SCHOOL ACHIEVEMENT THROUGH SOCIAL PROGRAMMING: THE EFFECTS OF A SCHOOL-BASED MENTORING PROGRAM

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ABSTRACT

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The minority and socioeconomic gaps in academic achievement have brought much focus to urban schools; and while many efforts have been implemented to close these gaps, the discrepancies in academic outcomes remain, as existing research confirms. This study analyzes the impact of an urban district’s CTAG (Closing the Achievement Gap), school based mentoring program on academic (GPAs and Ohio Graduation Test math and reading passage) and social performance variables (emergency removals, suspensions, expulsions, and juvenile court involvement). A causal-comparative approach was utilized to compare the outcomes of the three participating groups (middle school only participants, high school only participants, and participants who received both middle and high school CTAG services) in relation to their academic performance and reduction in exclusionary discipline practices that place students at a higher risk of school failure due to being excluded from class and school. This research sought to answer the question, “Is there a difference in academic and social performance based on the level of CTAG mentoring participation?” Quantitative procedures were utilized to compare the three groups, while also factoring in school attendance as a covariate in the analyses. The examination revealed that there was statistically significant evidence to conclude that students who participated in the CTAG program in both middle and high school were more likely to earn higher GPAs and pass the OGT reading and math, and less likely to exhibit chronic absenteeism, get expelled, or be involved with juvenile court.
I dedicate this project to my three amazing, motivational, and gifted children Diamund, Mark, and Malcolm McClinton. I am very proud of your uniqueness and accomplishments. Thank you for making my work as mother easy and exciting. As we were all in our educational pursuits together at different universities, the amount of support was endless; and there was solace in calling on any one of you. A special thanks to my mother Gladys Guice-McNeal, the person I admire the most. You never cease to offer a kind word, a helping hand, a loving hug, a bright smile, a look of approval, and a warm heart. Thank you Willie James McNeal for believing that I am the smartest person you know. 😊 Your continued acknowledgments and support of my efforts are much appreciated. My siblings, LaGracia Guice-Williams, Sandra Guice, and Alicia and Donald Brew, I can’t thank you all enough. Your love, motivation, and supportive deeds have been springboards for my pursuits. My most recent inspiration, MaKhi McClinton, we are expecting great things from you; and it is beyond exhilarating watching you seek knowledge and develop into your purpose. To my nieces, nephews, and other family, I dedicate this to all of you.

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CHAPTER I. INTRODUCTION

Background of the Problem

Since the publications *A Nation at Risk* (National Commission on Excellence in Education, 1983) and *A Nation Prepared* (Carnegie Forum on Education and the Economy, 1986), school reform and global competitiveness have been a significant legislative focus (Boyd, 2000; Cuban, 2008; Sahlberg, 2006; West, 2012). And in spite of decades of research and reform efforts, educational equity remains an issue in the 21st century as evidenced by academic gaps and school performance disparities across the United States (May & Sanders, 2015). Research continues to show that relationships exist between socioeconomic status and race (McKinsey & Company, 2009; May, 2006; Tatum, 2007; Danner & Toland, 2013). In addition, both race and class influence social inequality (Holcomb-McCoy, 2002) and both are used as a measurable determinant of aptitude and ability (McDermott, Raley, & Seyer-Ochi, 2009).

Similarly, many schools with high populations of both students of color and low socioeconomic students are oftentimes more likely to have limited resources and inexperienced or less qualified teachers (Baumgardner, 2010; Darling-Hammond, 2010; Hochschild, 2003; Orfield & Lee, 2005; Rice, 2010; Tatum, 2007). Researchers further note that public schools in urban areas increasingly reflect enrollment patterns reminiscent of the 1950s (McPherson, 2011; Tatum, 2007) and in order to avoid further societal regression, the social implications of these enrollment patterns require attention (Tatum, 2007). Understanding that schools are social institutions and that individual and institutional culture contributes to the operation and success, this study sought to examine both academic and cultural variables within one urban school district’s gap closing program. The purpose of this study was to determine if urban school
students improve academically and socially when involved in a school-based mentoring program targeting social and emotional issues.

From the past segregation of *Plessy v Ferguson, 1896* and the desegregation of *Brown v Board of Education, 1954* to present-day school choice and the *No Child Left Behind Act of 2001 (NCLB)*, educational equity continues to be a significant challenge for public education (Johnston, 2011; Jordan, 2010; May, 2015; Orfield & Lee, 2005; Perry, 2009; The Equity and Excellence Commission, 2013). Jordan (2010) noted that while progress has been made, the promises of *Brown v Board of Education* to create a racially and ethnically integrated educational system with equal opportunity and access for all students have not been realized. Jordan further stated that although *Brown* helped America move forward in terms of acknowledging a major social injustice, considerable work remains in terms of instituting sustained research based strategies that improve educational opportunities for all students. These strategies should include high expectations for academic success regardless of race, ethnicity, and class.

While national educational reforms have sought to address equality of educational opportunity (Mickelson & Smith, 1987) and discussions around school reforms that specifically target racial inequality have been central for the past two decades (Orfield & Lee, 2005), educational equality remains on the school reform agenda. Additionally, Orfield and Yun (1999) stated that while individuals usually think of segregation in racial and ethnic terms, it is important to recognize the strong class component of segregation as well. With the many years of addressing the issue of full equality between classes, the United States has not witnessed the expected outcomes of the advent of reforms such as magnet schools, charter schools, accountability systems, standards-based reforms, or school choice options (U.S. Department of
Education, 2010). Full equality has also not been achieved through the Teacher Incentive Fund (performance-based teacher and principal compensation systems in high needs schools), the School Improvement Grant Program, a model for the transformation of the lowest performing schools through Turnaround, Restart, Closure, or Transformation (U.S. Department of Education, 2010) and the Race to the Top initiative (RttT) funded by the American Recovery and Reinvestment Act of 2009. The most recent RttT grants were designed to encourage and reward states for creating the conditions for education innovation and reform and for achieving significant improvement in student outcomes. The expectations of RttT included substantial gains in student achievement, closing achievement gaps, improving high school graduation rates, and ensuring student preparation for success in college and careers (U.S. Department of Education, 2009).

The purpose of this study was to determine if participating in a school-based mentoring program significantly impacted student performance. This study examined inequity issues in the public school system with specific attention given to the role of race and culture. As presented in the literature review, school-based mentoring is perhaps a small strategy that may produce positive changes in student’s academic and social performance outcomes for underperforming populations. The study argued that a degree or teacher certification may not necessarily be required to implement research-based strategies to enhance the achievement of marginalized student groups.

Some of the school performance improvement strategies that does not necessarily require certification include building relationships, creating a sense of belonging (Becker & Luthar, 2002; Taliaferro & DeCuir-Gunby, 2008; Taylor, 2009), bridging home and school cultures (Yosso, 2005), ensuring a positive self-identity (Harper, 2007; Harper & Tuckman, 2006), and
acknowledging students’ cultural capital (Yosso, 2005). With the intent of closing academic gaps and increasing graduation rates for African American males, the mentoring program utilized for this study positioned noncertified individuals to serve students in several capacities. Not only are mentors placed in a position to tutor, but they also helped to create a sense of belonging, bridge cultures, promote a positive self-identity, work as a liaison between teachers and students, and engage parents in the academic and social schooling process as well. The mentors were all African American; and served a population of primarily African American students. In addition, the mentors had relationships with many of the students and the parents that extended beyond the school walls.

In terms of the need to continue to examine inequities, historically, there are significant patterns of discrimination that may have contributed to the creation of opportunity gaps. Overt acts of segregation as well as educational policy have contributed to the increased scrutiny of educational outcomes for some populations. Two such subtle discriminatory practices are zero tolerance and the disproportionate representation of Black males in special education (Codrington & Fairchild, 2012; Kunjufu, 2005; National Association of School Psychologists, 2013; The United States Commission on Civil Rights, 2009). In response to the goal of making all schools free of violence, drugs, alcohol, and the unauthorized use of firearms, congress passed the Safe and Drug Free Schools and Communities Act of 1994 (Forgione, 1998). However, zero tolerance was first employed by the Reagan administration in the early 1980s when some school districts embraced the administration’s War on Drugs initiative (Freiberg & Reyes, 2008). This policy became law in 1989 in the form of the Drug Free Schools and Campuses Act of 1989 (Forgione, 1998). It required educational institutions to establish disciplinary sanctions for violations or risk losing federal aid. As such, this law became the impetus for zero tolerance,
which according to a National Center for Education Statistics (NCES) press release, was a policy intended to make schools more safe and orderly by mandating predetermined consequences or punishments for specific offenses (Forgione, 1998).

While zero tolerance policies were intended for serious drug and firearm offenses, the language changed from guns to weapons (Moore, 2010), which lead to an array of interpretations concerning what is considered a weapon and what is considered a serious offense (Forgione, 1998). Consequently, school leaders’ perceptions of serious offenses vary, and policies have been too broadly implemented and oftentimes for minor offenses (Epstein, 2014; Evenson, Justinger, Pelischek, & Schulz, 2009; Forgione, 1998; Moore, 2010). Therefore, instead of the zero tolerance policies reducing the number of disciplinary infractions in school, they have resulted in the overuse of suspensions and expulsions in many schools (Duncan, 2014; Fuentes, 2012; Skiba & Leone, 2001) that disproportionately affects youth of color (Duncan, 2014; Evenson, Justinger, Pelischek, & Schulz, 2009; Harry, 2014; Payne, 2010; Reyes, 2006; Skiba & Leone, 2001; Valles & Miller, 2010). Nationally, the over-representation of students of color experiencing school disciplinary issues has been a consistent finding for many, many years.
Specifically Black and Latino students are suspended and expelled at much higher rates than White students (Kang-Brown, Trone, Fratello, & Daftary-Kapur, 2013; Payne, 2010; Skiba & Leone, 2001; U.S. Department of Education Office for Civil Rights, 2014) and because boys are twice as likely as girls to receive punishments at school, the proportion of Black and Latino boys who are suspended or expelled is especially large (Kang-Brown, Trone, Fratello, & Daftary-Kapur, 2013).

Additionally, in terms of the patterns of discriminatory disciplinary practices, negative cultural stereotypes with regard to specific races have resulted in the overuse of exclusion
through suspensions and expulsions and have had a devastating impact on the academic
achievement of students of color (Bobo & Fox, 2003; Ryan & Goodram, 2013). Removed from
the educational setting creates lapses in the opportunity to thrive in the education process, which
result in educational disparities that are due to institutional, systemic, and collective community
failure (Moss-Lee, 2010).

Pertaining to the opportunity gap, The Glossary of Education Reform (2014) defines this
as the “ways in which race, ethnicity, socioeconomic status, English proficiency, community
wealth, familial situations, or other factors contribute to or perpetuate lower educational
aspirations, achievement, and attainment for certain groups of students.” The glossary further
notes that the opportunity gap refers to the unequal or inequitable distribution of opportunities
and resources, characterizing the inputs; and the achievement gap refers to the unequal or
inequitable distribution of educational benefits and results, characterizing the outputs (The

In relation to opportunity gaps, the USDOE’s Office of Civil Rights (2012) revealed
disproportionate discipline, inequities in resources, and in college and career readiness.
Specifically, teachers in elementary schools that served more Hispanic and African American
students were paid an average of $2250 less than teachers in the same district that served the
fewest students of color. In addition, schools with higher rates of Latino and African American
students offered fewer college prep courses; for instance, less than one third offered calculus and
only 40% offered physics (USDOE Office for Civil Rights, 2012). The report further noted that
African American students were over three and half times more likely to be suspended or
expelled than their White peers (USDOE Office for Civil Rights, 2012). A similar USDOE
Office of Civil Rights study of approximately 72,000 schools revealed that less than one-fourth
of the schools offered a prekindergarten program for children from poor families (Johnston, 2011). Johnston (2011) further noted that the heart of the academic disparities described was a result of access, opportunity, and the lack of public and community determination to transform outcomes for all children.

Considering the school climate that allows gaps in schooling opportunities, a sense of belonging may often be elusive for African Americans (Taliaferro & DeCuir-Gunby, 2008; Taylor, 2009). Operationally, as reported by Adelabu (2010), school belonging is feeling accepted, encouraged, included, and valued by others. Many researchers theorize that social support and belonging in the classroom may be one of the most common factors that contribute to the achievement motivation and engagement of disadvantaged students (Finn, 1989; Gutman & Midgley, 2000; Wehlage, Rutter, Smith, Lesko, & Fernandez, 1989 as cited in Becker & Luthar, 2002), which may promote the appearance of low aspirations as stated in the Glossary of Education Reform’s definition of opportunity gaps. Additionally, “Values and beliefs about ensuring that every student belongs and feels membership in the school community are essential dispositions for the journey towards inclusive schooling” (Salisbury & McGregor, 2005, p. 2). Furthermore, Booker (2007) found that school demographics influence feelings of school belonging among African American adolescents; and there was a stronger sense of school belonging in schools where African American students experienced feelings of commonality, comfort, and tolerance in relation to their cultural background.

In relation to race discrimination and opportunity gaps, CQ Researcher (2008) reported that school systems were not designed to educate all students to the levels of proficiency now required, and teachers are taught not to acknowledge race differences. Not acknowledging race, or belief in colorblindness, is as Howard (2006) noted, a close cousin to the melting pot. This
declaration of the melting pot perspective, which grows from a dominance-oriented perspective (Howard, 2006), is a situation in which cultural assimilation results in blending the heritage and traditions of previously distinct ethnic groups or the melting, reforming, and assimilating of a variety of races into a cohesive whole (Branch, 2014; Green-Gibson & Collett, 2014). It offers an explanation for ignoring differences (Howard, 2006); for being unaware of one’s assumptions about other racial groups (Tatum, 1997); and for not acknowledging the impact of race, both individually and institutionally (Singleton & Linton, 2006).

As a society we are oftentimes exposed, through many mediums, to stereotypical views of Black people and the urban communities in which they reside; and because of this, some educators may consequently blame students, their families, their culture, and communities for school failure (Harper, 2007; Weiner, 2006; Sperling, 2009; Howard, 2010). While there is a correlation between school failure and poverty and discrepancies in academic achievement by race, the assumptions that poor children and students of color have problems learning, their parents have no time or knowledge to impart; they do not want to be involved or engaged in the educational process, and that people in poor neighborhoods are unmotivated (Yosso, 2005; McDermott, Raley, & Seyer-Ochi, 2009; Bailey, 2011) further impedes academic performance.

Moreover, when students are solely blamed for their academic deficiencies, it is considered victim blaming or the deficit paradigm. This notion, along with the zero tolerance policies may also emphasize an overly controlling and punitive approach to teaching Black students (Harper, 2007; Leone, Christie, Nelson, Skiba, Frey, & Jolivette, 2003; Thompson & Tawannah, 2012). In an environment where victim blaming is the norm, instead of encouraging a positive racial identity, development of a negative self-concept may result (Harper, 2007). Accordingly, Howard (2006) argued that a significant transformation in the beliefs, attitudes, and
actions of those in positions of influence and dominance in the lives of students was necessary in order to obtain a meaningful movement toward social justice and educational reform.

In terms of the desired expectations for students and how students are deemed academically successful, not only are students expected to achieve proficiency on standardized testing, but the success trend has also shifted to college and career readiness as well. According to the United States Department of Education’s blueprint for reform under the Reauthorization of the Elementary and Secondary Education Act, the goal for America’s education system is for every student to graduate ready for college and a career (USDOE, 2011).

The minority and socioeconomic gaps in academic achievement have brought much focus to urban schools; and while many efforts have been implemented to close these gaps, the discrepancies in academic outcomes remain as extant research confirms. In his remarks on the Program for International Student Assessment (PISA) results, Secretary of Education Arne Duncan declared that high-performing countries were closing achievement gaps while dramatically boosting student achievement, but schools in the U.S. were not doing as much as possible to close achievement gaps (U.S. Department of Education, 2010). In addition, more recent studies further acknowledged that achievement gaps persist and require innovation (Darling-Hammond, 2014-2015; Jeynes, 2014; Reardon, Greenberg, Kalogrides, Shores, & Valentino, 2013; Toroff, 2014).

Moreover, McKinsey & Company (2009) delineated the following four divergent achievement gaps: between the United States and other nations, between Black and Latino students and White students, between students of different income levels, and between similar students schooled in different systems or regions. They further reported in their economic analysis that the gaps represented the economic equivalent of a permanent national recession.
Significantly, these researchers found that low-income Black students suffered from the largest achievement gap of any cohort (McKinsey & Company, 2009); and these findings provided major implications for the rationale behind the focus of this research study on closing educational opportunity gaps.

While there are urban schools making noteworthy strides of increasing at risk students’ performance, many of the identified practices for improving performance are practices that are consistent with what is expected from all schools and what many schools may already be undertaking. For example, conducting needs assessments, developing SMART goals (Specific, Measurable, Attainable, Realistic, and Timely), job-embedded professional development, research-based practices, and standards-based curriculum are characteristically included in Ohio school districts’ Comprehensive Continuous Improvement Plans (CCIP). Additionally, phrases such as high expectations for all and rigorous and robust instruction are also widely used and can be found throughout various Ohio documents and grant descriptions, including Ohio’s Leadership Development Framework and the school improvement grant initiative. However, since underperforming schools remain, districts need to continue to seek additional practices or more effective use of the above-mentioned practices.

In reference to some of Ohio’s school improvement documents and initiatives, the Ohio Leadership Advisory Council (OLAC) is an advisory and study group that was developed through a partnership between the Ohio Department of Education and the Buckeye Association of School Administrators. It is comprised of representatives of key professional associations, business and school board representatives, higher education representatives, and practitioners in leadership roles and state department of education personnel. The goal is to provide educators with the structures and resources necessary to develop and support effective leadership at every
level (Ohio Leadership Advisory Council, 2014). Ohio’s Leadership Development Framework is part of OLAC’s work that identifies six essential leadership practices based on the concepts of shared leadership (Ohio Leadership Advisory Council, 2014). Also, the Ohio Improvement Process (which includes teacher based teams and the Decision Framework) are additional strategies aimed at improving academic achievement (Ohio Department of Education website [ODE], 2015). In reference to the Decision Framework, it is a tool designed to assist district and school leadership in making informed decisions based on data regarding where to spend time, energy, and resources to improve student performance (ODE website, 2015). However, OLAC’s focus on leadership in school reform efforts is only one piece of the school improvement process. Instead of the traditional reform efforts, this study focused on improving student performance through attention to the social and emotional aspects that accompany the academic barriers in school.

**Purpose of the Study**

The purpose of this study was to determine if participating in a school-based mentoring program significantly impacted student performance. This area of focus resulted from a 2014 qualitative analysis of the CTAG school-based mentoring program used in this study. The data collection for the 2014 examination included three months of CTAG group observations for grades four through nine (male and female groups) and interviews with current and former CTAG students, mentors, and building principals. Data further included survey responses from CTAG students (past and present), teachers, community members, and parents. The students’ perceptions of the program, their positive feelings for the mentors, and their attribution to the program for personal growth (academic and social achievements), sparked an interest for deeper examination.
This quantitative inquiry examined a program that was designed to specifically increase the academic achievement and reduce disciplinary infractions. This study focused on a Closing the Achievement Gap (CTAG) mentoring initiative held during the school day in an academic class format that was created to close the academic gaps between African American and their White counterparts and between students with differing socioeconomic statuses. The program was a required class for referred students at the middle level and served as an elective course for referred freshmen students. The mentors provided daily lectures, activities, community speakers, and advocacy to assigned students who were struggling academically and/or socially.

During the time of this research, the CTAG mentors were full time employees of the district. They had assigned offices, shared teacher classrooms for group sessions; and because they were present all day, they were available for students outside of group sessions. All mentors were assigned lunch duty, assisted with before school and after school student arrival and departure procedures, and assisted with some disciplinary issues.

The study utilized the following dependent variables to ascertain if there was indeed an impact on student performance. The academic variables consisted of grade point average (GPA), Ohio Graduation Test (OGT) passage in reading and mathematics; and the social variables included behavioral issues resulting in exclusion from class time in the form of emergency removals, suspensions, expulsions, juvenile court involvement / juvenile court supervised school-related programs, and attendance. The inquiry method was a causal-comparative design to determine if there were differences in the outcome measured based on the level of CTAG participation (middle school only, high school only, or both middle and high school participation). The study used existing data of high school sophomores, juniors, and seniors
formerly involved in the closing the achievement gap (CTAG) mentoring program, to compare the above variables.

Many organizations have a history of reporting research on reform efforts aimed at reducing the achievement gap. In relation to this academic gap closing area of interest, key research involving urban schools and reform efforts is available through national organizations such as The Center for Comprehensive School Reform and Improvement, National Institute of Health, American Psychological Association, Council of the Great City Schools, Education and Urban Society, and the National Institute for Urban School Improvement. Some of these organizations have examined the achievement gap from sociological perspectives to include examining social-emotional issues that undermine academic performance, examining the relationship between toxic stereotypes and school belonging, and examining if a 15-minute intervention could boost ethnic-minority student achievement. While there are certainly other studies relating to culture, race, and achievement, empirical data quantifying the relationship between school-based mentoring programs and the social and academic achievement of marginalized students is lacking in the educational research base.

Given the prevalence of student mentoring programs, this dearth in research literature is difficult to explain. Considering the many years of combating educational gaps and the longstanding use of during school and after school mentoring practices as prevention and intervention programs, it seems as if a vast amount of quality research would be available. Also, the CTAG program is a nontraditional school-based mentoring program; and, the school-based mentoring program research that does exist involves the traditional program format of a few hours of mentor / mentee interactions at the school after school hours.
In addition to the condition of the economy, the challenges facing public schools are currently receiving a great deal of national attention. Inasmuch, political focus on the positive relationship between education and income make sense when considering research literature (Taylor, 2009; May, 2006; Baum & Ma, 2007; McKinsey & Company, 2009); and the impact that the educational gaps impose on the economy (McKinsey & Company, 2009). The research of McKinsey & Company (2009) reported that the existing gaps imposed the economic equivalent of a permanent national recession as well as tragic consequences for individuals by way of lower earnings, higher incarceration, and poor health. Since few studies are available with a distinct focus on social mentoring programs that are designed for closing the achievement gap, this descriptive research study sought to ascertain if a school-based mentoring program significantly impacted the academic achievement and social development of urban school students.

This study sought to highlight the significant relationships between a school-based mentoring program and data relating to GPAs, OGT reading and math passage, disciplinary issues resulting in emergency removal, suspension, expulsion, and juvenile court involvement. This study adds to the scholarly work of Tatum (2007), Kowalski and Hermann (2008), Perry (2002), Check (2002), and D’Andrade (1995), Goodenough, (1963; 1981; 1996), Howard (2006), Yosso (2005), Darling-Hammond (2014-2015), and countless others who have examined educational equity. Examining research from 1963 to the present validates the presence of the on-going and unresolved existence of achievement gaps and the need for further research studies on this topic. The purpose of this study was to examine if the Northwest Ohio closing the achievement gap (CTAG) mentoring program that focused on social and cultural issues impacted academic performance.
Research Question

This study was designed around one overarching question: Does CTAG participation significantly impact academic and social performance, when controlling for attendance? For ease in statistical analyses, the research question was divided into two parts. The first question the researcher sought to answer was the following: Is there a difference in academic outcomes (GPAs and OGT passage) based on the level of CTAG mentoring participation (middle school only, high school only, or both middle and high school)? The social performance portion of the research question examined reductions in the behavioral issues that place students at risk of school failure (the behaviors that result in exclusion from class time). Therefore, the second research question the researcher sought to answer was: Is there a difference in social outcomes (emergency removals, in school and out of school suspensions, expulsions, and juvenile court involvement) based on the level of CTAG mentoring participation (middle school only, high school only, or both middle and high school)?

The independent variables in this study were CTAG participation (middle school only, high school only, and both middle and high school participation) and gender. The academic dependent variables were GPAs and OGT reading and math passage. The social dependent variables were emergency removals, in school and out of school suspensions, expulsion, and juvenile court involvement. In addition, school attendance was used as a covariate in the academic analyses. The sample involved student participants at the middle school level (8th grade), high school freshmen level (9th grade), and students that participated in both eighth and ninth grades. The most common reason students may not have participated at all grade levels was that there were more students than there were class mentors.
The quantitative analyses served to understand group differences and the degree of the relationships between level of program participation and social performance (out of class time via emergency removals, in school suspensions, out of school suspensions, expulsions, and involvement with the juvenile justice system) and level of participation and academic performance (Ohio Graduation Test reading and math scores and grade point average). Because of the multiple dependent variables, the two or more categorical independent variables, and using attendance as the covariate, multiple factorial analyses of variance (ANOVA) and Chi-Square Tests were utilized to investigate the group differences. Since absenteeism may influence the dependent variables, controlling for attendance was necessary. In summary, this investigation utilized a causal-comparative approach with CTAG program participation and gender as the categorical independent variables; OGT reading and math assessment passage, GPAs, in school and out of school suspensions, emergency removals, expulsions, and involvement with the juvenile justice system as the dependent variables; and attendance as the covariate.

**Theoretical Framework**

This research was guided by Critical Race Theory (CRT) and Cognitive Anthropology. CRT is a lens used for countless studies in an array of disciplines including culture, education, and policy studies. In terms of educational research, CRT has been used by a multitude of researchers to examine teaching and learning processes as well as to frame culturally relevant pedagogy (Delpit, 1995, 2006; Howard, 2006; Knaus, 2009; Ladson-Billings, 1997, 2001), class and gender in schools (Lynn, Benigno, Williams, Park, & Mitchell, 2006), racial identity and the Black / White achievement gap (Allen, 2010; Fordham, 1988, 1996; Harper & Tuckman, 2006; Fordham & Ogbu, 1986), and educational culture and cultural capital studies (Tatum, 2007; Yosso, 2005). CRT was utilized in this study to examine school performance issues and assisted
in the analysis of whether school-based mentoring programs can be instrumental in addressing achievement and opportunity gaps for African American students.

Anthropology, which is the study of humans past and present, consists of the influence of the following four major areas of study: sociocultural, biological or physical, archeology, and linguistic anthropology (American Anthropological Association, 2015). However, from these sub-disciplines, additional fields have developed to include psychological and cognitive anthropology, the study of thought in cultural context (Society for Psychological Anthropology, 2001). There are numerous definitions of culture, but for the purpose of this study the cognitive definition was used, which states that culture is characterized as whatever one has to know or believe in order to operate in a manner acceptable to its members, and the forms of things people have in mind, their models for perceiving, relating, and otherwise interpreting them (Goodenough, 1957 as cited in Henstrand, 2006).

Cognitive anthropology is one anthropological comparative approach to the study of human cognition in its cultural context with an insistence on the interaction of mind and culture (Brown, 2006). It is the study of how culture happens (Booster, 2005). A few studies that have used the cognitive anthropological approach include understanding school culture (Henstrand, 2006), exploring and measuring commonalities in cultural cognition among undergraduate students in divergent countries (Klein, Pongonis, & Klein, 2000), and examining the scientific gender gap (Mukhopadhyay, 2005). In this examination, cognitive anthropology was employed to examine the commonalities in the cultural cognition of the CTAG mentors as well as to explore the development of the mentoring classroom culture.

