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Doctor of Education in Organizational Leadership

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Abilene Christian University
School of Educational Leadership

Advancement Via Individual Determination and Its Impact on the Academic Achievement of
African American Male Students

A dissertation submitted in partial satisfaction
of the requirements for the degree of
Doctor of Education in Organizational Leadership

by
Christopher L. Turner

January 2023

Dedication

This dissertation is dedicated to my father, Sidney Lee Turner, who only attended school through the sixth grade. His advice to me was “Always do something with your head so you won’t have to work as hard as I do.” My dad instilled in me the characteristics to work hard, but also emphasized the importance of education. For that, I am forever grateful.

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I want to take this opportunity to thank my family for supporting me throughout this journey. To my amazing mother, Essie, I hope that I made you proud. To my older brother and sister, Lee and Val, thank you always for your protection. To my oldest daughter, Kristyn, thank you for blazing the trail and motivating me to push forward. To the rest of my children: Matthew, Collin, Chase, and Cayla, I hope I can continue to serve as an inspiration as you continue to blossom. Finally, to my wife, Lanette, I especially want to thank you for your patience, support, and faith in me.

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Abstract

The purpose of this study was to evaluate the effectiveness of the Advancement Via Individual Determination (AVID) program and its impact on the academic achievement of African American and White male students. A causal-comparative quantitative design was used as the methodology for this study. For this study, the academic achievement of AVID and non-AVID African American and White male students was measured by comparing their Algebra 1 scores. The sample included data from approximately 550 African American and White male high school students in a suburban school district in Texas. Student achievement data were collected and analyzed using a statistical software program. The results of the study revealed that students who were enrolled in the AVID program had higher achievement than those who were not enrolled. There also appeared to be no achievement gaps between Black and White male students. Among all major demographic groups in America, data show that African American males fall behind other groups in test scores, high school graduation, college enrollment, and college graduation. This also holds true for the district where the study was conducted. The AVID program has attracted national attention for its efforts to close the academic achievement gaps between student groups. Thus, the results of this study may support the decision of school districts to adopt AVID practices schoolwide.

Keywords: AVID, achievement gap, African American males

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Chapter 1: Introduction

Background

For decades, researchers have studied the phenomenon of the academic performance gap between African American and Caucasian students. Despite attempts by scientists, policymakers, and education officials, little headway has been made in reducing the academic achievement gap (Williams, 2011). Even during periods in which Black students have shown improvement in achievement, their performance (relative to their White peers) in benchmark testing and college acceptance assessments has remained consistent (Gillborn et al., 2017). Data from the National Center for Education Statistics (NCES; 2015) show a significant divide in academic achievement between ethnic groups. More specifically, Caucasian students perform better than their African American counterparts.

Academic gaps in learning for Black students are generally linked to historical occurrences such as slavery and segregation. Researchers attribute low cognitive skills passed down through generations and other social factors as sources of origin (Olszewski-Kubilius & Clarenbach, 2014). Explanations and theories regarding achievement gaps have also been traced back to segregation cases such as *Plessey v. Ferguson* (1896) and *Brown v. the Board of Education of Topeka* (1954). Relative to these accounts, Condrón et al. (2013) asserted that segregation has negative consequences for minorities. The researchers identified adverse factors experienced by segregated minority groups such as unequal resources, poorer teacher quality, income gaps, and lower levels of educational attainment (Condrón et al., 2013). Further, Condrón et al.'s findings supported prior claims that school segregation is detrimental to the learning of Black children and that school separation of students may contribute to the learning disparities and achievement gaps that exist between Black and White students.

Chapin (2006) noted that achievement gaps are present before students enter kindergarten and continue throughout their secondary years. Daniel (2018) added that achievement gaps begin at birth, persist through development, and have lifelong negative consequences. Such academic gaps cause minority students to fall behind, translating to lower rates of employment, higher incarceration rates, substance abuse, and intergenerational poverty (Williams, 2013).

Furthermore, performance levels relative to academic achievement have lasting effects on students once they graduate from high school. Data show that significant gaps in degree attainment are particularly prevalent between African American and White students (Dorime-Williams, 2018). Thus, college choices and career opportunities are far more limited for students of color. As a result, the opportunities for minorities to secure occupational positions and income equivalent to their White counterparts are reduced (El-Amin et al., 2017).

Despite attempts to close academic achievement gaps in U.S. public schools, there has been little change since the early 1990s (Condrón et al., 2013). Disparities in educational learning outcomes between African American students and peers from other racial groups are directly linked to a wide array of structural injustices (El-Amin et al., 2017; Noguera, 2015). For example, Kotok (2017) revealed that Black and Latino students are more likely to be placed in lower track courses—even when they score in the top math percentile rank—than their White and Asian peers. Cisneros et al. (2014) found that students of color and students from economically disadvantaged backgrounds are enrolled in Advanced Placement (AP) courses at lower rates than White students (Cisneros et al., 2014). *Ability grouping* is a common practice of school districts used to differentiate the placement and instruction of students based on their ability (Tomlinson, 2015). Statistical data from one high school campus in Texas showed that only 4% of African American students and 7% of Hispanic students were enrolled in AP courses

as compared to 72% enrollment of White students (Office of Civil Rights, 2015). These figures support prior research findings that minority students are disproportionately underrepresented in high school courses of rigor (Olszewski-Kubilius & Clarenbach, 2014).

The lack of fair and equitable practices within schools may also contribute to the academic achievement gaps that exist there. Khanal (2017) attested that many policies fail to acknowledge diversity and do not guarantee equity within school systems. Dominant cultures reflect power relationships in schools, and minority groups are forced to conform to those ideals. Inasmuch, the cultural and linguistic dispositions of minority students are incompatible with the dominant group (Khanal, 2017). Thus, their cultures seldomly are recognized, which may explain minority students' low feelings of belonging and motivation in schools.

Academic Achievement of African American Male Students

Gaps in academic achievement are particularly concerning for African American male students. Henfield et al. (2014) posited that Black male students historically perform at a lower rate on academic achievement tests than any other student group. Among all major demographic groups in America, African American male students fall behind other groups in test scores, high school graduation, college enrollment, and college graduation (Watt et al., 2018). The effects of these results have adverse consequences for their future. Patterson (2015, as cited in Jackson, 2019) detailed the hardships that African American males face:

Black males experience disproportionately high rates of unemployment, incarceration, and homicide, and many of them are so disenfranchised (approximately 34% of Black males between the ages of 16 and 34) that they are literally “missing” from key census data because they are neither working, in school or college, or in the criminal justice system. (p. vii)

Many assumptions have been attributed to these results. For example, a study by Battle (2017) illustrated that young Black male students are subjected to more negative stereotyping by teachers; thus, they are not held to high academic expectations. This theory of stereotype threat, as coined by Steele and Aronson (1995), posited that African American students underperform on standardized assessments based on the societal assumptions that Black students are not good test takers. Black male students also face more stringent barriers than their White peers. Disproportionate suspension rates, higher special education placements, lower income levels, inferior school resources, and poor teacher-student relationships are among the obstacles that have been associated with Black male students' lack of academic achievement in schools (Douglas et al., 2008; Graham & Nevarez, 2017). Consequently, the mistreatment of Black males in schools, lack of educational opportunities, and disproportionate discipline referrals lead to their disengagement from school, which may affect their overall academic productivity (Allen, 2017).

Strategies That Address the Academic Achievement Gap

Despite school districts' attempts to address the academic gaps in achievement between African American and White students, the issue remains a concern (Henfield et al., 2014; Kotok, 2017). However, the continuing presence of these gaps is not due to a lack of responsiveness. In fact, several studies have been conducted that recommend strategies for closing student performance gaps. For example, a report by Fergus (2017) suggested that mechanisms should be established to allow educators to understand their bias-based beliefs and develop equity principles that encourage healthy cultures. Another study by Tobisch and Dresel (2017) found that teachers had the highest expectations for students in the majority group and lowered their expectations for minority students. Thus, African American students were not challenged at a

level that would improve their academic skills and performance. Finally, Henderson and Guy (2017) suggested that the relationships established between White teachers and Black students are particularly important for academic success. Notably, many teachers of the majority race lack the knowledge and skills to successfully interact with students who are different from them (Kim & Zabelina, 2015). As a result, less effective instructional practices are delivered due to lowered teacher expectations.

Ideally, it is the expectation of policymakers, school officials, and state representatives that adopted policies will address the academic and social needs of African American students. However, performance gaps on standardized tests between Black and White students prevail despite these stakeholders' efforts to reduce them (Kim & Zabelina, 2015). Thus, questions remain as to how to effectively implement practices that will address and lessen those gaps. Understanding these questions may aid in the effort of systemic school reform.

Statement of the Problem

There is a domestic phenomenon regarding the academic achievement gap that exists between African American and Caucasian students. From a national perspective, achievement gaps weaken America as a whole on multiple levels—internationally, economically, and morally (Pitre, 2014). While the overarching picture displays gaps between White and minority students, much of the conversation turns specifically to the divide between Black and White students (Kotok, 2017).

Daniel (2018) noted that the achievement gap results from inequitable opportunities provided to the families and communities of African American students. Their school experiences are routinely complicated due to factors such as zero-tolerance rules, cultural biases, cognitive deficiencies, inadequate educator training, and a lack of a challenging and enriching

curriculum (Olszewski-Kubilius & Clarenbach, 2014). Hence, more aggressive school-based practices are needed to address these concerns.

Although student achievement divisions are noticeable between African American and Caucasian students, some campus interventions have shown promising results toward overall improvement in academic performance of African American students (Pitre, 2014). One such measure is Advancement Via Individual Determination (AVID), a college preparatory program that focuses on reducing the achievement gap by preparing all students for college and career readiness (Wooldridge, 2017). Through AVID, students are provided consistent academic support while enrolled in a rigorous course of study.

To date, more than 4,800 schools in 48 states utilize AVID strategies (Huerta et al., 2013). When implemented with fidelity, research shows that AVID students demonstrate higher levels of self-esteem, self-efficacy, and motivation (Wooldridge, 2017). Similarly, the family-like structure incorporated within the program contributes to the academic success of students and increases their chances of attending college (Pugh & Tschannen-Moran, 2016). With this in mind, this study focused on the problem of practice, asking the question: Does the AVID program in an urban public school in Texas help close the academic achievement gaps between African American male and Caucasian male students?

Purpose of the Study

The purpose of this causal-comparative study was to examine whether implementation of the AVID program at one suburban high school district in Texas may contribute to closing the academic achievement gap between African American male students and White male students. Studies have shown that there are educational programs at the middle and high school level (e.g., AVID) that can increase the academic achievement of underperforming students and effectively

prepare them for college and career readiness (Wooldridge, 2017). This study examined end-of-course (EOC) assessment results of high school students in Grades 9–12 to investigate AVID’s effectiveness with improving academic achievement of African American male students.

Research Questions and Hypotheses

RQ1: Is there a significant difference in Algebra I achievement of African American male students enrolled in AVID compared to White male students enrolled in AVID?

H1₀: There is no significant difference in Algebra I achievement of African American male students enrolled in AVID compared to White male students enrolled in AVID.

H1_A: There is a significant difference in the Algebra I achievement of African American male students enrolled in AVID compared to White male students enrolled in AVID.

RQ2: Is there a significant difference in Algebra I achievement of African American male students enrolled in AVID compared to White male students not enrolled in AVID?

H2₀: There is no significant difference in Algebra I achievement of African American male students enrolled in AVID compared to White male students not enrolled in AVID.

H2_A: There is a significant difference in Algebra I achievement of African American male students enrolled in AVID compared to White male students not enrolled in AVID.

RQ3: Is there a significant difference in Algebra I achievement of African American male students enrolled in AVID compared to African American male students not enrolled in AVID?

H3₀: There is no significant difference in Algebra I achievement of African American male students enrolled in AVID compared to African American male students not enrolled in AVID.

H3_A: There is a significant difference in Algebra I achievement of African American male students enrolled in AVID compared to African American male students not enrolled in AVID.

Definition of Key Terms

Achievement gap. The difference in academic performance between two subgroups when one group outperforms another group is known as an achievement gap (Kotok, 2017).

Advanced Placement (AP) courses. The AP program was created by the College Board, which offers college-level curricula and examinations to high school students. American colleges and universities may grant placement and course credit to students who obtain high scores on the examinations (Wikipedia, 2022a).

Black or African American. These terms refer to any person having origins in any of the Black racial groups of Africa. These include people who identify their race as Black or African American or report entries such as African American, Kenyan, Nigerian, or Haitian (United States Census Bureau, 2010). The terms Black and African American are used interchangeably in this study.

Diversity. This refers to differences along the dimensions of race, ethnicity, sexual orientation, gender, socioeconomic status, age, ability, religious or political beliefs, or other different ideologies (University of Rhode Island, 2020). Diversity, in terms of this study, refers to the exploration and incorporation of these differences to enrich learning in schools.

Equity. This is defined as the assurance that personal or social circumstances (i.e., gender, ethnic origin, or family background) are not obstacles to achieving educational potential and that all individuals reach at least a basic minimum level of skills (Wikipedia, 2020b).

