

East Tennessee State University Digital Commons @ East Tennessee State University

**Electronic Theses and Dissertations** 

Student Works

5-2022

# Virginia High Schools: Academic and Social Climate Performance Measures and Black Public Secondary School Administrators

Tim Duncan East Tennessee State University

Follow this and additional works at: https://dc.etsu.edu/etd

Part of the Curriculum and Instruction Commons, and the Curriculum and Social Inquiry Commons

### **Recommended Citation**

Duncan, Tim, "Virginia High Schools: Academic and Social Climate Performance Measures and Black Public Secondary School Administrators" (2022). *Electronic Theses and Dissertations*. Paper 4017. https://dc.etsu.edu/etd/4017

This Dissertation - unrestricted is brought to you for free and open access by the Student Works at Digital Commons @ East Tennessee State University. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Digital Commons @ East Tennessee State University. For more information, please contact digilib@etsu.edu.

Virginia High Schools: Academic and Social Climate Performance Measures and Black

Public Secondary School Administrators

A dissertation

presented to

the faculty of the Department of Educational Leadership and Policy Analysis

East Tennessee State University

In partial fulfillment

of the requirements for the degree

Doctor of Education in Educational Leadership, concentration in School Leadership

by

Timothy S. Duncan

May 2022

Dr. Jill Channing, Chair

Dr. Doris Battle

Dr. William Flora

Dr. Donald Good

Keywords: Black administrators, student performance, systemic racism, cultural

sensitivity

#### ABSTRACT

Virginia High Schools: Academic and Social Climate Performance Measures and Black Public Secondary School Administrators

by

#### Timothy S. Duncan

Data have consistently revealed a major problem with disproportionality in several academic and social climate measures for African American students compared to their White counterparts. Black students tend to have lower end-of-course (EOC) testing scores in mathematics and reading, a greater tendency to be suspended from school, lower average on-time graduation rates, and higher rates of absenteeism. The current investigative study examined the role of same race administrators and performance indicators among African American students.

The findings demonstrated that significant differences between Black and White students existed in end-of-course testing in reading and math. The research also indicated significant relationships between race, school suspension, and attendance in schools with a Black administrative presence. Further qualitative and quantitative research investigating the variables that significantly indicate academic and social climate performance improvements, particularly among marginalized student groups, could be beneficial to students and education leaders alike.

Data from this research study showed that student economic status predicted academic and social climate performance between Black and White students, regardless of the race of administrators. However, Black students in non-impoverished settings with a Black administrative presence outperformed their White counterparts in academic and

social climate measures. This study could be a precursor to more expansive research on the ways in which improving economic conditions could improve Black student performance, especially with a more diverse administrative school presence. Copyright 2022 by Timothy S. Duncan

All Rights Reserved

## DEDICATION

This work is dedicated to my wife Melinda, my wonderful children and stepchildren, my supportive parents, and all the past teachers, coaches, professors, and mentors who have brought me great inspiration.

## ACKNOWLEDGEMENTS

I want to thank my dissertation committee: Dr. Jill Channing, Dr. Doris Battle, Dr. William Flora, and Dr. Donald Good for their support, patience, encouragement, and guidance during this process.

I also want to thank my wife, family, and colleagues with Bristol Virginia Public Schools for their encouragement and support during this process.

ABSTRACT2
DEDICATION5
ACKNOWLEDGEMENTS
LIST OF TABLES
LIST OF FIGURES11
Chapter 1. Introduction
Statement of the Problem15
Research Questions16
Significance of Study17
Definitions of Terms18
Limitations of Study19
Overview of Study19
Chapter 2. Review of Literature
Theoretical Assumptions21
Disproportionality in Student Performance Measures for Black Students22
Black Teachers Effect on Black Students' Performance Measures35
Effect of Presence of Black Administrators on Black Students' Performance40
Black Students Compared to White Students in Chronic Absenteeism, Math
and Reading Scores, and Suspensions43
Gaps in Research49
Long-Term Effects of the Gap in Educational Achievement50
Chapter Summary54

# TABLE OF CONTENTS

Chapter 3. Research Methods
Research Questions and Null Hypotheses56
Sample58
Data Source
Data Collection
DataAnalysis60
Chapter Summary61
Chapter 4. Results
Research Question #162
Research Question #264
Research Question #365
Research Question #467
Research Question #568
Research Question #670
Research Question #771
Research Question #872
Chapter 5. Summary, Conclusions, and Recommendations74
Summary75
Conclusions76
Recommendations for Practice77
Recommendations for Future Research
References
APPENDIX: Virginia High Schools by Region