During a three-month observation of the CTAG program, the mentors expressed a shared understanding of students’ challenges within the schools and some even shared common
backgrounds (neighborhoods, single parent, and/or economic hardships). Some of the activities mentors utilized were designed to boost confidence, encourage academic improvement, build self-esteem, and enhance social skills. These activities, if successful, can assist in building the sense of connectedness and belonging discussed in past research, which also aligns with the cognitive definition of culture - whatever one has to know or believe in order to operate in a manner acceptable to its members. In this regard, culture is not to be confused with school climate, but viewed through an anthropological discipline in terms of how cultural cognition shapes a shared classroom culture that influences academics and positive behaviors outside of the classroom.

CRT founders Derrick Bell and Alan Freeman and Cognitive Anthropology founder Ward Goodenough provided the backdrop for the literature review and analysis. Tara Yosso, a more recent CRT scholar, provided the structure for the analysis of culture and race in education. As well, CRT and Ward Goodenough’s framework contributed greatly to the cognitive analysis of culture and the institutional change process (Henstrand, 2006).

In an effort to offer an understanding of the importance of culture when addressing school performance, this study utilized research literature that offered a historical context of public education and highlighted the salience of the social and cultural constructs of schooling and institutional change. The literature in these areas presented the impact of race on the internal and external culture of schooling, and the significance of cultural competency and social justice to urban school reform. Consequently, these tenets are delineated in detail throughout this study utilizing a critical race and anthropological frame of reference.

The existing literature and theory were used to provide a historical examination of the prevalence of race in the policies and practices that drastically shape the structure and function of
the United States education system. Theory was further used to demonstrate what West (1993) illustrates in his book, *Race Matters*. Specifically, in view of the relationship between race and culture and culture being embedded in one’s mindset and beliefs, culture becomes a framework for thinking and acting (Klein, Pongonis, & Klein, 2000). Concurrently, Omi and Winant (2000) purport race as both a social structure and cultural representation. Therefore the data in the literature review support this notion as well.

CRT is beneficial in studying race and racism, equality, and historical and economic issues. Moreover, the conception that perceptions of race as a social construction (Bell, 1979; Winant, 1994) is viewed as CRT’s major strength; and the utilization of the critical race scholarship provided a framework for analyzing school practices and demonstrating how the structure and function of education and programming can shape academic performance outcomes for students of color as well as economically disadvantaged students. Similarly, the benefits of the cognitive study of urban school culture embrace the notion that culture emanates in the mental processes of the individuals and allows for an analysis of the complexities within the social system, in this case a mentoring program. Cognition provides the basis for individuals’ perception, assessment, judgment, and action (Klein, Pongonis, & Klein, 2000). Therefore, in this study, a cognitive analysis was employed to understand the mental models and beliefs that contributed to the shared practices in the school district’s CTAG (Closing the Achievement Gap) program; and Ward Goodenough’s cognitive model provided a means for analyzing individuals, groups, and the change process. More specifically, the analysis involved how the CTAG program utilized relationships, positive identity, expectations, and advocacy to improve student outcomes.

Combining the Critical Race and Cognitive Anthropology scholarship provided a rich framework in demonstrating how the structure and function of education as well as personal
perceptions influence institutional culture, school performance, and cultural change. CRT is rooted in not only politics, but in the fields of anthropology, sociology, history, and philosophy as well. Coupling CRT with a sub-field of anthropology in this study helped to present a comprehensive analysis of the influence of mentor / mentee relationships and race and culture in urban schools.

As mentioned previously, Joseph Check (2002) noted at least three types of cultural influences that typically control urban schools. These include the influence of ethnic and racial identity, the influence of a building’s unique “school culture”, and the influence of a distinct “culture of reform”. The first refers to ethnically and racially centered beliefs, attitudes, and practices of minority school populations in relation to the represented mainstream culture of the public school. The second, school culture, refers to a pervasive system of hidden and overt operational rules that create a climate unique to each school. The third, culture of reform, refers to the beliefs, practices, and effects of systemic reform at the policy level, particularly in relation to minority students. It is this philosophy that helped to guide the literature review for this research in order to examine how the decades of racially centered beliefs, attitudes, and practices may have resulted in the culture of institutionalized educational policies contributing to inequities and the academic and opportunity gap phenomena.

Winant (1994) argued that race provides a key cultural marker in the reproduction and expression of identity, collectivity, language, and agency. In association with this study, CRT is used to address the first of Check’s three ideologies of cultural influences on urban schools (ethnic and racial influence) and Cognitive Anthropology provided the foundation for addressing the second and third influence on urban schools, (the influence of a building’s unique school culture and culture of reform) (Check, 2002).
Significance of the Study

Former Ohio Governor Ted Strickland’s *Closing the Achievement Gap (CTAG)* initiative was launched in 2007 to specifically target the graduation rate of African American male students (Strickland, Delisle, & Cain, 2010). His aim for closing the achievement gap involved a shared responsibility model, “the social construction of hope”, which focused on assisting at risk ninth grade males earn enough credits to be promoted to 10th grade and gain a sense of self-worth. This shared model included the student, the linkage coordinator (mentor), and the teacher, while working in collaboration with the school system, the community, and the Governor’s Office for Closing the Achievement Gap. With using this model, grant funds were made available to schools embarking upon this gap closing initiative.

The CTAG program’s concept of a “social construction of hope” and focus on self-worth, appears to reflect on the social construction tenet of CRT in recognizing the effects of racial inequities. The program’s effectiveness is contingent upon relationships, which are developed through getting to know the students. Through mentor and mentee commonalities (cultural identity, gender, and shared experiences), trusting relationships are likely the byproduct. Considering the definition of cognitive anthropology, the trusting relationships then result in the mentees operating in a manner acceptable to its members (the CTAG group). The level of participation in the CTAG program as an independent variable in this study is of major significance since it was asserted that more exposure to the mentoring services equates to better academic and social performance.

Without competent mentors and service fidelity, the exposure to the CTAG program is null and void. The district employed four full time CTAG mentors, two middle school mentors and two high school mentors. Some of the mentors had a rich history of working with youth
through other academic and social programs, juvenile court programs, coaching and refereeing youth sports, and church affiliation. The middle school mentors were housed in the seventh and eighth grade building; and facilitated two group sessions each. The seventh grade male mentor served two groups of male seventh graders, totaling approximately 40 students. The eighth grade male mentor served two groups of male eighth graders; a population of approximately 50 students. Together, they would go to the fifth and sixth grade middle school building twice per week to co-facilitate the fifth grade boys on one day and the sixth grade boys on another day. There were approximately 65 fifth and sixth grade male participants during the researcher’s 2014 group observations.

The two full time mentors located at the high school facilitated (one male and one female) served one freshman group daily that included 20-25 students each. In addition, the high school male CTAG mentor provided some student mentoring services to elementary students as well as provided other non-CTAG related duties at the high school. The female high school CTAG mentor was responsible for fifth through ninth grade female CTAG participants. In addition to facilitating the daily female freshman CTAG group, she divided the rest of her week between the fifth, sixth, seventh, and eighth grade girls (40 – 45 girls). Each mentor was responsible for a significant number of students and traveled between several school buildings to provide mentoring services.

In order to assess if ethnic and economic gaps are closing, a comprehensive evaluation and monitoring process was essential for this program. With specific focus on the research site, the linkage coordinators for the CTAG program were responsible for mentoring, monitoring, and ensuring that the academic, social, and emotional issues of participating students were being addressed. However, assessing student outcomes were not a part of their responsibilities. This
study examined the effectiveness of these efforts on students’ academic and social performance by analyzing GPAs and OGT reading and math passage, emergency removals, in school suspensions, out of school suspensions, expulsions, and juvenile court involvement, based on level of program participation. The years of analyses included academic years 2011-2012, 2012-2013, 2013-2014, and 2014-2015.

The research on the significance of culture and its role in the achievement of urban school students is longstanding; yet the achievement differences still exist and culture is still not a significant variable in student success. While the central focus for change has been on curriculum and the structure of schools (as evidenced by the standards-based reforms, magnet, and charter schools, etc.), history reveals that curricular and structural changes alone do not raise student achievement. According to Cross, Howard, and Pearson (2013), culture is the foundation for all school improvement.

As the U.S. becomes increasingly more diverse, it is not only imperative that individuals are considerate of diversity but also that policies and practices are intentionally designed with a multicultural and culturally competent approach. According to the Glossary of Education Reform (2014), multicultural education refers to any form of education or teaching that incorporates the histories, texts, values, beliefs, and perspectives of people from different cultural backgrounds. Similarly, a cultural competent approach encourages students to learn to maintain their cultural integrity and culture as a vehicle for learning (Ladson-Billings, 2009).

The 2010 census data reveal that the White population experienced their slowest rate of growth and for the first time children of color make up the majority of children under the age of two. It is also noted in the 2010 census report that 45% of young people in the United States were of color. Twelve states and the District of Columbia have White populations below 50%
among children under the age of five. These states include Hawaii, California, New Mexico, Texas, Arizona, Nevada, Florida, Maryland, Georgia, New Jersey, New York, and Mississippi (Yen, 2011). Correspondingly, The Southern Education Foundation reported in 2009 that African American, Latino, Asian-Pacific Islander, American Indian, and multi-racial children comprised slightly more than half of all children attending public schools in the 15 states in the South (The Southern Education Foundation, 2010).

The 2010 Census data further revealed a 43% rise in the Hispanic population alone, from 35.3 million in 2000 to 50.5 million in 2010. Similarly, the Asian population experienced the fastest rate of growth within the last decade (also demonstrating a 43% growth). The five states with what the Census Bureau refers to as having “the majority-minority” population are California (60%), the District of Columbia (65%), Hawaii (77%), New Mexico (60%), and Texas (55%). Overall, the U. S. has become more racially and ethnically diverse over time (U.S. Census Bureau, 2010); and considering the overall diversity of the nation, the rising number of children of color, and the increased focus on global competitiveness, a study of race and culture in education becomes even more paramount. Hence, educational research with race and culture as the central argument for school reform is most valuable. In relation to this study, considering the growing population of students of color, private and rural schools may also see a shift in the demographics of students they have grown accustomed to serving. Therefore, in order to enhance global competitiveness, this data is relevant not only for urban districts, but for all school systems that have yet to become culturally competent; specifically in terms of ensuring that all students of color thrive at the highest levels and at the same pace as their White counterparts.

Institutional culture is a concept rooted in fundamental assumptions about the core functions of schooling (Kowalski & Hermann, 2008). It explains why schools that appear the
same function differently and achieve varying levels of effectiveness, (Ancess, 2000; Giles, 1998 as cited in Hoy & DiPaola, 2008) and with pressure to improve the image of public schools, many officials have implemented ecological and organizational changes (Kowalski & Hermann, 2008). While this research may not serve as a panacea for the public education system or a prescription for reforming all school cultures with school-based mentoring, it does provide cultural insight for leaders, policymakers, and school practitioners, as well as suggestions for using race and culture to improve academic and social outcomes for students.

**Definition of Terms**

The following terms are used in the context of this study:

**Academic Achievement** - Measured by students’ performance at a single point in time and how students perform against a standard (Battelle for Kids, 2011).

**Achievement Gap** – The achievement gap refers to the unequal or inequitable distribution of educational benefits and results (The Glossary of Education Reform, 2014).

**Academic Performance** – For this study performance is defined as how well students are meeting academic expectations, not just at a single point in time, but overall.

**Academic Progress** – Measured by how much gain or growth students make over time - i.e., year to year, semester to semester, etc. (Battelle for Kids, 2011).

**Cognitive Anthropology** – Cognitive anthropology is the study of thought in cultural context (Society for Psychological Anthropology, 2001).

**Cognitive Theory** – Cognitive theory involves analysis of the development of a person’s thought processes and social cognitive theory extends the conception of human agency to collective agency (Bandura, 1997).
Comprehensive Continuous Improvement Plan (CCIP) – A unified grants application and verification system consisting of the Planning Tool (goals, strategies and action steps) and the Funding Application (ODE).

Critical Race Theory – An academic discipline developed out of the legal scholarship that provides a critical analysis of race and racism and recognizes that racism is endemic and engrained in the fabric, system, and consciousness of American society and schooling that it is often invisible (Chapman, 2011; Ladson-Billings & Tate, 1995; UCLA School of Public Affairs, 2009).

CTAG – CTAG is an acronym for a “closing the achievement gap” mentoring initiative.

Culture – Whatever one has to know or believe in order to operate in a manner acceptable to its members, and the forms of things people have in mind, their models for perceiving, relating, and otherwise interpreting them (Goodenough, 1957).

Cultural Competence – When teachers encourage students to learn to maintain their cultural integrity and culture as a vehicle for learning (Ladson-Billings, 2009).

Culturally Relevant Pedagogy – A pedagogy that empowers students intellectually, socially, emotionally, and politically by using cultural references to impart knowledge, skills, and attitudes (Ladson-Billings, 1994)

Deficit Paradigm – Blaming the victim and overlooking student and teacher abilities (Weiner, 2006)

Highly Qualified Teachers (HQT) - There are three parts to meeting the HQT requirement: 1) Teachers must have at least a bachelor’s degree 2) Teachers must have a certificate/license that is appropriate to the grade and subject they are teaching 3) Teachers must be able to demonstrate
their subject area expertise in the core academic subjects they teach (U.S. Department of Education, 2005)

High Needs Schools – Schools serving a high population of students meeting the criteria of low socioeconomic status (SES) / high economically disadvantaged as defined by the free and reduced student lunch program and/or English language learners (Reichardt, 2002).

Mental Models – perceptions and beliefs that shape how one acts and explains why two people can observe the same event and describe it differently (Senge, 2000).

Minoritized - refers to the objective outcomes experienced by minority racial-ethnic groups to include exclusionary practices of more dominant groups that result from historical and contemporary racism (Chase, Dowd, Pazich, & Bensimon, 2012).

Ohio Leadership Advisory Council (OLAC) – OLAC is an advisory and study group comprised of representatives of key professional associations, business, and school board representatives, practitioners in leadership roles, higher education representatives, and state department of education personnel (OLAC website).

Ohio’s Leadership Development Framework – Essential practices for superintendents, district leadership teams, and building leadership teams (OLAC website)

Ohio Improvement Process (OIP) - Ohio’s strategy for establishing a statewide system of support to provide high-quality services to all districts that consist of the following four stages: the use of data to identify areas of greatest need, develop a focused plan with a limited number of goals and strategies targeted at instructional practice and student performance, implement and monitor and evaluate the effectiveness (OLAC website).

Opportunity Gaps – Opportunity gaps are the unequal or inequitable distribution of opportunities and resources; and the ways in which race, ethnicity, socioeconomic status, English proficiency,
community wealth, familial situations, or other factors contribute to or perpetuate lower educational aspirations, achievement, and attainment for certain groups of students (The Glossary of Education Reform, 2014).

Risk Factors – Risk factors are the variables that place students at risk of low academic performance and of dropping out of school. According to ERIC’s thesaurus, risk factors may include but are not limited to behavior, socioeconomic status, cognitive or physical problems, academic background, family or community environment, and school capacity to meet student needs.

School Climate – the quality and character of school life based on patterns of students’, parents’ and personnel’s experiences and reflects norms, goals, values, interpersonal relationships, teaching and learning practices, and organizational structures (National School Climate Center, 2011)

Special Education Services – Individualized instruction and services specifically designed to meet the unique needs of children with disabilities (Center for Parent Information and Resources, March 2013).

State Support Teams - State Support Teams use a connected set of tools to improve instructional practice and student performance on a continuing basis (ODE website). Sixteen regionally assigned teams work closely with their assigned schools to guide them through the OIP.

Teacher Based Teams – A team of teachers with structured time set aside to review and revise the impact of instructional practices and student learning utilizing Ohio’s 5-Step Process: Collect evidence of student learning, analyze assessments, plan for instruction, implement with fidelity, and re-assess and evaluate effectiveness (OLAC website).
Delimitations and Limitations of the Study

In terms to delimitations and limitations, as noted previously this study does not serve as a panacea for school reform, but offers some suggestions for student improvement and perhaps a refocus in efforts. Considering this, a delimitation of this study is the exclusion of an in-depth analysis of the outcomes of the various school reform initiatives. Although reviewing all of the reforms with their results could have added to the historical analysis, due to the vast number of initiatives, covering all reforms was beyond the scope of this examination. Therefore, only the reform initiatives that were relative to this current study were included.

This study is also delimited to an urban district due to the racial differences in school performance (Wiggans, 2007) and the low high school graduation rates (McGuigan, 2008). According to American Council on Education (2009), economically disadvantaged populations and racial minority groups have higher drop-out rates and lower graduation rates. Currently one quarter of U.S. high school students drop out or fail to graduate on time (Education Secretary Duncan, 2011); and according to Alliance for Excellent Education (2011), everyone benefits from increased graduation rates. These benefits include higher wages, increased spending power, higher tax receipts, and increased levels of worker productivity. In addition to all of the aforementioned data and the notion that jobs in the fastest-growing economic sectors are now requiring at least a high school diploma and often two years or more of post high school training (McKinsey, 2009), targeting urban high schools was appropriate.

Furthermore, a limitation of this study was utilizing existing school groups for a causal-comparative examination as opposed to conducting an experiment with randomly assigned student groups. However, because the groups were already intact prior to this study the causal-comparative approach appeared to be the most reasonable. While the results do not provide a
cause and effect conclusion, the strength of the relationship between levels of CTAG participation and the outcome variables, as well as the effect of absenteeism on performance is identified in Chapter IV and should offer insight to the district for future programming.

**Organization of the Study**

After stating the problem, the purpose, and significance of this study, research and legislation is delineated that lays the foundation for why the problem exists. After a review of the historical context of education and past school reform efforts, an in-depth evaluation of educational inequities, school reform through cultural and social shifts, educators’ responsibilities in school performance, and mentoring as a reform is provided. Chapter two presents a literature review of key studies and theories involving the aforementioned areas of focus. Chapter three outlines the methodology and data collection procedures. Chapter four provides the results of the analyses; and chapter five concludes with discussions, implications, and recommendations.
CHAPTER II. LITERATURE REVIEW

The purpose of this study was to determine if a school-based mentoring program significantly impacted academic and social performance as measured by grade point averages (GPA), Ohio Graduation Test passage in reading and mathematics, emergency removals, suspensions, expulsions, and juvenile court involvement. The research hypothesis was as follows: *Students who participated in CTAG at both the middle school and high school level would perform better than the participants in the middle school only and high school only sample groups.* The participating school district’s Closing the Achievement Gap (CTAG) initiative was designed to address the nonacademic barriers to academic performance. As such, the rationale for this focus was to determine if urban school students performed better academically and socially when involved in this classroom structured, school-based mentoring program that addressed their social and emotional concerns. Chapter two provides a contextual analysis of public education and urban schools with race, culture, socioeconomics, and reform as central focal points. A guide through the historical to the present-day educational system and practices offers a comprehensive basis for examining this phenomenon.

Through decades of research, policies, and reform efforts, multifaceted challenges with public education are still prevalent in the 21st century. While culture has been well documented as a variable correlated with school performance (Beaudoin & Taylor, 2004; Check, 2002; Conchas & Rodriguez, 2008; Ginwright, 2004; Gonsalves & Leonard, 2007; Kowalski & Hermann, 2008; Ladson-Billings, 1997; McDermott, Raley, & Seyer-Ochi, 2009), there is a lack of quantitative data in terms of culture as it relates to mentoring programs and their empirical and diagnostic impact on academic and social performance.
To further substantiate the need for cultural studies in education, the United States is becoming more and more diverse (2010 Census). It is therefore critical that educational policies and practices are geared toward intentional efforts to improve schooling for not only students of color, but economically disadvantaged students as well. Hence, considering the need for urban school reform and the significance of culture, this study sought to answer the following research question: Does CTAG participation significantly impact academic and social performance, when controlling for attendance? While examining the relationships between the students and the service providers (mentors) is also significant, relationships are only discussed in the literature review, but not measured in this analysis as this analysis occurred during the qualitative study mentioned in the first chapter.

**Historical Context of Public Education**

This historical analysis of public education provides insight into the chronological events and policies that assisted in creating the current structure and conditions of public education. Primarily, one must understand history in order to understand the present. And recognizing the present condition of education allows for a true appreciation of a school’s ability to transform and maintain a thriving school culture in spite of the circumstances.

Often the context of people’s lives has an equal or greater influence on people’s actions than individual choice (Beaudoin & Taylor, 2004). Therefore, it is important to understand context, because it has power to not only shape actions, but also to influence how people expect others to behave; it is also the backdrop against which problems develop (Beaudoin & Taylor, 2004). Similarly, Beaudoin and Taylor (2004) noted that until contexts and experiences are well understood no school culture can be significantly addressed.
W.E.B. DuBois (1949) stated that the right to learn is undoubtedly the most fundamental of all the civil rights. Notwithstanding, legislative efforts continue to fall short even more than six decades after this remark. Check (2002) reported that “Both media and politics are lured by simple answers to complex questions and quick fixes to long-standing problems” (p. 37). However, historians use what Check calls present-mindedness or presentism to refer to an obsession with the recent and the present that seems endemic to a now-oriented culture; for example, believing that the achievement gap has no connection with past institutionalized discriminatory practices in schooling. Similarly, Check (2002) also reported that treating today’s perspectives as the only valid viewpoints results in individuals thinking, speaking, and acting as if current events are entirely unconnected to their roots in the past. Just as one of the first things a physician does is to review a patient’s history in order to diagnose current problems (Gonsalves & Leonard, 2007) the same is applicable when diagnosing organizational problems. Ignoring lessons from the past or failing to view educational history results in a limited understanding of the current problems and limits the ability to solve the problems (Check, 2002). Therefore, a review of history is the only means of an accurate diagnosis of current conditions (Gonsalves & Leonard, 2007).

The present and the past, especially in the cultural sense, are in continuous, dynamic interaction with each other. Therefore, practicing double sight in terms of viewing the past and the present simultaneously or concentrating on the present, but always being aware of how the past shines through is essential (Check, 2002). In reiterating the importance of history, previous circumstances and experiences shape actions and how people expect others to behave (Beaudoin & Taylor, 2004); and until contexts and experiences are well understood no school culture can be significantly addressed.
The *Plessy v Ferguson* decision of 1896 legalized “separate but equal” treatment of African Americans in schools, facilities, businesses, restrooms, transportation, and in other public accommodations throughout American society (Constitutionfacts.com, 2015; A&E Networks, 2015; McPherson, 2011 & Alexander, 2012). In this era, constitutional sanction was given for the adoption of a series of Jim Crow laws, which was a system of government-sanctioned racial oppression and segregation in the United States (Constitutionfacts.com; Alexander, 2012; Bryant, 2004; Educational Broadcasting Corporation, 2002). Therefore, Black Americans experienced unequal treatment in all public facilities and institutions. In terms of education, Black children attended schools in less than adequate facilities and with limited resources at the elementary and secondary levels. Additionally, there was minimum access to higher education for Black students.

Because there were no structured higher education programs for Black Americans prior to the Civil War and Black students were unable to attend White universities, historically Black colleges and universities (HBCUs) were created (U.S. Department of Education Office for Civil Rights, 1991). According to this same report, in validating separate but equal elementary and secondary schooling, *Plessy* encouraged HBCUs to focus on teacher preparation programs to prepare teachers to work in the segregated schools. However, desegregation began at the post-baccalaureate level when Black students were able to enroll in some all-White universities if their program of study was unavailable at the HBCU (U.S. Department of Education Office for Civil Rights, 1991).

In 1954, the *Brown v Board of Education* doctrine held that racially segregated schools deprived Black children of the equal protection guaranteed by the Fourteenth Amendment of the U.S. Constitution (U.S. Department of Education Office for Civil Rights, 1991). Desegregation
of public schools as a result of Brown was believed to be the solution to Black children’s educational needs (Bell, 1995). However, the pattern of widespread school segregation did not begin to change substantially until the Civil Rights Act of 1964 (Tatum, 2007). This act protects individuals from discrimination based on race, color or national origin in programs or activities receiving federal funding and led to the establishment of the Office for Civil Rights (U.S. Department of Education Office for Civil Rights, 1991). According to Tatum (2007), this congressional act authorized the U.S. attorney general to bring lawsuits against school districts continuing segregation practices and permitted the secretary of Health, Education and Welfare to withhold federal funds from school districts that were excluding students on the basis of race.

According to Bell (1995), the arguments of school desegregation are that Blacks must gain access to White schools because integration is the only means by which equal educational opportunity is possible in terms of Black children receiving the same education as White children. Jordan (2010) argues, however, that equity is not about providing the same education to all students regardless of race, social class, or gender. He stated that because contexts shape one’s views of equity, it takes on different meanings among different populations. Furthermore, although some progress has been made as a result of Brown, creating a racially and ethnically integrated educational system with equal opportunity and access for all students still has not happened (Jordan, 2010). In addition, Bell (1995) purported that if there were existing benefits to Brown they began to dissipate as Whites fled in alarming numbers from school districts with mandatory reassignment plans. Thus, public schools have increasingly become re-segregated (Tatum, 2007). This re-segregation is primarily due to not only an authorized return to neighborhood schools (as diverse cultural communities are separated neighborhood by
neighborhood and school by school), but also because of relaxed desegregation regulations (Jordan, 2010; Tatum, 2007).

The *Elementary and Secondary Education Act (ESEA) of 1965* legislation was created as a part of the War on Poverty in 1965 and designed to help disadvantaged students meet high academic standards (U.S. Department of Education). The *Elementary and Secondary Education Act (ESEA) of 1965* was reauthorized in 2001 as the *No Child Left Behind Act (NCLB)*. This reauthorization had the neediest children in mind when it incorporated increased accountability for states, districts and schools, more choices for parents and students, greater flexibility in spending federal dollars, and a stronger emphasis on reading (U.S. Department of Education).

With fostering equitable access to all students through accountability mandates as the intent, *NCLB* hasn’t improved achievement or closed educational gaps; however, it has succeeded in making public schools far more expensive to operate (Coulson, 2007). These additional expenses are due in part to the unfunded school improvement mandates. Even with increased accountability and a government model for school improvement, currently one quarter of U.S. high school students drop out or fail to graduate on time (Education Secretary Duncan, 2011). Although with great intentions, under the *NCLB* legislation students of color are still being left behind and scholars continue to research problems and solutions for inequities in education.

**Urban School Culture and the Social Implications: Nature of the Problem**

In July 2011, *Education Week* released an article summarizing a U.S. Department of Education’s Office (USDOE) of Civil Rights study regarding the existing inequality in public education. Utilizing data from approximately 72,000 schools in 7,000 American districts with more than 3000 students each, it was reported that thousands of students across the country do
not have equal access to a rigorous education, experienced teachers, early education, and school counselors.