Minorities. This group includes several different race categories—Black, American Indian, Asian, Hispanic, Pacific Islander, other, and two or more races—that are not considered as part of the dominant (White) race (Esri, 2012).

White. This term refers to a person having origins in any of the original peoples of Europe, the Middle East, or North Africa. It includes people who identify their race as White or report entries such as Irish, German, Italian, Lebanese, Arab, Moroccan, or Caucasian (Wikipedia, 2020c). For this study, White and Caucasian are used interchangeably.

Summary

The purpose of this chapter was to introduce the study and provide background knowledge of the academic achievement gaps and their effects relative to Black and White students. The literature presented in the background section of this chapter supports a need for systemic school reform. Specific strategies, such as AVID, were presented as possible measures to improve these gaps. Chapter 2 of this dissertation provides a review of relevant literature about academic achievement gaps and explores the AVID program in greater detail.

Chapter 2: Literature Review

This literature review outlines the compelling concerns related to the academic achievement gaps between African American and White students in public schools. First, an overview of the performance differences between student groups is presented followed by a brief history of the academic achievement gap and patterns throughout school and social environments. A more specific focus describes the educational hardships that African American males have endured, their performance status compared to other ethnic groups, and some theoretical frameworks that may explain their academic placement. Finally, a program model is introduced to determine if its implementation may help lessen the existing academic achievement gaps.

Academic Achievement Gaps

According to Dictionary.com (2021), *achievement* is defined as “something accomplished, especially by superior ability or special effort” (para. 1). An act of achievement can often lead to a monumental award of some sort such as a certificate of completion, personal recognition, or a sense of self-fulfillment. In school settings, the ultimate forms of achievement are high school diplomas and college/post college degrees. Many students work tirelessly to perform at the level to ensure they are someday positioned to attain university scholarships, which may lead to competitive employment opportunities. Other students, however, face overwhelming challenges that derail their hopes of success. These challenges, consequently, contribute to educational gaps in achievement that ultimately lead to the inequitable social, economic, and academic positioning of minority groups.

The *achievement gap*, as defined by Bjorklund-Young and Plasman (2020), is described as the percentage of students who do not reach academic proficiency at a given grade level. This

parameter projects how many students are on track to handle the academic tasks associated with college and career preparation. A plethora of factors hinder the academic progress of students and lessen their chances of reaching their full capacity. In their study, Bjorklund-Young and Plasman (2020) outlined how some influences may contribute to gaps in achievement at three different levels:

At the individual student level, the achievement gap relates to such variables as family socioeconomic status, low motivation, poor attendance, behavioral factors, or even predictors related to student health. At the classroom level, potential explanations include low-quality curricula or being surrounded by low-achieving peers. Finally, at the school level, factors that may worsen the achievement gap include a lack of effective instructors and inequitable access to high-level mathematics coursework. (p. 2)

These factors are illustrated in greater detail later in this literature review.

Inequities for African American Students

The American dream ideally grants everyone an equitable opportunity to reach their highest aspirations. However, in the realm of public education, this remains an elusive dream for African American students and their families (Earp, 2012). Factors such as low socioeconomic status and the high poverty rate that plague many African American students present extreme challenges in schools. As a result of these conditions, many Black children are forced to attend unsafe, substandard inner-city schools, where the level of education and academic resources are considerably inferior to the neighboring schools that other middle- and upper-class students attend.

The results of these inequitable opportunities have proven to be detrimental for many African American students, particularly relating to educational performance. Research has

suggested that factors such as low socioeconomic status, parental income, and educational attainment contribute to the academic success of African American students (Torrats-Espinosa, 2020; Williams et al., 2020). These circumstances are particularly prevalent in low-income Black households. Consequently, in many minority neighborhoods, where resources are scarce, schooling becomes a secondary priority to families that are struggling to balance other necessities. Parents are forced to work multiple jobs, and thus, are rarely at home to monitor their child's progress in school. As a result, less emphasis is directed toward education, which further obstructs the academic advancement of African American students.

Experiences such as those mentioned above have led to notable academic divides between individual student groups. As a result, researchers, school officials, and policymakers have focused on measures to close these gaps in achievement (Ford, 2011; Henry et al., 2020; Spitzer & Aronson, 2015). More specifically, they sought to explain the continual differences in academic performances between African American and White students. Studies suggest that African American students have consistently underperformed on standardized achievement tests and achieved at a rate lower than all other ethnic groups in academic settings (St. Mary et al., 2018; Torrats-Espinosa, 2020; Williams et al., 2020). White et al. (2016) also noted that Black and Hispanic students have lower average reading, mathematics, and science scores compared to their White peers.

Historically, these statistics date back to the primary schooling of students and continue as students matriculate through their elementary years (Henry et al., 2020). Moreover, these trends hold steady or marginally increase throughout their secondary years. Evidence of this data was presented by Balfanz and Byrnes (2006) who found that achievement gaps grow rapidly during the middle school years and are clearly evident by sixth grade. Statewide data

supported Balfanz and Byrne’s claims with statistics that showed nearly a 50-point difference between middle school achievement assessment results of White students and minority groups—even when assessments were scored at the basic level (Balfanz & Byrnes, 2006). As a result, many minority students spend their intermediate years receiving instruction well below grade level. Consequently, they are thrust into a system in which they are ill-prepared to succeed academically, contributing to high drop-out rates.

Data from the 2007 NCES report supported these accounts. Based on the National Assessment of Educational Progress (NAEP) standardized achievement test results of eighth grade students in the United States in 2007, Black students earned the lowest average scaled scores of all student groups in the areas of math and reading. Table 1 illustrates the percent of Black and White students who scored at each achievement level in the areas of math and reading.

Table 1

Comparison of Math and Reading Achievement Levels on the NAEP

Achievement level	Math		Reading	
	Black (%)	White (%)	Black (%)	White (%)
Below	53	19	54	23
Basic	36	41	32	36
Proficient	10	32	12	31
Advanced	1	17	2	10

Note. From *The Nation’s Report Card*, by the National Center for Education Statistics, 2007.

(<https://nces.ed.gov/nationsreportcard/pdf/main2007/2007496.pdf>). In the public domain.

Statistics such as those shown in Table 1 serve as a call to action for school officials, policymakers, and state and local decision-makers. Researchers have examined these gaps for far too long and revealed little to no headway. For example, a study by Bjorklund-Young and Plasman (2020) examined middle school programs that focused on closing academic achievement gaps. Based in their results, not a single school was able to completely eliminate the math achievement gap during a student's middle school years. Moreover, less than 10% of the schools included in the sample were able to successfully reduce the achievement gap for African American students across middle schools. Consequently, African American students continue to fall further behind their White counterparts, and their hopes of achieving the American dream becomes less likely.

Segregation and the Achievement Gap

One of the most significant predictors of the academic achievement gap is racial segregation (Reardon et al., 2019). Historical periods such as slavery created a systemic precedent that denied African Americans the opportunities to receive proper schooling necessary for a quality standard of living (Welcome, 2003). Mitchall and Jaeger (2018) suggested that American society was constructed on the values of the dominant culture. They posited that the majority race has been afforded superior educational resources and formal practices that granted them certain privileges. This has placed Black students at a comparative disadvantage to their White counterparts, making it more difficult to live up to social and academic standards (Earp, 2012). As a result, African American students struggle to find their place in an environment that excludes or refuses to embrace their customs (Earp, 2012).

While there has been a concerted effort to improve systems of segregation, social and structural inequality persist. Despite the *Brown vs. Board of Education* decision (1954), forms of

segregation remain prevalent within public school systems. For example, all-Black neighborhoods and schools are common in almost every city. Schools in predominantly White neighborhoods typically have greater resources, offer more rigorous content, employ better-qualified teachers, and allocate higher funding than those in Black neighborhoods (Davis et al., 2019; Henfield, 2012; Vuletich et al., 2019). For schools that are diverse, student groups tend to seclude themselves within their specific race. Research suggests that such habits may be a consequence of social isolation (Marsh et al., 2012). For example, African American students may be hesitant to interact with White students due to their social background and oppressive behaviors that occurred in the past. These patterns represent the systemic segregated nature that inhibits a level playing field for students of color. While one group continues to benefit from the privileges that society has afforded to them, the other group strives to find its place in a world that struggles to embrace its culture (Marsh et al., 2012).

Theoretical Framework Discussion

A theoretical framework identifies the key factors or variables of a study (Roberts, 2010). It provides the scaffolding for the research and brings into focus how a particular theory or concept relates to the current study. The following sections explain the oppositional culture and self-efficacy theories and discuss how their concepts may influence the academic achievement of African American male students.

Oppositional Culture Theory

One possible concept that may illuminate differences in academic outcomes for African American and White students is the oppositional culture theory. Based on Ogbu's (2003) argument, this theory asserts that African American students are not motivated to achieve at high academic levels due to the systemic inequalities that seem impossible to overcome (Harris,

2006). This theory further postulates that certain aspects of public schooling and society have been designed to ensure that the majority race will secure economic and social dominance regardless of academic achievement. Moreover, D. C. Carter's (2004) review suggested that there are explicit structures that perpetuate the position of the dominant race. For example, the dominant culture in the United States, which remains White and wealthy, is better positioned to understand the advantages of enrollment in courses of rigor, and thus, make provisions to ensure that their students have access to them. In public schools, more than 80% of the teachers are White, while students of color make up more than 50% of the student population (Mitchell et al., 2017). AP courses are easily identified by the overwhelming presence of White students who participate in them, while many African American students are disproportionately placed in remedial courses. School leadership organizations (e.g., student council and class officers) are normally represented by members of the majority group. In contrast, African American students struggle to find a sense of belonging in school settings.

In context, these cultural and social differences reflect the country as a whole while maintaining the power relations of the dominant group. Serna and Woulfe (2017) argued that this type of social power excludes disadvantaged students from equal access and ensures the value and dominance of the majority race. Hence, the oppositional culture theory suggests that African American students recognize these inequities, and as a result, develop an oppositional attitude toward certain facets of the educational system. Whiting and Ford (2009) asserted that this behavior is a defense mechanism that often prompts the Black male student to adopt a seemingly cool image and intellectual inferior identity that includes a "refusal to assimilate or to otherwise become involved in experiences that could help broaden his personal, social, and political consciousness" (p. 225). Ogbu (2003) referred to this as *acting White syndrome*, the dilemma in

which Black students have to choose between adopting behaviors and standard practices that enhance the academic success typical of White Americans. Conversely, *acting Black* is about adopting attitudes that minority students consider appropriate for their group but are not necessarily conducive to school success (Stinson, 2006). Consequently, these standards in public school academic settings seem to create an educational framework that works unfavorably against Black male students.

Bandura's Theory of Self-Efficacy

Bandura's (1997) theory of self-efficacy may also provide a conceptual means to understand the challenges that Black male students face with respect to their academic achievement. *Self-efficacy* refers to a person's beliefs in their ability to organize and execute a course of action required to achieve a goal (Jonson-Reid et al., 2005). Studies have concluded that self-efficacy is a critical factor for school success (Fife et al., 2011; Jonson-Reid et al., 2005) while others have documented a strong relationship between academic self-efficacy and individual student achievement (Cokley, 2004; Ryan & Deci, 2000). Fife et al. (2011) suggested that "students with higher academic self-efficacy, regardless of earlier achievement or ability, work harder and persist longer, have better learning strategies and are less likely to engage in risky behaviors that negatively affect school success" (p. 6). Akhtar (2008) described four efficacy beliefs that were coined by Bandura (1997), which may assist in more positive academic outcomes for African American male students. They are (a) mastery experiences, (b) vicarious experiences, (c) verbal persuasion, and (d) emotional states (Akhtar, 2008).

Two of those beliefs that were noted by Bandura (1997)—vicarious experiences and verbal persuasion—fall in line with the oppositional culture theory mentioned earlier. For example, if African American males had more Black males as teachers, or more of their peers

enrolled in AP courses, they may be more motivated to take educational risks. Comparatively, White students are typically afforded natural privileges that allow them to be academically successful. For example, the majority of classroom teachers are also White, their parents are knowledgeable of how school systems are structured, and the curriculum is established mostly around their culture and history. Consequently, White students are empowered simply by showing up to school. On the other hand, Black males require a certain degree of enabling and empowerment. For motivation, they require the presence of strong relationships, collaborative circles, guidance, and focus (Wynn, 2005). While additional measures such as these may seem somewhat extreme, those vicarious experiences are necessary for the increased self-efficacy of African American males.

Akhtar's (2008) mention of the equity belief of verbal persuasion noted that influencers such as parents, teachers, and coaches can strengthen the beliefs that students can accomplish their goals. Along those lines, a study by Fife et al. (2011) concluded that there was a positive relationship between faculty encouragement and the academic self-efficacy of African American students. The results are more positive when teachers understand the cultural background and engagement triggers of Black males. Notably, those who influence and understand the unique abilities of Black males are prominent African American role models. In a classroom setting, Black teachers fill this position. This is quite a daunting task since Black teachers make up only about 30% of the public-school faculty population. As Landsman and Lewis (2006) explained, Black students may progress through their entire school years without ever having a Black teacher or principal who understands their diverse needs. Data presented earlier in this literature supports this claim. The absence of African American principals and Black male teachers in public education continues to pose a threat to the academic success of Black male students.

