdle, 2013; Lee & Slate, 2014; Wright, 2015; Wright & Slate, 2015) have been consistent in demonstrating that poverty negatively influences achievement, especially when achievement is measured by standardized test scores. In this investigation, statistically significant differences were present in social studies achievement by student economic status. Students who were Not Poor had higher average social studies scores in all five objectives than students who were Moderately Poor and Extremely Poor. In addition, students who were Moderately Poor performed better than students who were Extremely Poor in all five social studies objectives. Results of this research investigation were similar with the results of other researchers (Alford-Stephens, 2016; Dixon-Román, Everson, & McArdle, 2013; Lee & Slate, 2014; Wright, 2015; Wright & Slate, 2015) who demonstrated that students who are economically disadvantaged have lower achievement scores than students who are not economically disadvantaged.

Researchers (Bein et al., 2009; Chapin, 2006; Daniels, 2011; Heafner & Fitchett, 2015; Heafner & Fitchett, 2018) have documented the presence of ethnic/racial differences in social studies. In this investigation, statistically significant differences were also present in social studies achievement by ethnicity/race. Asian and White students had statistically significantly higher average scores on all five TAKS Exit Level Social Studies Objectives than their Hispanic and Black peers. Results of this investigation are congruent with the findings of other researchers (Bein et al., 2009;

Daniels, 2011; Heafner & Fitchett, 2015; Heafner & Fitchett, 2018) who have established the presence of gaps in social studies achievement as a function of ethnicity/race.

Implications for Policy and Practice

Based upon the results of the three articles in this journal-ready dissertation, several implications are present for policy and for practice. With respect to policy, policymakers and educators should be aware that gender bias may be present in social studies state standards, curriculum, and textbooks. Heafner and Fitchett (2018) noted that gender inequalities in social studies curriculum affects how students make sense of the concepts. Continued disregard for women in social studies curriculum will only exacerbate the gender gap evident in social studies performance (Crocco et al., 2008; Engebretson, 2014; Heafner & Fitchett, 2018). Therefore, policymakers need to investigate social studies standards, curriculum, and textbooks to ensure that the role of women in history is equivalent in value to the role of men in history. In regard to practice, educators need to be cognizant of how the role of women in social studies is being presented in the classroom. Moller et al. (2013) indicated that postsecondary outcomes are determined by school context and curriculum. Therefore, it is recommended that educators incorporate more female figures into their lessons so that girls feel more valued in social studies disciplines. Schools may need additional training on how to increase the role of women in their social studies curriculum.

For each level of poverty examined in the second article in this journal-ready dissertation, students who were Not Poor had the highest level of social studies achievement. The achievement gap on the TAKS Exit Level Social Studies Exam between students who were economically disadvantaged and students who were not

economically disadvantaged is consistent with similar gaps on the TAKS Exit Level Mathematics exam (Alford-Stephens, 2016) and the TAKS Exit Level Reading exam (Wright, 2015). As such, results from this investigation could serve as evidence that more support is needed to assist schools with educating students in poverty.

Overall, Asian and White students outperformed Hispanic and Black students on all five social studies objectives examined in this investigation. With respect to policy, policymakers and educators should be aware that racial/ethnic disparities are present in social studies performance. Researchers (Chapin, 2006; Bein et al., 2009; Daniels, 2011; Heafner & Fitchett, 2015; Heafner & Fitchett, 2018) have indicated ethnic/racial disparities in social studies achievement is present at the primary and secondary levels. Researchers (Daniels, 2011; Heafner & Fitchett, 2015; Martell, 2013) have also addressed that social studies curriculum and instructional delivery are two components that contributes to racial/ethnic differences in social studies performance. Therefore, policymakers are encouraged to investigate social studies textbooks, curriculum, and state standards to guarantee that different ethnic/racial groups are properly represented in social studies curricula.

Further, educators need to include ethnic/racial pedagogical practices and promote ethnic/racial awareness in the classroom. Martell (2013) recommended that teachers include pedagogy that includes diverse interpretations of history and is representative of different backgrounds. In addition, diversity training is recommended to ensure teacher instruction is culturally inclusive (Daniels, 2011; Heafner & Fitchett, 2015).

Suggestions for Future Research

Examined in the three articles in this journal-ready dissertation was the extent to which differences were present in the social studies achievement of Texas high school students as a function of their gender, economic status, and ethnicity/race. These three studies were an extension of studies previously analyzed with respect to reading (Wright, 2015) and mathematics (Alford-Stephens, 2016). A recommendation for future research would be to extend this study to other academic areas such as science and writing. The degree to which the results delineated herein on social studies would be generalizable to science and writing is not known.