Urban schools enroll a large portion of America’s children, including 40% of the country’s minority students and 30% of the country’s economically disadvantaged students (Council of Great City Schools, 2002). Likewise, the 2010 Census reflect an overall rise in the nation’s population of children of color. Although the White race remains the largest population in Ohio, there is significant growth in all other races. For example, the census data demonstrated that there was a 1.1% decline in the White alone population, but an 8.2% rise in the African American alone population, 3.3% rise in American Indian and Alaska Native, 44.9% rise in the Asian population, 63.4% rise in the Hispanic or Latino population, and 50.6% rise in two or more races. Consequently, as schools become more and more diverse there is a need for qualified, experienced, diversified and responsive leaders, and practitioners.

Additionally, No Child Left Behind (NCLB) required schools to employ highly qualified teachers and projected that all students would be proficient by 2013-2014. However, year after year the local school report cards indicated that the expectation for proficiency was unrealistic and would not come to fruition. Therefore, new federal initiatives were created to provide funding for school improvement efforts (Race to the Top, American Recovery and Reinvestment Act, School Improvement Grant and The School Turnaround AmeriCorps Initiative to name a few). Race to the Top (RttT) funds could be used to support CTAG programs, but not all eligible schools took advantage of this reform opportunity as the district participating in this study chose to utilize general funds to support its CTAG program instead of incorporating the additional demands for RttT funding.
Also, State Educational Agencies have restructured existing goals and implemented new efforts for improvement such as new teacher evaluation systems and teacher incentive programs. More specifically, Ohio created the Ohio Leadership Advisory Council, the Ohio Improvement Process, and Ohio’s Leadership Development Framework in addition to implementing State Support Teams, restructuring the grading system for schools and districts, and incorporating many mandates that are specific to failing schools.

Within the very comprehensive \(NCLB\) document there are accountability measures for primary and secondary schools to ensure that marginalized groups are not disproportionately taught by inexperienced and unqualified teachers. But, “Tragically, low-income and minority students do not have equitable access to effective teachers across the country. The children who need the most help get the least (help); and too often, we perpetuate poverty and social failure” (Human Development Network Forum, 2011, p. 3). Substantiated by the USDOE Civil Rights study, lack of equal access is continuously alarming as the 2009-2010 data revealed that schools with predominantly African American students are twice as likely to have teachers with only one or two years of teaching experience.

While demanding highly qualified teachers, the \(NCLB\) legislation place little or no emphasis on increasing the cultural competence of teachers to better prepare them to work with children from diverse cultural and racial backgrounds (National Collaborative on Diversity in the Teaching Force, 2004); nor does it place emphasis on the social elements of schooling. According to Morrell (2004), social interaction is a critical component of situated learning. Noguera (2004) noted that investing in the social capital of parents via empowering them to become involved in the education process and transforming the relations between school personnel and parents will help improve the academic performance of low income students.
According to Secretary Arne Duncan (2011), we cannot afford to accept and ignore the problem of the mediocre performance of America’s students. However, the vast number of reform initiatives, such as Public School Choice, Magnet, Alternative, and Charter Schools as well as the more recent grants and initiatives mentioned on the previous page demonstrate that the problem is not being ignored. However, since problems with student performance persist, perhaps there needs to be a shift in the focus of reform.

School Culture

In shifting the reform focus to school culture, Joseph Check (2002) noted the three types of cultural influence on urban schools as the following: (a) The influence of ethnic and racial identity, (b) The influence of a building’s unique school culture (c) The influence of a distinct culture of reform. The influence of ethnic and racial identity refers to the beliefs, attitudes, and practices of minority school populations with respect to the represented mainstream culture of the public school. The school’s unique culture is recognized as a pervasive system of hidden and overt operational rules that create a climate unique to each school; and finally, a culture of reform is defined as the beliefs, practices, and effects of systemic reform at the policy level, predominantly in relation to minority students (Check, 2002). Furthermore, according to Check (2002), addressing social change in the forms of social interactions / relationships, feelings of belonging, self-identity, and social justice will be interwoven in the three cultural influences when seeking cultural institutional reform.

Winerman (2011) conducted research through the American Psychological Association on a 15-minute intervention program designed by a group of social and cognitive psychologists to boost ethnic-minority student achievement. The idea was that some of the academic disparities are not the result of faulty teachers or a broken school system, but instead result from toxic
stereotypes that cause students to question whether they belong in school or if they can do well there. The interventions are based on the concept of stereotype threat, first identified in the 1990s by psychologist Claude Steele (Winerman, 2011). Winerman found that dramatic results were achieved. Compared with a control group, GPAs were raised by nearly half a point over two years for low performing California middle school students who completed 15-minute classroom writing exercises that were specifically designed to bolster students’ resistance to stereotypes and to change their way of thinking about learning.

A similar test was conducted in a Connecticut middle school with approximately 400 seventh-grade students in which half of the students were asked to pick a personal value and write about why that value was important to them and the control group was asked to write about why a value that was not important to them might be important to someone else. This was done a couple of times at the beginning of the school year and in a short time the achievement gap between Black and White students was reduced by up to 40% over one school term as demonstrated through Connecticut’s standardized test. This simple writing exercise may be viewed as both a social or developmental exercise and an academic assignment; and can be easily replicated in other schools to attempt the same positive gap closing results.

**The Role of Race in Educational Institutions**

The role of race in schooling must be acknowledged in order to transform the institutional practices and policies that obstruct academic excellence in urban schools. School leaders, researchers, and policymakers must all work under the notion that all students can learn. Although the Black - White achievement gap is well documented, it must be argued that the gap is not because Black people lack social and cultural capital (Yosso, 2005); the same is true of the socioeconomic achievement gap. Believing that the chasm is due to the student’s ineptness
further perpetuates the injustice and inequality in educational practices. When one believes that students do not value education, several things may occur: expectations are lowered, educators may avoid any responsibility to equalize the education inequities with which they challenge; and unfair practices may be seen as justified or normal such as when offering a universal half day kindergarten, but allowing full day kindergarten services to those who can afford to pay for it (Gorski, 2008).

For example, sometimes teachers are led to assume that the achievement gap and the problem with failing schools are due to the students and their families and not the structure or function of schooling (Howard, 2006). Accordingly, making assumptions about who can and cannot learn may lead to these teachers lowering expectations for students rather than placing the necessary high demands on them. Therefore, the deficit thinking mindset moves educators away from maintaining high expectations for all students. This in turn may lead to the ideology noted in *The Color of Success*, that schools train the wealthy for places at the top of the economy and condition the poor to accept their subordinate class positions (Malone, 2008).

**Benefits of a Quality Education**

Culturally, the diversity and uniqueness of individuals in this country have contributed to the nation’s identity of being known as a salad bowl and embracing this diversity through education is advantageous. In contrast to the melting pot discussed in chapter one, the salad bowl simply refers to the many different cultures in the United States integrating like a salad as opposed to a cultural melting into one. Because all of America’s populations contribute to the social fabric and economic development of this country, an inadequate education for any group has significant ramifications for all groups. Economically, while African Americans contribute billions of dollars annually in spending (McKinsey & Company, 2009), undereducated
individuals cost the nation billions of dollars in not only unearned revenue (Wilson & Hayes, 2000), but also in terms of health-related issues. According to McKinsey and Company (2009), lower education is highly correlated with unhealthy lifestyles. For example, an inadequate education is substantially related to the economic and social issues of smoking and obesity, which result in various health-related costs. As well, less educated people are more likely to be uninsured and consume more public health resources (McKinsey & Company, 2009).

On the other hand, society benefits from an educated population. In addition to personal income and more tax revenue, high school graduates are twice as likely to vote as those with an eighth grade education or less and college graduates are 50% more likely to vote than high school graduates (McKinsey & Company, 2009). And, if given the opportunity for diversity experiences in college, individuals may also continue a pattern of cross-cultural interaction in their neighborhoods and at work after college graduation (Tatum, 2007). Furthermore, an educated population also makes fewer demands on social services and correctional institutions (National Center for Public Policy and Higher Education, 2004).

According to Education Secretary Duncan, education is now the key to eliminating gender inequality, to reducing poverty, to creating a sustainable planet, to preventing needless deaths and illness, and to fostering peace (Human Development Network Forum, 2011). Duncan further stated that education is inseparable from the development of human capital and is the new currency by which nations maintain economic competitiveness and global prosperity. Therefore, quality education benefits society as a whole.

**Critical Race Theory and Education**

Solorzano (1997) delineated five principles of Critical Race Theory (CRT) that should inform theory, research, pedagogy, curriculum and policy. These principles include the centrality
of race and racism with other forms of subordination, the challenge to dominant ideology, the commitment to social justice, the centrality of experiential knowledge, and the utilization of interdisciplinary approaches. While all tenets are discussed in this study, because social change is a major component of both CRT and Cultural and Cognitive Anthropology, the commitment to social justice principle is given greater attention. Critically, in education CRT is conceived as a social justice venture that works toward liberating the potential of schooling (Yosso, 2005).

**Centrality of race and racism.** The first of the CRT principles situates racism as one of the United States’ critical social problems. Racism overtly shaped social institutions at the beginning of the 20th century and continues more subtly to impact social institutions in the 21st century (Yosso, 2005). With race at the nucleus, Critical Race Theory (CRT) posits that racism is prevalent in society and in education, and that racism is deeply embedded in the consciousness of society and schooling – legally, culturally, and psychologically (Bartlet & Brayboy, 2006; Ladson-Billings & Tate, 1995). Correspondingly, critical race theorists take the position that there are four dimensions of racism: micro and macro, institutional and individual, conscious and unconscious and a cumulative impact on individuals and groups (Solorzano, 1997).

Theorist Tara Yosso (2005) utilized CRT to challenge the traditional interpretations of Bourdieuean cultural capital theory, which assumes that people of color lack the social and cultural capital required for social mobility. Yosso posed two research questions: Whose culture has capital; and are there forms of capital that marginalized groups bring to the table that traditional cultural capital theory does not recognize or value? In seeking to answer this question, she dismissed the Bourdieuean theory of deficit thinking and promotes a community cultural wealth concept. In doing so, Yosso analyzed the assets students of color bring with them from home and their communities to the classroom and delineated six forms of capital. In highlighting
some of the students’ underutilized assets, she provided recommendations for the potential of transforming the schooling process.

According to Yosso (2005) the six forms of capital that comprise community cultural wealth that students of color bring to the classroom are aspirational, navigational, social, linguistic, familial, and resistant capital. Aspirational capital refers to the ability to maintain hopes and dreams in times of adversity or barriers. Navigational capital is the skill to maneuver through social institutions not created with communities of color in mind. Social capital is the networks of people and community resources that students have for support when needed. Linguistic capital refers not only to intellectual and social skills attained through communication experiences in multiple languages, but also to the ability to communicate by way of visual art, poetry, and music. Familial capital is the cultural knowledge (history, traditions, etc.) nurtured within the family, a broad understanding of kinship and lessons of caring, coping, and providing. Finally, resistant capital refers to knowledge and skills fostered through oppositional behavior to challenge the status quo, inequities, and racism learned via verbal and nonverbal lessons (Yosso, 2005).

Overall, students of color bring valuable cultural assets to the classroom that could be better utilized in the teaching and learning process (Yosso, 2005). The researcher concluded that marginalized groups indeed bring forms of capital to the classroom that traditional culture may not recognize in schools. Yosso revealed the need for social institutions to restructure practices around the knowledge, skills, abilities, and networks (community cultural wealth) possessed and utilized by people of color (Yosso, 2005); and school-based mentoring programs could be positioned to confront this need.
Correspondingly, Bartlett & Brayboy (2006) examined the problem of race and schooling in their quest to answer the question of how best to educate minoritized students. These scholars chose a meta-analysis of five theoretical approaches of contemporary ethnographers to identify the best theoretical approach to answering the research question. They examined cultural ecological theory, racial formation, cultural production theory, critical race theory, and theoretical work around race talk and silence. The researchers concluded that all have contributed greatly to the scholarship of race and schooling, but that their research question of how to best educate minoritized students must remain central to the research agenda. Furthermore, they report that they expect the growing number of immigrant children and youth to pose serious questions to race and schooling scholars; and as a result, research questions will grow.

In terms of the expected growth, according to the Census Bureau, by 2020 minority children are expected to make up over half of the nation’s children. This proportion is expected to continue so that by 2060, only 36% of children will be single race, non-Hispanic White. However, the U.S. population as a whole is expected to be majority-minority by 2044. In addition, Bartlett and Brayboy expect critiques in research methods to flourish and scholars to initiate fruitful debate regarding the role of particular types of theories in race and schooling studies.

**Challenge to dominant ideology and commitment to social justice.** There should be a challenge to dominant ideology as it relates to the traditional claims of the legal system, meritocracy, colorblindness, race neutrality, and equal opportunity (Solorzano, 1997). As one method of challenging dominant ideology, much research has been geared toward urban school reform through cultural competence and multiculturalism approaches.
The third principle, social justice, requires knowledge of the past and a strategic vision of an equitable educational system. With relation to social justice there are five key concepts of a democratic education: equality, diversity, choice, participation, and cohesion (Perry, 2002). Initially, the term democratic relates to the broad masses of people and favors social equality. But in order to prepare students for active participation in a democracy, there should be balance, integrity, vision, a clear sense of collective responsibility, and ethical leadership (Tatum, 2007).

Likewise, as reported by Korn and Bursztyn (2002) John Dewey (1938/1963) proposed that schools should not only prepare students for life in a democracy but that schools themselves should reflect democratic processes and ideals. Therefore, the faulty beliefs that educators hold relating to minority and poor students, which damage students’ educational outcomes and access to opportunities (Holcomb-McCoy, 2002) must be dispelled first.

While “race and class interact and are both determinants of social inequality” (Holcomb-McCoy, 2002, p. 50), and considering the definition of democracy, the use of incorporating a commitment to social justice as a component of CRT is validated. Social justice in education involves ingraining the practices and policies of a democratic education into urban school culture; and effectively doing so requires strategically planning and executing each concept. According to the Center for Educational Leadership and Social Justice, educational leaders must have the courage to risk personal comfort and safety to improve the lives of students when confronted with conditions of social injustice. They further noted that socially just leaders systematically and intentionally interrogate themselves (ethic of critique) to continuously improve and understand personal biases, assumptions, and prejudices. Furthermore, working for social justice in the educational setting involves guiding both students and staff to reflect
critically on their roles in proliferating racism and discrimination and supporting systemic change to prevent ongoing inequities (National Association of School Psychologists, 2012).

**Equality.** Focusing on equality, schooling is the primary process by which social inequalities are reproduced, but at the same time is the main vehicle for social mobility and a higher quality of life (Ginwright, 2004; Perry, 2002). In other words, providing an equitable culture involves not only fair and just treatment, but equal access to all programming. Given that school is a place where children’s home culture intersects with the dominant culture, schools need to be unambiguous in how decisions are made and whether such decisions enhance or restrict access for students (Korn & Bursztyn, 2002).

**Diversity.** In view of diversity, schools are called upon to identify and to make explicit the underlying assumptions and expectations of the dominant culture. Therefore, when bridging the worlds of school and home/community cultures educators must examine their own positions in addressing or avoiding discussions of differences (Korn & Bursztyn, 2002). At the same time, these researchers also stated that diversity engages individuals in continual renegotiation of the personal and the social. Consequently, an individual’s culture or perceptions and beliefs influences social interactions and shape collective and institutional culture.

Unequivocally, urban school reform must be grounded in a real understanding of the complexities of urban life that have led to poor academic achievement (Dittmann, 2004). Deliberately restructuring schooling to capitalize on the rich qualities that each student brings to the school and the classroom is advantageous. Tatum (2007) references the need for environments that acknowledge the significance of race and racial identity in ways that empower and motivate students. She demarcated this process in her ABC’s of creating inclusive learning environments. The ‘A’ represents affirming identity, in which Tatum refers to diminishing
feelings of marginality through a focus on allowing students to see themselves in the environment, the curriculum, among the faculty and staff and in their classmates.

Tatum’s ‘B’ in the ABC’s of creating an inclusive environment is for building communities whereby there is a sense of belonging within the school milieu. Additionally, “When schools address the issues of race head-on, dramatic results occur” (Singleton & Linton, 2006). And finally, the ‘C’ is for cultivating leadership, which addresses the role of education in terms of preparing citizens for active participation in a democracy (Tatum, 2007).

**Participation and cohesion.** The final concepts of a democratic education require access to multiple opportunities as well as engaging, consistent, and systemic practices that encourage participation in the learning process. Moreover, in relation to a commitment to social justice (the third principle of CRT), a Title II Teacher Quality Grant resulted in the outgrowth of a major university and elementary school (majority-minority and 90% low income) partnership designed to transform urban education through social justice education. Carlisle, Jackson, and George (2006) utilized a field-based study and existing research to identify five key principles of social justice education in schools. The project’s purpose was to address the problem of student achievement in urban environments and teacher preparation, in terms of equipping educators to work effectively in diverse environments and improving student achievement.

The research procedures involved field work at the partnering elementary school to include observations, meetings, interviews, and discussions grounded in Paulo Freire’s Educational Theory (Carlisle, Jackson & George, 2006). Participants included classroom teachers, student interns, parents, community members, school administration, university faculty, and doctoral students. With the purpose of improving student achievement, the researchers utilized the data to create generative themes most relevant to this focus. They identified the five
principles of social justice education in schools to be: (a) inclusion and equity, (b) high
expectations, (c) reciprocal community relationships, (d) system-wide approach, and (e) direct
social justice education and intervention. The mentors of the school-based mentoring program
used in this study appeared to seek all five of these principles. The principles of inclusion and
equity, high expectations, reciprocal community relationships, and social justice education and
intervention are within the mentors’ control, but only for the students they serve. Yet, a system-
wide approach was not evidenced as the mentoring program and the processes within the
mentoring classrooms were not supported by the entire district (teachers, support staff, and
principals).

While the study did not report the impact on student achievement, the researchers did
highlight the significance of assessing the implementation of the new activities. Therefore, they
concluded with next steps of field testing their systems model and assessment tools in their local
districts as well as a commitment to continue to assess the theoretical and experiential
connections between social justice education and student achievement to provide the empirical
evidence in a future analysis (Carlisle, Jackson, & George, 2006).

Urban School Influences

As noted previously, Check (2002) reported three major urban school influences which
include the influence of ethnic and racial identity, the influence of a building’s unique school
culture and the influence of a distinct culture of reform. In utilizing a CRT and cognitive
anthropological lens, in relation to this current examination of the relationship between CTAG
participation and school performance, these influences were also relevant.

With race defined as a social construct as opposed to a biological condition (Bernasconi
& Lott, 2000; Omi & Winant, 1994), race as a phenomenon is a component of "collective
identities and social structures" as well as a constituent of individual psyche and of relationships among individuals (Winant, 1994). In view of this position and looking at school as a social institution, ethnically and racially centered beliefs, attitudes and practices of minority school populations in relation to the represented mainstream culture of the public school (Check, 2002) was important to this study.

In reference to the influence of a school’s unique culture, according to McGuigan (2008), not one of America’s large urban districts had a sustained record of high student achievement or an impressive high school graduation rate. He argued that urban schools with high achievement often succeed in spite of the district rather than because of it. Furthermore, McGuigan discussed how organization-wide reform must emanate from the central office and include changes to its management structure, culture, rules, policies, and processes. He stated that as a result of the legal and regulatory bureaucracies, unfortunately inflexibility has become the fabric of the organizational culture of public schools. Inasmuch, McGuigan claimed that changing outcomes requires a complete retooling of the culture and not just a change in law or restatement of legal standard.

**Cognitive Anthropology: Cognition, Culture, and Institutional Culture of Reform**

School culture refers to patterns of meaning or activity shared in varying degrees by members of a school community (Perry, 2002). Schools seeking to reform school culture must identify the variables related to student and school success. On the notion that schooling is more than just reading, writing, and arithmetic, education should give a sense of identity, purpose, and direction (Kunjufu, 2002). In terms of urban school reform, long-lasting institutional change stems from change in the belief systems, attitudes, and a deep understanding of the reason and rationale for change (Senge, 2000).
According to McGuigan (2008), systems change as a result of understanding the culture, structure, and processes of the system. This researcher noted that changing the culture of large systems requires explicit, targeted, and aligned change efforts at these identified leverage points. Gonsalves and Leonard (2007) further substantiated that the ecological systems model of educational reform focuses on the primary setting of the development of individuals such as students, teachers, and school leaders. This approach to educational reform enables researchers to focus on the relational conditions necessary to create and sustain a healthy school culture.

It is reported that the ecological approach allows for a deeper understanding of the ways in which cultures combine within the school context to impact relations (Gonsalves & Leonard, 2007). Thus, Check (2002) noted that there is little in today’s reforms to address the historic gap between those outside who dictate reform and those inside the schools who must implement it. Therefore, focusing reform on the school as a unit of improvement and high academic performance as the primary measurable outcome leaves little room for ecological questions.

Nonetheless, changing organizational culture is far more difficult than analyzing it (Perry, 2002). Overall, school culture studies strongly support the following two conclusions: the shared patterns of meaning and activity significantly affect teaching and learning and that school leaders (principals) must influence school culture in order to create change (Perry, 2002). These two premises are discussed further in the following sections.

Cognition and culture. In view of school culture, this portion of the literature review utilized an ecological approach to cognitive science which emphasizes the significance of individual culture (internal beliefs – micro-system) to the ability to work effectively within institutional (external – macro-system) culture. Cognitive science, (based on models of brain
functioning) and cultural theory is a unified conception of cognitive culture, which is vitally important for the study of organizational culture and organizational change (Lakomski, 2001).

Ward Goodenough, founder of cognitive anthropology, asserted that culture consists of the models individuals use to understand the world and to guide their own behavior (Booster, 2005). Therefore, leaders taking the time to observe followers’ language and actions could result in an understanding of beliefs and principles that guide actions within the school. Individual cognition is significant to the cultural change process because paying attention to how individuals notice and interpret stimuli and how prior knowledge, beliefs, and experiences influence the construction of new understandings (Spillane, Reiser & Reimer, 2002) is helpful in designing and implementing change initiatives.

Accordingly, “true change begins within the person and emanates outward” (Calabrese, 2002, p. 39). However, making sense of or interpreting attitudes, beliefs, and understandings is a complex task and differences in interpretation or differences in acting on understandings are a necessary part of the human understanding process (Spillane, Reiser & Reimer, 2002). These scholars argued that teachers’ prior beliefs and practices can pose challenges not only because they may be unwilling to change in the desired direction, but also because their extant understandings may interfere with their ability to interpret and implement the reform in ways consistent with the intent.

For example, research revealed that school personnel in dominant positions may utilize the deficit model when interacting with and teaching students of color. Under this assumption, students, families, and their communities are to blame for the lack of academic achievement in school. Believing that underperforming students are incapable of learning and that the education system holds no blame are faulty beliefs. Holcomb-McCoy (2002) states that the faulty beliefs
educators hold regarding minority and poor students damages the students’ educational outcomes and access to opportunities.

Conversely, Howard (2006) reported that transformationist teachers reject the assumptions that the present culture and schooling practices work well for all students. They also reject the idea that those who do not achieve or do not perform in ways comfortable and familiar to them are either insufficiently intelligent or inadequately supported in their home environments. In addition, not only do these transformationist teachers reject these assumptions, but they also take responsibility for extricating the inequities in the classroom that have perpetuated the achievement gap. Furthermore, understanding that the dominant culture and schooling practices do not work well for all students requires the development of cultures and practices that do work well, which may include such practices as school-based mentoring programs for students of color that are led by adults of color.

As noted in Tatum’s (2007) ABCs of creating an inclusive environment, there are several strategies to remember when educating African American children. One strategy includes affirming identity (or diminishing feelings of marginality) through a focus on allowing students to see themselves in the environment, the curriculum, among the faculty, staff, and classmates. Another strategy consists of building communities or a sense of belonging within the school. Finally, the last strategy consists of cultivating leadership, in terms of preparing citizens for active participation in a democracy. Additionally, Singleton and Linton, (2006) stated, that when schools address the issues of race head-on, dramatic results occur.

Researchers McDermott, Raley and Seyer-Ochi (2009) sought to address the issue of cultural preoccupation and circumstances that invite general bias of race and class. As noted, these biases led educators to believe that they should focus on fixing the children. The purpose of
their study was to display how race and class differences were acted on by people in social relationships on one hand, but made consequential in risk-embedded situations on the other. The biases they found as a result of three case studies (in high schools and of high school students) is significant to understanding school cultures.

In order to change a school’s culture and obtain cultural competency, an organizational learning process needs to take place that moves the organization beyond its currently held understandings of itself as well as its ways of dealing with internal and external reality (Lakomski, 2001). In order to achieve a culture of high academic performance for all students, schools must be willing to move away from the status quo and toward innovative cultural reform strategies that place the economically disadvantaged and students of color at the forefront.

Cultural shift: people, relationships, and the change experience. Cultural transformation involves patterns of assumptions, beliefs, and attitudes. It involves mental models and scripts, which limit people’s ability to change and can cause complacency with the status quo. Therefore, “If you want to change a school system, before you change the rules, look first to the ways that people think and interact” (Senge, 2000, p. 19). It is suggested that one is to immerse oneself into studying a culture until he or she understands it and then propose new values, new ways of doing things and articulate new governing ideas; then overtime new behavior will result (Senge, 1999).

In reference to school leaders influencing change in school culture, change is a process that takes time as constituents may need to unlearn past ways of acting and behaving and learn new ways. Kurt Lewin calls this reeducation process unfreezing, changing and refreezing as cited in Calabrese (2002). Implementing school-based mentoring requires a change in scheduling, a great deal of teacher and leadership engagement, and an adjustment to new
practices. Therefore, creating a supportive environment for the desired change, involving those who are affected by the change in the planning and the implementation of the change, and reeducating those involved are three basic lessons for the leader (Calabrese, 2002).

Additionally, Collins (2001) stated that it is important to not only have the “right” people on the bus, but they also must be in the “right” seats. Clearly, employing the “right” people is essential to any organization as personal beliefs or a person’s norms influence his or her actions and behaviors in social interactions and the work environment. Likewise, district reformers would agree that a key determinant for school success is having the right leaders in place; and therefore, focusing on the structures or people is the first step to reform; and then structures or people must be well matched to strategy (McGuigan, 2008). Furthermore, McGuigan reported that there is a cause and effect relationship between structures and processes; and therefore, a change in one is likely to cause a change in the other.

As well, Gonsalves and Leonard (2007) discussed that the importance of externalization of problems is a key concept to creating change. This practice of externalization removes the problem from an individual and it becomes a tangible entity that an individual can control rather than allowing the problem to control them. Externalization shifts the focus from blaming people to working as a team and noticing people’s efforts. For effectiveness, externalization has to be embedded into conversations that reflect its implication, not something that is used on people (Gonsalves & Leonard, 2007).

Concerning building cultural competence within individuals and institutions, Buehler, Gere, Dallavis, and Haviland (2009) found that it is wise to focus on the struggle enacting cultural competency as opposed to the achievement of it. Therefore, externalizing the problem by discussing cultural competency as a school-wide reform as opposed to something an individual
needs may produce better outcomes. Buehler et al. (2009) found through a four year ethnographic study of beginning teachers enrolled in Teachers for Tomorrow (designed to prepare prospective teachers for careers in urban and under-resourced schools) that participants struggled with reconciling the gaps between teaching goals and the realities of classroom practice.