Hence, one may assume that the presence of African American mentors has a positive effect on the self-efficacy of Black students. Consequently, Bandura's (1997) work may be used as a framework to better understand the motivational triggers of African American male students and their influence on increasing their academic achievement.

Academic Challenges of African American Males

Although a great deal of attention has been directed toward academic gaps that exist between African American and White students, efforts to close these gaps have been met with little success. In fact, in every decade since the late 1940s, national and state executive, judicial, and legislative mandates and guidelines have been enacted and implemented to improve student achievement and narrow the achievement gap (Harvey et al., 2013). However, the academic disparity has seemingly only widened. African American males particularly face an uphill balance to compete academically with other student groups. Of the various groups represented in the public school system, they are arguably the most misunderstood. African American males experience a multitude of trials during the course of their lifetime. As one study documents, Black males are disproportionately born into lives of challenge; they suffer disproportionately high infant mortality rates, are reared in chronic and abject poverty, and are overrepresented in underfunded schools (Black Male Collegians, 2014). Edelman (as cited in Wynn, 2005) further described the struggles that Black students face with the following characterization:

Every 5 seconds during the school day, a Black public school student is suspended. Every 46 seconds during the school day, a Black high school student drops out. Every minute, a Black child is arrested and a Black baby is born to an unmarried mother. Every 3 minutes, a Black child is born into poverty. Every hour, a Black baby dies. Every 4 hours, a Black child or youth under 20 dies from an accident, and every 5 hours, a Black youth

is a homicide victim. Every day, a Black young person under 25 dies from HIV infection and a Black child or youth under 20 commits suicide. (p. 1)

Given these obstacles, it should be clear that African American males face an uphill battle to perform at the level of other ethnic groups. Even today, African American males continue to be undereducated, overincarcerated, socially and culturally misunderstood, and in pursuit of an identity that allows them to be viewed as intellectually adept and worthy of inclusion in the American dream (Howard, 2013). Moreover, the negative labels attached to African American males do little to advance their social and economic standing. For example, African American males are at times depicted as dysfunctional, drug dealers, pimps, rappers, murderers, unintelligent, savages, absentee fathers, dead-beat dads, and many other degrading characteristics. Such labels cast a perpetual dark shadow around the image of Black males and bind them to a glass ceiling that is seemingly based on the structures of American society (Lewis & Erskine, 2012).

The aforementioned societal barriers and systemic policies that hinder the success of Black males are also prevalent within public school systems. Hence, Black male students continue to face challenges that are difficult to overcome as they progress throughout their primary, middle, and high school years. Noguera (2003) posited that Black male students are physically punished and suspended and recommended for remedial and special-education classes more often than any other identifiable group of students. As a result, they fall behind academically relative to their grade-level peers. Data suggest that African American males have the lowest graduation rates among Black, Latino, and White male and female students, and are the least likely to secure a high school diploma (Holzman, 2012). Research presents statistics that support these figures. For example, data from NCES (2015) reported that 17.5% of Black

students in grades K–12 have been retained at least one grade in comparison to 9.3% of White students. This same report documented that 13% of Black students had not earned a high school credential—a figure that was almost double that of White students who had not earned a high school credential.

Statistics such as those noted above play an important role in job positioning for African American males. Hence, without the proper schooling and recommended diploma or degree, the opportunities to secure employment comparable to their White counterpart becomes even more difficult. It should be noted that one's completion of high school and college plays a critical role in their level of employment. Particularly for African Americans, the unemployment rate for Blacks without a high school credential is 30%, 19% for those who hold a high school but no college degree, 10% for those with some college but no degree, and only 6% for those with a bachelor's degree (Wynn, 2005). These statistics paint a grim picture of the disproportionate graduation rates between Black and White students and may likely explain some of the inequitable outcomes that surface for future employment opportunities.

The academic achievement statistics for African American males also rank considerably lower than other student groups in school settings. This is notable in almost every category of statistical academic performance measure. For example, a study by Harvey et al. (2013) showed that the average ACT scores for Black students were lower than Asian, White, and Hispanic students. This same report suggested that the college readiness scores of White, Asian, and Hispanic students were significantly higher than those of Black students. Hence, African American males are less likely to attend college, and those who do are less prepared to handle the rigorous coursework required at the university level. This is indeed a disturbing trend for African American male students and one that must be understood for corrective action to occur.

Some root causes which may help better understand the plight of African American male students and their academic struggles are explained below.

Race and Discrimination

Race and discrimination remain evident in the progression of African American males. This is evident in the classification of the working class in American society. Black fathers are generally thought of as assuming the role of hardworking laborers who are incapable of securing prestigious positions of stature. These attributions may be shaped by events of race-relevant factors due to a history of oppression and systemic racial inequities (Vuletich et al., 2019). Society has done little to disprove these assumptions. For example, Black people account for approximately 12% of the U.S. population but occupy only 3.2% of the senior leadership roles at large companies in the U.S. (Brooks, 2019). In comparison, at the school level, findings from a study by Hanover Research (2019) documented the underrepresentation of African American administrators in campus leadership. They reported that Blacks accounted for 17% of principal positions while Whites held 71% of principal positions. These statistics represent a stark disproportional contrast in job position between ethnic groups and highlights the racial disparities that continue to exist today.

Black male students also face more significant discriminatory policies in schools that lead to disproportionate disciplinary consequences (Greer et al., 2018). For example, a 2015 report from the NCES showed that Black students, while representing only 17% of public-school students, account for 30% of suspensions and 30% of expulsions. Moreover, the report showed that 35% of all Black students in grades 7–12 had been suspended or expelled from school in comparison to 20% for Hispanics and 15% for Whites. These discretionary actions lead to a loss of instructional time that is difficult for African American males to regain (Wynn, 2005). Still,

they are expected to take the same standardized assessments as their White counterparts, but with less preparation. This further complicates the academic progress of African American male students.

Besides the aforementioned results of underperformance, low graduation rates, and college attainment, race-related discrimination occurrences may also pose psychological effects for African American male students. Vuletich et al. (2019) contended that African American males may ultimately conclude that the discriminatory treatment they receive is normal, and thus, will never overcome the obstacles that will allow them to achieve at the level of their White peers. As a result, they exert less effort in school which results in lower academic performance. This type of behavior is consistent with Ogbu's (2003) oppositional culture theory, which was explained earlier in this review.

Stereotypes

Another explanation for the academic gaps may be linked to what Spitzer and Aronson (2015) defined as *stereotype threat*. They posited that African American students are generally stereotyped as academically inferior and singled out as being incapable of high academic success. Collins (2018) described threats such as these as social injustices that undermine the potential, self-perception, and opportunity for African American students to achieve at higher levels in academic settings. Thus, certain stereotypes based on one's social identity can lead to inequitable practices that create complex barriers and have long-lasting effects on African American youth. Steele (2010, as cited in Boyko, 2016), for example, made the following statement relative to a student's social identity and performance:

Social identities can strongly affect things as important as our performances in the classroom and on standardized tests, our memory capacity, our athletic performance, the

pressure we feel to prove to ourselves, even the comfort level we have with people of different groups – all things we typically think of as being determined by individual talents, motivations, and preferences. (p. xxx)

Despite this statement, researchers have reported that Black males from low-socioeconomic neighborhoods are nevertheless perceived as incapable of performing at the same level as White male students in complex subject areas such as math (Davis et al., 2019). Other studies noted that Black boys are more likely than other student groups to be classified as mentally deficient or to be identified as suffering from a learning disability (Black Male Collegians, 2014; Davis et al., 2019; Henfield, 2012). Accordingly, the NCES (2015) reported that Black children are labeled “mentally retarded” nearly 300% more than White children while only 8.4% of Black males are identified and enrolled in gifted and talented classes. As a result, labels such as “at-risk learner” and “special needs learner” are adopted in school settings and are typically associated with Black male students.

Delpit (2012) posited that the societal stereotypes and disproportionate labeling of African American males have had an adverse effect on their academic and social well-being. Consequently, these categorizations often lead to racial profiling and low-academic placement tracks of Black students. This biased process of tracking, as documented by Maupin (2016), begins as early as preschool and is especially targeted at Black boys. Hence, from the onset of their schooling, stereotyped students develop the mentality that they do not belong in certain academic settings (Walton & Cohen, 2007). The educational ramifications of these labels are disturbing. Stinson (2006) provided one example of the negative effects of these labels by referencing a 1992 analysis of New Orleans Public Schools, which showed that African American male students accounted for 58% of the non-promotions, 65% of the suspensions, 80%

of the expulsions, and 45% of the dropouts, while accounting for only 43% of the school population. Disproportionate odds such as these are difficult to overcome. As a result, the typical Black male student is forced to fight through challenges that are systemic by nature but may have negative consequences for their long-term future.

Public school educators also elicit certain stereotypes that impact the academic achievement of African American males. These ideals, which may be based on their cultural and social background, shape their thinking, even when they are not aware of it (Chiner et al., 2015). Many teachers unconsciously develop the mindset that they will treat all their students equally. These mostly implicit, but sometimes explicit actions have dire consequences for the African American male student. Payne (2018) raised concerns about this issue with the following statement:

There is perhaps no greater disparity than to treat all students as the same—the equal treatment of differences. When I hear an educator say, “I treat all of my students the same,” I know they are not a very good educator. First of all, it is not possible, and secondly, it is not desirable. Many of the gifts of humanity are our differences and diversity. (p. 88)

Nevertheless, public school teachers often respond to stereotypes in ways that alienate or disenfranchise African American males. For example, in some classes, Black male students are not challenged by teachers to think at a higher level like their White counterparts; thus, they are not held to the same standard of excellence. Research suggests that African American students attract more negative attention. Scott et al. (2019) found Black students received more negative feedback from teachers regardless of their behavior. Even when there were no differences in behavior between Black and White students, the teacher’s disproportionate negative responses

continued. Irvine (1990) further concluded that White teachers particularly had more negative expectations for Black students than for White students. Through a series of studies, variables emerged such as personality traits, ability, language, behavior, and potential that are stereotypical of the characteristics used to label Black students. Hunter and Stinson (2019) expanded on these characterizations with the following statement based on their research:

African American male students are (too often) faced with teachers who do not believe in their abilities; they are too often seen as how Black males are portrayed in the media: problematic and inclined toward criminality. This existence has been one of reality for Black male youth for far too long. (p. 27)

Notably, in line with the discriminatory practices described earlier, White teachers often misinterpret, overreact to, and become frightened by these Black male cultural-specific behaviors (Noguera, 2003). Consequently, the African American male student may feel targeted, or as if the teacher does not have their best interest at heart.

Opportunity Gaps

Literature in this study showed that much attention has been devoted to the academic achievement gaps that exist between African American and White students. Yet, little emphasis has been placed on the disparities in opportunity that are possible causes for these gaps (P. Carter & Welner, 2013). The academic opportunities that should be afforded to students, especially during their primary years, create a foundation for future school success. However, systemic patterns in school systems continue to divide student groups which hinder their ability to achieve at high academic levels.

Separations in academic ability between Black and White students occur as early as third grade (P. Carter & Welner, 2013). From this moment, standardized assessments are used to place

students in specialized classes. This testing process, known as *tracking* continues throughout a student's secondary years and creates unfavorable academic conditions, specifically for African American males. In a study by Bailey and Bradbury-Bailey (2007), tracking was described in this context:

Tracking only serves to widen the achievement gap and make it virtually impossible for even an African American male in his second year of high school to be prepared for postsecondary options. By this time, the student has been tracked into, for example, lower level math classes and will only be in geometry by the time they are in their third year of high school and in the best-case scenario, Algebra II by his fourth year of high school. (p. 88).

The tracking of students creates systemic patterns in schools that discourage African American students from maximizing their full potential. School officials use achievement test results as the primary benchmark to measure students' abilities. Academic counselors and teachers make course recommendations, often without considering the unique characteristics of minority students. AP courses and Gifted and Talented programs are rarely encouraged for African American males. Thus, it is no surprise that they score significantly lower than their White counterparts on college entrance exams (Black Male Collegians, 2014).

The opportunity for participation in honors or AP courses creates yet another barrier for African American male students. In many educational settings, it is common for a wide majority of White students to enroll in AP courses while only a few Black male students gain access to them (Davis et al., 2019). Jeffries and Silvernail (2017) argued that the underrepresentation of Black male students in AP courses denies them access to a more rigorous curriculum that will pay dividends in their college and career endeavors. Economists, in fact, describe these gaps as a

permanent national recession (Flowers & Banda, 2019). They posited that the absence of minoritized students in AP courses could very well limit their status and contributions to society due to the lack of exposure and participation in higher-level mathematics, science, and STEM courses.

Comparisons of the students who participate in these courses and the academic results are telling. Census data between the years of 1994–2004 determined that Black students were 23% less likely to participate in advanced or gifted classes than White students. Moreover, the NCES (2015) reported that 30% of Black high school students take advanced mathematics courses compared to 45% of Whites. Hence, one may determine that the number of students enrolled in AP courses will directly affect the number of students that take the AP exams. Black students, as noted by the NCES (2015), take AP exams at a rate of 53 per 1,000 students. Comparatively, Whites students take AP exams at a rate of 185 per 1,000 students. Performances on national standardized assessments follow the same pattern and show a significant achievement gap between Black and White students. Also reported in the 2015 NCES data was the average Scholastic Aptitude Test (SAT) score for Black students at 859 while White students had an average score of 1068. The average ACT score for Black students was 16.9 while White students had an average score of 21.8. These results support a study by Flowers (2008) who concluded that participants in AP courses score higher on college entrance exams, have higher grade point averages, are more likely to earn advanced degrees, and have higher lifetime incomes.