VITA
------

# LIST OF TABLES

Table 1. Disciplinary Action by Race	.24
Table 2. School Suspensions and Graduation Rate	.25
Table 3. Black and White Student Math Score Means in Impoverished Settings	.63
Table 4. Black and White Student Math Score Means in Non-Impoverished Settings	.65
Table 5. Black and White Student Reading Score Means in Impoverished Settings	.67
Table 6. Black and White Student Reading Score Means in Non-Impoverished	
Setting	68

## LIST OF FIGURES

Figure 1. Undergraduate Student Enrollment by Race/Ethnicity: Fall 2000-2016	23
Figure 2. Student Suspension and Discipline Among Student Groups	27
Figure 3. Reading Achievement Gap Comparison among United States K-12 Students?	29
Figure 4. Impact of Learning From a Teacher of the Same Race	38
Figure 5. Cumulative Impact of Sharing a Teacher's Race	39
Figure 6. Texas Principals Effect on Student Achievement	43
Figure 7. Black and White Student Group Reading EOC Score Percentages	52
Figure 8. Black and White Student Groups Math EOC Test Scores	52
Figure 9. Black and White Student Groups Chronic Absenteeism Percentages	53
Figure 10. Black and White Student Groups School Suspensions Rates	53
Figure 11. Black and White Student Math Score Means in Impoverished Settings with	
Administrative Presence	63
Figure 12. Black and White Student EOC Math Score Means in Non-Impoverished	
Settings with Black Administrative Presence	65
Figure 13. Black and White Student EOC Reading Scores in Impoverished Settings	
with Black Administrative Presence	66
Figure 14. Black and White Student Reading Scores in Non- Impoverished Settings	
with Black Administrative Presence	68
Figure 15. Black and White Student Suspension Rates in Impoverished Settings with	
Black Administrative Presence	69
Figure 16. Black and White Student Suspension Rates in Non-Impoverished Settings	

Figure 17. Black and White Student Absenteeism in Impoverished Settings with Black	
Administrative Presence7	2
Figure 18. Black and White Student Absenteeism in Non-Impoverished Settings with	
Black Administrative Presence	3

#### **Chapter 1. Introduction**

Martin Luther King once said, "We may have all came on different ships, but we are on the same boat now" (Jesuit Resource, 2021, p. 1). Although students who are American citizens have access to a free and appropriate education mandated by the state and federal governments, African American students do not have the same opportunities to succeed due to hundreds of years of systemic racism and cultural insensitivity (Soloman & Weller, 2019).

In the wake of a societal pursuit of increased equity, public school divisions sought interventions and pedagogical paradigm shifts to curtail systemic racism and a lack of cultural responsiveness. According to previous research, systemic racism produced negative effects on measurable outcomes, such as academic performance and social measures, such as disruptive behavior incidences and student attendance, for Black students (Mahnken, 2015). For example, according to the National Center for Educational Statistics (NCES), from 2000-2016, Black students were more likely than other students to be suspended and less likely than White students to graduate from high school (NCES, 2019), attributable, in part, to a lack of Black role models and a dearth of Black administrators. The fact that African Americans held only 11% of public education administration positions in 2018—the same figure as in 2000—indicated that societal equality and racial inequity were still problems in American society that, according to educational leaders, needed to be addressed (NCES, 2020).

African American students with a disproportionate percentage of negative outcomes, academically and socially, would and do benefit from same race mentoring and instruction (Camera, 2018). According to Camera, data showed that Black students

who were exposed to at least one Black teacher by third grade were 13% more likely to enroll in college, and Black students who had two Black teachers prior to third grade were 32% more likely to enroll in college. According to Camera (2018), having at least one Black teacher in elementary school decreased the risk of Black male students dropping out of school by 40% and significantly increased the likelihood of not only their enrolling in college but also demonstrating increased perseverance and work ethic throughout primary and secondary public school.

Data collected by the Virginia Department of Education (VDOE) (2018) indicated that Black students were more likely to face suspension, have attendance problems, and be less likely to graduate than were their White peers. On the other hand, according to Camera (2018), Black students could benefit both socially and behaviorally from having Black instructors and mentors. The purpose of the current quantitative study was to determine whether a Black administrative presence would reveal differences in EOC reading and math scores, student suspensions, and school attendance among students in high schools throughout Virginia. The independent variable in this study was race (African American or Caucasian) and the dependent variables were the EOC test scores and social climate percentage measures.