In following one student teacher’s experiences with cultural competence, the researchers found that complex issues involving race, emotion, and school context surfaced repeatedly. They also found that cultural competence appeared and disappeared in the teacher’s words and actions throughout the semester. The teacher frequently articulated feelings of guilt, anxiety, and negativity in discussions concerning her response to students’ language and behavior; she avoided race issues and preferred the colorblind stance despite her two years in the Teachers for Tomorrow program.

Likewise, even when committed to culturally relevant pedagogy, pre-service teachers can face struggles as they become fraught with the numerous challenges of seeking to develop cultural competence (Buehler, Gere, Dallavis, & Haviland, 2009). Since mentors are utilized as advocates and liaisons between students and teachers, they could also be utilized to simplify the complex issues revolving around race and emotion in the school context. This could be evidenced in using mentors to assist teachers with bridging the students’ home and classroom cultures to help reduce classroom management challenges that result in exclusion from the academic setting.

**Social and Cultural Possibilities of Mentoring**

In shifting to systemic and coherent practices, McGuigan (2008) reported that systems thinking make systems and system linkages explicit; and as an analytical approach, systemic
practices reveal the roles of all members of the organization and the relationship of their roles to each other as well as to the whole. In view of this notion of systems thinking, school-based mentoring should not be a simple independent program within the school, but there should be collective autonomy as it should be connected to the academic program as well. This gives the mentors, teachers, principals, and students shared responsibility and accountability for the outcomes. The process recognizes social systems as more than simply the sum of their individual parts, but also views individuals as independent and interdependent (McGuigan, 2008). When thinking of the educational process and specifically the CTAG program in this study, systems thinking requires all stakeholders noted above to understand their role and responsibility in the students’ success.

Henstrand (2006) argued that in the last 20 years most change investigations have been from a technological or political perspective. Therefore, utilizing a cognitive anthropological framework, she sought to identify the way people experience change as well as the interaction of an organization’s internal culture with the change process. Utilizing a case study approach and ethnographic research techniques, she concluded that relationships are instrumental to the reform process. Henstrand’s findings revealed the importance of communication and how crucial it is for principals and teachers to understand the individual’s and group’s principles and beliefs.

She reported that when principals violated sacred norms, teachers stopped supporting the reform initiatives. It is further noted that the teachers and administrators had opposing ideational systems. As teachers tended to focus on the specifics of each situation and how their classrooms would be impacted, administrators focused on the big picture and how to move the system toward its goals. Henstrand (2006) concluded that the school reforms impacted teachers’ lives as well as the students; and that the teachers’ beliefs about the reforms had a greater impact than the
facts. Finally, this scholar noted that in order to fully comprehend the culture of the school, the whole must be understood in terms of its parts just as the parts must be understood in terms of the whole.

Thinking in terms of CTAG (school-based mentoring) as a school reform, teacher buy-in is also crucial to students’ success. Teachers must believe in the programs’ validity, especially at the middle school level, because this approach affects them by requiring their input and sometimes by encouraging them to repair broken teacher-student relationships. CTAG’s maximum success, at the middle school level, depends on the regular communication and collaboration between mentors and teachers. Thus, if teachers are not on board there is not only a lack of communication but also some hindrance as teachers have the authority to allow other things to take precedence over program participation and may even prohibit participation for classroom behavioral problems, which is antithetical to the program’s purpose.

Performance

In view of the purpose of the present study, this next section provides a contextual analysis of some of the variables related to school performance. This portion of the literature review consists of leader, instructor, student, and school performance and is delineated as follows: leadership responsibilities, mentor competencies, and student and school performance. In traditional closing the achievement gap examinations teacher effectiveness would be a major part of the study. However, because this study focused on social programming, the discussion of teacher effectiveness was not given a subheading but is included in the mentor competencies section to argue the significance of particular characteristics and qualities needed by all educational service providers.
Leadership responsibilities: In consideration of principals’ influence on student performance, Leithwood, Patten, and Jantzi (2010) reported the conception of four influential leadership paths. The two interdependent paths are the Rational and Emotions Paths. The Rational Path includes classroom and school wide variables such as curriculum, teaching and learning, and the knowledge and skills of the staff. The Emotions Path requires social appraisal skills or emotional competence, which involves leaders improving the collective efficacy of teachers (Leithwood et al, 2010). According to these researchers, the final two influences on student learning are the Organization and Family Paths. The Organization Path is the leaders’ influence on teachers’ working conditions, such as the culture, policies, structures, and operating procedures (e.g. maintaining a professional learning community); and the Family Path involves leaders influencing student learning by altering the family-related variables that are directly related to student learning (Leithwood et al, 2010).

The responsibilities of school leadership encompass a variety of tasks as today’s principals are constantly shifting roles and multitasking (Habegger, 2008). While Habegger noted that all roles and responsibilities are important, creating a positive school culture and evaluating teacher (in this case mentor) effectiveness were the two focal points for this study. In terms of school culture, attention to culture is important since evidence revealed that there is a strong correlation between a healthy and strong school culture and increased student achievement and motivation as well as with teacher productivity and satisfaction (Stolp, 1994).

As reported by Goldring, Porter, Murphy, Elliott, and Cravens (2007), creating a positive school culture is a component of the principals’ instructional leadership responsibilities (Hallinger & Murphy, 1985); and as it relates to the magnitude of change, it is viewed as the principal’s ability to foster shared beliefs, a sense of community, and cooperation (Waters,
Accordingly, in regards to Habegger’s (2008) study of principals in three high performing schools of low socioeconomic status, it was revealed that the principals’ major goals for their buildings were not to achieve high test scores, but to create a sense of belonging for students and teachers and to provide clear direction for students, teachers, parents, and the community.

According to The School Leader’s Toolkit, the first step to creating a high performing school is choosing the right team (recruitment and selection), which involves not only selecting strong teachers but also setting expectations for the school’s unique culture (The New Teacher Project, 2011). Moreover, research revealed that some principals view the quality of a teacher not solely on professional traits, but also on personality or affective characteristics (Ladson-Billings, 2001; Rutledge, Harris, & Ingle, 2010; Walls, Nardi, von Minden, & Hoffman, 2002) as well as job fit, when hiring and evaluating teachers (Ingle, Rutledge, & Bishop, 2011).

**Mentor competencies.** In view of the CTAG mentors, they are referred to as linkage coordinators. The linkage coordinators in this study were not required to be certified teachers or have a college degree. While the CTAG mentors’ primary responsibility is to provide social and emotional instruction, they do however assist with academics via individual and sometimes whole group assistance. Because effective assistance to students requires collective approaches, teacher buy-in is critical for the success of most change initiatives and this initiative is no different. Mentors and teachers must work in collaboration in order to attain optimal results from the CTAG program. Nevertheless, before delving into mentor competencies it is deemed appropriate to begin with teacher effectiveness research which began as early as the 1920s (Battelle for Kids, 2010).
Since teachers are the single most important determinant of academic outcomes and the schooling experience (Battelle for Kids, 2009; Sanders, Wright, & Langevin, 2008) teacher effectiveness has been thoroughly examined. However, characteristics of a strong or effective teacher may be determined differently according to building needs and school culture. Likewise, teacher quality or teacher effectiveness has multiple definitions; and thus measuring teacher effectiveness remains elusive partly because of ongoing debate about what an effective teacher is and does (Goe, Bell, & Little, 2008); but it is oftentimes measured from a standpoint of gains in academic achievement and classroom processes (Goe, Bell, & Little, 2008).

In reference to instruction and pedagogy, a great deal of literature exists on culturally relevant / responsive behaviors and instructional practices. Although cultural responsiveness is not a new theory, recently there has been an increased interest in this approach as an academic transformation model. This theory encourages educators to intentionally consider race and all aspects of culture in instructional practices. In Giroux’s Critical Pedagogy, an active, dialogical pedagogy that draws upon social and critical educational theory as well as cultural studies is central. Its objective is to empower the marginalized and transform existing social inequalities and injustices (Duncan-Ardrade & Morrell, 2008).

In Ladson-Billings’ (2001) research study that involved a three-year examination of eight teachers (African American and European American) who were perceived successful at teaching African American students, she found that their styles of teaching were different. She also found no common threads in their practices, but found congruence in philosophy/ideology, how they structured social relations, and how they conceived knowledge. Some of the things they had in common included that they were all proud of their jobs, saw themselves as part of the community, maintained a fluid and equitable relationship with their students, and encouraged
their students to give back to the community. They also encouraged students to act as teachers and they used students’ interests and ideas to teach academic content. This current study of the effects of a school-based mentoring program argues that these same concepts of social relationships, empowering students, multicultural curriculum, utilizing the student’s personal and cultural knowledge as the basis of inquiry (Howard, 2006), and encouraging citizenship are not just appropriate for teachers but also for mentors and other educational service providers as well.

Howard (2006) noted that being culturally competent, knowing one’s students well, and having the capacity to form authentic relationships with students is essential. He stated that a transformationist classroom is one in which students and teachers learn together, differences are honored, students of color achieve at higher levels, and succeed without giving up who they are (Howard, 2006). According to Becker and Luthar (2002) the shift toward a more negative self and school achievement attitudes occur as a result of the middle school environment and early adolescent developmental needs. As this relates to the person-environment fit model, changes associated with the transition to, the experience of, and the middle school environment conflict with the development needs of adolescents (Becker & Luthar, 2002).

While one of the research district’s goals is to improve the high school graduation rates of African American students, CTAG services began at the elementary level, but were more comprehensive at the middle school level. The ecological approach was mentioned previously in understanding the intersection of home and school cultures (the micro and macro levels) in the Cognitive Anthropology section of the literature review. Becker and Luthar couple the ecological approach with the transactional model in their study to understand multiple contexts affecting school performance. A few of the conclusions they reported were that there was a sharp decline in achievement motivation with the transition to middle school and that student achievement was
linked to the state of children’s emotional and mental health. They further concluded that simply raising educational standards without addressing the social-emotional forces contributing to academic performance will not exemplify real learning and achievement improvements (Becker & Luthar, 2002). With consideration to the decline in achievement motivation with the transition to middle school finding, the CTAG initiative was designed with a focus on the transitional periods from elementary to middle school and middle school to high school (Strickland, Delisle, & Cain, 2010).

In view of Bronfenbrenner’s ecological theory of development, it is important to build relationships between the systems (home, school, and the community). With specific focus on academic performance, the child-family system, and the school system work in conjunction to shape academic performance and general school experiences (Taylor, Clayton, & Rowley, 2004). Utilizing the ecological framework as a basis for intervention places school-based mentors in a unique position to build and enhance a dynamic interplay between the systems; especially when their focus is academic achievement through social development and mental and emotional supports. School-wide communication concerning the need for and the benefits of such an approach should acquire the teacher buy-in necessary to increase the likelihood of desired reform outcomes.

According to the Canadian Coalition for Global Health Research (2007), the five qualities of a good mentor are: commitment, acceptance, teaching, communication, and learning. This research also noted that the conceptual framework involves a balance of abilities (cognitive, emotional, and relational), competencies (teaching, mentoring, and communicating) and virtues (integrity, caring, and prudence). According to Gordon, Iwamoto, Ward, Potts, and Boyd (2009) in their study of mentoring African American males, they reported that mentoring could be used
to counter the “no one cares” attitude that students may experience. They also reported that effective intervention mentoring programs should have the following: (a) an emphasis on the relationship, (b) an emphasis on information exchange, (c) focus on facilitation, (d) focus on confrontation, (e) attention to the role as a model for the mentee, and (f) attention to the vision that the mentee brings to the relationship.

In their investigative study of the impact of involvement in the Benjamin E. Mays Institute’s (BEMI) mentoring program on racial identity development, academic identification, and academic performance for Black male 8th grade students, Gordon et al sought to determine if participating in this mentoring program would increase academic performance, cultural consciousness, and attitudes toward academics. The conceptual framework of BEMI builds on the Afrocentric teachings that involve linkages to ancestry and history (Sankofa), cooperative economics (Ujama), spirituality, self-determination (Kujichagulia), truth (Maat), freedom, and social justice (Uhuru). The researchers concluded that the experimental group members were able to express more positive views about the importance of an internalized racial identity status and its impact on their current levels of functioning; and they had a more positive and higher identification with academics scores, lower pre-encounter attitudes, and higher internalization scores than the comparison group of students. Racial identity status was a strong predictor of student performance as students with a higher identification with academics and higher internalization scores had higher GPAs and students with higher internalization racial identity attitudes appeared to have higher standardized reading and math scores. While there were limitations with this study as with all studies, it did underscore the significance of school-based mentoring programs when implemented with fidelity.
Mentoring programs. Although there is currently little evidence that school-based mentoring programs improve academic achievement, there is evidence of improvement to the social and other nonacademic barriers to school success. Understanding that school is both an educational and social institution and that the schooling process should prepare students for productive citizenship, improving the social barriers should at a minimum build the confidence students need to work with others and to engage in the learning process. The ultimate goal is that the increased self-efficacy will then lead to high school graduation. For this reason, it is beneficial to increase the research efforts on the impact of mentoring as well as other social intervention and prevention programs.

In the 2010 Social Policy Report, Wheeler, Keller, and DuBois provided a comparative analysis of three large-scale random assignment studies of the effectiveness of school-based mentoring programs. The three studies were the Big Brothers Big Sisters of America (BBBSA), Communities in Schools (CIS) of San Antonio, Texas, and the U.S. Department of Education’s (USDOE) Student Mentoring Program. Overall, they found that school-based mentoring is modestly effective for improving peer support, perceptions of scholastic efficacy, school-related misconduct, truancy, absenteeism, and non-familial adult support. However improvement in academic achievement was not apparent, although schools routinely include both improvements in academic performance and school-related behavior as program goals (Wheeler, Keller, & DuBois, 2010).

Impacts of the three above mentioned mentoring programs were measured after one school year of involvement. As reported by Wheeler, Keller, and DuBois (2010), BBBSA utilized end of the year outcome measures that included teacher reports of academic performance, quality of class work, number of completed assignments, engagement in school-
related misconduct, truancy, youth reports regarding their relationships with non-parental adults, and perceived scholastic efficacy. The CIS-SA study measured outcomes in a variety of areas and found positive results on outcomes related to connectedness to peers, self-esteem, and perceived social support from friends, but no positive results on measures of academic achievement or social skills. The USDOE SMP reported no effects on youth outcomes in the areas of academic achievement, engagement, interpersonal relationships, personal responsibility, or high risk and delinquent behavior.

Specifically, the USDOE program found no statistically significant impacts on students in pro-social behavior, problem behavior, or academic achievement (the three outcome domains). CIS concluded that school-based mentoring may be of limited value for students in general, but most helpful for elementary boys and high school girls. Finally, the BBBSA program found improvement in a range of school-related areas to include academic attitudes, performance, and behaviors. Nonetheless, contingent upon how one interprets the results of these studies, arguments could be made for or against school-based mentoring. The dissimilar program evaluation results led to varied responses from practitioners and policymakers. The BBBSA findings resulted in an initiative to pilot and evaluate an enhanced school-based mentoring model; and funding was eliminated from the federal budget for the USDOE Student Mentoring Program, citing the evaluation findings as the reason for elimination (Wheeler, Keller, & DuBois, 2010).

These researchers utilized meta-analytic techniques to synthesize the findings of the three studies in order to clarify trends in the impact of school-based mentoring. They first noted that relationships are instrumental to enhance coping skills, to promoting positive social-emotional, cognitive and identity development, but could also have detrimental consequences with negative
interactions, role-modeling, or when the relationship ends prematurely. Secondly, program characteristics (frequency of service, duration of service, etc.) and fidelity of implementation (training, experience, support, etc.) are essential to outcomes. Thirdly, while modest results were evident for youth after one year of school-based mentoring, the effects may not persist over time without continued participation in mentoring programs or other supportive services. Finally, Wheeler, Keller, and DuBois (2010) concluded that school-based mentoring improves interpersonal relationships and have significant, but small effects on several outcome domains related to school success. However, longitudinal studies are needed and innovative approaches to school-based mentoring should be investigated.

As noted previously, mentoring is believed to improve the relationships students have with other adults, including teachers; and the relationship between teachers and students is instrumental to students’ academic success. According to researchers Martin and Baxter (2001), school achievement depends on the quality of teacher-student relationships and poor quality interactions between White educators and Black students insures that the Black-White achievement gap will persist. These researchers examined the Antiracism Education model, which assumes that the responsibility for improving achievement is the adult professional who either consciously or unconsciously acts within what may be described as institutional racism. They utilized a pre and post approach to evaluate the pattern, direction, and significance of participating White teachers’ change in White racial identity as a function of antiracism professional development. They used the White Racial Identity Attitude Survey to verify and operationalize the status of prospective White mentors’ racial identities before and after undergoing antiracism professional development and prior to their service as antiracism mentors.
of Black middle school students as a means of closing the Black-White achievement gap (Martin & Baxter, 2001).

According to a 2004 Report of the National Study Group for the Affirmative Development of Academic Ability, in addition to high quality teaching in the classroom, trusting relationships in school and environmental supports for pro-academic behavior in the school and the community affirm development of academic abilities (Bennett, Bridglall, Cauce, Everson, Gordon, et al., 2004). One of the areas examined in this study was the following psychosocial processes that hinder the development of academic ability: attributional ambiguity and stereotype threat. The challenge that students of color may have to either discount negative feedback as external bias or to view the negative feedback as reflective of ability is known as attributional ambiguity (Bennett, Bridglall, Cauce, Everson, Gordon, et al., 2004). In addition, these researchers noted that the effects of stereotypes can occur with simple knowledge of the stereotype and is not necessarily contingent upon whether one believes it or not. In terms of building trust in order to nurture and develop academic abilities, these researchers discussed the need for relational diversity, which they define as educators and institutions actively working together to secure the trust and confidence of those students to whom they opened their doors (Bennett, Bridglall, Cauce, Everson, Gordon, et al., 2004).

These researchers further argued that concerns about belonging can directly impact one’s achievement and that the more academically successful minority students become, the more acutely they may experience the psychological impact of being a member of a stigmatized group. As such, the need to build trust and the need for both school and community support is warranted. This trust and support comes in the forms of access to education-relevant capital, family environmental supports (positive models, help with homework, etc.), classrooms that are
learner centered, and that build a sense of community and responsibility for each other and students being socialized to understand the attitudinal and behavioral demands of high academic achievement (Bennett, Bridglall, Cauce, Everson, Gordon, et al., 2004).

Furthermore, as reported by Bennett, Bridglall, Cauce, Everson, Gordon, et al. (2004), the academic and social integration of students leads to higher grade point averages, persistence, and retention (Maton, Hrabowski, & Schmitt, 2000; Treisman, 1992). The authors of this same National Study Group also highlighted the significance of long term student mentoring relationships with professional role models and reported that there was a critical need to bundle best practices, strategies, and research to enhance learning opportunities for all students simultaneously in the home, classroom, school, and community.

**Student performance.** According to the Children’s Defense Fund (2011), as African American youth matriculate through school the achievement gap gets larger. As a result, 84% of African American youth who have not dropped out of school in 12th grade are not performing at grade level in reading and 94% are not able to do math at grade level. Additionally, the average African American 12th grade student reads at the level of the average European American eighth grade student. Linda Darling-Hammond, (as cited in Singleton and Linton, 2006), wanted to know how U.S. public education could be reinvented to ensure a right to learn for all its students who will enter a world in which failure to learn is fast becoming an insurmountable defeat.

In terms of this inquiry, much research exists in relation to Black racial identity and academic achievement which provide guidelines for ensuring quality educational services to African American students. In Harper’s (2007) historical review of racial identity theories, he discussed several theories as blueprints for teachers to alleviate unfair and exclusionary treatment and to draw students’ attention to African American intellectual resources. One approach, the
Cross Racial Identity Theory, postulates that African Americans progress through a series of stages consisting of the pre-encounter stage (a state of naiveté), the encounter stage (experience in which Blackness is made salient), and the internalization stage. This internalization stage is the stage that Harper describes as having a beneficial influence on academic achievement since the internalization stage is the point when being Black is couched in the context of pride, effort, and achievement. Cross’s model also includes two additional stages not discussed in Harper’s review. The immersion/emersion stage is situated between encounter and internalization (when a newly defined and affirmed sense of self through exploration of one’s own history and culture surfaces) and the final stage is internalization-commitment. It is at this final stage that one develops a plan of action to the concerns of Black people as a group (Vandiver, Cross, Worrel, & Fhagen-Smith, 2002).

In addition, Harper and Tuckman (2006) substantiated the importance of identity through a quantitative inquiry. In reference to racial identity and academic achievement, based on analysis which utilized the Multi-dimensional Inventory of Black Identity (MIBI), they found that college students with the racial pride identity beliefs experienced significantly less psychological distress in academic settings. Also, Harper (2007) reported that there is a noteworthy historic basis for the link between African American culture and academic valuation and achievement. Furthermore, a great deal of literature supports the positive impact that students’ attitudes and behaviors have on academic achievement (Akey, 2006).

**School performance.** The underutilization of human potential in the United States is extremely costly (McKinsey & Company, 2009). According to Education Secretary Duncan (2011), education is now the solution for eradicating gender inequality, reducing and preventing poverty and needless deaths and illness, and for creating and fostering a sustainable planet and
peace (Human Development Network Forum, March 2011). He further stated that education is inseparable from the development of human capital and is the new currency by which nations maintain economic competitiveness and global prosperity. Thus, reforming the economy through education is logical. It is increasingly apparent that the government’s strategy to improve the nation’s economy is to put education at the forefront; this is evidenced by the $4.35 billion committed to the Race to the Top grant program (Battelle for Kids, 2011). The subsequent performance data further substantiates the need to increase funding for urban school reform.

According to the American Council on Education (2009) high school graduation rates were as follows: Asian 92%; White 88%; Black 77%; American Indian 71%; Hispanic 69%. However, Stark, Noel, and McFarland (2015) reported in a National Institute for Education Sciences study, that in 2012 the high school completion status had improved with Black (90%), Hispanic (82.8%), and American Indian (79%) versus White (94.6%). They further reported in the same study that in 2012 students from low-income families had a dropout rate of 5.9% while high income families had a dropout rate of 1.3%, a decline from the American Council on Education’s 2009 report whereby there was a 10% versus the 5.2% dropout for middle income families and 1.6% dropout rate for high-income families. Also, as reported by Stark, Noel, and McFarland (2015), 2.6 million 16-24 year olds had not earned a high school diploma and were not enrolled in high school in 2012 and the male versus female dropout rate was 7.3% versus 5.9%. As well, the Black (7.5%) and Hispanic (12.7%) dropout rates were higher than the White (4.3%) dropout rate among 16 – 24 year olds.

Urban school reform must be grounded in a real understanding of the complexities of urban life that have led to poor academic achievement (Dittmann, 2004); and schools must address the issues of race head-on in order for dramatic results to occur (Singleton & Linton,
Harper (2007) reported that, “Urban schools are uniquely positioned to contribute to the development of racial identity and are the primary force in socialization of Black adolescents” (p. 236). He further stated that if a positive racial concept is culminated in the internalization stage, students are likely to internalize behaviors and attitudes that contribute to academic achievement. Moreover, culturally competent schools honor, respect, and value diversity in theory and in practice and they ensure that teaching and learning are made relevant and meaningful to students of diverse cultures (Klotz, 2006).

Richards, Brown, and Forde (as cited in Klotz, 2006), identified three salient areas to address in order to ensure a culturally responsive school as organization of the school, policies and procedures, and community involvement. Essential strategies and procedures include staff development, early intervention assessment for achievement and behavior problems, instruction and curriculum selection, and community and parent involvement. In terms of instruction and curriculum, Koltz argued that culturally competent schools give all students the same opportunity for enriching evidenced-based instruction, offer a culturally sensitive curriculum that encourages cultural inquiry, and encourage teachers to hold cultural sensitivity discussions when literary selections or references present negative stereotypes. As well, in culturally competent schools, teachers explicitly teach and model important values and appropriate classroom behavior (Klotz, 2006). Likewise, mentors and all other school employees should engage in practices that are conducive to the academic achievement, social enrichment, and positive development of self-identity and sense of school belonging.

As previously reported, the mentors in this study were not required to have college degrees. However, it does not require a college degree to foster positive development, self-identity, and a sense of belonging in school. Providing social enrichment, building positive
relationships, understanding cultural capital, and simply making connections with students can be accomplished by anyone with a desire to do so. Providing this additional attention and having sensitivity to the role of race and culture in school is believed to produce positive student performance outcomes. As a result, this study focused on these aspects of reform through school-based mentoring that is structured as a course in school as opposed to irregular after school mentor/mentee interactions.

**Summary of Literature Review**

In conclusion, historical events support the argument that race, culture, class, and economics have been driving forces of educational policies in the United States for a long period of time. Inasmuch, reviewing the past is a necessary strategy for helping to identify solutions for current problems. Check (2002), argued that treating today’s perspectives as the only valid one causes individuals to think, speak, and act as if current events are entirely unconnected to their roots. Similarly, until contexts and experiences are well understood no school culture can be significantly addressed (Beaudoin & Taylor, 2004).

The research on the significance of culture and the years of combating the achievement gap is longstanding; yet the academic differences still exist. Culture does not appear to be appreciated for the worth it contributes to students’ development; and therefore opportunities may be missed in terms of utilizing culture to promote academic success. Although a range of reform initiatives exist, achievement and opportunity gaps currently pose significant problems in public education. Because the norms, values, and beliefs that drive schooling, curriculum, and practices often support the dominant culture, students who are already on the edge academically due to race, ethnicity, or social class are further marginalized (Nelson & Rogers, 2002). While race and class interact and are both determinants of social inequality (Holcomb-McCoy, 2002),
poverty has unfortunately become a balance point for individual identity and a measurable
determinant of aptitude and ability (McDermott, Raley, & Seyer-Ochi, 2009).

Using a CRT lens, racism overtly shaped social institutions at the beginning of the 20th
century and continues more subtly to impact social institutions in the 21st century (Yosso, 2005).
While culturally relevant pedagogy has been sufficiently argued as a key component to academic
achievement in the success of racial minority students (Buehler, et al., 2009; Delpit, 2006;
Howard, 2006; Ladson-Billings, 1997) the number of schools actually utilizing this approach is
not known. In addition, school is a place where children’s home culture intersects with the
dominant culture; and therefore educators are called on to bridge the worlds of school and
home/community cultures, which require educators to examine their own positions in addressing
or avoiding discussions of differences (Korn & Bursztyn, 2002).