Advancement Via Individual Determination

Systems are needed to direct attention, strategies, and resources to African American male students to address the gaps in achievement that have been outlined in this literature review. One program that may address the social forces that exist within schools is Advancement Via

Individual Determination (AVID), a college readiness system that targets traditionally underrepresented students. AVID's mission is to close the achievement gap by preparing all students for college readiness and success in a global society (Bernhardt, 2013). More specifically, AVID targets students in the "academic middle" (Court & Janicki, 2016, p. 48) who have the desire to go to college and the willingness to work hard, but who may lack certain academic life skills associated with college preparation and success.

AVID began in 1980 from the vision of Mary Catherine Swanson, a high school English teacher from San Diego, California (Mathews, 2015). Swanson had a passion for working with struggling, underserved students. It was during her tenure as department head that Swanson envisioned an elective class that would prepare disadvantaged students for college. Although Swanson received backlash and resistance from top school officials—particularly since many of her minority students were outperforming their more affluent counterparts—she persevered and developed the AVID system into one of the most adopted college readiness programs in U.S. secondary schools (Mathews, 2015).

AVID is based on the philosophy that if students are held accountable to the highest standards and are provided academic and social support, they will rise to the challenge (Vander Ark & Ryerse, 2017). AVID transforms the instruction, systems, leadership, and culture of an entire school by having students enroll in the AVID elective class. This course provides the structure necessary to meet the unique needs of the most underserved student groups. Clark et al. (2017) emphasized the importance of the AVID elective class with the following statement:

AVID incorporates a learning support structure that students use across content areas.

The goal is for the AVID strategies emphasized in the elective course to become integrated into the school's content classes to help create a college-bound school

atmosphere. To be implemented with fidelity, the AVID model requires thoughtful recruiting of students into the AVID elective course and careful interfacing with the master schedule when scheduling the AVID elective course. (p. 234)

Students who enroll in an AVID elective course are carefully chosen based on characteristics such as academic history, socioeconomic background, gender, and academic potential.

The AVID program structure intentionally places underrepresented students in the same college preparatory classes as their high-achieving peers and provides a special time for students to meet (i.e., one academic period every school day) throughout middle school and high school (Marchand et al., 2007). Once selected into the program, AVID students are provided with a trained teacher and college tutors who facilitate a rigorous curriculum designed to improve their writing, inquiry, collaboration, organization, and reading skills (WICOR). The WICOR strategies are considered the instructional model that guides the principles of the AVID program.

AVID has the potential to significantly impact the academic and social well-being of minority students. Studies document the effect of the program's outcomes on student achievement as well as individual student self-efficacy. For example, a study by Watt et al. (2017) examined the progress of minority boys enrolled in the AVID program. Qualitative data based on the responses of AVID coordinators suggested that males who were enrolled in the program rejected the negative stereotypes that are normally associated with high academic achievement and Black males. Participation in the program gave them an opportunity to learn in a setting that recognized and celebrated their ability, provided structure and guidance, and most importantly, included other Black males. As one coordinator stated, "AVID is one place where they [boys] can be smart and successful and not less masculine" (Watt et al., 2017, p. 384).

Advancement Via Individual Determination's Impact on Student Achievement

There have been several encouraging links to AVID's effect on the academic student achievement and social behavior of African American students. A study by Wooldridge (2017), for example, noted that when students enroll in AVID, particularly at the middle school level, a margin is established that positively impacts the academic performance of minority students. The findings determined that the greater number of years a student is enrolled in AVID, the greater the academic achievement in high school. Hence, the earlier a student is enrolled in an AVID elective course, the more likely they are to achieve at a higher level.

Huerta et al. (2013) explained that the level of academic achievement students attain by eighth grade has a significant impact on college readiness. The level of rigorous instruction that a student is exposed to during their middle school years is a determining factor in their academic success. It is during these years that academic gaps seem to widen between student groups. Particularly for mathematics, Bjorklund-Young and Plasman (2020) noted that understanding the skills and concepts at this level is critical in closing academic achievement gaps. Thus, a student exposed to high-level math content in middle school is more likely to be prepared for more rigorous math courses in high school. Consequently, high school mathematics course enrollment is strongly linked to eventual enrollment in a four-year institution, which paints a brighter picture for African American male students (NCES, 2015).

The involvement of minority students who enroll in the AVID elective course has particularly shown favorable results in comparison to minority students who are not enrolled in the program. Data presented in a study by Marchand et al. (2007) showed that while 76% of African American students in the AVID program passed the reading and math sections of a California high school exit exam, just 48% of African American non-AVID students passed

those sections. Other statistics note the importance of AVID and its initiative to prepare students for college. Vander Ark and Ryerse (2017), for example, conducted a study of senior AVID students in Washington State. Of the 42,418 high school seniors that participated in AVID, 98% graduated high school on time, 94% had plans to attend a postsecondary institution, 93% completed four-year college entrance requirements, and 63% planned to attend a four-year college. It is important to note that the majority of students sampled were of the African American or Hispanic race. Consequently, it may be assumed that minority high school students tend to be more successful in college-bound courses due to their participation in AVID (Swanson, 2000).

Advancement Via Individual Determination Success Factors

The AVID model encompasses an interlocking system of strategies that when implemented with fidelity, prepares students with the skills to meet their academic goals. Much has been discussed in this literature review about the underachievement, hardships, obstacles, and inequitable experiences of Black male students. While there have been several reforms to address the academic struggles of African American students and the achievement gaps that continue to loom, they have not been implemented widely enough to make a significant impact. However, Hebert and Reis (1999) identified specific factors that they believed contributed to the high achievement of a diverse group of underserved students. They noted that factors such as one's belief in self, caring adults, like-minded peers, rigorous coursework, and motivation were critical for student success. Noteworthy, these factors mirror some of the same structural components that the AVID system encompasses. Those factors, self-efficacy, relationships, and rigorous courses, and how they contribute to the academic improvement of African American male students are explained in the following section.

Advancement Via Individual Determination and Self-Efficacy

One's self-efficacy plays an important role in their academic achievement. Self-efficacy, as stated earlier refers to a person's beliefs in their ability to organize and execute a course of action required to achieve a goal. Several factors have been known to adversely affect the self-efficacy of Black male students. Many, such as low expectations, inadequate resources, lack of positive mentors, and limited representation of like ethnicities in courses of rigor have already been mentioned (Flowers & Banda, 2019). Student success is contingent upon one's ability to adapt their processes to complete the task at hand. Notably, the AVID system is structured to ensure that students become independent learners and gain the self-assurance needed to improve academically.

Studies pertaining to AVID's effect on student confidence support this reasoning. For example, Pugh and Tschannen-Moran (2016) described an increased sense of self-efficacy among African Americans due to the mastery experiences and social persuasions that exist within the AVID classrooms. In reference to Bandura's (1997) theory of self-efficacy, when students, particularly Black males, experience an environment that promotes high expectations and includes other students of the same race, they are more inclined to respond with more positive results. Moreover, Watt et al. (2018) posited that when grouped with like-minded peers, Black male students tend to gain the confidence needed to achieve at higher levels. These vicarious experiences specifically when observed in AP classes, provide opportunities for African American students to gain the same knowledge and achieve the same goals as their White counterparts (Flowers & Banda, 2019). Likewise, these mastery experiences seem to suggest that African American male students can and will be successful in AP courses if given the opportunity.

Research suggests that when African American males are directly asked to participate in the AVID program, it is especially meaningful to them (Watt et al., 2018). These social persuasions are critical factors that may determine the college eligibility and career standing of minority students. A study by Wooldridge (2017) further suggested that once enrolled in the AVID program, minority students, and those from lower socioeconomic families feel a greater sense of empowerment and self-efficacy. Hence, the support of influencers (i.e., teachers, coaches, community mentors, and other AVID participants) strengthen the belief that Black males can improve their academic status. Not only does their influence help them feel more confident, but it also sends a message that others believe in their academic ability.

Advancement Via Individual Determination and Relationships

Clark et al. (2017) posited that the AVID elective teacher is a key factor in the success of the implementation of the AVID model. Schools need to carefully consider who is best to fill this role and support that person in getting the necessary training. Hence, the AVID elective teacher's role as a mentor trained to develop strong relationships with students is vital for successful academic outcomes. This seems to support Bandura's (1997) efficacy belief of verbal persuasion (Akhtar, 2008). Classroom teachers have a unique ability to change student mindsets from nonbelievers to believers. Qualities such as these are necessary for the depth and complexity of rigor that is required in the AVID classroom. Hence, research seems to support the positive influences that AVID teachers have on their students. For example, a study by Watt et al. (2008) posited that AVID's teacher-student relationships improved students' self-esteem and determination. Jeffries and Silvernail (2017) further noted that the interactions that AVID students have with their teachers are significant factors that influence their motivational levels and persistence to matriculate at the honors level. As a result, students develop an appreciation of

school and begin to understand the effect that high academic achievement may have on their future careers.

AVID elective teachers are strategically selected based on their positive attitude and ability to motivate students to reach their goals. Part of their recruitment process requires that they are academically experienced, well-respected throughout the campus and community, and able to develop good relationships with students and fellow teachers (Clark et al., 2017). These characteristics provide a structured environment with high academic expectations, specifically for minority students. This leads to the development of a warm, inviting, and personal classroom culture. As a result, students who are enrolled in the AVID program become bonded into long-lasting relationships with others who have experienced comparable roadblocks.

While student/teacher relationships are extremely important in the AVID classroom, peer relationships among students are also vital for academic success. In many cases, AVID classrooms seem to offer an environment that is necessary for the social well-being of students. A study by Watt et al. (2017), for example, determined that male students who participated in the AVID program described a sense of family with their similar peers. They were able to relate to the commonalities that they shared with students of their own race while embracing the cultures and ideals of those others. For this reason, educators must be prepared to engage students from different cultural backgrounds while developing belief systems that value and support all learners (Chiner et al., 2015). It is equally important to show sensitivity and support for the unique student cultures, ethnicities, and race.

The AVID system also provides opportunities for students to connect with an academically focused peer group, foster meaningful relationships, and develop a positive academic identity (Bernhardt, 2013). In content areas such as mathematics, where African

American male students historically perform poorly, these experiences are critical to their success. Walker (2006), for example, noted the importance of peer relationships in a study that focused on math performance. Students proved to show greater academic success when engaged in fluid relationships with others who shared their interests and provided support, feedback, and encouragement. Moreover, the presence of family members and teachers' commitment to holding the students to high academic standards proved to be key to their mathematical success.

Advancement Via Individual Determination and Rigorous Courses

Finally, students who are enrolled in the AVID program are required to take at least one AP course. Because AP courses can help bridge gaps in college access and student achievement, expanding students' access to a broader range of AP courses and expanding students' participation in courses and testing is vital. National assessments such as the American College Test (ACT) or SAT are written in such a way to test the cognitive abilities of majority students who have been privy to gifted programs or AP courses. Consequently, students who participate in AP courses tend to perform better on a range of college outcomes than their peers who do not take AP courses (Cisneros et al., 2014). Furthermore, research has suggested there is a positive link between participation in advanced courses and the outcomes they produce for academic preparedness and postsecondary schooling (Balfanz & Byrnes, 2006). For the purpose of equity, Burris and Welner (2005) contended that students of all races and achievement levels must be given equal opportunities to an accelerated curriculum. However, since most minority students are not enrolled in such courses, they are not as academically prepared as their White counterparts. Consequently, many African American male students enter high school unprepared to handle the demanding sequence of classes that is necessary for college and career readiness.

For these reasons, the presence of African American participation in these courses is critical to their academic achievement.

Of all the student groups, Black males are less likely to participate in AP or honors-level courses (Noguera, 2008). There could be several reasons for this, one of which Fordham and Ogbu (1986) contended, that Black boys develop an opposition to academic settings that are normally reserved for the dominant culture. This oppositional culture theory, as described earlier in the theoretical framework is a typical stance taken by African American male students. A second explanation may be that Black boys have been less motivated than other students to achieve in school (Watt et al., 2017). Historically, African American students, particularly males, tend to select lower-track courses in schools because they believe they are less rigorous and easier to earn credit (Jeffries & Silvernail, 2017). It is possible that gender disparities in courses of rigor contribute to differences in the academic performance of student groups.

AVID, however, provides a system that may support the academic needs and development of African American male students. Swanson (2000), for example, suggested that with rigor and support, AVID provides a framework for underrepresented students that will prepare them for college and career readiness. A study by Young (2016) found that when African American students were recommended for AVID, their enrollment in AP and honors-level courses increased. This is no surprise since data suggest that students who participate in AVID programs take more honors and AP classes than students who are not enrolled in AVID (Marchand et al., 2007).