Texas has changed its state-mandated assessment from the TAKS to a new assessment, State of Texas Assessments of Academic Readiness (STAAR). Researchers are encouraged to analyze data from this new state-mandated assessment to ascertain whether the findings discussed herein on the TAKS would be generalizable to the STAAR. Additionally, only the TAKS Exit Level Social Studies exam that was administered to Grade 11 students was examined in this article. Lower level grades could be investigated to determine the extent to which differences might exist in social studies performance between students as a function of gender, economic status, or ethnicity/race in Grades 3-10. This study was limited to the state of Texas. A final recommendation for future research would be to extend this study to other states to determine whether the findings presented herein would be comparable to other states.

Conclusion

Investigated in this study was the extent to which differences were present in the social studies achievement of Texas high school students as a function of gender,

economic status, and ethnicity/race. After obtaining and analyzing eight school years of Texas statewide data, statistically significant differences in social studies skills were revealed for Texas high school students as a function of gender, economic status, and ethnicity/race. Boys had statistically significantly higher average raw scores on all five Social Studies Objectives than did girls. Students who were Not Poor scored higher than students who were Moderately Poor and Extremely Poor for each of the five Social Studies Objectives across each of the eight school years. In addition, students who were Moderately Poor performed better than students who were Extremely Poor, resembling a clear stair-step effect. Lastly, Asian students had the best performance, followed by White students, then Hispanic students, and then by Black students. These findings were consistent across all eight school years and across all five Social Studies Objectives.

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Appendix

TO: Mary Dietrich
 John Slate
 FROM: SHSU IRB
 PROJECT TITLE: Differences in Social Studies Skills as a function of Gender, Economic Status, and Ethnicity/Race of Texas High School Students: A Multiyear Statewide Study
 PROTOCOL #: IRB-2019-4
 SUBMISSION TYPE: Initial
 ACTION: Exempt
 DECISION DATE: February 14, 2019
 EXEMPT REVIEW CATEGORY: Category 4. Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

Greetings,

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

Since Cayuse IRB does not currently possess the ability to provide a "stamp of approval" on any recruitment or consent documentation, it is the strong recommendation of this office to please include the following approval language in the footer of those recruitment and consent documents: IRB-2019-4/February 14, 2019.

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

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

It is the PI's responsibility to consult with the IRB whenever questions arise about whether planned changes to an exempt study might make that study nonexempt human subjects research.

In this case, please make available sufficient information to the IRB so it can make a correct determination.

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

Sincerely,

Donna M. Desforges, Ph.D.
 Chair, Committee for the Protection of Human Subjects
 PHSC-IRB

VITA

MARY K. DIETRICH

EDUCATION HISTORY

2019	Doctorate of Education in Educational Leadership, Sam Houston State University <i>Differences in social studies skills as a function of gender, economic status, and ethnicity/race of Texas high school students: A multiyear statewide study.</i>
2008	Master of Curriculum and Instruction, Sam Houston State University
2005	Bachelor of Arts in History, Sam Houston State University Bachelor of Arts in Political Science, Sam Houston State University

PROFESSIONAL EXPERIENCE

2018- Present	Academic Specialist Cleveland High School	
2016-2018	Instructional Specialist Cleveland High School	Social Studies English Language Arts
2015-2018	Adjunct Professor Lone Star College	United States History 1301 United States History 1302 Western Civilization 2311 Western Civilization 2312
2008-2018	Teacher Cleveland High School	World History Advanced Placement World History Advanced Placement European History

PROFESSIONAL CERTIFICATIONS

Texas Principal Certification
 Texas Teacher Certification (Social Studies, 8-12)
 Texas Teacher Certification (History, 8-12)
 Texas Supplemental Certification (English as a Second Language)
 Level II Certified Trainer, Creating Independence through Student-Owned Strategies (CRISS)

PRESENTATIONS

Dietrich, M. K. (2016, September). *Differences in Advanced Course Enrollment as a Function of School Size*. Round table discussion presented at the 11th Annual TCPEA Graduate Research Exchange, Houston, TX.

Dietrich, M. K., Escalante, M., & Wiltz, J. (February, 2016). *Community Audit*. Presented at the Woodlands Center Research Symposium conducted at Sam Houston State University, The Woodlands, TX.

PROFESSIONAL ASSOCIATIONS

Texas Council of the Social Studies (TCSS)