As the education system is becoming more and more heterogeneous, an equitable
education must consider the cultural and linguistic diversity of the population it is serving.
Simply operating in a manner that suggests that growing a proficient society is determined by all
students demonstrating proficiency on a standardized test is a faulty belief that will continue to
achieve the same poor results. It is important to note that students’ inability to successfully
perform on standardized tests is not an indication of intellectual deficiency (May, 2006). When
seeking equitable practices one should take into account that learning is complex, dynamic,
linked to human development and embedded with a specific cultural context (Jordan, 2010).
However, in order to accomplish an equitable culture, culturally competent individuals must also
be included in the equation, such as the mentors of the Closing the Achievement Gap (CTAG)
school-based mentoring program.
Critical educational theorists stress pedagogical practice that demands a commitment to social transformation as well as one that analyzes schools as a cultural and historical process (Morrell, 2004). In understanding that schools are social institutions and that African American students oftentimes have issues with feelings of belonging in these social institutions, this issue should be addressed. As well, since individual and institutional culture contributes to the operation and success of institutions, relationships, cultural cognition, and culturally competent practices are essential tenets to school reform.

Finally, in terms of cultural change, vision alone does not suffice; systems change as a result of understanding the culture, structure, and processes of the system (McGuigan, 2008). Observing or analyzing individual cognition enables leaders to understand how individuals notice and interpret stimuli and how prior knowledge, beliefs, and experiences influence the construction of new understandings (Spillane, Reiser, & Reimer, 2002). Ultimately, long-lasting institutional change stems from change in the belief systems, attitudes, and a deep understanding of the reason and rationale for change (Senge, 2000). While changing mind-sets is not an easy process, tackling change via school-based mentoring that focus on race and culture is a start.

Since the process of education is a collective approach whereby staff, students, parents, leadership, and policymakers all have a responsibility in the outcomes, reform efforts should focus on all aspects of schooling to include innovative social approaches to closing all educational gaps. Because there is a lack of comprehensive studies on mentoring programs and their impact on academic achievement, this area of focus is underrepresented in educational research. Therefore, quantifying the effects of school-based mentoring services to academic and social performance in school fills a gap in the research literature. This study utilized a causal-comparative design to determine the impact of CTAG participation on academic (GPAs and
OGT reading and math passage) and social (in school and out of school suspensions, emergency removals, expulsion, and juvenile court involvement) performance, while controlling for attendance.
CHAPTER III. METHODOLOGY

The purpose of this study was to determine if participating in a school-based mentoring program significantly affected students’ academic and social performance when controlling for school attendance. In the research hypothesis, the researcher asserted that students who participate in CTAG at both the middle school and high school level will improve academic and social performance more than the students in the middle school only and high school only groups. Chapter Three contains the description of the research design and methodology, sample and sampling methods, instrumentation and variables, data collection tools and procedures, and data analysis.

Research Design and Methodology

In this descriptive study, the researcher used a causal-comparative design to examine the research question. Causal-comparative design is a non-experimental approach that includes a categorical independent variable and/or a dependent variable and compares two or more groups (Creswell, 2009; Fraenkel & Wallen, 2006; Johnson, 2001). This design was appropriate in examining the impact of program participation on students’ academic and social performance in school because “the effects and alleged cause” (CTAG participation) had already occurred (Fraenkel & Wallen, 2006). Further, in typical causal-comparative studies, the group difference variables are not manipulated (Fraenkel & Wallen, 2006). In this study, the researcher used the causal-comparative design to compare the CTAG groups, which occurred naturally (not manipulated), by looking for differences in the outcome measures (academic and social performance dependent variables). The outcome measures included GPAs, OGT reading and mathematics passage, emergency removals, in school and out of school suspensions, expulsions, school attendance, and juvenile court involvement.
Using this quantitative methods approach, the researcher examined the impact of the CTAG program on the school performance variables by analyzing the variable differences based on the level of CTAG participation. The rationale for using the causal-comparative design was to compare the three CTAG groups (middle school programming only, high school programming only, or both middle and high school program participation) in terms of any differences in the academic and behavioral dependent variables based on the number of years participants were exposed to CTAG programming. In other words, do CTAG participants with three years of exposure outperform participants with only one or two years of CTAG program exposure as it relates to GPAs, OGT reading and math passage, suspensions, expulsions, juvenile court involvement, and school attendance (the dependent variables)?

The research data for the participants in this study were gathered for the school years 2011-2012, 2012-2013, 2013-2014, and 2014-2015. Accordingly, the sophomore students’ data included 7th – 10th grades; the junior students’ data included 8th – 11th grades; and the senior class of participants’ data included their 9th through 12th grade years. The causal-comparative nature of this study manifests itself in the exploration of the effects or preexisting differences between the three groups that experienced different amounts of treatment (CTAG programming). The research participants were not randomly assigned as the three groups happened naturally (middle school only, high school only, and middle school and high school participation). Finally, because the sample participants were not receiving CTAG services at the time of the research, this examination occurred ex post facto (after the fact), which is also characteristic of causal-comparative research.

The independent variables used in this examination of group differences included gender and level of CTAG participation (middle school only, high school only, or middle and high
school). The dependent variables included GPAs and passage of the OGT reading and mathematics assessment (academic performance outcome measures) and exclusion from class time via emergency removals, in-school suspensions, out-of-school suspensions, expulsions, and juvenile court involvement (social performance outcome measures).

**Sample and Sampling Method**

The convenient sample used in this study was drawn from a district currently engaged in a Closing the Achievement Gap (CTAG) program that began as a pilot in 2007. The district also meets the urban school criteria illustrating the characteristic challenges discussed throughout the literature review. In terms of demographics, the sample district has a student population of approximately 3,589 (1,200 in grades nine through 12), a 60% population of students of color (Black, Hispanic, and Multiracial), 99.9% economically disadvantaged, and a 4-year graduation rate of 70%. The Ohio Department of Education (ODE) uses students being considered economically disadvantaged or living in poverty as the main criterion for participation in the Community Eligibility Provision (CEP) program. The CEP program allows schools with at least a 40% identified student population in poverty to serve breakfast and lunch at no cost to all students. The ODE identifies a school’s economically disadvantaged student population based on student families’ participation in the Supplemental Nutrition Assistance Program (SNAP) or Ohio Works First (OWF), the number of homeless, runaway, and migrant students, as well as the student population involved in Head Start and/or in court mandated foster placement (Ohio Department of Education).

As previously noted, the students identified for mentoring services were selected prior to the research; therefore, sample participants were not randomly selected because the groups had already existed. The total sample population included 187 students, including 63 (34%)
sophomores, 69 (37%) juniors, and 55 (29%) seniors. The same sample population was used for all school years of analyses, 2011-2012, 2012-2013, 2013-2014, and 2014-2015. See the breakdown of sample CTAG participation by gender and grade level in Table 1.

Table 1

*Sample CTAG Demographics*

<table>
<thead>
<tr>
<th>Participation</th>
<th>Middle School Only</th>
<th>High School Only</th>
<th>Middle and High School</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Sophomore</td>
<td>8</td>
<td>(18)</td>
<td>10</td>
<td>(13)</td>
</tr>
<tr>
<td>Junior</td>
<td>2</td>
<td>(16)</td>
<td>14</td>
<td>(9)</td>
</tr>
<tr>
<td>Senior</td>
<td>15</td>
<td>(15)</td>
<td>0</td>
<td>(5)</td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td></td>
<td>27</td>
<td></td>
</tr>
</tbody>
</table>

*Instrumentation and Variables*

The first categorical independent variable used in this study is participation (0 = middle school participation only, 1 = high school participation only, and 2 = both middle and high school participation); and the second categorical independent variable is gender. Using gender as an independent variable allowed the researcher to identify differences in the school performance dependent variables between the male and female research participants. The academic dependent variables chosen for this study were GPAs and Ohio Graduation Test (OGT) reading and math passage (0 = No; 1 = Yes), as these two forms of data were readily available and, therefore, the easiest to acquire.

According to the Ohio Department of Education (ODE), the OGT is aligned to Ohio’s academic content standards in reading, writing, mathematics, science, and social studies. While it may be argued that passing the OGT is not an adequate assessment of the abilities or proficiencies of the students, a score of at least 400 (proficient mark) is necessary on all five
parts of the test for graduation and was, therefore, used in this study. Students receiving scores below 400 are required to re-take the OGT at the next offering until they achieve a passing score. The student performance level descriptors from lowest to highest, as noted on the OGT guide are as follows:

- **Limited** – does not meet the standards for the subject area at grade level.
- **Basic** – does not meet the standards for the subject area at grade level, but demonstrates some skill in the area.
- **Proficient** – meets the standards for the subject area at grade level.
- **Accelerated** – performance is at a higher level than expected.
- **Advanced** – performance is much higher than expected in demonstrating an understanding of the standards for the subject area at grade level.

Scoring for the reading and mathematics indicators is as follows:

- **Limited** – scores below 382 in reading and 383 in mathematics.
- **Basic** – scores between 382–399 in reading and 383–399 in mathematics.
- **Proficient** – scores between 400–428 in reading and 400–424 in mathematics.
- **Accelerated** – scores in reading and mathematics of 429–447 and 425–443, respectively.
- **Advanced level reading and mathematics** – all scores above 447 in reading and 443 in mathematics.

With respect to grade point averages, while education specialists recognize that many factors outside of CTAG participation could cause similarities and differences in GPAs, identifying and analyzing all the possible factors was beyond the scope of this study, but they were taken into consideration when interpreting the outcomes. Nonetheless, the grade point average (GPA) is one of the most studied variables in education and educational psychology
(Kuncel, Crede’, & Thomas, 2005, p. 63). However, frequently, researchers use the self-reported GPAs because access to transcripts is impossible to obtain (Kuncel, Crede’, & Thomas, 2005). This study, however, used accurate GPAs, as the district superintendent granted access to students’ academic and disciplinary records.

In the context of the study, it was also essential to analyze the social performance (emergency removals, suspensions, expulsions, juvenile court involvement, and attendance) because students must be in class if they are expected to learn and matriculate effectively through school. In order for students to graduate high school, in addition to passing the OGT, they must acquire the required 21 credits. As such, if students are not in class regularly, they are excluded from the learning opportunities that are essential for them to obtain the grades that will earn them the necessary credits as well as the assistance they may need to score proficient on the OGT. Since this research district used a zero tolerance approach for noncompliance and misbehavior, the analysis of discipline along with OGT and GPA scores provided a comprehensive view of students’ school performance. Considering these zero tolerance practices, data was collected on exclusionary disciplines (emergency removals, in school suspensions, out of school suspensions, expulsions, and juvenile court involvement).

Emergency removal refers to a removal from school, usually just for that particular day, and may be a result of many low-level school infractions including insubordination (talking back to a school official) profanity, and others. In-school suspension is the temporary removal from the assigned classroom to the in-school intervention program room (ISIP). Previously noted minor infractions could also lead to in-school suspensions; however, such suspensions could result from tardiness, failure to complete homework, horseplay, and other behaviors that may disrupt the learning environment as well.
Out-of-school suspensions are assigned by the school principal and typically result from behaviors such as fighting, destruction of school property, and extreme insubordination. These temporary removals from school do not exceed 10 consecutive days. On the other hand, when a student is expelled from school, it is a more permanent removal from school premises that results from the more serious violations of school policies, such as bringing to school firearms and other items perceived as weapons, bomb threats, assaulting a school employee, and possessing or using drugs. Expulsions are recommended by the principal, generally follow a 10-day suspension and can last up to a year (Ohio Legal Services). Some expulsions, due to bomb threats and bringing firearms to school, have resulted in permanent removal from all public schools in Ohio; these permanent removals occur if the student is at least 16 and is convicted of a delinquent act, such as those noted above (Ohio Legal Services).

Behaviors leading to expulsion may also result in juvenile court involvement by way of detention, drug court, and/or day treatment, which is an educational program operated by the juvenile court. The districts’ out-of-school intervention program (OSIP) and/or home instruction (typically for students with disabilities) may also result from or be an alternative to expulsion. In any case, regular education students who are expelled but not permanently excluded from the traditional education are still required to pass the OGT and obtain 21 credits if they desire to earn a diploma. However, although students may receive alternative education services either through the juvenile court system or by way of half-day OSIP intervention, sometimes they choose night school and/or GED as a path to high school completion.

**Data collection tools and procedures.** No data collecting tools were necessary for this study as student data were simply extracted from the district’s database. As such, the instrumentation for data collection involved Data Analysis for Student Learning (DASL), the
school’s database, which was used to extract student academic and discipline data. DASL is a comprehensive web-based student information and management decision support system solution for Pre K-12 schools. DASL also provides a seamless exchange of information with the Ohio Department of Education's (ODE) Education Management Information System (EMIS) reporting and offers several modules. The modules required for this study were attendance, discipline, student marks, assessments, and graduation eligibility.

Using this simple conduit for data retrieval enabled accuracy of the student performance information collected for analysis. This process only required access into the district’s database. The data collection procedures began with obtaining the list of CTAG students from the linkage coordinators (mentors) to form the groups for the analysis. The specific data collection procedures consisted of the two stages delineated below.

Step 1: Formulate sample groups. The researcher held several meetings with the CTAG mentors and one meeting with the middle school principal and district superintendent along with the mentors. During this time, the researcher was granted access to DASL as well as to the CTAG class lists for the years of analysis. Based on the class lists, the years of CTAG participation could be determined, thus placing participants in one of the three groups.

Step 2: Create a data spreadsheet. By way of DASL, demographic information (gender, grade, and race), GPAs, out of class time (emergency removals, in school suspensions, out of school suspensions, and expulsions), attendance, juvenile court involvement, and reading and math passage data were transferred to the SPSS data editor. OGT passage, expulsion, and juvenile court involvement were categorized as 0 = No, 1 = Yes, and 2 = Intervention in the expulsion category. This indicates that students were expelled from the traditional school setting but received academic instruction in a nontraditional environment. The GPAs, school attendance,
and the number of days students were excluded from class due to disciplinary reasons were recorded for each school year of analysis. The spreadsheet further included a number from 0 to 2 for the level of CTAG program participation in the column next to the student’s number (categorical independent variable), with 0 = Middle School, 1 = High School, and 2 = Middle and High School).

**Data Analysis**

The data analysis focused on sample descriptives, inferential analyses, and statistical procedures. ANOVAs and Chi-Square tests were the statistical procedures used to examine CTAG group differences; and Post hoc tests were run to determine where group differences existed when significance was found with the ANOVA tests. This section further concludes with the limitations of utilizing the causal-comparative approach.

**Descriptive analysis.** The following data tables provide an image of the research sample and the variables used to answer the research question. N represents the number of sample participants for each variable, and the standard deviation quantifies the amount of variation of the data values. If the standard deviation is close to zero, it is an indication that the data points are very close to the mean or expected value. Valid N listwise refers to the number of non-missing values. The categorical variables range from 0 to 2 as described in step 2 of the procedures section; because some of the academic and social performance dependent variables were categorical and some were reported quantitatively, it was necessary to use different statistical procedures. The following section comprises a description of the statistical tests and procedures for each analysis.
Table 2

**Quantitative Dependent Variables**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPA2012</td>
<td>186</td>
<td>.00</td>
<td>3.85</td>
<td>1.9305</td>
<td>.90084</td>
</tr>
<tr>
<td>GPA2013</td>
<td>186</td>
<td>.00</td>
<td>3.85</td>
<td>1.7018</td>
<td>.92698</td>
</tr>
<tr>
<td>GPA2014</td>
<td>156</td>
<td>.00</td>
<td>3.73</td>
<td>1.7582</td>
<td>.91219</td>
</tr>
<tr>
<td>Attendance2012</td>
<td>182</td>
<td>0</td>
<td>60</td>
<td>10.56</td>
<td>10.052</td>
</tr>
<tr>
<td>Attendance2013</td>
<td>184</td>
<td>0</td>
<td>59</td>
<td>11.22</td>
<td>10.490</td>
</tr>
<tr>
<td>Attendance2014</td>
<td>187</td>
<td>0</td>
<td>61</td>
<td>12.66</td>
<td>12.790</td>
</tr>
<tr>
<td>Attendance2015</td>
<td>174</td>
<td>0</td>
<td>105</td>
<td>17.60</td>
<td>17.890</td>
</tr>
<tr>
<td>Discipline2012</td>
<td>183</td>
<td>0</td>
<td>25</td>
<td>4.98</td>
<td>6.301</td>
</tr>
<tr>
<td>Discipline2013</td>
<td>185</td>
<td>0</td>
<td>37</td>
<td>4.62</td>
<td>7.043</td>
</tr>
<tr>
<td>Discipline2014</td>
<td>187</td>
<td>0</td>
<td>21</td>
<td>3.12</td>
<td>4.926</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Categorical Dependent Variables**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTAG Participation</td>
<td>187</td>
<td>0</td>
<td>2</td>
<td>1.33</td>
<td>.866</td>
</tr>
<tr>
<td>Expulsion2012</td>
<td>184</td>
<td>0</td>
<td>2</td>
<td>.11</td>
<td>.417</td>
</tr>
<tr>
<td>Expulsion2013</td>
<td>186</td>
<td>0</td>
<td>2</td>
<td>.27</td>
<td>.660</td>
</tr>
<tr>
<td>Expulsion2014</td>
<td>187</td>
<td>0</td>
<td>2</td>
<td>.26</td>
<td>.648</td>
</tr>
<tr>
<td>Expulsion2015</td>
<td>178</td>
<td>0</td>
<td>2</td>
<td>.37</td>
<td>.756</td>
</tr>
<tr>
<td>JuvCtInvolved2012</td>
<td>183</td>
<td>0</td>
<td>1</td>
<td>.05</td>
<td>.217</td>
</tr>
<tr>
<td>JuvCtInvolved2013</td>
<td>186</td>
<td>0</td>
<td>1</td>
<td>.05</td>
<td>.226</td>
</tr>
<tr>
<td>JuvCtInvolved2014</td>
<td>187</td>
<td>0</td>
<td>1</td>
<td>.09</td>
<td>.280</td>
</tr>
<tr>
<td>JuvCtInvolved2015</td>
<td>178</td>
<td>0</td>
<td>1</td>
<td>.08</td>
<td>.279</td>
</tr>
<tr>
<td>Reading</td>
<td>176</td>
<td>0</td>
<td>1</td>
<td>.70</td>
<td>.460</td>
</tr>
<tr>
<td>Math</td>
<td>176</td>
<td>0</td>
<td>1</td>
<td>.57</td>
<td>.496</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>170</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
While there were a total of 187 students in the sample, some students were missing some variable data in certain years, as evidenced in Table 2. However, from the 2011 to 2015 school years, 160 of the 187 students received CTAG services at the middle school level, and 138 received high school services at the freshman level. Specifically, 49 (31%) of the 160 middle school participants did not receive services beyond the eighth grade, and only 27 (14.4%) of the total sample (187) did not receive services at the seventh and eighth grade level. Subsequently, 49 students were in the middle school only group, 27 in the high school only group, and 111 in the middle school and high school CTAG group.

**Inferential analysis.** Fraenkel and Wallen (2006) stated that inferential statistics are procedures that allow researchers to make inferences about a population based on sample findings. The statistical methods utilized to examine the significance of group differences in this study were the analysis of variance (ANOVA), multivariate analysis of covariance (MANCOVA), and Chi-square. When the researcher sought to identify significant differences in the quantitative dependent variables (GPAs and class exclusions / suspensions) based on the categorical independent variables (level of CTAG participation and gender), multiple ANOVAs were run for each dependent variable and for one year at a time to enable ease in interpretation. When GPAs were combined for all three years and attendance was used as the covariate (to remove the effects attendance may have on GPAs), the MANCOVA procedures were run. Finally, when examining the significant differences in the categorical dependent variables (OGT reading and mathematics passage, expulsion, and juvenile court involvement) based on the categorical independent variables (level of CTAG participation and gender), the Chi-square statistical test was utilized.
The overarching research question (Does CTAG participation significantly impact academic and social performance, when controlling for attendance?) was divided into two smaller questions. The first research question was: Is there a difference in academic outcomes (GPAs and OGT passage) based on the level of CTAG mentoring participation (middle school only, high school only, or both middle and high school)? The statistical procedures for this research question included descriptive analyses, One-way ANOVA for GPAs by year, Two-way ANOVA to compare the effects of participation and gender on GPAs, MANCOVA to combine all three years of GPAs with attendance as the covariate, and Chi-square tests for OGT analyses. The second research question the researcher sought to answer was: Is there a difference in social outcomes (emergency removals, in school and out of school suspensions, expulsions, and juvenile court involvement) based on the level of CTAG mentoring participation (middle school only, high school only, or both middle and high school)? The statistical analyses for research question two consisted of the One-way ANOVA and Chi-square tests. In addition, when statistical significance was determined, Post hoc tests were used to confirm where the significant differences occurred. The output tables of the descriptive and inferential analyses are interpreted and reported in detail in chapter four.

**Limitations.** Since causal-comparative studies do not allow researchers to fully establish causation (Fraenkel & Wallen, 2006), this is a limitation of this approach. According to Fraenkel and Wallen (2006), the alleged cause could actually be an effect, the effect could be a cause, or there could be a third variable that contributed to both the cause and effect. Considering this complication, it is difficult to account for all of the contextual factors and test all variables that may explain group differences. Another limitation of causal-comparative research is that there is a lack of control over threats to internal validity. Since the CTAG groups had already existed, the
researcher could not manipulate the independent variable (CTAG participation level) as well as a lack of randomization.

Since the researcher sought certain criteria prior to CTAG referral, the groups are, therefore, reasonably homogenous. All participants had academic and/or social concerns, which resulted in a referral to the closing the achievement gap (CTAG) intervention program. However, the groups may differ in a way that resulted in the differences in variable outcomes. While the sample individuals may have had some or all of the following characteristics in common (economically disadvantaged, single parent household, low academic performance, school attendance issues, behavioral concerns, lacking social relationships, or social ineptness), the participants’ external assets or support systems may vary; these factors were not examined in this study.
CHAPTER IV. RESULTS

Using the findings of the Closing the Achievement Gap (CTAG) school-based mentoring program analysis, the researcher aimed to address the following research question: Does CTAG participation significantly impact academic and social performance? The research sample consisted of 187 students. CTAG participation and gender were used as the independent variables, and the dependent variables consisted of GPAs, Ohio Graduation Test (OGT) reading and math passage, exclusions due to disciplinary actions (in school and out of school suspensions, emergency removals, and expulsions), and juvenile court involvement. Data on these variables were reported for the 2012, 2013, 2014, and 2015 school years for high school sophomores, juniors, and seniors. This chapter includes the following sections: Participant Demographics, Descriptive Statistics, Statistical Analysis, and Key Findings.

Participant Demographics

At the time of the research, the 187 students were high school sophomores, juniors, and seniors and two met the requirements for graduation during the 2015 school year. All students received the mentoring services either in middle school, high school, or at both levels; and most received regular education services, with the exception of 34 (18.2%) of the sample population who received some form of special education service.

The research district encompassed over 3500 students in four elementary buildings (k-4), two magnet schools (k-8), two middle schools (5-6 grades and 7-8 grades), and one high school (9-12). The middle school had 416 students and during the school years of this analysis, 160 students participated in the middle school CTAG program. The total high school population consisted of 921 students, with the high school CTAG group (freshman program) consisting of 138 participants during the four school years of analyses.
At the time of this examination in 2015, the research sample included 34 (18%) males and 29 (15.5%) females in the sophomore class, 43 (23%) males and 26 (14%) females in the junior class, and 25 (13.4%) males and 30 (16%) females in the senior class. In addition, there were 138 (73.8%) African American students, 30 (16%) Multi-Racial students, and 19 (10.2%) Caucasian students. In relation to their involvement in the CTAG mentoring program, 49 (26.2%) participated in middle school, but not high school; 27 (14.4%) only participated in high school, and 111 (59.4%) participated in both middle school and as a high school freshman.

The data for expulsion and juvenile court involvement (dependent variables) were available for school years 2012, 2013, 2014, and 2015. These expulsion and juvenile court data were reported as yes or no as opposed to the number of expulsions and the number of times students may have been involved with juvenile court (see Tables 3 and 4). In the subsequent tables, the term valid refers to the number of non-missing data. In Table 3, the data reflect that there were 184 participants in the 2012 school year that did not have any missing expulsion data. With a total sample of 187, this indicates that three participants were missing 2012 expulsion data. Also, in Table 3 the intervention category indicates those that were expelled but received some form of academic intervention in a nontraditional school setting. From the 2012 through the 2015 school years, the percentages of CTAG participants that were expelled from school (combining categories Yes and Intervention) were 13 (6.9%), 28 (15%), 28 (14.9%), and 35 (28.7%) respectively.
### Table 3

*Expulsions*

<table>
<thead>
<tr>
<th></th>
<th>2012 School Year</th>
<th></th>
<th>2013 School Year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>171</td>
<td>91.4</td>
<td>158</td>
<td>84.5</td>
</tr>
<tr>
<td>Yes</td>
<td>6</td>
<td>3.2</td>
<td>6</td>
<td>3.2</td>
</tr>
<tr>
<td>Intervention</td>
<td>7</td>
<td>3.7</td>
<td>22</td>
<td>11.8</td>
</tr>
<tr>
<td>Total</td>
<td>184</td>
<td>98.4</td>
<td>186</td>
<td>99.5</td>
</tr>
<tr>
<td>Missing</td>
<td>System</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>1.6</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Total</td>
<td>187</td>
<td>100.0</td>
<td>187</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Expulsions*

<table>
<thead>
<tr>
<th></th>
<th>2014 School Year</th>
<th></th>
<th>2015 School Year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>159</td>
<td>85.0</td>
<td>143</td>
<td>76.5</td>
</tr>
<tr>
<td>Yes</td>
<td>7</td>
<td>3.7</td>
<td>5</td>
<td>2.7</td>
</tr>
<tr>
<td>Intervention</td>
<td>21</td>
<td>11.2</td>
<td>30</td>
<td>16.0</td>
</tr>
<tr>
<td>Total</td>
<td>187</td>
<td>100.0</td>
<td>178</td>
<td>95.2</td>
</tr>
<tr>
<td>Missing</td>
<td>System</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the juvenile court involvement table, from the 2012 to the 2015 school years 9 (4.8%), 10 (5.3%), 16 (8.6%), and 15 (8%) of the sample population were involved with juvenile court respectively (See Table 4).
Table 4

Juvenile Court Involvement

<table>
<thead>
<tr>
<th></th>
<th>2012 School Year</th>
<th></th>
<th>2013 School Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
</tr>
<tr>
<td>Valid</td>
<td>No</td>
<td>174</td>
<td>93.0</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>9</td>
<td>4.8</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>183</td>
<td>97.9</td>
</tr>
<tr>
<td>Missing</td>
<td>System</td>
<td>4</td>
<td>2.1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>187</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Juvenile Court Involvement

<table>
<thead>
<tr>
<th></th>
<th>2014 School Year</th>
<th></th>
<th>2015 School Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
</tr>
<tr>
<td>Valid</td>
<td>No</td>
<td>171</td>
<td>91.4</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>16</td>
<td>8.6</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>187</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td>System</td>
<td>9</td>
<td>4.8</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>187</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Descriptive Statistics

In terms of Descriptives, OGTs, GPAs, and discipline for school years 2012, 2013, and 2014 are reflected in Tables 5, 6, and 7. Table 5 displays a descriptive visual of the sample OGT reading and math pass/fail numbers and percentages. Tables 6 and 7 display the GPA ANOVA output and Post hoc results.
Table 5

Sample OGT Results

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fail</td>
<td>53</td>
<td>28.3</td>
<td>30.1</td>
<td>30.1</td>
</tr>
<tr>
<td>Pass</td>
<td>123</td>
<td>65.8</td>
<td>69.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>176</td>
<td>94.1</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Missing System</td>
<td>11</td>
<td>5.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>187</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Math

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fail</td>
<td>75</td>
<td>40.1</td>
<td>42.6</td>
<td>42.6</td>
</tr>
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<td>Pass</td>
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<td>54.0</td>
<td>57.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>176</td>
<td>94.1</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Missing System</td>
<td>11</td>
<td>5.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>187</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Statistical Analysis

The research question that guided this study was: Does CTAG participation significantly impact academic and social performance when controlling for school attendance? For ease in statistical analyses, the research question was divided into two parts. The first question the researcher sought to answer was: Is there a difference in academic outcomes (GPAs and OGT passage) based on the level of CTAG mentoring participation (middle school only, high school only, or both middle and high school)? The researcher ran an ANOVA, using CTAG participation as the categorical independent variable and GPAs for school years 2012, 2013, and 2014 as quantitative dependent variables. However, the Chi-Square test was run for the OGT analysis because both the independent variable (CTAG participation) and dependent variables
(OGT math and reading passage) were categorical. In order to quantify OGT passage, zero was assigned for scoring below proficient on the exam and a score of one was assigned for proficiency and above.