Marchand et al. (2007), however, posited that the recruitment and retention of Black boys poses a challenge. Reasons such as oppositional culture, peer and family support, leadership opportunities, and positive male influences were described as obstacles that deterred male

participation in the AVID program. However, as Swanson (2000) argued, change is likely to occur when support, rigorous coursework, and accountable measures are provided to African American students who show potential. Hence, the need to recruit more African American males in the AVID program becomes more important.

Future Research

Despite the vast number of intervention programs that are available for students, few studies have examined their effect on the academic performance of African American male students. Yet as Payne (2018) argued, it is clear that African American male students are not receiving the proper education that will prepare them for postsecondary readiness or a competitive career in the workforce. Given that high-quality programs have been linked to higher academic achievement (Hodges et al., 2017), more positive social outcomes (Shernoff, 2010), and fewer school-related behavior incidents for minority students (Kremer et al., 2015), it seems reasonable that public school systems adopt programs that are designed to reach students who vary in academic ability.

Although there have been positive signs that suggest that certain school programs may contribute to improving academic achievement levels of minority students, there remains insufficient evidence that a specific intervention or reform measure has been able to consistently close achievement gaps between Black and White students (Bjorklund-Young & Plasman, 2020). Specifically, in the content area of mathematics, where African Americans consistently struggle to make academic gains, literature from this review suggests that measures such as strong schoolwide instructional programs, genuine student-teacher relationships, collaboration with peers, and providing opportunities for rigorous coursework may significantly improve academic achievement results. To that point, given the research which suggests that the AVID program can

have positive effects on their academic achievement and social development (O'Donnell & Kirkner, 2014), it still remains unclear if it improves the academic and behavioral outcomes of African American male students (Kremer et al., 2015). Thus, additional research must be conducted to determine the relationships between the AVID program and its effects on the academic success of Black male students.

Summary

In this chapter, a body of literature has been examined providing an overview of the academic achievement gaps and the social, economic, and educational factors that impact the behaviors of African American male students. In addition, the AVID system was introduced as a measure that may possibly curtail these gaps. Chapter 3 outlines the methodology that will be used to determine if participation in AVID will influence the academic achievement of African American males.

Chapter 3: Research Design and Method

African American male students continue to lag in academic achievement compared to their White male counterparts. The purpose of this study was to determine if participation in the AVID program would provide parity or greater academic performance for African American males. This chapter outlines the research design, sampling techniques, and data analysis procedures. The study assumptions, limitations, delimitations, and ethical considerations are also presented. Finally, a summary of the methodology is discussed.

Research Design

A quantitative approach was used for this research. This style is appropriate when researchers seek to examine the differences between variables and collect data through statistical measures (Roberts, 2010). Specifically, a causal-comparative design was most appropriate for this study. In causal-comparative research, the researcher investigates the effect of an independent variable on a dependent variable by comparing two or more groups (Salkind, 2010). This research design is also more suitable when preexisting groups are being compared.

Terrell (2016) outlined four basic steps of causal-comparative research: (a) identify the preexisting groups and state the hypothesis, (b) collect data representing the variables to investigate, (c) use statistical software to analyze the data, and (d) test the hypothesis based on the data. In this study, the preexisting groups were African American male and White male participants and nonparticipants in the AVID program. The preexisting groups (participants and nonparticipants) were the independent variables in this study. Student achievement scores were the outcome measures or dependent variables. After collecting and analyzing the data, the results were analyzed to determine the effectiveness of the AVID program and its impact on the academic achievement of African American males.

Research Questions and Hypotheses

RQ1: Is there a significant difference in Algebra I achievement of African American male students enrolled in AVID compared to White male students enrolled in AVID?

H1₀: There is no significant difference in Algebra I achievement of African American male students enrolled in AVID compared to White male students enrolled in AVID.

H1_A: There is a significant difference in the Algebra I achievement of African American male students enrolled in AVID compared to White male students enrolled in AVID.

RQ2: Is there a significant difference in Algebra I achievement of African American male students enrolled in AVID compared to White male students not enrolled in AVID?

H2₀: There is no significant difference in Algebra I achievement of African American male students enrolled in AVID compared to White male students not enrolled in AVID.

H2_A: There is a significant difference in Algebra I achievement of African American male students enrolled in AVID compared to White male students not enrolled in AVID.

RQ3: Is there a significant difference in Algebra I achievement of African American male students enrolled in AVID compared to African American male students not enrolled in AVID?

H3₀: There is no significant difference in Algebra I achievement of African American male students enrolled in AVID compared to African American male students not enrolled in AVID.

H3A: There is a significant difference in Algebra I achievement of African American male students enrolled in AVID compared to African American male students not enrolled in AVID.

Participants and Sampling

Participants for the study were selected from a school district located in a suburban city in Texas. The district serves approximately 7,900 students in grades 9–12. The district’s demographic make-up largely reflects the following groups: White (48%), Hispanic (30%), and African American (15%). In addition, 30% of the district’s student population is listed as economically disadvantaged (AVID Center, 2020). Approximately 550 students were enrolled in the AVID elective course. Table 2 presents an ethnic breakdown of secondary AVID and non-AVID students in the district during the 2020–2021 school year.

Table 2

Ethnicity of AVID and Non-AVID High School Students

Student ethnicity	Total males (%)	Total females (%)	AVID males (%)	AVID females (%)	Total students (%)	Total AVID students (%)
Asian	5.0	4.8	4.0	4.6	4.9	4.4
Hispanic	27.7	27.2	34.1	40.8	27.5	37.9
African American	15.2	15.9	19.6	22.0	15.5	20.9
White	47.2	48.2	37.1	28.6	47.7	32.3
Multiracial	3.9	3.4	4.5	3.1	3.7	3.7

Note. From *General data for XYZ Independent School District*, by AVID Center, 2020.

(<https://avid.org>). Reprinted with permission.

For this study, the target population included African American and White male high school students. Of the district’s 7,900 high school students, approximately 4,000 were males in

grades 9–12, of which 200 were enrolled in the AVID elective (AVID Center, 2020). For comparative purposes, I examined data from both AVID and non-AVID male students. Table 3 presents a grade level breakdown of high school AVID and non-AVID students in the district during the 2020–2021 school year.

Table 3

Grade Level of AVID and Non-Avid High School Students

Grade level	Total males	Total females	AVID males	AVID females	Total students	Total AVID students
9th	998	1,023	71	88	2,021	159
10 th	1,026	997	90	89	2,023	179
11 th	1013	924	73	110	1,937	183
12 th	987	901	48	61	1,888	109
Total	4,024	3,845	282	348	7,869	630

Note. From *General data for XYZ Independent School District*, by AVID Center, 2020.

(<https://avid.org>). Reprinted with permission.

According to Salkind (2010), the sampling method of matching strengthens one's research by identifying specific characteristics and selecting participants who fit those descriptions. Thus, matching provides an ideal choice for this study. Participants for this study were matched by grade level, race, and gender. Then, pairs of similar subjects were split into either the experimental or control group (Leavy, 2017). Once the data were analyzed, the

outcomes of the participants' performance provided data that addressed the aforementioned research questions.

Quantitative studies offer various technical tools that can help researchers determine sample size (Locke et al., 2004). Thus, based on this study's targeted population, I used a statistical power test to calculate an appropriate sample size, which revealed that approximately 136 students as a sufficient sample for this research. This analysis included a 95% confidence level and a 5% margin of error. Participants for this study included 552 African American and White male AVID and non-AVID students in grades 8–12.

Data Collection

Upon approval from the district's IRB committee (see Appendix A), annual state achievement assessment data for the Algebra I State of Texas Assessments of Academic Readiness (STAAR) EOC exam were used for this study. The EOC exam is the required state assessment in Texas and is used to measure a student's proficiency level at a given grade level. The analysis of student assessment results was based on archival data that already existed for the school district. For comparison purposes between student groups, the most recent assessment data for the district are presented in the tables in the upcoming section.

State of Texas Assessments of Academic Readiness Assessment

The STAAR is given each year to public school students in Texas in grades 3–8. The assessments are meant to test the essential knowledge and skills of students based on state standards and determine if students are eligible to progress to the next grade level. At the high school level, students are required to pass five content-specific STAAR tests (EOC exams) in order to graduate and earn a high school diploma.

The performance categories of the STAAR tests are based on raw and scale scores. As described by the Texas Education Agency (TEA; 2017), a raw score represents the number of test questions on the STAAR answered correctly. Scale scores differ from raw scores in that they can be interpreted across different sets of test questions. Students may fall into the following categories based on their performance on the STAAR test: (a) *did not meet grade level*, (b) *approaches grade level*, (c) *meets grade level*, or (d) *masters grade level*. Table 4 provides an example of STAAR performance score conversion for the Algebra I STAAR EOC test.

Table 4

Algebra I STAAR EOC Conversion Table

Performance marker	Raw score	Scale score	Percentile
Did not meet grade level	0–18	1420–3448	0–13
Approaches grade level	19–32	3500–3961	15–44
Meets grade level	33–40	4000–4288	46–67
Masters grade level	41–54	4333–6181	69–100

Note. From *STAAR performance standards*, by Texas Education Agency, 2017.

(<https://tea.texas.gov/student-assessment/testing/staar/staar-performance-standards>) In the public domain.

Based on the table, a student who *did not meet grade level* shows a lack of basic understanding of the course content that was presented during the school year. A student who *approaches grade level* shows some knowledge of the course content but may be missing critical elements. Hence, the student may need additional support for the next school year. A student who *meets grade level* shows strong content knowledge and is prepared to progress to the next

grade. Finally, a student who *masters grade level* is on track for college and career readiness (TEA, 2017).

Table 5 depicts one Texas school district’s performance results disaggregated by student ethnicity and illustrates substantial gaps in levels between African American and White students. Specifically, in the *meets* and *masters grade level* categories, a difference of more than 30% exists between those two student groups. The data are comparable to nationwide academic gaps reported between African American and White public-school students (see Table 5).

Table 5

Algebra I STAAR EOC Exam Results 2019

Performance marker	African American (%)	Hispanic (%)	White (%)	American Indian (%)	Asian (%)	Two or more races (%)
Approaches grade level	82	83	95	92	97	97
Meets grade level	54	62	85	77	86	82
Masters grade level	33	41	66	54	72	67

Note. From *Texas Academic Performance Report*, by Texas Education Agency, 2021.

(<https://rptsvr1.tea.texas.gov/perfreport/tapr/2021/index.html>) In the public domain.

The wide margin between student groups who are on track to attend college is depicted in Table 6. College and career readiness standards (CCRS) were developed collaboratively between Texas secondary and postsecondary faculty as indicators of the content knowledge and skills needed for college and career readiness. CCRS delineate performance criteria and mathematics proficiency necessary for students to succeed in entry-level college courses in Texas (TEA, 2021). Similar to the Algebra grade-level performance data, there is almost a 30% gap between the number of African American and White students who are college and career ready (see Table

6).

Table 6*Percentage of Graduates Considered College and Career Ready 2019*

Indicator	African American (%)	Hispanic (%)	White (%)	American Indian (%)	Asian (%)	Two or more races (%)
CCR graduates	54	58	82	80	85	81

Note. CCR = college and career ready. From *Texas Academic Performance Report*, by Texas Education Agency, 2021. (<https://rptsvr1.tea.texas.gov/perfreport/tapr/2021/index.html>) In the public domain.

The data in Table 6 signal early warning signs for African American students who must do well on college-entry exams such as the Scholastic Assessment Test (SAT) or the American College Test (ACT) if they are to attend a college of their choice and/or receive academic scholarships. The higher a student scores on one of the college-entry assessments, the greater their chances of being awarded a scholarship and admission to college.

An explanation of the scoring process of the college entrance exams can be summarized as follows. The ACT assessment covers four sections: English, math, reading, and science. The ACT is scored on a scale of 1–36 (Maryville University, n.d.). The average ACT composite score is 21. The SAT assesses the content areas of reading and math. The SAT has a score range of 400–1600. The average SAT composite score is 1051 (Maryville University, n.d.).

Table 7 illustrates the performance of student groups on college-entry exams from one Texas school district. The data depicts the trend that African American students perform lower than any other student group on achievement assessments. Although African American students

performed at the national average on both college entrance exams, they continue to fall short of their White counterparts (see Table 7).

Table 7

Average ACT/SAT Results in 2019 by Race

Test	African American	Hispanic	White	Asian	Two or more races
ACT score	21	22	25	26	26
SAT score	1058	1105	1186	1279	1205

Note. From *Texas Academic Performance Report*, by Texas Education Agency, 2021.

(<https://rptsvr1.tea.texas.gov/perfreport/tapr/2021/index.html>) In the public domain.

Data Analysis

To address the research questions, a series of linear models were constructed and tested through a software program called Statistical Package for Social Sciences (SPSS). Muijs (2011) posited that SPSS is probably the most common statistical data analysis software package used in educational research. Thus, it is an ideal data analysis program for this study. The category of Algebra I results was labeled as the dependent variables. The independent variables consisted of the following four groups of students: (a) African American AVID male students, (b) African American non-AVID male students, (c) White AVID male students, and (d) White non-AVID male students.

Once the frequency samples of participants were generated, the mean averages between student groups were calculated. The statistical results were then tested for normality after which, an analysis of variance (ANOVA) was run. An ANOVA tests for relationships between three or more groups and a continuous dependent variable (Salkind, 2010). For example, in this study, an

ANOVA was used to examine the academic achievement of AVID and non-AVID African American and White male students by comparing their Algebra I scores. Consequently, the results of the ANOVA determined if AVID had a significant effect on the achievement of the student groups sampled in the study.

Ethical Considerations

The researcher's obligation is to provide nonbiased, accurate, and honest information throughout the dissertation process (Roberts, 2010). Since this study leans in the direction of nonhuman research, there are minimal risks involved. However, for this quantitative causal-comparative study, I ensured that there were no fabrication or falsification of data. I also have the ethical responsibility to inform district officials of how my study may affect their work and if there will be any harm to release the data results.

Assumptions

For this research, I assumed that the data to be used for this study would be easily accessible since I was an employee of the district at the time. Furthermore, I assumed that once the data were run through SPSS, a clearer picture of the effect that the AVID program model will have on specific student groups would come to light.

Limitations

There are several limitations to consider for this study. First, although AVID participation is the primary independent variable used in this study, there could be other factors that may affect the students' Algebra I achievement results. Second, the study consists of data from only one school district. Third, only male participants of the African American and White race were used in the research. Finally, student assessment data served as the only measure to determine the relationships between variables.

Delimitations

I purposely narrowed my study to focus on specific student groups and certain categories of achievement. Hence, only African American and White male students were included in this research. I used data provided during the 2020–2021 academic school years and focused only on student achievement results based on the Algebra I STAAR EOC assessment.

Summary

This chapter presented the methodology that was used to examine AVID’s impact on the academic achievement of African American and White male students. In this chapter, I first explained why a causal-comparative design was the appropriate design for research. Then, I described the setting for the study as well as the selection process for the participants. Finally, I presented the method of data collection and analysis along with limitations and delimitations of the study. In Chapter 4, I present the results of the study and discussed differences between AVID and non-AVID participants and their Algebra achievement.

Chapter 4: Results

The purpose of this causal-comparative study was to examine whether implementing the AVID program at one suburban secondary school district in Texas could contribute to closing the academic achievement gap between African American male and White male students. In this study, I examined Algebra I achievement, as measured by EOC assessment results, of secondary students in grades 8–12 to determine AVID’s effectiveness on the academic achievement of African American male students.

Archival data from the 2020–2021 school year were used to conduct this study. EOC test results were provided by the school district with the performance levels of all students with valid Algebra I scores over a period of two school years. The data were then filtered to show only AVID and non-AVID African American and White male students who tested during this period. The results for this study addressed the following research questions:

RQ1: Is there a significant difference in Algebra I achievement of African American male students enrolled in AVID compared to White male students enrolled in AVID?

RQ2: Is there a significant difference in Algebra I achievement of African American male students enrolled in AVID compared to White male students not enrolled in AVID?

RQ3: Is there a significant difference in Algebra I achievement of African American male students enrolled in AVID compared to African American male students not enrolled in AVID?

Sample Characteristics

A total of 552 Black and White male students met the selection criteria for the study. The sample were enrolled in the AVID elective course during the 2020–2021 school year and had a valid score on the Algebra I EOC exam. Of the 552 students who comprised the sample, 92

students (16.7%) were Black males, and 460 students (83.3%) were White males. The difference in number is representative of the demographics of the school district. Table 8 displays the frequency of the sample by grade level. Since Algebra I is a high school credit course, most students are enrolled during ninth grade, which explains the greater frequency of grade 9 students. Some students were enrolled in Algebra I during eighth grade and took the EOC assessment during middle school. Others may take the Algebra EOC assessment up to grade 12, although this is not typical. Hence, as Table 8 illustrates, the frequency of the sample who met the selection criteria is much lower in higher grades than in earlier grades.

Table 8

Sample Frequencies by Grade Level

Grade	f	%
8	24	4.3
9	247	44.7
10	195	35.3
11	45	8.2
12	41	7.4
Total	552	100.0

Research Question 1 Results

RQ1 asked whether there is a significant difference in Algebra I achievement of African American male students enrolled in AVID compared to White male students enrolled in AVID. Results for RQ1 are presented in three sections. First, descriptive statistics are presented, including means and standard deviations. Next, tests for normality of the dependent variable of

Algebra I achievement are conducted for African American and White male students enrolled in AVID. The section concludes with the presentation of results from a one-way between-subjects ANOVA of the effects of race on Algebra I achievement between African American and White male students enrolled in AVID.

Descriptive Statistics

Descriptive statistics were performed to determine the mean and standard deviation of Algebra I EOC scores by race for students enrolled in AVID. The subjects for this examination included 159 students of the total sample who (a) had valid Algebra I EOC scores, and (b) were African American male students enrolled in AVID ($n = 60$), or (c) were White male students enrolled in AVID ($n = 99$). The data revealed Algebra I EOC scores were relatively higher for White males than for African American males enrolled in AVID (see Table 9).

Table 9

Descriptive Statistics for Algebra Scores by Race

Group	AVID	n	M	SD
African American	Yes	60	4,296.34	362.34
White	Yes	99	4,495.33	431.61
Total		159	4,420.25	417.05

Note. A scale score of 3500 was a passing score in the 2020-2021 school year.

Normality

Normality is a frequent assumption for statistical tests, including ANOVA. The first test of normality was to examine skewness and kurtosis for the dependent variable of Algebra I achievement for African American and White male students enrolled in AVID. For the assumption of normality to be met, skewness and kurtosis must both fall between +2 and -2

(George & Mallery, 2010). In this study, an acceptable range of skewness (.589) and kurtosis (.995) were present for Algebra I EOC scale scores of African American males. Table 10 displays descriptive statistics including skewness and kurtosis, both of which are in a range that suggests normality.

Table 10

Normality of Algebra Scores of Black and White Males in AVID

Statistic	Value	SE
<i>M</i>	4,420.25	33.075
95% CI for mean		
Lower bound	4,354.92	
Upper bound	4,485.57	
5% Trimmed mean	4,406.69	
Mdn	4,393.00	
Variance	173,934.25	
<i>SD</i>	417.05	
Minimum	3,616.00	
Maximum	6,123.00	
Range	2,507.00	
Interquartile range	569.00	
Skewness	0.589	0.192
Kurtosis	0.995	0.383

A second test for normality was conducted using the Shapiro-Wilk test, which was appropriate since the data were fewer than 2,000 cases (Morgan et al., 2013). For Algebra I EOC scale scores of African American male students and White male students enrolled in AVID, the Shapiro-Wilk statistic ($W = 0.974$, $df = 159$) was less than the established .05 significance level

($p = .005$). The results suggest a violation of the assumption of normality, which is a limitation of the study; however, the statistical test I selected for the analysis—a one-way ANOVA—is a robust test that is resistant to violations of normality.

Analysis of Variance

A one-way between-group ANOVA was conducted to compare the effect of race on Algebra I achievement as for AVID enrollment of Black male students ($n = 60$) and AVID enrollment of White male students ($n = 99$) conditions. There was a significant difference between groups in Algebra achievement at the $p < .01$ level for the two conditions [$F(1, 157) = 8.931, p = .003$].

The average Algebra I EOC scale score for White male students enrolled in AVID ($M = 4296.35, SD = 362.34$) was higher than the average EOC scale score of African American male students enrolled in AVID ($M = 4495.33, SD = 431.61$). The difference in scores was significant at the .003 level (see Table 11). Results of the analysis suggest that the AVID program had a positive influence on both African American and White males but had a more significant impact on White males.

Table 11

ANOVA of Algebra Scores of Black and White Males in AVID

Measure	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	Sig.
Between groups	1,479,185.784	1	1,479,185.784	8.931	0.003
Within groups	26,002,425.650	157	165,620.546		
Total	274,81,611.430	158			

Research Question 2 Results

RQ2 asked whether there is a significant difference in Algebra I achievement of African American male students enrolled in AVID compared to White male students who were not enrolled in AVID. Results for RQ2 are presented in three sections. First, descriptive statistics are presented, including means and standard deviations. Next, tests for normality of the dependent variable of Algebra I achievement are conducted for African American male students enrolled in AVID and White male students not enrolled in AVID. The section concludes with the presentation of results from a one-way between-subjects ANOVA of the effects of race on Algebra achievement for the conditions of AVID enrollment of African American male students and non-AVID enrollment of White male students.

Descriptive Statistics

The subjects for this examination included 519 students of the total sample who (a) had valid Algebra I EOC scores, and (b) were African American students enrolled in AVID ($n = 60$), or (c) were White students not enrolled in AVID ($n = 459$). Descriptive statistics were calculated to determine the mean score and standard deviation by race. Results revealed higher Algebra I EOC scores for Black male students enrolled in AVID than White male students not enrolled in AVID (see Table 12).

Table 12

Descriptive Statistics of Algebra Scores by Race and AVID Enrollment

Group	AVID	n	M	SD
African American	Yes	60	4,296.35	362.34
White	No	459	4,252.43	796.93
Total		519	4,257.51	759.40

Note. A scale score of 3500 was considered passing in the 2020–2021 school year.

Normality

The first test of normality was to examine skewness and kurtosis for the dependent variable of Algebra I achievement for African American male students enrolled in AVID and White male students not enrolled in AVID. The rule of thumb is that for the assumption of normality to be met, skewness and kurtosis must both fall between +2 and -2 (George & Mallery, 2010). In this study, an acceptable range of skewness (-1.593) and kurtosis (5.990) were present for Algebra I EOC scale scores of African American male students enrolled in AVID and White male students not enrolled in AVID. Kurtosis above the threshold of +2 indicates a violation of the assumption of normality and a possible limitation of the study; however, the statistical test I selected for the analysis—a one-way ANOVA—is a robust test that is resistant to violations of normality. Table 13 displays descriptive statistics including skewness and kurtosis.

Table 13

Normality of Algebra Scores of Black AVID and White Non-AVID Males

Statistic	Value	<i>SE</i>
<i>M</i>	4,257.51	33.334
95% CI for mean		
Lower bound	4,192.02	
Upper bound	4,323.00	
5% Trimmed mean	4,309.42	
Mdn	4,292.00	
Variance	576,691.91	
<i>SD</i>	759.40	
Minimum	335.00	
Maximum	6,165.00	
Range	5,830.00	
Interquartile range	755.00	
Skewness	-1.593	.107
Kurtosis	5.990	.214

A second test for normality was conducted using the Shapiro-Wilk test, which was appropriate since the data had fewer than 2,000 cases (Morgan et al., 2013). For Algebra I EOC scale scores of African American male students enrolled in AVID and White male students not enrolled in AVID, the Shapiro-Wilk statistic ($W = 0.869$, $df = 519$) was less than the established .05 significance level ($p = .001$). The results suggest a violation of the assumption of normality, which is a limitation of the study; however, the statistical test I selected for the analysis—a one-way ANOVA—is a robust test that is resistant to violations of normality.

Analysis of Variance

A one-way between-subjects ANOVA was conducted to compare the effect of race on Algebra I achievement for AVID enrollment of Black male students ($n = 60$) and no AVID enrollment of White male students ($n = 459$) conditions. There was not a significant effect of race on Algebra I achievement at the .05 level of significance for the two conditions [$F(1, 157) = 0.177$, $p = 0.674$].

The average Algebra I EOC scale scores for African American male students enrolled in AVID ($M = 4296.35$, $SD = 362.34$) were higher than the average Algebra I EOC scale scores for White male students not in AVID ($M = 4252.43$, $SD = 796.93$). The results of the ANOVA revealed no significant difference ($p = .674$) in Algebra I achievement between the two student groups (see Table 14). These findings suggest that no achievement gap exists between Black and White male students, as measured by the Algebra I EOC test, when Black male students are enrolled in AVID. In other words, Black male students enrolled in AVID had similar Algebra I achievement as White male students not enrolled in AVID. Table 14 displays the results of the ANOVA.

Table 14*ANOVA of Algebra Scores of Black AVID and White Non-AVID Males*

Measure	SS	<i>df</i>	<i>MS</i>	<i>F</i>	Sig.
Between groups	102,351.47	1	102,351.473	0.177	0.674
Within groups	298,624,058.20	517	577,609.397		
Total	298,726,409.70	518			

Research Question 3 Results

RQ3 asked whether there is a significant difference in Algebra I achievement of African American male students enrolled in AVID compared to African American male students not enrolled in AVID. Results for RQ3 are presented in three sections. First, descriptive statistics are presented, including means and standard deviations. Next, tests for normality of the dependent variable of Algebra I achievement are conducted for African American male students enrolled in AVID and not enrolled in AVID. The section concludes with the presentation of results from a one-way between-subjects ANOVA of the effects of the AVID program on Algebra I achievement of African American male students.

Descriptive Statistics

Descriptive tests were performed to calculate means and standard deviations for Algebra I EOC scaled scores of African American male students by AVID enrollment. The subjects for this examination included 246 students of the total sample who (a) had valid Algebra I EOC scores, and (b) were African American male students enrolled in AVID ($n = 60$), or (c) were African American male students not enrolled in AVID ($n = 186$).