The second question the researcher sought to answer addressed the social performance portion of the research question: Is there a difference in social outcomes (emergency removals, in school and out of school suspensions, expulsions, and juvenile court involvement) based on the level of CTAG mentoring participation (middle school only, high school only, or both middle and high school)? This question was answered in the same manner, utilizing ANOVA statistical analyses when the dependent variables were quantitative (days of exclusions due to emergency removals and suspensions) and Chi-Square when the dependent variables were categorical (expulsion and juvenile court involvement, which were categorized as yes or no).

The ANOVA and Chi-Square statistical methods were used to examine the significance of group differences. ANOVA was run for quantitative dependent variables and Chi-Square to examine the association between two categorical variables (independent and dependent). In this study, the three examined groups included middle school mentoring only, high school mentoring only, and both middle school and high school mentoring. The quantitative variables were GPAs, attendance, and discipline, and the categorical variables included OGT reading and math passage, expulsions, and juvenile court involvement. School attendance was utilized as a covariate in the academic analyses.

The three CTAG groups used in the analyses were disproportionate in numbers as the groups happened naturally. However, although the groups were not equal in numbers significant differences were found and inferences could be drawn from the results of the analyses. To reiterate, group one consisted of 49 students who received mentoring in middle school only.
Group two consisted of 27 students who received mentoring services in high school only; and group three consisted of 111 students who received mentoring at both the middle and high school levels.

**Inferential statistics.** To determine whether the differences between the groups and between means were statistically significant, the researcher used a *p*-value < .05. The *p*-value is a probability measurement against the null hypothesis (the assumption a researcher is seeking to disprove or reject); lower probabilities indicate stronger evidence against the null hypothesis. The *f*-value is the test statistic used to calculate the *p*-value and is reported on the output tables.

**Academic outcomes.** In reference to GPAs, the One-Way ANOVA output in Table 6 reveals that there was no significant difference between the three groups in terms of GPAs in the 2012 and 2013 school years. However, significant differences were found at the 95% confidence level (*p = .025) during the 2014 school year. According to the Tukey Post hoc test of multiple comparisons in Table 7, for the 2014 school year there were significance differences in GPAs between the students in the middle school only group and the students that participated in mentoring in both middle school and high school. Post hoc tests are utilized when statistical significance is determined, but there is uncertainty as to where the significant differences occurred. As such, this test was run to understand the statistical significance found between groups in the 2014 school year. Within the statistical software there are various post hoc tests from which to choose. However, according to the instructional procedures for running the analysis and interpreting the results, the Tukey test is the most popular (See Table 7).
Table 6

ANOVA GPAs and CTAG Participation

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPA 2012</td>
<td>Between Groups</td>
<td>.172</td>
<td>2</td>
<td>.086</td>
<td>.105</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>149.959</td>
<td>183</td>
<td>.819</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>150.130</td>
<td>185</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPA 2013</td>
<td>Between Groups</td>
<td>1.658</td>
<td>2</td>
<td>.829</td>
<td>.964</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>157.309</td>
<td>183</td>
<td>.860</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>158.968</td>
<td>185</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPA 2014</td>
<td>Between Groups</td>
<td>6.081</td>
<td>2</td>
<td>3.040</td>
<td>3.785</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>122.893</td>
<td>153</td>
<td>.803</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>128.974</td>
<td>155</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CTAG Participation GPA2012 GPA2013 GPA2014
MS Mean 1.9686 1.5480 1.4292
N 49 49 49
Std. Deviation .95584 .90696 .92032
HS Mean 1.8684 1.8081 1.9782
N 26 26 19
Std. Deviation .89719 .96954 1.05523
Both Mean 1.9283 1.7448 1.8507
N 111 111 97
Std. Deviation .88411 .92601 .85280
Total Mean 1.9305 1.7018 1.7582
N 186 186 156
Std. Deviation .90084 .92698 .91219
Table 7

Post Hoc Multiple Comparisons GPAs

<table>
<thead>
<tr>
<th>GPA</th>
<th>2014</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>(I) CTAG Participation</td>
<td>(J) CTAG Participation</td>
<td>Mean Difference (I-J)</td>
</tr>
<tr>
<td>Tukey HSD</td>
<td>MS</td>
<td>HS</td>
</tr>
<tr>
<td></td>
<td>Both</td>
<td>-.42158*</td>
</tr>
<tr>
<td></td>
<td>HS</td>
<td>MS</td>
</tr>
<tr>
<td></td>
<td>Both</td>
<td>.12743</td>
</tr>
<tr>
<td></td>
<td>Both</td>
<td>MS</td>
</tr>
<tr>
<td></td>
<td>HS</td>
<td>-.12743</td>
</tr>
<tr>
<td>LSD</td>
<td>MS</td>
<td>HS</td>
</tr>
<tr>
<td></td>
<td>Both</td>
<td>-.42158*</td>
</tr>
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<td>Both</td>
<td>MS</td>
</tr>
<tr>
<td></td>
<td>HS</td>
<td>-.12743</td>
</tr>
</tbody>
</table>

* The mean difference is significant at the 0.05 level.

For multiple comparisons, the output from the LSD (another post hoc test) is also included in Table 7. Lower bound and upper bound are the ranges of numbers that fall between the 95% confidence interval. Any mean difference that does not fall in the lower and upper bound range is a significant result (indicated by an *). Considering this and the Tukey test, the significant differences in GPAs for 2014 are evident between the MS (middle school only) group and those with both (middle school and high school mentoring), but not between the MS and HS groups or between the HS and both groups.

Also, when the researcher used the Two-Way ANOVA (Appendix A) to compare the effects of both mentoring participation and gender on GPAs and MANOVA (Appendix C) to factor in attendance in relation to its effect on mentoring participation and combined years of
GPAs, the method yielded statistically significant results. Again, the $f$ ratios and $p$ values indicated the degree to which attendance significantly influenced GPAs. Based on the $p$-value and a 95% confidence interval (significance level of .05), the $*p$-value = .0008 indicates that there was a statistically significant difference in GPAs between school years as noted in the One-Way ANOVA (statistical differences noted in the 2014 school year). In addition, the Two-Way ANOVA revealed an interaction effect between participation and gender in relation to GPAs.

The $*p$-value of 0.0217 (demonstrating statistical significance at the 95% level) from the GPA, gender, and CTAG participation analysis, as well as the profile plot in Appendix B, indicates that with the exception of male participants in the high school only mentoring group, female participants had higher GPAs. Specifically, female student participants with both middle school and high school mentoring had the highest GPAs of all of the other groups except for the male high school only group (See the graph in Appendix B). It was concluded that female CTAG students with mentoring services at both the middle and high school levels were more likely to earn higher GPAs.

Finally, the MANCOVA analysis revealed evidence that there was an association between school absences and GPAs for the combined three school years. The $*p$-value of .0001 suggests statistically significant differences in GPAs in relation to the students’ number of school absences (See Appendix C). The MANOVA analyses simply revealed that there were significant differences in GPAs based on the number of school absences (less than 30, 30-60, or more than 60 days) and that there were significant differences in combined GPAs between the three groups when controlling for attendance.

The mentoring participation and OGT math output is as follows: Pearson Chi-Square = 1.322, $df = 2$, $p$-value = 0.516; Likelihood Ratio Chi-Square = 1.340, $df = 2$, $p$-value = 0.512.
The mentoring participation and OGT reading passage output was as follows: Pearson Chi-Square = 1.944, $df = 6$, $p$-value $= 0.925$; Likelihood Ratio Chi-Square $= 1.917$, $df = 6$, $p$-value $= 0.927$. These results indicate that there was not a statistically significant difference between the three mentoring groups in terms of the exam passage. With a $p$-value of $0.516 > .05$ and $p$-value $= 0.925 > .05$ no statistical differences were found between mentoring participation and OGT math passage. However, the Chi-Square Test revealed that when considering school attendance as a factor, the groups showed different results. A $p$-value of .039 (reading) and a $p$-value of .041 (math) indicate that there were statistically significant differences in school attendance between the three groups who passed the reading and math OGT exam.

It is important to note that not only were groups disproportionate in number of participants, but also 11 sophomores had not taken the exam at the time of data collection. The 11 students consisted of six female and five male students; three were in the middle school only group, four in the high school only group, and four in the group with mentoring at both middle and high school. Nonetheless, of the 176 students that took the exam, there was a 74% (130) reading passage rate and a 61% (108) math passage rate.

Based on the output in Table 8, students with both middle and high school mentoring had fewer school absences. Also, according to the output for reading passage, of the 78 students who were absent from school 30 days or less, 55 (71%) were in the group who had both middle and high school mentoring. According to the math passage output in Table 9, of the 67 that were absent 30 days or less, 46 (69%) were in the both middle and high school mentoring group. See the Tables 8 and 9 for specific group OGT passage and attendance data. Overall, it appeared that students who received CTAG mentoring services at the middle and high school level were more likely to pass the reading and mathematics Ohio Graduation Test (OGT).
Table 8

**OGT Reading Passage**

<table>
<thead>
<tr>
<th>Mentoring Participation and Absence</th>
<th>≤30 days</th>
<th>30-60 days</th>
<th>&gt;60 days</th>
<th>Total</th>
<th>% Passed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle School</td>
<td>15</td>
<td>8</td>
<td>5</td>
<td>28</td>
<td>61%</td>
</tr>
<tr>
<td>High School</td>
<td>8</td>
<td>10</td>
<td>3</td>
<td>21</td>
<td>91%</td>
</tr>
<tr>
<td>Both</td>
<td>55</td>
<td>13</td>
<td>13</td>
<td>81</td>
<td>76%</td>
</tr>
<tr>
<td>Total Passage</td>
<td>78</td>
<td>31</td>
<td>21</td>
<td>130</td>
<td>74%</td>
</tr>
<tr>
<td>Attendance %</td>
<td>60%</td>
<td>24%</td>
<td>16%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Pearson Chi-Square = 10.115, *df* = 4, *p*-value = 0.039; Likelihood Ratio Chi-Square = 9.466, *df* = 4, *p*-value = 0.050

At a 95% confidence level, the *p*-value of .039 < .05 indicates that for the students who passed the reading OGT, there was an association between mentoring program participation and total days absent from school.

Table 9

**OGT Math Passage**

<table>
<thead>
<tr>
<th>Mentoring Participation and Attendance</th>
<th>≤30 days</th>
<th>30-60 days</th>
<th>&gt;60 days</th>
<th>Total</th>
<th>% Passed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle School</td>
<td>14</td>
<td>9</td>
<td>3</td>
<td>26</td>
<td>57%</td>
</tr>
<tr>
<td>High School</td>
<td>7</td>
<td>9</td>
<td>2</td>
<td>18</td>
<td>78%</td>
</tr>
<tr>
<td>Both</td>
<td>46</td>
<td>10</td>
<td>8</td>
<td>64</td>
<td>60%</td>
</tr>
<tr>
<td>Total Passage</td>
<td>67</td>
<td>28</td>
<td>13</td>
<td>108</td>
<td>61%</td>
</tr>
<tr>
<td>Attendance %</td>
<td>62%</td>
<td>26%</td>
<td>12%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Pearson Chi-Square = 10.264, *df* = 4, *p*-value = 0.036; Likelihood Ratio Chi-Square = 9.966, *df* = 4, *p*-value = 0.041

Based on the output shown in Table 9, the *p*-value of .036 provides statistically significant evidence at the 95% confidence level that there was an association between students who passed the math OGT and school attendance. Table 9 also illustrates that those who passed the exam were also less likely to be absent more than 30 days.
**Social outcomes.** The social variables for the second part of the research question (Is there a difference in social outcomes based on the level of CTAG mentoring participation?), the quantitative social dependent variables included emergency removals and in-school and out-of-school suspensions. The One Way ANOVA was run for these quantitative exclusion variables; and the output revealed statistically significant differences between the three groups in mentoring participation and discipline in the 2012 school year with \( p\text{-value} = .036 < .05 \). The Tukey post hoc test revealed that within the 2012 school year there were statistically significant differences in disciplinary exclusions between the middle school only and high school only groups (See Table 10 below). The mean discipline days (emergency removals and in school and out of school suspensions) were 6.6 for the middle school only mentoring group and 2.68 for the high school only mentoring group. This data indicates that the students in the high school mentoring program were less likely to get removed and/or suspended from class and school.

Table 10

*Post Hoc Multiple Comparisons*

Discipline 2012

*Tukey HSD*

<table>
<thead>
<tr>
<th>(I) CTAG Participation</th>
<th>(J) CTAG Participation</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle School</td>
<td>High School</td>
<td>3.924*</td>
<td>1.534</td>
<td>.030</td>
<td>.30 - 7.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Both</td>
<td>1.804</td>
<td>1.076</td>
<td>.217</td>
<td>-.74 - 4.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>Middle School</td>
<td>-3.924*</td>
<td>1.534</td>
<td>.030</td>
<td>-7.55 - .30</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Both</td>
<td>-2.120</td>
<td>1.378</td>
<td>.276</td>
<td>-5.38 - 1.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Both</td>
<td>Middle School</td>
<td>-1.804</td>
<td>1.076</td>
<td>.217</td>
<td>-4.35 .74</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High School</td>
<td>2.120</td>
<td>1.378</td>
<td>.276</td>
<td>-1.14 5.38</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*. The mean difference is significant at the 0.05 level.*
No statistical significance was revealed in 2013 and 2014 with \( p\)-value = .305 > .05 in 2013 and \( p\)-value = .397 > .05 in 2014 respectively (See Table 11). When the researcher used ANOVA to compare the interaction between mentoring participation and gender on disciplinary exclusions (emergency removals and in school and out of school suspensions), there was also no statistically significant evidence of an interaction between the variables (See Appendix D). The analysis did not indicate statistically significant evidence of differences between mentoring groups with respect to disciplinary exclusions in the 2013 and 2014 school years as well as no interaction effect of gender in regard to disciplinary exclusions for all school years (2011-2012, 2012-2013, and 2013-2014).

Table 11

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Discipline</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>262.432</td>
<td>2</td>
<td>131.216</td>
<td>3.391</td>
<td>.036</td>
</tr>
<tr>
<td>Within Groups</td>
<td>6964.519</td>
<td>180</td>
<td>38.692</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7226.951</td>
<td>182</td>
<td>49.503</td>
<td>1.194</td>
<td>.305</td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>118.230</td>
<td>2</td>
<td>59.115</td>
<td>1.194</td>
<td>.305</td>
</tr>
<tr>
<td>Within Groups</td>
<td>9009.521</td>
<td>182</td>
<td>49.503</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9127.751</td>
<td>184</td>
<td>22.560</td>
<td>.929</td>
<td>.397</td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>45.121</td>
<td>2</td>
<td>22.560</td>
<td>.929</td>
<td>.397</td>
</tr>
<tr>
<td>Within Groups</td>
<td>4469.051</td>
<td>184</td>
<td>24.288</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4514.171</td>
<td>186</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The difference between the three CTAG mentoring groups in relation to the categorical dependent variable (expulsion), continuing to utilize a 95% confidence interval (\( p\)-value \( < = .05 \)) to indicate statistical significance, the Chi-Square results revealed that in 2012 Pearson Chi-Square = 1.313, \( df = 2 \), \( p\)-value = 0.519; Likelihood Ratio Chi-Square = 1.306, \( df = 2 \), \( p\)-value =
0.521. Based on the \( p = 0.519 > .05 \), the test did not reveal statistical significance. In 2013, Pearson Chi-Square = 12.831, \( df = 2 \), \( *p\)-value = 0.002; Likelihood Ratio Chi-Square = 11.509, \( df = 2 \), \( p\)-value = 0.003. The \( p\)-value = 0.002 indicates strong evidence to conclude that participation in the CTAG mentoring program had an impact on the 2013 expulsions. Statistical significance was evidenced in the group with both middle school and high school mentoring, as the data in Table 20 in the Appendices displays that mentoring had the greatest impact on this group when comparing expulsion data.

In 2014, Pearson Chi-Square = 12.576, \( df = 4 \), \( *p\)-value = 0.014; Likelihood Ratio Chi-Square = 11.669, \( df = 4 \), \( p\)-value = 0.020. With a \( p\)-value = 0.014 \(< .05 \), there is strong evidence to indicate that participation in the mentoring program had an impact on the 2014 expulsions. Table 24 in the Appendices again demonstrates that mentoring had the greatest impact on the participants, with mentoring at both levels when comparing 2014 expulsions. Finally, in 2015 Pearson Chi-Square = 2.930, \( df = 2 \), \( p\)-value = 0.231; Likelihood Ratio Chi-Square = 2.855, \( df = 2 \), \( p\)-value = 0.240. Based on \( p\)-value = 0.231 \(> .05 \) there is no evidence of statistically significant differences between the three mentoring groups and being expelled from school in 2015 (See Appendices E, F, G, and H for aforementioned results).

When analyzing the differences between the CTAG mentoring participation groups and juvenile court involvement, the researcher ran Chi-Square Test for this final categorical variable. The output revealed statistical significance in the 2013 and 2014 school years with \( p\)-values \(< .05 \). In the tables to follow, the first numbers in the No and Yes columns are the actual numbers of participants not involved or involved with juvenile court, and the second numbers represent the expected numbers calculated by the statistical program. The contingency tables further
demonstrate that the least probability of juvenile court involvement was evident in the group with both the middle and high school CTAG mentoring participation (See Tables 12 - 15).

Table 12

**Juvenile Court Involvement 2012**

<table>
<thead>
<tr>
<th>Participation Level</th>
<th>No</th>
<th>Yes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle</td>
<td>46</td>
<td>3</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>46.38</td>
<td>2.62</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>25</td>
<td>2</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>25.56</td>
<td>1.44</td>
<td></td>
</tr>
<tr>
<td>Both</td>
<td>106</td>
<td>5</td>
<td>111</td>
</tr>
<tr>
<td></td>
<td>105.06</td>
<td>5.94</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>177</td>
<td>10</td>
<td>187</td>
</tr>
</tbody>
</table>

*Note.* Pearson Chi-Square = 0.440, df = 2, *p*-value = 0.802; Likelihood Ratio Chi-Square = 0.423, df = 2, *p*-value = 0.809. No statistical significance of differences in juvenile court involvement between the three groups is shown in 2012 as *p*-value = 0.802 > .05.

Table 13

**Juvenile Court Involvement 2013**

<table>
<thead>
<tr>
<th>Participation Level</th>
<th>No</th>
<th>Yes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle</td>
<td>43</td>
<td>6</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>46.38</td>
<td>2.62</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>25</td>
<td>2</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>25.56</td>
<td>1.44</td>
<td></td>
</tr>
<tr>
<td>Both</td>
<td>109</td>
<td>2</td>
<td>111</td>
</tr>
<tr>
<td></td>
<td>105.06</td>
<td>5.94</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>177</td>
<td>10</td>
<td>187</td>
</tr>
</tbody>
</table>

*Note.* Pearson Chi-Square = 7.589, df = 2, *p*-value = 0.022; Likelihood Ratio Chi-Square = 7.304, df = 2, *p*-value = 0.026.

Based on the *p*-value = .022 < .05, there is statistically significant evidence to indicate that participation in the CTAG mentoring program had an impact on the Juvenile Court Involvement in the 2013 school year with mentoring having the greatest impact on the group with mentoring services at both the middle and high school levels. According to Table 13, 5.94
were expected to be involved with juvenile court, but only two were actually involved, as opposed to the other groups exceeding the expected involvement.

Table 14

**Juvenile Court Involvement 2014**

<table>
<thead>
<tr>
<th>Participation Level</th>
<th>No</th>
<th>Yes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle</td>
<td>40</td>
<td>9</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>44.81</td>
<td>4.19</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>24</td>
<td>3</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>24.69</td>
<td>2.31</td>
<td></td>
</tr>
<tr>
<td>Both</td>
<td>107</td>
<td>4</td>
<td>111</td>
</tr>
<tr>
<td></td>
<td>101.50</td>
<td>9.50</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>171</td>
<td>16</td>
<td>187</td>
</tr>
</tbody>
</table>

*Note.* Pearson Chi-Square = 9.733, df = 2, *p*-value = 0.008; Likelihood Ratio Chi-Square = 9.248, df = 2, *p*-value = 0.010.

Based on *p*-value = .008 < .05, there is strong evidence to indicate that participation in mentoring program had an impact on Juvenile Court Involvement in the 2014 school year. There is statistically significant evidence to conclude that mentoring had the greatest impact on the group with mentoring at both the middle and high school levels. According to Table 14, 9.5 students were expected to be involved with juvenile court (in group 3) but only four were actually involved, as opposed to the other groups, again exceeding the expected involvement.
Table 15

**Juvenile Court Involvement 2015**

<table>
<thead>
<tr>
<th>Participation Level</th>
<th>No</th>
<th>Yes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle</td>
<td>45</td>
<td>4</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>45.07</td>
<td>3.93</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>25</td>
<td>2</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>24.83</td>
<td>2.17</td>
<td></td>
</tr>
<tr>
<td>Both</td>
<td>102</td>
<td>9</td>
<td>111</td>
</tr>
<tr>
<td></td>
<td>102.10</td>
<td>8.90</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>172</td>
<td>15</td>
<td>187</td>
</tr>
</tbody>
</table>

*Note.* Pearson Chi-Square = 0.016, *df* = 2, *p*-value = 0.992; Likelihood Ratio Chi-Square = 0.017, *df* = 2, *p*-value = 0.992.

Based on the output, the *p*-value did not suggest that CTAG mentoring had a statistically significant impact on juvenile court involvement in the 2015 school year.

**Key Findings**

When controlling for attendance, the ANOVA results provided evidence of statistically significant differences between the CTAG mentoring program participation groups and GPAs. Since *p*-value = .0001 < .05, the null hypothesis was rejected as there was strong evidence to suggest that students with CTAG mentoring at both the middle and high school levels earned different GPAs. Further, since *p*-value = .0001 < .05 was also revealed in the GPA and attendance analysis, there was also strong evidence to suggest that there was an association between school day absences and GPAs. In addition, when combining the three school years (2012, 2013, and 2014), there was also an interaction effect of participation and gender with *p*-value = 0.0008 < .05, indicating an association between these two categorical variables and GPAs: evidence revealed that female participants with mentoring at both the middle school and high school levels received higher GPAs than all the groups except for the males in the high school only mentoring group.
Additionally, there was statistically significant evidence to suggest that for students who passed the reading and math Ohio Graduation Test (OGT), there was a relationship between program participation and the number of school absences. In terms of group differences, based on the Chi-Square results, students who participated in the CTAG mentoring program in both middle and high school had better attendance, as they were less likely to be absent from school more than 30 days.

Research question one: Is there a difference in academic performance (GPAs and OGT reading and math passage) based on the level of CTAG mentoring participation (middle school only, high school only, or both middle and high school participation), when controlling for attendance?

- There is a statistically significant difference in GPAs when controlling for attendance with *p*-value = .0001 < .05, as the tests allowed the researcher to conclude that students with CTAG mentoring at both levels had better school attendance and received better GPAs.
- There is a statistically significant difference between the CTAG mentoring groups and OGT passage when controlling for attendance. With *p*-value = .039 < .05 (Reading) and *p*-value = .036 < .05 (Math), evidence suggests that students who passed the OGTs were more likely to not exceed 30 days of school absences.

Research question two: Is there a difference in social performance (emergency removals, suspensions, expulsion, and juvenile court involvement) based on the level of CTAG mentoring participation?

- Based on ANOVA results, there was only a statistically significant difference between program participation and class exclusion (emergency removals and
suspensions) in the 2012 school year between the middle school only and high school only groups, demonstrated by \(*p = .036 < .05\) that the students in the high school only group were less likely to receive emergency removals and suspensions.

- Based on the Chi-Square results, there is a statistically significant difference in the impact of CTAG mentoring program participation on expulsions in the 2013 and 2014 school years with \(*p\)-value = 0.002 and \(*p\)-value = 0.014, respectively. The greatest impact was evidenced in the group with CTAG mentoring services at both the middle and high school levels.

- Based on the Chi-Square Test, CTAG participation had a greater impact on students who participated in both middle school and high school as they had the least probability of being involved with juvenile court in the 2013 and 2014 school years. However, no statistically significant differences in juvenile court involvement were discovered between groups in the 2012 and 2015 school years.

In conclusion, based on the methods used to analyze the impact of the CTAG mentoring program on academic and social performance outcomes, when controlling for attendance, the tests have revealed significant differences among the three participating groups in GPAs and OGT passage. There was only statistical significance between mentoring groups in the 2012 school year when comparing exclusions (emergency removals and suspensions). Additionally, significant differences were revealed between mentoring groups in relation to CTAG’s impact on expulsions and juvenile court involvement in the 2013 and 2014 school years.
CHAPTER V. DISCUSSION, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Utilizing the statistical findings of the CTAG (*Closing the Achievement Gap*) school-based mentoring program analysis, this final chapter concludes with an overview of the study, discussion of the findings, conclusions from the research, implications for stakeholders, and recommendations for future research. While not all tests resulted in significance, there are some practical and relevant conclusions that have been drawn from all outcomes. Considering the popularity of mentoring programs, the findings of this study can be used to guide the structure of mentoring programs moving forward and will be helpful to school officials, practitioners, parents, and students as well.

Overview of Study

This study began as a result of a three-month field study which included observations, interviews, and surveys in 2014. After learning of the positive perceptions and the astonishing comments the students made about the CTAG program, deeper inquiry into CTAG through statistical analysis became both a necessary and an intriguing opportunity. Consequently, understanding if CTAG significantly affected academic and social performance became the focus of this study.