Algebra I achievement was relatively higher for African American males who participated in AVID than those who did not as evidenced by their scale score on the EOC assessment. Table 15 displays statistics based on RQ3 that compares the Algebra I EOC scale scores of the two groups.

Table 15

Descriptive Statistics of Black Males' Algebra Scores by AVID Enrollment

Group	<i>n</i>	<i>M</i>	<i>SD</i>
Non-AVID	186	3,554.11	86.91
AVID	60	4,296.35	46.78
Total	246	3,735.14	69.68

Normality

The first test of normality was to examine skewness and kurtosis for the dependent variable of Algebra I achievement for AVID or no AVID enrollment of African American male students. For the assumption of normality to be met, skewness and kurtosis must both fall between +2 and -2 (George & Mallery, 2010). In this study, an acceptable range of skewness (-1.922) and kurtosis (3.831) were present for Algebra I EOC scale scores of AVID and non-AVID enrolled African American male students. Kurtosis above the threshold of +2 indicates a violation of the assumption of normality and a possible limitation of the study; however, the statistical test I selected for the analysis—a one-way ANOVA—is a robust test that is resistant to violations of normality. Table 16 displays descriptive statistics including skewness and kurtosis.

Table 16*Normality of Black Males' Algebra Scores by AVID Enrollment*

Statistic	Value	SE
<i>M</i>	3,735.14	69.684
95% CI for mean		
Lower bound	3,597.89	
Upper bound	3,872.40	
5% Trimmed mean	3,846.29	
Mdn	3,907.00	
Variance	1,194,541.18	
<i>SD</i>	1,092.95	
Minimum	315.00	
Maximum	6,165.00	
Range	5,850.00	
Interquartile range	838.00	
Skewness	-1.922	.155
Kurtosis	3.831	.309

A second test for normality was conducted using the Shapiro-Wilk test, which was appropriate since the data had fewer than 2,000 cases (Morgan et al., 2013). For Algebra I EOC scale scores of African American male students enrolled in AVID and not enrolled in AVID, the Shapiro-Wilk statistic ($W = 0.769$, $df = 246$) was less than established .05 significance level ($p = 0.001$). The results suggest a violation of the assumption of normality, which is a limitation of the study; however, the statistical test I selected for the analysis—a one-way ANOVA—is a robust test that is resistant to violations of normality.

Analysis of Variance

A one-way between-subjects ANOVA was conducted to compare Algebra I achievement of African American males by AVID enrollment ($n = 60$) and non-AVID enrollment ($n = 186$) conditions. There was a significant difference between groups in Algebra I achievement at the $p < .01$ level for the two conditions [$F(1, 244) = 22.783, p = 0.001$].

The average Algebra I EOC score for African American male students enrolled in AVID ($M = 4296.35, SD = 1185.32$) was higher than the average score for African American male students not enrolled in AVID ($M = 3554.11, SD = 86.91$). The results of the ANOVA revealed a significant difference at the 0.001 level between the two student groups. These findings suggest that a significant achievement gap exists between Black male students as a result of AVID enrollment (see Table 17).

Table 17

ANOVA of Black Males' Algebra Scores by AVID Enrollment

Measure	Sum of squares	<i>df</i>	Mean square	<i>F</i>	Sig.
Between groups	24,993,132.52	1	24,993,132.52	22.783	0.001
Within groups	267,669,457.50	244	1,097,005.97		
Total	292,662,590.00	245			

Summary

This chapter presented the quantitative results of Algebra I achievement of secondary school students in Texas to determine if the AVID program could help close the academic achievement gaps between Black and White males. A one-way between-subjects ANOVA was conducted to determine the significance of any differences in achievement that AVID enrollment

had on the Algebra I EOC assessment results of the student groups. Based on the ANOVA, two significant differences and one nonsignificant difference in achievement results emerged.

Chapter 5 discusses the implications of these findings and provides recommendations to address the academic achievement gaps.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this study was to examine if the implementation of the AVID program may contribute to closing the academic achievement gap between African American male and White male students. A quantitative approach was taken that compared math achievement results of the two student groups. The research questions for this causal-comparative study sought to determine the effect that the AVID program would have on the academic performance of the students who were sampled for this research. Statistical differences were tested using an ANOVA, and the outcomes were presented in Chapter 4 of this study.

This chapter presents a summary of the study and important conclusions drawn from the data that was presented in Chapter 4. First, a discussion of the findings of each research question is presented, followed by implications for policy and practical applications. The chapter closes with a list of limitations, recommendations for future research, and my personal conclusions based on the findings of the study.

Discussion of the Findings for Research Question 1

RQ1 examined the following question: Is there a significant difference in Algebra I achievement of African American male students enrolled in AVID compared to White male students enrolled in AVID? The null hypothesis for this research question predicted that there would not be a significant difference in Algebra I achievement between the two groups; however, the results of the ANOVA showed a statistical difference at the .01 level in favor of White male AVID students. Based on the data, White male students who were enrolled in the AVID elective outperformed African American male students who were enrolled in the AVID elective. As a result, the null hypothesis was rejected, and the alternative hypothesis could not be rejected. This finding aligns with White et al. (2006) who found that Black male students

typically have lower average math scores when compared to their White peers. The data for this research question support those claims. Interestingly, students' participation in AVID improved the academic results of both African American and White male students. The data presented in Chapter 4 showed that the average Algebra I performance results for African American and White male students were 4296 and 4420 respectively. While a point differential is apparent in achievement scores, both student groups approached or scored within the range of the *masters* category as noted in (see Table 4). Scores at this level indicate that the student is on track for college and career readiness (TEA, 2017). Still, this research question aligns with a study by Balfanz and Byrnes (2006) who claim on average that a 50-point difference in school achievement results exists between Black and White students. Notably, in this instance, both student groups performed well above the basic passing standard.

For Black male students, who have historically underperformed on standardized assessments, this accomplishment is huge. Hence, the results seem to back AVID's systemic structure that with the proper support and adequate resources, the academic achievement of Black male students increases (Marchand et al, 2007; Vander Ark & Ryerse, 2017). As such, the class environmental structure provided opportunities for African American male students to succeed. In contrast to predominantly all-Black schools where resources are scarce, the district in which this study was performed had a demographic makeup that is 46% White and 15% African American. This demographic and the district's structures allowed for more school funding, highly qualified teachers in their specific content area, and a better selection of course offerings geared toward college preparation. Accommodations such as these, which in many cases are not as accessible in minority neighborhoods, are critical success factors for African American male students (Davis et al., 2019; Henfield, 2012; Vuletich et al., 2019).

The high academic scores of the African American male students on the Algebra exam may also be contributed to their participation in the AVID elective class. As noted earlier, Watt et al. (2018) posited that Black male students achieve at higher levels when grouped with like-minded peers. Data from AVID Center (2020) show that 121 Black males and 229 White males were enrolled in the selected school district's AVID elective course during the 2020–2021 school year. Also, noteworthy, Black males had the experience to receive high quality instruction in an instructional setting that included other Black males. Consequently, they were exposed to the same rigorous content as their White counterpart. These actions align with Walker's (2006) depiction of peer relationships and its impact on the academic achievement of African American males, particularly in the area of math.

As the descriptive statistics for this study show, the average scale score of 4296 for African American male AVID students who took the Algebra I assessment highlights their academic success. Of relative importance, the average scale score of 4495 for White male AVID students also signals high academic achievement. Hence, both student groups either met or exceeded the academic standard. These achievement results seem to erase the negative academic consequences that Black male students may normally experience when isolated in public school systems (Condrón et al., 2013).

The participation of Black male students in the AVID elective provided several advantages that may have contributed to their academic success. First, Black and White males were given the opportunity to study and collaborate together. Both groups were held to the same expectations and standards that were necessary for student learning. Social isolations (Marsh et al., 2012) that are common in many school structures between diverse student groups were not as apparent within the AVID system in this district. Because of AVID requirements, Black male

students, who are generally underrepresented in courses of rigor or AP courses (Flowers & Banda, 2019; Jeffries & Silvernail, 2017) were now enrolled in some of those classes. Hence, they were provided additional opportunities to collaborate with like-minded students in courses that challenged their intellect and expose them to curricula that would prepare them for college and career readiness.

The findings of RQ1 were not consistent with prior research that suggests Black males underperform academically, specifically on math assessments (St. Mary et al., 2018; Torrats-Espinosa, 2020; Williams et al., 2020). Particularly, when compared to the general student population for this school district, the data for this study paint a surprising picture surrounding the academic achievement of African American males who were enrolled in AVID in comparison to all other students who were administered the Algebra assessment. Table 18 displays the performance comparisons of these specific student groups.

Table 18

Algebra I Performance of Black AVID Males and All Students

Performance marker	Black males in AVID (%)	All students (%)
Approaches grade level	100	91
Meets grade level	73	68
Masters grade level	53	45

Note. From *Texas Academic Performance Report*, by Texas Education Agency, 2021.

(<https://rptsvr1.tea.texas.gov/perfreport/tapr/2021/index.html>). In the public domain.

As reported by TEA (2021), of the 60 African American male AVID students included in this research with valid Algebra I results, 100% met the passing standard, 73% scored at the *meets grade level* (shows strong content knowledge), and 53% at the *masters grade level* (on

track for college and career readiness). In comparison to the general student population for Algebra I, results for this assessment period, 91% of all students met the passing standard, 68% scored at the *meets grade level*, and 45% scored at the *masters grade level*. It should be noted that the demographic makeup of the school district is approximately 46% White and 15% African American. As a result, the statistics above, for this particular group of Black male students, highlight the absence of the academic achievement gaps that have existed between Black and White students.

The results of RQ1 addressed the academic performance of Black and White male students who participated in the AVID program. It comes as no surprise that White male students outperformed Black male students. Given the structure of the AVID program, if implemented correctly, the data suggest that all students should benefit academically from the use of AVID best practices. However, the performance of Black males stood out, particularly their notable achievement on the Algebra I assessment in light of prior research that consistently reports underperformance (Harvey, 2013; Hebert & Reis, 1999; Marchand et al., 2007)

Discussion of the Findings for Research Question 2

RQ2 sought to answer the following question: Is there a significant difference in Algebra I achievement of African American male students enrolled in AVID compared to White male students not enrolled in AVID? The null hypothesis for this research question stated that there would not be a significant difference between the academic achievement scores. The results of the ANOVA showed a no statistical difference in the academic achievement scores of the two student groups. As a result, the null hypothesis is accepted, and the alternative hypothesis is rejected. This research question serves as the catalyst for this study. While a significant difference between the two student groups was not determined, the descriptive statistics show

that African American males who were enrolled in AVID had higher average Algebra scores than White males who were not enrolled in AVID. Hence, based on the data for this particular research question, there is no achievement gap between Black and White male students.

As mentioned in Chapter 2, Bjorklund-Young and Plasman (2020) defined the achievement gap as the percentage of students who do not reach academic proficiency at a given grade level. Other researchers specifically acknowledged the historical achievement gaps between Black males and other student groups noting that Black males consistently perform lower academically than all other ethnicities (Henfield et al., 2014; Watt et al., 2018). Yet, the results for this study debunk those claims. Descriptive data from Chapter 4 show that African American male students who were enrolled in AVID had an average scale score of 4296 on the Algebra I state assessment while White male students who were not enrolled in AVID had an average scale score of 4252. Similar to RQ1, the findings from this question produced some surprising results when disaggregated by performance levels. Table 19 displays the performance of African American male AVID students and White male non-AVID students.

Table 19

Algebra I Performance of Black AVID and White Non-AVID Males

Performance marker	Black AVID males (%)	White Non-AVID males (%)
Approaches grade level	100	92
Meets grade level	73	70
Masters grade level	53	47

Note. Data are from the 2020-2021 school year. From *Texas Academic Performance Report*, by Texas Education Agency, 2021. (<https://rptsvr1.tea.texas.gov/perfreport/tapr/2021/index.html>).

In the public domain.

In terms of academic performance, TEA (2021) reported 100% of African American male AVID students met the passing standard, 73% scored at the *meets grade level*, and 53%

scored at the *masters grade level*. In comparison, 92% of White non-AVID students met the passing standard, 70% scored at the *meets grade level*, and 47% scored at the *masters grade level*. These results are significant since AP courses are generally filled with White students while Black male students rarely have access to them (Davis et al., 2019). As noted, the demographic makeup of this school district is 48% White and 18% African American. White students account for 53% of the AP enrollments. Research suggests that students who participate in AP courses have better academic outcomes than those who do not take AP courses (Cisneros et al., 2014). However, when comparing the figures in Table 24, Black male AVID students outperformed White non-AVID students on the Algebra I state assessment in all performance levels. Thus, the significant academic gaps between Black and White students that have been advertised in the past (Henfield et al., 2014; Kim & Zabelina, 2015; Kotok, 2017) were not prevalent for this research question.

In their study, Bjorklund-Young and Plasman (2020) contended that no school program that was examined was able to eliminate the math achievement gap during a student's middle school years. Despite the many recommendations made by researchers to curtail the academic gaps (Fergus, 2017; Olszewski-Kubilius & Clarenbach, 2014), performance gaps between Black and White students still remained (Kim & Zabelina, 2015). However, the data presented here make a strong case that the AVID system, if implemented with fidelity, can aid in the academic improvement of African American male students. Hence, statistical evidence presented through this study supports the reasoning that African American male students can indeed perform at the academic level of their White peers.