The researcher used quantitative inquiry to examine a CTAG mentoring program in Northwest Ohio that was held during the academic school day in an academic classroom format. The researcher used the causal-comparative approach to identify if CTAG participation had a significant impact on school performance by analyzing several academic and social variables. The academic variables used were the Ohio Graduation Test (OGT) reading and math passage and GPAs; the social variables included emergency removals, in-school and out-of-school
suspensions, expulsions, juvenile court involvement, and school attendance. All variables were calculated for four school years (ex post facto) and analyzed using a series of ANOVAs and Chi-Square Tests to compare the outcomes of the three participating groups (middle school participation only, high school participation only, and both middle and high school mentoring participation).

Many researchers theorize that social support and a sense of belonging in the classroom may be some of the most common factors that contribute to the achievement motivation and engagement of disadvantaged students (Finn, 1989; Gutman & Midgley, 2000; Wehlage, Rutter, Smith, Lesko, & Fernandez, 1989, as cited in Becker & Luthar, 2002). In terms of CTAG as a school reform, understanding the benefits and/or lack thereof is essential to how individuals and systems strategically utilize the program as an intervention and/or prevention initiative to combat educational inequities and provide the social supports and confidence students need to succeed.

Considering the salience of self-esteem, cultural connections, and feelings of belonging (discussed in detail in the literature review), social programs such as CTAG could be vital to the success of marginalized students—if not academically, then at least developmentally, emotionally, and socially. There is evidence that mentoring can facilitate improved relationships with parents, peers, teachers, and other adults (Rhodes & DuBois, 2006), and there is cause to belief that these gains in social development result in academic gains as well.

Combining the Critical Race and Cognitive Anthropology scholarships provided a rich framework for discussing culture, student performance, and race in education, as well as the implications and recommendations for reform. Based on the first of Check’s (2002) three types of cultural influence that typically control urban schools, the influence of ethnic and racial identity (ethnically and racially centered beliefs, attitudes, and practices of minority school
populations in relation to the represented mainstream culture of the public school), CTAG mentors are in a position to influence students in this regard.

While acknowledging race and cultural challenges, and reporting efforts to reduce inequities in performance, fully bridging the gaps between staff and students and between the student populations in academic performance is a daunting task. Although the mentors do not have certification, they are capable of helping to increase academic performance and reduce disciplinary infractions. Such results are evidenced by the district positioning CTAG linkage coordinators / mentors as teachers of a class. The results of this analysis provide evidence that teacher certification is not necessary to provide the social supports students need to achieve academically. With CTAG recognized as a course in middle and high school, mentors have a vast responsibility to serve their students adequately.

Although the mentors are not required to have college credentials, not having a degree does not prevent one from having the ability to build the relationships necessary to positively affect student performance. CTAG mentors are given the responsibility of changing behaviors and teaching students to overcome obstacles that may be barriers to school success; and no certification is needed to accomplish this task. Even though certification is not required, mentors must be culturally competent and possess a balance of characteristics if students are expected to excel. According to Gordon, Iwamoto, Ward, Potts, and Boyd (2009), this balance involves abilities (cognitive, emotional, and relational), competencies (teaching, mentoring, and communicating), and virtues (integrity, caring, and prudence).

Additionally, one of the characteristics of culturally relevant pedagogy is that educators should identify with the students’ culture, backgrounds, and experiences in order to make the learning relevant. In this case, the mentors live in or have lived in similar communities; they are
familiar with the families, and share cultural experiences. As such, positive relationships are built from this knowledge and shared experiences, thus, enabling the mentors to make the learning experiences or behavior changes relevant to the students’ cultural contexts.

**Summary of the Findings**

To determine if CTAG participation significantly affected academic and social performance, the researcher developed two research questions: (a) Is there a difference in academic outcomes (GPAs and OGT passage) based on the level of CTAG mentoring participation (middle school only, high school only, or both middle and high school)? (b) Is there a difference in social outcomes (emergency removals, in school and out of school suspensions, expulsions, and juvenile court involvement) based on the level of CTAG mentoring participation (middle school only, high school only, or middle and high school participation)?

When controlling for school attendance, the researcher revealed significant differences among the three groups in GPAs and OGT reading and math passage. A significant difference was also found in the 2014 school year for GPAs before factoring in the students’ attendance. When using attendance as a covariate (a variable that may affect the outcome), the evidence suggested that there was an association between school absences and GPAs as well as significant evidence to support differences in GPAs between the three mentoring participation groups.

Accordingly, when controlling for attendance, the researcher found that for those who passed the standardized exam, there was a difference between mentoring program participation and total days absent from school. Sample participants who passed the reading and mathematics Ohio Graduation Test (OGT) were less likely to be absent from school more than 30 days. In addition, 81 students (62%) who passed the reading exam received CTAG mentoring services in
both middle school and high school, and 64 (59%) of the students who passed the math exam also received CTAG mentoring in both middle school and high school.

Based on the analyses of CTAG program participation and social performance, program participation appeared to have a greater impact on those with both middle and high school mentoring services in relation to not being involved with juvenile court. In terms of emergency removals and suspensions, there was no association between participation, gender, and discipline and no significant differences between groups in the 2013 and 2014 school years. However, there was statistically significant evidence of group differences in the 2012 school year.

Finally, with reference to being expelled from school, statistically significant differences between groups were evidenced in the 2013 and 2014 school years, but not in the 2012 and 2015 school years. This same pattern was evident with juvenile court involvement with statistically significant differences revealed in the 2013 and 2014 school years, but not in the 2012 and 2015 school years.

**Conclusions from the Findings**

The intent of the first research question was to contextualize academic performance in a manner that is meaningful, but not previously emphasized. While there was statistically significance evidence that students who received CTAG in both the middle school and high school were more likely to get higher GPAs, it is important to note that without addressing the social-emotional forces contributing to academic performance real learning and achievement improvements will not result (Becker & Luthar, 2002). Furthermore, students’ inability to successfully perform on standardized tests is not an indication of intellectual deficiency (May, 2006), and low GPAs do not necessarily equate to school failure and not achieving graduation requirements. The results of the Chi-Square analysis indicated that students with less than 30
days of absenteeism were more likely to pass the reading and mathematics Ohio Graduation Test (OGT), which was not contingent upon grade point averages. This finding provides sufficient evidence to conclude that low GPAs do not equate to school failure because when students attend school regularly, they can still pass the OGT, which is a requirement for graduation.

The researcher posited that the more involved students were in CTAG, the better the social outcomes (fewer suspensions, expulsions, and juvenile court involvement). This assertion was supported for expulsions and juvenile court involvement in the 2013 and 2014 school years, but was not supported for suspensions at all. Expulsions and juvenile court involvement typically result from severe behaviors and / or criminal acts whereas the suspensions are due to lower level rule violations. Since CTAG participation at both the middle and high school levels had a greater impact on the behaviors that would result in expulsions and involvement with juvenile court in the 2013 and 2014 school years, other factor(s), such as zero tolerance, are believed to have been prevalent that reduced the program’s impact on suspensions in those years. It was further concluded that while mentoring at both levels impacted the students more in the 2013 and 2014 school years, there was no determination of statistically significant differences between grade levels.

One variable believed to contribute to the findings of this analysis was the district’s zero tolerance policies. The students’ attendance data used in the analysis ranged from zero to 105 days in one school year and reflected excused and unexcused absences, as well as days of absence due to disciplinary reasons. However, the findings revealed that most of the reported absences for the students in this study were due to disciplinary reasons (emergency removals, suspensions, and expulsions). Zero tolerance is a subtle discriminatory practice (Codrington & Fairchild, 2002; Kunjufu, 2005; National Association of School Psychologists, 2013; The United...
States Commission on Civil Rights, 2009) that may not be recognized as discriminatory by all. Nonetheless, instead of zero tolerance policies reducing the number of disciplinary infractions in school, the policies have resulted in the overuse of suspensions and expulsions in many schools (Duncan, 2014; Fuentes, 2012; Skiba & Leone, 2001) that disproportionately affects youth of color (Duncan, 2014; Evenson, Justinger, Pelischek, & Schulz, 2009; Harry, 2014; Payne, 2010; Reyes, 2006; Skiba & Leone, 2001; Valles & Miller, 2010). In addition, with the exception of statistical significance between the middle school only group and high school only group in the 2012 school year, the statistical analysis revealed no other statistically significant differences in suspensions between the three groups (not by participation or gender).

Nationally, the over-representation of students of color experiencing school disciplinary issues has been a consistent finding for many, many years. Specifically, Black and Latino students are suspended and expelled at much higher rates than White students (Kang-Brown, Trone, Fratello & Daftary-Kapur, 2013; Payne, 2010; Skiba, 2001; U.S. Department of Education Office for Civil Rights, 2014). Since boys are twice as likely as girls to receive reprimands at school, the proportion of Black and Latino boys who are suspended or expelled is especially large (Kang-Brown et al., 2013).

The intent of the second social outcomes research question was to operationalize the connection between the socialization of schooling and educational success. Some of the issues discussed in the literature that are deemed vital to the success of students of color are relationships, a sense of belonging, a connection between home and school cultures, a positive self-identity, and having their cultural capital acknowledged ((Becker & Luthar, 2002; Harper, 2007; Harper & Tuckman, 2006; Taliaferro & DeCuir-Gunby, 2008; Taylor, 2009; Yosso, 2005). Without these things, students may be more likely to act out and be excluded from the
educational process. There was evidence that CTAG contributed to the social process of schooling by addressing social issues, increasing confidence, and helping some students gain the necessary connection to school. This revelation was more prevalent from the student surveys, but statistically significant results from this study in academic and social performance outcomes evidenced that positive gains were possible with regular school attendance and CTAG participation as well.

As noted previously, there was a statistically significant difference between the three sample groups when analyzing OGT passage and school absences. While this standardized test may not demonstrate intellect, passage is necessary to graduate high school. So students must be in school regularly to receive the necessary instruction to optimize their opportunity of passage. Since the analysis demonstrated fewer absences for students who passed the reading and math exam and who had both middle and high school mentoring, CTAG can be a beneficial intervention to improve school performance. However, greater outcomes may be possible if the institutionalized exclusionary practices are significantly minimized. Institutionalized policies and practices set the tone for the climate and culture of the school. While reducing disciplinary infractions may be a goal of the CTAG program, redirection strategies are pertinent as well as positive behavioral supports.

Since attendance appeared to be one of the key elements to the overall findings and is instrumental to the program producing the intended outcomes, greater emphasis on attendance improvement is essential. Students who are frequently absent from school are not present to receive academic instruction, nor are they present to receive the mentoring services. Importantly, the absenteeism that was recorded occurred primarily due to unexcused absences, emergency removals, suspensions, and expulsions as opposed to excused absences. The point here is that
major efforts should be made to address the issues surrounding absenteeism (school exclusionary practices and/or student and family matters). This will be discussed further in the key points below.

**Key Discussion Points**

Does CTAG participation significantly impact academic and social performance?

Utilizing CRT in this study, school discipline policies require further examination and the CTAG school-based mentoring program was instrumental in addressing the relationships and social supports that some African American students require to perform adequately in school. In terms of the Cognitive Anthropology scholarship used in combination with CRT to frame this study, the CTAG mentors not only resembled the students they served, but they also developed long-term relationships with them due to the structure and duration of programming. Because of the relationships and the school-based format, the program helped to influence a positive ethnic and racial identity, connectedness and belonging in school, and influenced positive academics and behaviors outside of the classroom group sessions. In addition to these overall findings, there are three specific areas of discussion that were found to serve as the basis for the program’s effectiveness – mentor qualifications and characteristics, school attendance, and the duration of mentoring services. The three factors are discussed below.

**Mentor qualifications and characteristics.** While the CTAG mentors shared the same race, they varied in age and experiences. One mentor served four years as a coordinator for an urban minority alcohol and drug abuse outreach program. Other experiences included four years as an entrepreneur (CEO of a youth-based program), five years as NAACP president, and 20 years of youth mentoring and coaching. Another mentor also has a long history of youth services that began soon after high school. This mentor’s experiences included 17 years with juvenile
court. Seven of those years in behavior intervention, three and half years as a detention officer, and the last seven years as a part time intervention specialist. The behavior intervention program (Day Treatment) was the last intervention before incarceration for unruly and delinquent behaviors whereby students had been suspended or expelled from school. It was a nine-week intervention program that students were mandated to complete prior to returning to school, and was an available intervention for city and county school students. Additional experiences included 18 years of coaching middle school and varsity track and field for girls and boys as well as coaching for middle school girls and boys basketball. The third mentor was a retired laborer for a manufacturing company of 23 years who served six years with the CTAG program before full retirement. Other experiences included being an assistant coach for midget football, 25 years as a basketball coach for the YMCA, and a mentor for juvenile probation. The final mentor served as a campus protection officer at the high school for four years prior to being hired as a CTAG mentor. Prior to employment with the district, the mentor’s employment experiences included two years in the security field for a manufacturing company and seven years at a correctional institution.

There was congruence between the four mentors in instructional methods with the use of movies, lectures, group discussions, activities, and presentations from community members and former CTAG students. There was also adherence to the CTAG agreements: Confidentiality, Amnesty, Respect, No Put Downs, No Cross Talking, Use “I” Statements, Listen, Honesty, Right to Pass, and Apologize. These agreements were typically stated in a call and response format. For example, the mentor would say “Confidentiality” and the students would respond, “What’s said in here stays in here.” The mentors incorporated the “Manhood” curriculum in the middle and high school programs as well as supplemental resources from the Ohio Violence Prevention
Process, which focused on understanding and preventing violent behaviors. In addition, regularly scheduled, well-known, community volunteers helped to facilitate group discussions and provide additional support to CTAG students.

When asked about college credentials, one mentor stated “Degrees are a plus, but compassion works best.” Considering this statement, compassion or the concern for the misfortunes of others, is a characteristic that may assist with gaining the trust necessary to build and maintain relationships with the mentees. Improving student performance appears to be a huge, daunting task. When in actuality, this undertaking can be reduced to building positive relationships. The students’ responses were the most compelling in the ideology of the association between positive relationships and improved performance (See Appendix I).

**School attendance.** According to Balfanz and Byrnes (2012), the public education system is based on the assumption that students attend school regularly. Therefore, if students are frequently absent from school and academic instruction it is difficult to expect the same performance and academic achievements as those who attend regularly. Consequently, chronic absenteeism is believed to increase the achievement gap at the elementary, middle, and high school levels (Attendance Works, 2014). Chronic absenteeism is defined as missing at least10% of school or missing a month or more of school days in one school year (U.S. Department of Education, 2016). Additionally, chronic absenteeism is predominantly prevalent among students who already appear to face significant challenges and for whom school is particularly beneficial (U.S. Department of Education, 2016), such as low-income, highly mobile, juvenile court involved, students of color, and students with disabilities (Balfanz & Byrnes, 2012; U.S. Department of Education, 2016).
The statistical analyses of this study revealed not only an association between mentoring program participation and total days absent from school, but also revealed that the students who passed the reading and math exam were less likely to be absent more than 30 days. Also, the analyses demonstrated a relationship between attendance and GPAs at the 95% confidence level with a *p*-value of .0001. Furthermore, school attendance is essential to developing relationships and feeling connected to school. Relationships with the mentors, teachers, other adults, and other students are springboards to the social and academic schooling process; and strong, trusting relationships develop with consistent interaction.

As previously noted, the students’ absenteeism in this study was primarily due to suspensions and expulsions. However, according to the definition of chronic absenteeism, being absent 10% or 30 days or more for any reason is considered chronic; and is a primary cause of low academic achievement and a powerful predictor of students who may eventually drop out of school (U.S. Department of Education, 2016). However, according to this analysis, students with CTAG mentoring at both the middle school and high school levels were less likely to be chronically absent from school.

**Duration of mentoring services.** In addition to mentor qualities and school attendance, the duration of mentoring services was also essential to a successful CTAG program. According to the analyses, students who received mentoring in both middle and high school were not only more likely to have better school attendance, but they were less likely to be involved in juvenile court, be expelled from school, and more likely to pass the Ohio Graduation Test.

CTAG mentoring had the greatest impact on students with services at the middle and high school level with respect to expulsion and juvenile court involvement in the 2012-2013 and the 2013-2014 school years and on OGT reading and math passage. The expulsion analysis
displayed *p-values of .002 and .014 respectively indicating statistically significant differences among the three groups. Accordingly, *p-values of .022 and .008 demonstrated statistically significant differences among the three groups with respect to juvenile court involvement in the aforementioned school years. Again, the greatest impact was evidenced within the group receiving CTAG in both middle and high school.

The OGT passage analysis revealed that 130 students passed the reading exam and 81 (62%) of them received mentoring at the middle and high school level; and 108 students passed the math exam with 64 (59%) receiving CTAG mentoring in both middle and high school. These results indicate that students who received CTAG mentoring services at the middle and high school levels were more likely to pass the reading and mathematics Ohio Graduation Test (OGT). Overall, the CTAG students who passed the required standardized exam were less likely to be absent more than 30 days and more likely to receive mentoring at both the middle and high school levels.

Since statistically significant evidence concluded that the students with mentoring at both levels had better attendance, were less frequently expelled, were less likely to be involved with juvenile court, and more likely to pass the OGT the district may want to focus on the middle school to high school mentoring transition. Utilizing this data effectively will require the district to do whatever is necessary to ensure that CTAG services continue beyond the middle school and that students attend school regularly. Importantly, CTAG is not simply an after school program, but an actual school year mentoring course that students may get exposed to as early as the fourth grade. A program of this magnitude allow for long-term relationships that extended beyond the CTAG program, evidenced by former students returning to the schools after graduation to pay it forward.
Implications

The implications of this school-based mentoring study are multifaceted. In a meta-analysis of more than 50 evaluations of mentoring programs researchers found wide variation in mentoring program effectiveness; and while the magnitude of impact was small, there was evidence of benefits in emotional, behavioral, social, academic, and career development for youth participants (Rhodes & DuBois, 2006). However, it is believed that empirically driven, as opposed to just theory based approaches could yield greater benefits. The results of this study suggest some implications for policymakers, leadership, practitioners, parents, and students that are delineated to maximize the effects of school-based mentoring.

**Implications for policymakers.** Because attendance was a major factor in the outcomes and the chronic absenteeism was related to suspensions and expulsions, modifying the discipline policy should produce favorable outcomes. Eliminating zero tolerance policies and creating proportional and innovative means of redirecting nonviolent behaviors may be the most dynamic implication for policymakers. Because, until the attendance and exclusionary practices are significantly addressed, there will be challenges with quantifying complete success.

Referring back to the cultural influences that typically control urban schools, culture reform at the third of the three levels involves the beliefs, practices, and effects of systemic reform at the policy level in relation to marginalized students (Check, 2002). School climates that allow gaps or disproportion in school opportunities contribute to the disconnection to school and the lack of belonging that some students feel. Implementation of positive behavioral interventions and a thorough analysis of all school policies is an essential component to initiating a social justice framework. The commitment to social justice is the third principle of Critical Race Theory (CRT). This principle involves engaging, consistent, and systemic practices that
Encourage participation in the learning process as well as access to multiple opportunities. Social justice in education includes five key concepts of a democratic education: equality, diversity, choice, participation, and cohesion (Perry, 2002). Accordingly, Carlisle, Jackson, and George (2006) reported five principles of social justice education as inclusion and equity, high expectations, reciprocal community relationships, a system-wide approach, and direct social justice education and intervention. Largely, social justice in education involves ingraining the practices and policies of a democratic education into urban school culture. A systemic change such as this, will directly impact student performance and outcomes and indirectly impact the fidelity of the CTAG program as well.

**Implications for school leadership.** Continuing the recommendation for social justice in education, according to the Center for Educational Leadership and Social Justice, educational leaders must have the courage to risk personal comfort and safety to improve the lives of students when confronted with conditions of social injustice. They further noted that socially just leaders systematically and intentionally interrogate themselves (ethic of critique) to continuously improve and understand personal biases, assumptions, and prejudices. Furthermore, working for social justice in the educational setting involves guiding both students and staff to reflect critically on their roles in proliferating racism and discrimination and supporting systemic change to prevent ongoing inequities (National Association of School Psychologists, 2012).

Social justice in education also requires leadership to have knowledge of the past and a strategic vision of an equitable educational system. Two strategies are recommended for leaders to create an equitable climate that fosters shared responsibilities to further enhance the effectiveness of the CTAG program. First, a school-wide culturally competent and inclusion seminar, rather than simple diversity training, will remove the problem from the individuals and
make it an institutionalized problem. Beginning with an assessment of individual and group competence will offer a baseline from which to design climate and cultural change strategies. One researched based tool that can be used in this process is the Intercultural Development Inventory (IDI). The IDI is a 50-item, online, cross-cultural assessment of intercultural competence. It is grounded in the Developmental Model of Intercultural Sensitivity (DMIS) and employs concepts from cognitive psychology and constructivism (Hammer, 2011). The IDI measures cognitive structures and assesses the fundamental attitudes of individuals, groups, and organizations toward cultural differences (Hammer, 2011).

In the training process, individual IDI results are given privately. However, group profiles and institutional profiles are shared openly with recommendations on moving the institution to adaptation. The measurement includes Perceived Orientation (where one thinks they are or would like to be on the continuum) and Developmental Orientation (actual location on the continuum). The developmental continuum includes Denial, Polarization, Minimization, Acceptance, and Adaptation, in addition to Cultural Disengagement. The customized Intercultural Development Plan (IDP) makes the results actionable and can be used as a means of understanding differences, not just based on race, but socioeconomic and sociocultural as well. Considering the academic and opportunity inequities discussed in detail in Chapter Two and the theory behind the CTAG program (“social construction of hope”) designed to improve graduation rates for African American males, reform begins with an understanding and need for reform in both policies and practices.

Second, a well implemented, greatly structured, theory-based, and empirically-based school mentoring (Rhodes and DuBois, 2006) program can improve a school’s climate and culture and ultimately lead to improved school performance outcomes. A critical component of a
successful school-community environment is effective urban school leadership (May & Sanders, 2015). School-based mentoring programs should be structured and implemented with high fidelity. Because of the significance of their roles, CTAG mentors must receive high quality training and ongoing professional development, clearly defined goals and expectations, continuous monitoring (observations), and ongoing evaluations of outcomes (Rhodes & DuBois, 2006). As well, since mentors are given autonomy of their lessons and interventions, they must be capable of creating effective and appropriate lessons. Although positive outcomes have resulted, there is always room for personal growth and improvement. Therefore, better prepared mentors who have an understanding of why their services are significant will only enhance CTAG services and outcomes. Moreover, being that CTAG mentors are full time district employees, they should certainly understand the role and responsibility they have in helping to enhance the young lives in their care. Therefore, ensuring that CTAG mentors are an active part of the school-wide team is necessary to help with further progression towards a positive shift in the school climate and culture.

In addition, since the 2014 survey responses revealed a deficiency in communication between mentors and teachers and between building leadership and staff, there appeared to be limited buy-in from teachers. Consequently, improving communication from the top down should help to develop the systems thinking necessary for buy-in and for systemic practices to occur. Improved communication through regularly scheduled meetings and program updates, couched with system-wide training, should lead to the shared responsibility and accountability model of CTAG’s original intent, which is necessary to enhance the benefits students gain from CTAG participation.
Mentors want the teachers to understand and/or respect the social development work and teachers want the mentors to not overstep and interfere with their classroom operations. However, given school wide training, each can understand how to fully benefit from the significance of the other. It is going to require leadership to pull the pieces together to create the type of collective autonomy and shared responsibility necessary. Building a strong connection between the social CTAG program and academic programs should further create a shared accountability in student and school success whereby mentors, teachers, administrators, and students all work together for optimal outcomes because they understand the significance of each part to the whole.

**Implications for practitioners.** Since attendance is a major concern, mentors should closely monitor attendance and the reasons for absenteeism. They should be prepared to intervene and report concerns when necessary. According to Attendance Works (2014), poor attendance in September predicts a pattern of chronic absenteeism throughout the school year. Considering this, mentors should aggressively intervene at the onset of absences by developing relationships with parents / caregivers and communicating concerns to leadership as they arise. With the salience of mentor / mentee relationships, mentors monitoring school absences and providing early interventions will reinforce the importance of school attendance and influence regular attendance patterns.

In addition, enhancing the parent component in a manner that involves and engages the adult caregivers in the process of academic achievement through social development will be beneficial for the students and the school. According to Noguera (2004), investing in the social capital of parents via empowering them to become involved in the education process and transforming the relations between school personnel and parents will help improve the academic
performance of low income students. Since teachers are the single most important determinant of academic outcomes and the schooling experience (Battelle for Kids, 2009; Sanders, Wright, & Langevin, 2008), they must work with the mentors and school leadership to ensure optimal student outcomes. Accordingly, the teachers and mentors should embark upon this endeavor together by creating innovative opportunities for parents and family members to get involved and remain engaged in the educational process. Instead of the simple parent-teacher conferences or to discuss reprimands for behaviors, examples for parent inclusion could include inviting parents and families to goal achievement celebrations; inviting them to observe student presentations, or participate in a parent-student project. Additionally, implementing a staff and parent in-service to highlight the benefits of working together and to give parents a voice in the school improvement process would provide a powerful indication of the value of parents and guardians.

Finally, if social justice policies are not implemented, practitioners will need to augment prevention strategies. The following recommendations are practical approaches to deterring behaviors that could result in exclusionary discipline. First, clarify students’ roles and responsibilities in a manner that is positive as opposed to setting rules that they must follow. Second, role play scenarios that typically result in school rule violations and encourage students to discuss alternative ways to respond to the various situations. Third, by using the student handbook and school disciplinary policies, teach students how to effectively utilize their aspirational, navigational, resistant, and social capital (Yosso, 2005) to avoid punitive consequences. To reiterate from Chapter Two, aspirational capital refers to the ability to maintain hopes and dreams in times of adversity or barriers. Navigational capital is the skill to maneuver through social institutions not created with communities of color in mind; and social capital is the networks of people and community resources that students have for support when
needed. Lastly, require students to create a vision for schooling success and assist them in aligning strategies and tasks that will bring their vision to fruition. Encourage students and provide opportunities for them to monitor their plans regularly to ensure that they remain focused on goal attainment.

**Implications for parents and students.** Parents and students play a major role in the education process and therefore, should not be left out of the equation in this study. Yes, research is clear that there are some significant challenges in k-12 schools and policies and practices need to be reformed. But the question here is: How can parents and students use this research to enhance performance? Decades of existing research validate the positive effect of parental involvement to academic achievement. Unless tragically dysfunctional, parental involvement and engagement in all parts of a student’s life should produce positive outcomes. Considering this, parents must not wait to be invited into the school or invited to participate in a specific program event, but seek ways in which they can be engaged.

Involvement can begin with simply discussing CTAG lessons with their children, inquiring about what they are learning and have learned; how they are utilizing the information learned, and so forth. Parents should observe classes; work cooperatively with mentors, and be accessible, when possible. Parents who have an understanding of what their children are being taught in the CTAG program and who work to reinforce the lessons will only enhance students’ individual development and progression through school.

In terms of implications for students, the onus lies with them as well. If they are having difficulty applying the new information, students must discuss this with the mentors, parents, and/or other responsible adults in their lives. Students must not be ashamed to ask questions, ask for assistance, and not be too proud to admit when there is a problem beyond their abilities to
control. Students should also utilize their relationships with the mentors to assist with academic and social obstacles. But most importantly, students must take advantage of every learning opportunity, follow their individualized plans for success, create a vision board if necessary, and seek to become autonomous learners. Autonomous learning, capitalizing on all learning opportunities, and following a well strategized vision will lead to achievement even when school and/or home obstacles are present.