Discussion of the Findings for Research Question 3

RQ3 sought to answer the following question: Is there a significant difference in Algebra I achievement of African American male students enrolled in AVID compared to African American male students not enrolled in AVID? The null hypothesis for this research question predicted that there would not be a significant difference between the Algebra I achievement scores. However, the results of the ANOVA showed a statistical difference at the .01 level in favor of African American male AVID students. As a result, the null hypothesis is rejected, and the alternative hypothesis is accepted.

The findings for research questions one and two provided statistical evidence that Black male students who were enrolled in the AVID elective can achieve comparable to their White male counterparts. Thus, the AVID program model may positively contribute to the longstanding phenomenon of the academic performance gaps between Black and White students. However, it is also important to highlight the academic performances of African American male students who were not enrolled in the AVID elective.

Descriptive data from Chapter 4 show that African American male students who were not enrolled in AVID had an average scale score of 3554 on the Algebra I state assessment. This score falls within the Approaches level of performance which means that students show some knowledge of the content but may be missing some critical elements. In comparison, African American students that were enrolled in the AVID elective had an average score of 4296 which suggests that they are on track for college and career preparedness. Table 20 displays a more descriptive performance comparison between African American male AVID students and African American male non-AVID students.

Table 20*Algebra I Performance of Black Males by AVID Enrollment*

Performance marker	Black AVID males (%)	Black non-AVID males (%)
Approaches grade level	100	70
Meets grade level	73	36
Masters grade level	53	22

Note. Data are from the 2020-2021 school year. From *Texas Academic Performance Report*, by Texas Education Agency, 2021. (<https://rptsrvr1.tea.texas.gov/perfreport/tapr/2021/index.html>).

In the public domain.

As Table 20 shows, TEA (2021) reported that 70% of African American male non-AVID students scored at the Approaches level, 36% scored at the *meets grade level*, and 22% scored at the *masters grade level*. In comparison to African American male AVID students, 100% scored at the *approaches grade level*, 73% scored at the *meets grade level*, and 53% scored at the *masters grade level*. While not surprising, these findings highlight a different picture of academic gaps. In addition to the Black-White achievement gaps that have been common for decades, there also appears to be gaps in achievement within the Black male ethnicity as well.

The results of this research question also align with a study by Marchand et al (2007) which showed almost a 30% gap in academic performance on math and reading assessments between African American AVID and non-AVID students. As noted by Bjorklund-Young and Plasman (2020), the understanding of skills and concepts is important in closing academic achievement gaps. Particularly for math, a content in which Black male students tend to struggle the most (Davis, 2014; Kirp, 2022), rigorous content should be exposed at least in the early years of middle school. As noted above, the average scale score of Black non-AVID students on the

Algebra I assessment fell within the *approaches grade level* performance range. This signals a lack of critical skills that are necessary for preparedness for the next grade level. Hence, based on the results of this study, which shows the impact that AVID may have on academic performance, the need for the AVID program for this particular student group is highly recommended.

Implications for Policy

Measures to address the academic achievement gaps between Black and White students continue to pose challenges. Policymakers, school officials, and researchers have tried for decades to implement long-term systems to lessen the gaps. Yet, accounts from this study detail that even today, academic gaps between student groups continue to surface. Consequently, state (TEA, 2021) and national (NCES, 2015) school data show trends that place African American male students below all other ethnicities for performance ratings.

The findings from this study, uncovered implications that address the academic achievement gap. For example, African American males should have the opportunity to take courses that will challenge their intellect. Findings from this study show that when enrolled in courses of rigor, Black male students performed at an achievement level equivalent or higher than their White peers. In addition, Black male students should have the opportunity to collaborate with other like-minded peers in courses of rigor. Fordham and Ogbu's (1986) oppositional culture theory argued that Black males purposely avoided higher level courses since they were normally reserved for the majority race. Hence, as the findings from this study indicate, African American males who took courses of rigor far exceeded the academic expectations of those who did not.

School systems should also provide resources or alternatives to address the academic needs of African American male students who were not enrolled in the AVID elective. For this

study, it was evident that funding and structures were in place in this school district to support the needs of most of the student population. However, as the findings from this data indicate, the students who performed the lowest on the state assessment were the Black male students who were not enrolled in AVID. Thus, gaps in achievement still exist for this particular student group.

Implications for Practical Application

Based on the findings of this study, school systems should consider implementing the AVID program in a greater capacity. The statistical data in this report clearly show an increase in student performance for students who were enrolled in the AVID elective. Throughout this study, attention has been drawn toward improving the academic achievement of African American male students. Research provided in this study suggests that AVID provides the resources necessary to meet those needs. For example, Mathews (2015) detailed how minority students were outperforming their more affluent counterparts in the early stages of the AVID model. The findings from the current study also show instances in which Black students achieve at a higher rate than their White peers. Literature in this research explains that the AVID system specifically targets students who may lack certain academic skills. With the proper structure, guidance and support, the course provides a blueprint that serves to meet the needs of the most underserved students. Hence, Black male students fit this description. As Watt et al. (2017) noted, Black males who were enrolled in the AVID program rejected the negative stereotypes associated with academic achievement. As was evident from the findings of this study, students who were enrolled in the AVID program, whether Black or White, achieved at a level greater than those who were not.

Limitations

There are several limitations to consider for this study. First, although AVID participation is the primary independent variable used in this study, there could be other factors that may affect the students' Algebra I achievement results. For example, enrollment in AP courses, teacher effectiveness, parent involvement, and even a student's personal attitude may have played a role in their academic performance. Second, the study consists of data from only one urban school district in Texas. Third, only male participants of the African American and White race were used in the research. Conducting a study that includes other ethnicities and gender, on a wider scale, may offer a more in-depth picture of the effectiveness of the AVID program. Finally, student data from one annual assessment in a single state served as the only measure to determine the relationships between variables.

Recommendations for Further Research

Based on the findings and limitations of this study, there are several recommendations for additional research. First researchers may consider conducting a qualitative study using African American male student perspectives to determine if the AVID program was the primary factor in improving their academic performance. While this study presents quantitative data that show their academic success, questions remain to determine if other factors contribute to the academic achievement of Black males. Second, researchers may consider a study that will compare all ethnicities enrolled in the AVID program to determine the academic performance levels between student groups. As explained in this study, the unique structure of the AVID program provides a collegial and inviting environment focused on meeting the needs of students who fall in the middle. A study that encompasses all student groups may provide information that determines how effective the AVID program may be in closing the gaps between all ethnicities. Finally, for

a more intensive process to understand measures to close the academic achievement gap, researchers may track the progression of African American AVID students from their middle school years until high school graduation. Using data sources such as standardized assessments, grade point average, ACT or SAT results, and college entry percentages in comparison with other ethnicities could provide insight into the effectiveness of the AVID program and its potential impact to close academic achievement gaps.

Conclusion

This study's purpose was to examine a school program to determine if its structural components would help close academic achievement gaps between African American and Caucasian male students. Based on the findings for this particular school district, the answer is yes. Research question two particularly provides statistical data that show that Black males outperform White males. In a sense, when Black students are enrolled in AVID, the playing field becomes leveled. While White students are generally well-represented in AP courses, Black students tend to enroll in more remedial classes (Bailey & Bradley-Bailey, 2007). As noted in this study, nationwide data report that Black students are twenty-three% less likely to participate in AP courses and only thirty% of Black high school students take an advanced mathematics course (NCES, 2015). Consequently, White students perform better on standardized assessments due in part to the exposure of more rigorous coursework. This trend has existed for decades. However, as this study suggests, there are no academic achievement gaps with the implementation of the AVID program.

The findings from this study also uncovered additional gaps in academic achievement. The findings of research question one showed a significant difference in the performance outcomes of Black and White male AVID students. Of the ethnicities referenced in this study,

White male AVID students outperformed all other student groups. As noted in the literature, the AVID program targets students in the academic middle, who are mostly from economically disadvantaged households. Many White students fall within this category and thus, are recruited for the AVID program. Hence, it is apparent that the AVID program is a successful model that also improves the academic performance of students from economically disadvantaged backgrounds, regardless of ethnicity.

The findings from this study have provided a clear picture of a program that when implemented with fidelity, will help close academic achievement gaps, particularly for African American male students. Simply put, school systems should implement the AVID model. The formula only requires that students are provided with caring teachers who understand the value of genuine relationships. These teachers should be gifted in their craft and hold students to high expectations while motivating them to push forward to achieve their goals. In addition, students should be allowed to enroll in courses of rigor that will expand their knowledge and challenge their thinking. Finally, students should have the opportunity to learn in a diverse environment with their like-minded peers, using a curriculum that engages them intellectually, morally, and culturally.

Researcher's Reflection

For African American males, the path toward academic excellence continues to be rocky. Stereotypes, rap music, incarceration rates, and school standardized testing results have presented a damaging perception of us. As an educator of 19 years, serving mostly in Title I schools, I have seen firsthand the struggles of Black male students. I have witnessed students who have overcome the most adverse situations, and in turn, observed instances which have confirmed some of the negative stereotypes that have been referenced throughout this

study. Still, I find hope in continuing the efforts to dispel the labels that have been attached to young Black men.

I am reminded of a particular school year in which I was serving as a middle school assistant principal. An opportunity evolved to mentor a group of eighth-grade African American male students, most whom had a history of behavior incidents and low academic achievement. Through mentorship, peer relationships, accountability, and parental involvement, those 25 students progressed through the year with minimal disciplinary incidents. Moreover, they all experienced growth on their end of the year math and reading assessments. From a theoretical viewpoint, the approach used when advising these students mirrored Bandura's (1997) efficacy beliefs. Hence, when addressing the needs of Black male students, I strongly encourage the following: (a) assuring the presence of Black male role models who can provide guidance, support, and motivation, (b) encouraging Black male students to enroll in courses of rigor and holding them accountable for completing the work, and (c) providing opportunities for peer relationships with other Black male students who have the same goals.

In closing, I would like to share why I center my work around the phenomenon of the academic achievement gaps. As a senior in high school, my grade point average placed me as the number two ranking student in my class. At semester, someone (not me) made the decision to transfer me from my environmental science course to a chemistry course. At first, I was elated by the decision, as many of my White peers were enrolled in that course. One of my best friends, an African American male who would later become the valedictorian, was also enrolled in the course. During my first grading period in chemistry, I earned a grade of *D*. This was the lowest grade I had made in my school age years. I earned grades of *A* in chemistry for the final two grading periods of my senior year; however, the damage had been done. My class ranking

dropped from second in the class to fourth. Years later, it registered on me that the chemistry teacher at the time was also the counselor responsible for class rankings. I also vividly remember the teacher calling out the class rankings aloud on my first day in chemistry, specifically referencing my African American friend as number one and me as number two. Her next words were, “That’s probably going to change.”

This unfortunate experience helped me realize that some opportunities that develop are not always with the best intent. It raises the question of how many of our Black male students have experienced a similar situation. Whether implicitly or explicitly, African American males continue to face biases that prevent them from reaching the social status of the majority race. Indeed, society has progressed exponentially since my time in high school, and much of the conversation around academic gaps has turned to opportunity gaps. This creates yet another issue to address; however, no matter the terminology, our broken educational system needs fixing. Adopting proven systems such as AVID may be a good start.

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Appendix A: Institutional Review Board

Date: September 14, 2022

PI: Christerpher Turner

Department: ONL-Online Student, 17250-EdD Online

Re: Initial - IRB-2022-16

Advancement Via Individual Determination (AVID) and its Impact on the Academic Achievement of African American Male Students

The Abilene Christian University Institutional Review Board has rendered the decision below for *Advancement Via Individual Determination (AVID) and its Impact on the Academic Achievement of African American Male Students*. The administrative check-in date is September 13, 2022.

Decision: Exempt Non-Human Research

Category: Category 2.(ii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording).

Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation.

Research Notes:

Additional Approvals/Instructions:

If at any time the details of this project change, please resubmit to the IRB so the committee can determine whether or not the exempt status is still applicable. All approval letters and study documents are located within the Study Details in Cayuse IRB.

The following are all responsibilities of the Primary Investigator (PI). Violation of these responsibilities may result in suspension or termination of research by the Institutional Review Board. If the Primary Investigator is a student and fails to fulfil any of these responsibilities, the Faculty Advisor then becomes responsible for completing or upholding any and all of the following:

- When the research is completed, inform the Office of Research and Sponsored Programs. If your study is Exempt, Non-Research, or Non-Human Research,

email orsp@acu.edu to indicate that the research has finished.

- According to ACU policy, research data must be stored on ACU campus (or electronically) for 3 years from inactivation of the study, in a manner that is secure but accessible should the IRB request access.
- It is the Investigator's responsibility to maintain a general environment of safety for all research participants and all members of the research team. All risks to physical, mental, and emotional well-being as well as any risks to confidentiality should be minimized.

For additional information on the policies and procedures above, please visit the IRB website <http://www.acu.edu/community/offices/academic/orsp...> or email orsp@acu.edu with your questions.

Sincerely,

Abilene Christian University Institutional Review Board