**Recommendations for Future Research**

If school-based mentoring is to offer optimal and sustained benefits to participating youth, research will need to assume a more central role to include opportunities for linkages between basic and applied research to truly understand the transformation of youth development and resilience (Rhodes & DuBois, 2006). In furthering this research, additional variables could be analyzed to include parental involvement, assignment completion, and involvement in extracurricular activities. However, an experimental design would be the best indication of cause and effect and provide an enhanced view of the CTAG program’s impact on academic and social performance. A longitudinal analysis of the treatment and control groups beginning at the middle school level and through at least one year after high school graduation would provide a more comprehensive analysis.

**Conclusion**

To conclude, the literature reviewed for this study began with legislation that laid the foundation for educational inequities, such as the “separate but equal” policies of *Plessy vs. Ferguson of 1896*. Beginning with the historical context of education was an intentional approach to link current inequities to past institutionalized practices. Failing to view educational history limits a full understanding of the current problems; and thus, limits the ability to solve the
problems (Check, 2002); and accurately diagnosing current conditions, requires a review of history (Gonsalves & Leonard, 2007). This study offered research on changing current conditions through a focus on the social and cultural aspects of schooling, including developing relationships, connections and feelings of belonging in school, and promoting positive self-identity, confidence, and cultural capital. Notably, it behooves policymakers, leaders, and practitioners to remain actively engaged in high quality, equitable student opportunities and outcomes. Because, in the words of James Baldwin “These are all our children. We will profit by, or pay for whatever they become.”

This nontraditional school-based Closing the Achievement Gap (CTAG) mentoring program utilized full time program linkage coordinators (mentors) to facilitate programming designed to address the social barriers to academic achievement. The results of the analyses revealed that the program had the greatest impact on students who participated in the program at both the middle and high school levels. Students with both levels of mentoring were more likely to get higher GPAs, pass the reading and mathematics Ohio Graduation Test (OGT), and less likely to be chronically absent and expelled from school. There was also less probability of students with both levels of mentoring being involved with juvenile court.

One of the epistemological perspectives of CRT is that institutions and institutional practices and policies are complicit in the construction of identity and inequities. Also, the recent events that led to the implementation of activist movements such as Black Lives Matter, Color of Change, and other social activist organizations remind the nation that a post-racial society is still nonexistent. Analyzing the issue of inequities through a cognitive anthropological lens addresses the link between how people and events are conceived, how information is interpreted, and how one responds. It is essentially the relationship between mind and society (the impact of society
on the human mind) (Simova, Robertson, & Beasley, 2009). Accordingly, media driven narratives have propagated negative images of people of color, further resulting in biased perceptions. Consequentially, these perspectives result in the perpetuation of low expectations, overly punitive practices, and ultimately the seemingly underperformance of students of color. Thus, there remains a need for continued studies on inequities, discriminatory policies and practices, and cultural perceptions.

The significance of the results of this study is evidence of the value of social prevention and intervention programs to students’ school performance. One of the constructs of CRT is social change by way of using knowledge learned for social justice and to make social change. Therefore, as a result of uncovering the link between chronic absenteeism and student performance, a social change necessary from the CTAG examination is to scrutinize the discipline policies and create alternatives to exclusion. While this study does not serve as a panacea for all public school challenges, tackling educational challenges via long-term, nontraditional, school-based mentoring is one catalyst for change.
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APPENDIX A. ANOVA: GPA OUTPUT

The abbreviations in the tables are from the table headings (e.g. MS is Mean Square and MSE is Mean Square Error). Since $p$-value = 0.4009 > .05, failed to reject Ho (null hypothesis) as there was insufficient evidence demonstrating that the model was significant.

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<th>Source</th>
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<td>0.8858268</td>
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<td>Error</td>
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<td>0.8433132</td>
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<td>Corrected Total</td>
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<td>472.9781181</td>
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Note: R-Square = 0.031839; Coefficient Variable = 51.78194; Root MSE = 0.918321; GPA Mean = 1.773439

Based on the ANOVA output for Gender and Participation in Table 18, there was a significant difference in GPA between school years 2012, 2013, and 2014 according to the $p$-value = 0.0008 < .05. The interaction effect of participation and gender was also significant based on the $p$-value = 0.0217 < .05. Therefore, it was concluded that based on the level of CTAG mentoring participation, there were differences in male and female GPAs. The interaction plot in Appendix C demonstrates where the differences occurred.
Table 16

**TWO-WAY ANOVA**

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<td>Error</td>
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<tr>
<td>Error: 0.6672<em>MS(Gender</em>Year(Participation)) + 0.3328*MS (Error)</td>
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*Note:* This test assumes one or more other fixed effects are zero.

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<tr>
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*Note:* This test assumes one or more other fixed effects are zero.

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APPENDIX B. GENDER/GPA PLOT

Participation*Gender*GPAs

The 0 in the legend is middle school only; the 1 is high school only; and the 2 represents both middle and high school participation. The graph reveals that with the exception of the high school only group, the female participants in the other two groups received higher GPAs in 2014.
APPENDIX C. MANCOVA: GPA/ATTENDANCE

Attendance*GPA*Participation

Based on the output for attendance and GPAs, \( p \)-value = .0001 < .05. Therefore, the Ho (null hypothesis) was rejected as there is strong evidence to suggest that at least one difference of GPAs is not equal to 0. This reflects that students with different numbers of full school day absences get different GPAs. The following data were used in the MANCOVA analysis:

\[
\text{Absence} \begin{cases} 
1 \rightarrow \leq 30 \text{days} \\
2 \rightarrow (30, 60] \\
3 \rightarrow > 60
\end{cases} , \text{Gender} = 0 \text{ (F)}, 1 \text{ (M)}
\]

Table 17

MANOVA GPA for Combined Three Years*Attendance

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<tr>
<th>Characteristic Root</th>
<th>Percent</th>
<th>Characteristic Vector V’EV=1</th>
<th>MVAR1</th>
<th>MVAR2</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.22591620</td>
<td>100.00</td>
<td>0.14738046</td>
<td>-0.02140634</td>
<td></td>
</tr>
<tr>
<td>0.00000000</td>
<td>0.00</td>
<td>-0.00154339</td>
<td>0.29429442</td>
<td></td>
</tr>
</tbody>
</table>

MANOVA Test Criteria and Exact F Statistics for the Hypothesis of No Overall Intercept Effect on the Variables Defined by the M Matrix Transformation

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Value</th>
<th>F Value</th>
<th>Num DF</th>
<th>Den DF</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wilks’ Lambda</td>
<td>0.81571644</td>
<td>20.56</td>
<td>2</td>
<td>182</td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>Pillai’s Trace</td>
<td>0.18428356</td>
<td>20.56</td>
<td>2</td>
<td>182</td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>Hotelling-Lawley Trace</td>
<td>0.22591620</td>
<td>20.56</td>
<td>2</td>
<td>182</td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>Roy’s Greatest Root</td>
<td>0.22591620</td>
<td>20.56</td>
<td>2</td>
<td>182</td>
<td>&lt; .0001</td>
</tr>
</tbody>
</table>
According to the MANOVA output, \( p \)-value = .0001 < .05. Therefore, the Ho (null) was rejected as there is strong evidence to suggest that at least one difference of GPAs is not equal to 0. That is, students with different mentoring program participation get different GPAs.

The following participation data and hypotheses were utilized in the MANOVA analysis:

\[
\text{Mentoring Program Participation } \begin{cases} 
0 \rightarrow \text{Middle school} \\
1 \rightarrow \text{High school} \\
2 \text{ both}
\end{cases}
\]

Gender = 0 (F), 1(M)

Table 18

**MANOVA GPA for Combined Three Years* Participation**

<table>
<thead>
<tr>
<th>Characteristic Root</th>
<th>Percent</th>
<th>MVAR1</th>
<th>MVAR2</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.14734508</td>
<td>100.00</td>
<td>0.14992731</td>
<td>0.00669152</td>
</tr>
<tr>
<td>0.00000000</td>
<td>0.00</td>
<td>-0.00953588</td>
<td>0.29552179</td>
</tr>
</tbody>
</table>

MANOVA Test Criteria and Exact F Statistics for the Hypothesis of No Overall Intercept Effect on the Variables Defined by the M Matrix Transformation

\[
H - \text{Type III SSCP Matrix for Intercept} \\
E - \text{Error SSCP Matrix}
\]

\[S = 1, \ M = 0, \ N = 90\]

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Value</th>
<th>F Value</th>
<th>Num DF</th>
<th>Den DF</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wilks’ Lambda</td>
<td>0.87157737</td>
<td>13.41</td>
<td>2</td>
<td>182</td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>Pillai’s Trace</td>
<td>0.12842263</td>
<td>13.41</td>
<td>2</td>
<td>182</td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>Hotelling-Lawley Trace</td>
<td>0.14734508</td>
<td>13.41</td>
<td>2</td>
<td>182</td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>Roy’s Greatest Root</td>
<td>0.14734508</td>
<td>13.41</td>
<td>2</td>
<td>182</td>
<td>&lt; .0001</td>
</tr>
</tbody>
</table>
APPENDIX D. DISCIPLINE/GENDER

Participation*Gender*Discipline

The data in Table 19 include the analysis of differences between program mentoring groups and discipline (exclusion data) for the combined three school years (2012, 2013, and 2014). According to the ANOVA output, the corresponding *p – value = 0.0115 < .05 indicates that at least one mentoring group had different number of disciplinary infractions in the three years. Gender, Year, Interaction effect of Participation and Gender, and Interaction of Participation and Year were not significant.
Table 19

ANOVA Mentoring Participation*Gender*Discipline

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F Value</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>11</td>
<td>861.97886</td>
<td>78.36171</td>
<td>2.11</td>
<td>0.0180</td>
</tr>
<tr>
<td>Error</td>
<td>549</td>
<td>20371.05144</td>
<td>37.10574</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>560</td>
<td>21233.03030</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note:* R-Square = 0.040596; Coefficient Variable = 143.5841; Root MSE = 6.091448; Discipline Mean = 4.242424

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Type I Sum of Squares</th>
<th>Mean Square</th>
<th>F Value</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentoring</td>
<td>2</td>
<td>308.9759494</td>
<td>154.4879747</td>
<td>4.16</td>
<td>0.0160</td>
</tr>
<tr>
<td>Gender</td>
<td>1</td>
<td>25.3184479</td>
<td>25.3184479</td>
<td>0.68</td>
<td>0.4091</td>
</tr>
<tr>
<td>Year</td>
<td>2</td>
<td>363.8645276</td>
<td>181.9322638</td>
<td>4.90</td>
<td>0.0078</td>
</tr>
<tr>
<td>Mentoring*Gender</td>
<td>2</td>
<td>60.9922863</td>
<td>30.4961432</td>
<td>0.82</td>
<td>0.4401</td>
</tr>
<tr>
<td>Mentoring*Year</td>
<td>4</td>
<td>102.8276475</td>
<td>25.7069119</td>
<td>0.69</td>
<td>0.5971</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Type III Sum of Squares</th>
<th>Mean Square</th>
<th>F Value</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentoring</td>
<td>2</td>
<td>333.8419117</td>
<td>166.9209559</td>
<td>4.50</td>
<td>0.0115</td>
</tr>
<tr>
<td>Gender</td>
<td>1</td>
<td>4.5969755</td>
<td>4.5969755</td>
<td>0.12</td>
<td>0.7250</td>
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<td>Year</td>
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<td>221.3828197</td>
<td>110.6914099</td>
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<td>0.0515</td>
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<tr>
<td>Mentoring*Gender</td>
<td>2</td>
<td>60.9922863</td>
<td>30.4961432</td>
<td>0.82</td>
<td>0.4401</td>
</tr>
<tr>
<td>Mentoring*Year</td>
<td>4</td>
<td>102.8276475</td>
<td>25.7069119</td>
<td>0.69</td>
<td>0.5971</td>
</tr>
</tbody>
</table>
APPENDIX E. 2012 EXPULSIONS

Participation*2012 Expulsions

Based on the Chi-Square Test, the null hypothesis could not be rejected in 2012 based on the output which $p - \text{value} = .521 > .05$, indicating that there was insufficient evidence to conclude that participation in the mentoring program had an impact on 2012 expulsions.

Table 20

2012 Participation*Expulsion

<table>
<thead>
<tr>
<th>Participation</th>
<th>Expulsion</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Middle School</td>
<td>44</td>
<td>1</td>
</tr>
<tr>
<td>High School</td>
<td>26</td>
<td>1</td>
</tr>
<tr>
<td>Both Middle and High School</td>
<td>104</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>174</td>
<td>6</td>
</tr>
</tbody>
</table>

Note: Pearson Chi-Square = 1.313, DF = 2, $p$-Value = 0.519; Likelihood Ratio Chi-Square = 1.306, DF = 2, $p$-Value = 0.521
APPENDIX F. 2013 EXPULSIONS

Participation*2013 Expulsions

Based on the output which *p – value = .003 < .05 there is statistically significant evidence to indicate that there were differences between mentoring groups and expulsions in 2013 (See Table 21).

Table 21

2013 Participation*Expulsion

<table>
<thead>
<tr>
<th>Participation</th>
<th>Expulsion</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Middle School</td>
<td>34</td>
<td>4</td>
</tr>
<tr>
<td>High School</td>
<td>24</td>
<td>1</td>
</tr>
<tr>
<td>Both Middle and High School</td>
<td>101</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>159</td>
<td>6</td>
</tr>
</tbody>
</table>

*Note: Pearson Chi-Square = 12.831, DF = 2, p-Value = 0.002; Likelihood Ratio Chi-Square = 11.509, DF = 2, *p-Value = 0.003
APPENDIX G. 2014 EXPULSIONS

Participation*2014 Expulsions

Based on the Chi-Square output in Table 22 with \( p \)-value = .02 < .05 there is statistically significant evidence to indicate that there were differences between mentoring groups and expulsions in 2014.

Table 22

2014 Participation*Expulsion

<table>
<thead>
<tr>
<th>Participation</th>
<th>Expulsion</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Middle School</td>
<td>35</td>
<td>5</td>
</tr>
<tr>
<td>High School</td>
<td>23</td>
<td>1</td>
</tr>
<tr>
<td>Both Middle and High School</td>
<td>101</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>159</td>
<td>7</td>
</tr>
</tbody>
</table>

Note: Pearson Chi-Square = 12.576, DF = 4, \( p \)-Value = 0.014; Likelihood Ratio Chi-Square = 11.669, DF = 4, \( *p \)-Value = 0.020
APPENDIX H. 2015 EXPULSIONS

Participation*2015 Expulsions

Based on the Chi-Square results in Table 23, the output reflects with $p – value = .24 > .05$ that mentoring participation had no significant impact on the 2015 expulsions.

Table 23

2015 Participation*Expulsion

<table>
<thead>
<tr>
<th>Participation</th>
<th>Expulsion</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Middle School</td>
<td>36</td>
<td>3</td>
</tr>
<tr>
<td>High School</td>
<td>21</td>
<td>6</td>
</tr>
<tr>
<td>Both Middle and High School</td>
<td>94</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>151</td>
<td>5</td>
</tr>
</tbody>
</table>

Note: Pearson Chi-Square = 2.930, DF = 2, $p$-Value = 0.231; Likelihood Ratio Chi-Square = 2.855, DF = 2, $p$-Value = 0.240
APPENDIX I. STUDENT SURVEY RESPONSES

CTAG Student Responses

The final question on the survey was: Overall, what do you like most about CTAG / how has it helped you and/or what else can be done to help you be successful in school?

There were 100 responses from 7th – 9th grade CTAG participants. With the exception of deleting names, the comments below were taken directly from Survey Monkey as students wrote them.

- How everything we do is real. We keep it real in there. No lies are told. No dressed rehearsals.
- What do I like most about CTAG is that I have more confidence then in the beginning of the school year. It help me keep trying to reach for my dream or goal. I could do my absolute best to get my grades up and start fresh next year.
- It has taught me that what is outside of these walls is real and that there are many steps to become a man.
- What I like most about CTAG is when other people come in and talk to us about what they seen and been through. It helped me see what's real in the world but for the most part I hate CTAG.
- I like CTAG alot, because it helped me and soon it will help a lot of others too!
- I like how every group I learn something new and change my thinking a little and I like how _____ gives us the knowledge that we need.
- It's made me think more about my grades and how to succeed in life.
- I mostly think CTAG is about Closing The Achievement Gap, and the program is helping me do all I can to close the gap. I maybe could've had good grades without CTAG, but the program requires an excellent amount of motivation and extra push.
- I like how CTAG has stopped me from getting in trouble in class. I also like how CTAG has helped me try to get better grades.
- That we talk about how some stuff actually effects what you do in life. It has helped me by seeing that my grades are really important. Take extra class for a good look.
- Talking about manhood and how to be a man. It made me focus on the right choices of being a man. I've given me enough to know, I would sometimes slack off but not the 4th quarter. I've gotten everything set up to earn that 3.0.
- It help me feel better about myself.
- He teach us how to be young men and without having good grades will not make it anywhere.
- It really didn't help me it just gave me certain advice my dad didn't give me but most of it my dad taught me early on in my life.
- I helped me to be more friendly.
- That we talk about being a young man and when its time to grow up to be more challenged.
- Yes it help me.
I like how we can chill and not be stressed with teachers and homework/i started doing homework.
i like how it teaches us about life and living and give us real world advice unlike most schools.
everything and mostly about how i get influenced to get my grades up.
ctag shows me people who changed their life and became something from getting bad grades in middle school
what i like most about ctag is that mr ____ never gives up on anybody
What i like most about CTAG is that it helps me be better in the things i do.
i like catag because how it make me fill
the way they help me and support me and not follow down the right path and always do then right thing.
trust

dont interact with the wrong group of people
Just being able to have someone else other than my parents that care about me... I feel like CTAG is another outlet to help me succeed in not just school work but life itself...
get help on school work.
TO BE MATURE AND LEARNING ABOUT MANHOOD VS CHILDHOOD AND LEARNING ABOUT HOW TO BE A MAN
it help me stop being bad in school and live life
the way we keep it real and being comfortable to share and to have someone to talk to
its good for the overall acceptance from other peers
it help me alot to keep my head straight
i like how Mr. _____ is always on our back about our grades.
I like how they try to keep us on track it helped me with grades
i like if you would have no one to talk to ctag is there
IDEK, probably the movies is the most best part about CTAG
it has helped me by encouraging me to do all my work and get better grades so that i can go to highschool and college to get my PHD, and GED
helped me to be successful
watching movies & learning about stuff
CTAG have helped me by helping me turn in missing assignment.
ctag help me get in to less fights hep me turn in missin work and make mw wor harder in class
it helps u overall in life and can help u be a better person
I like how the C-TAG program helps influence your home life and also your school performance. C-TAG has really just help me realize that in school and outside of school that life is real and that if your not prepared to brace for it, it could tear you down. C-TAG is like a tutor on how to improve your life. This program has helped me alot and Im really glad that we have this program in high school.
it teaches you about manhood and try to make you think about school more.
what I like most about ctag is that it is real and all the discussions are relevant to the success of your future and it has helped me in situations where usually i would feel anxious or unsure of what to do they give you instructions for those situations.
• if i could rate it from 1-10 it would be a 10. i like that they keep it real and dont sugar
cold the situation. every since i been it i started to see what they been talking about in
the other students in my school. it help me want to be a better student and it helps me
want to better my journy to man hood.
• The thing i like most about Ctag is the positive role models. They influence me to do
my best and strive for greatness.
• What I Like About CTAG The Most Is The Brother-Hood And How Everybody Is
Here For Each Other
• Overall i like that both of my CTAG teachers are lijke father figures that i can look up
to and they both help with everything i go through CTAG is like another family to me
that hepls you whatever the problem is
• it helped me do the right things and be mature and and get better grades and help but
• what i like most about CTAG is that the people that our are teachers actually care
about us and have maybe had the same experiences when they were younger also
theyre educated and actually know what theyre talking about and they also ask
whoever needs help in class they will help you
• Overall the thing i most like about CTAGis how it helps me to get better grades and
shows me more of the right things to do.
• i like most about ctag is that they keep it real with they dont sugarcoat things i dont
know
• Overall, i like CTAG because it helps us better ourselves and it helps teach us how to
be more of a man and less of a child. It has helped me in just about all of my classes
and my behavior issues since i started school. And i feel as though it showed me how
to man up and be a better person in and out of school.
• what i like about C-tag is that i can talk about things to my C-tag brothers and
teachers that i really cant talk to my family about and iknow that my C-tag family
wont hurt me in any kind of way . they are only here to help me with anythink i need
help with .and it helped me to get better in everything overall
• They back you up through everything, and they're there when you need them. From
the beginning they give you help and provide you with information that you'll need
when you're older. Some might not use the information given right away but they
have the information.
• i like i can be myself and i can feel confortable and they be real with us
• i like how ctag keeps me on track wiht not just school but with life . it teaches me alot
with being a man because i dont have a father in the home . its teaches me the
nessesary things needed to be a man .
• I've always liked CTAG and what it has done for other guys. I like how they help us
in or out of school when we need it. They give the right advice about what happens in
life.
• What i like most about CTAG is it helped out alot i learned so much in the 7th grade
to now. Ctag helped me become a man and a better child to my mom before CTAG i
wasn't as constant with my behavior i was always clowning and it helped realize that
if i wanna be successful i need to stop clowning and really do my work.
• ctag has helped me in many ways coming up, its nothing but truthful teachings, how
to be a men, how to act in public , how to dress like a men, how to live right & how to
treat other people, it even teaches you how to respect yourself in others. ctag is the best freshman class i love...

- CTAG keeps me out of trouble and helps me focus on my education more than anything else
- I like how it gives me somebody to trust and talk to and how the help or try to help when i need it
- i like every thing about ctag and it helps me alot
- CTAG is cool i dont really have problems at home or anything but i made a few friends in there.
- I Like Everyhting. I helped me by having better behavior.
- THE TALKS AND SESSIONS
  - What I like the most about CTAG is that they're their for me and they motivate me. Yes they have helped me. They've helped me a lot!
  - What I like the most about CTAG is that they're their for me and they motivate me. Yes they have helped me. They've helped me a lot!
  - what i like most about CTAG is the movies we watch even tho some of them make me mad
  - I like how we watch movies about specific things. Like, things that we can learn from, and thing's that do happen and have happened before. I like how we're motivated to get things done. Like our school work, and to behave and all. To stay on the right track.
  - I like how they tell you grades are the most important thing. It helped me because I learned that I needed to drop a lot of my friends in order to succeed in life. ALso that i needed to grow up a lot because this is what matters and that there is a time and place for playing and in class when there is work to be done is not it.
  - I LIKE THAT CTAG HAS HELPED ME AND INFLUENCED ME TO DO AND ACHIEVE ALOT OF THINGS I NEVER THOUGHT I WOULD DO.
  - CTAG is an amazing class. i love it and wish we had it through out high school because it really helps me. i like that we learn alot and know we can talk about anything an we have people that actually care about us and our grades. that encourage us to do better and be a better person. Ctag has helped me ALOT! it showed me i need to get my act together right away because slacking specially in the 9th grade as a freshman will haunt my through my high school year. It showed me i need to stay caught up an do better and be the best i can be. and if i had this class helping me through high school i know for sure i can succeed in school.
  - what i like most about CTAG is when we talk about our problems...CTAG has helped me find who my real friends are and how to make different choices.
  - I like how Miss Angel takes the time out to make sure we get all of our homework done and she checks on our grades and talks to us about what we can do to improve them.
  - CTAG has helped me be a little more confident in speaking in front of people.
  - I like that we all can talk to eachother about anything if were comfortable .. and were all girls.
  - I like that the class gives us time to do school work in class.
  - teach me about life
• ctag has help me secced by having people to talk to and help me about my problems
• i like CTAG beacause it is a class that allows you to better yourself as both a person, and academically, it also helps you to form new frienships, and to better understand other peoples lives.
• The things that we talk about in CTAG help me with everyday situations. Without CTAG i would be going through the same problems i was at the beginning of the year.
• WHAT I LIKE MOST ABOUT CTAG IS THAT ITS AN ALL GIRL CLASS.
• What I like most about CTAG is that it is helping me to become A Young Lady. It is helping me because Im Slowly doing better with my gradses and with my behavior.
• It has helped me open my eyes and realize that i'm growing up and that lifes not a game. That nobody is gonna hold my hand and let me get the easy way out. Ctag helped me take school more serious and focus more.
• it give me good advice, i get closer to my friends apperance, help me stay focused, help me think more about life and etc.....
• I FEEL LIKE I CAN BE MY SELF IN CTAG AND GIVE MY OPINION ABOUT ANYTHING THAT WE ARE TALKING ABOUT.
• CTAG has helped me be more social and i recieved great advice and learned new things.
• yes it has helped me by being calm wen some one say something to me just walk away from them and don't say nothing to them....
• Help with the drama that was happping in this school ... less people are getting supplended and fighting .... If west didnt have ctag , im pretty sure 9x outta 10 thepeople hanging around the people thats doing the most would be supplended
• I Like That My Ctag Teacher Help Me With My Problems
• It has helped me because I haven't gotten into any trouble .
• it helps my anger & I get along with everybody in there I haven't been in drama since ive been in ctag maybe like once or twice .but other then that im good ctag good for me .
• IT HELPS ME STAY OUT OF GIRL DRAMA & DRAMA PERIOD
• i LIKE HOW ______ HELP US OUT AND HOW WE ARE INCTAG!!!!
• I LIKE THE TALKS WE HAVE .
• well i love the things she give out and how much she puts effort in tobeig withus every day <3
APPENDIX J. HSRB LETTER

DATE: August 21, 2015

TO: Andrea Guice
FROM: Bowling Green State University Human Subjects Review Board

PROJECT TITLE: [770487-2] CLOSING THE ACHIEVEMENT GAP THROUGH SOCIAL PROGRAMMING: THE EFFECTS OF A SCHOOL-BASED MENTORING PROGRAM

SUBMISSION TYPE: New Project

ACTION: DETERMINATION OF EXEMPT STATUS
DECISION DATE: August 21, 2015

REVIEW CATEGORY: Exemption category # 4

Thank you for your submission of New Project materials for this project. The Bowling Green State University Human Subjects Review Board has determined this project is exempt from IRB review according to federal regulations AND that the proposed research has met the principles outlined in the Belmont Report. You may now begin the research activities.

Note that an amendment may not be made to exempt research because of the possibility that proposed changes may change the research in such a way that it is no longer meets the criteria for exemption. A new application must be submitted and reviewed prior to modifying the research activity, unless the researcher believes that the change must be made to prevent harm to participants. In these cases, the Office of Research Compliance must be notified as soon as practicable.

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

If you have any questions, please contact Kristin Hagemyer at 419-372-7716 or khagemy@bgsu.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Bowling Green State University Human Subjects Review Board's records.