Educators want to offer all students an optimum environment, culture, and climate to succeed academically, socially, and emotionally. Generally, they want to assure success for students of all racial makeup and to ensure that there are no disproportionate academic or social factors that cause concern (Jarvis & Okonofua, 2020). Data from the Virginia Department of Education (VDOE, 2020a) illustrated that Black students were more likely to be suspended from school, have disproportionally lower end-of-course

scores in reading and mathematics, have higher incidences of chronic absenteeism, and have disproportionately lower on-time graduation percentages than were their White counterparts. This study focused on African American and Caucasian students from grades 9-12 in schools throughout the Commonwealth of Virginia, analyzing students from 70 schools throughout all eight regions in Virginia (see Appendix A).

Lindsay and Hart (2017) suggested that African American students performed much better in academic, behavioral, and social measures when they were exposed to same-race instruction. Lindsay and Hart's study suggested that positive Black student/Black teacher relationships played an important role in creating an optimum learning environment that produced significant growth in measurable outcomes for Black students. The current study analyzed Black and White student data across the Commonwealth of Virginia and compared academic and social outcomes for students exposed to African American Administrators and teachers to those who were not.

#### **Statement of the Problem**

This study investigated the ways in which administrative staff who more closely reflected the racial makeup of their respective schools affected achievement gap indicators, such as school suspensions, academic achievement, school graduation percentages, student attendance, and student behaviors. The research compared the findings between Black and White high school students in the Commonwealth of Virginia. Lopez (2018) demonstrated that race was a factor in predicting the likelihood a student could be sent to the principal's office, and data from VDOE (2020b) noted Black high school students in Virginia were disproportionately suspended more often than were their White counterparts. Additionally, in Virginia, Black students had lower student

growth, were more likely to be high school dropouts and suffered from poorer attendance.

These problems are probably a result of systemic racism and implicit biases (Cokley, 2016). All students have the right to be given the best opportunity for success. The aim of the current study was to determine whether statistical differences, such as end-of-course testing scores in math, reading, and writing, existed between Black and White students. The independent variable (race, African American or Caucasian) and dependent variables (EOC scores in math and reading, attendance, and suspension rates) assessed whether significant differences between Black and White students existed in schools with a Black administrative presence. Although the research was not experimental in nature, it investigated and assessed differences in measurable outcomes (of end-of-course testing scores, chronic absenteeism, and on-time graduation rate) between Black and White students with Black administrative presence in both impoverished and non-impoverished settings.

#### **Research Questions**

The current study addressed the following research questions:

RQ1. For impoverished high schools with at least one Black Administrator was there a significant difference in end-of-course mathematics scores between Black and White students?

RQ2. For non-impoverished high schools with at least one Black Administrator was there a significant difference in end-of-course mathematics scores between Black and White students?

RQ3. For impoverished high schools with at least one Black Administrator was there a significant difference in end-of-course reading scores between Black and White students?

RQ4. For non-impoverished high schools with at least one Black Administrator was there a significant difference in end-of-course reading scores between Black and White students?

RQ5. For impoverished high schools with at least one Black Administrator was there a significant relationship between suspension rates and race?

RQ6. For non-impoverished high schools with at least one Black Administrator was there a significant relationship between suspension rates and race?

RQ7. For impoverished high schools with at least one Black administrator was there a significant relationship between absenteeism and race?

RQ8. For non-impoverished high schools with at least one Black administrator was there a significant relationship between absenteeism and race?

#### Significance of Study

The significance of this study relates to the way in which school officials consider administrative race as a potential variable that could impact student performance in endof-course testing, chronic absenteeism, student discipline, and on-time graduation rates. Closing the achievement gap has been a goal for school administrators for many decades due to federal and state accreditation requirements that incorporate school performance measures of student subgroups and include marginalized groups such as Black students (Haycock, 2001). Decreasing the achievement gap, according to Haycock, could impact

the percentages of Black students who attend college, which number was traditionally lower than the number of their White counterparts.

Ultimately, it is important for school officials to understand whether administrative race indicates any significant differences in Black and White student performance due to the potential impact on division hiring practices (Grissom & Bartanen, 2019). Therefore, the goal of the current study was to investigate through quantitative analysis, whether or not significant differences in measurable outcomes between Black and White students existed with the presence of Black administration.

School division leaders across the Commonwealth of Virginia, particularly those in the rural/small division school coalition due to their general lack of racial diversity, expressed interest in the way in which equitable hiring initiatives could affect schools and student performance (VDOE, 2018). The current research has the potential to influence the hiring practices of school leaders and to contribute to racial equality in schools from an administrative perspective.

#### **Definitions of Terms**

For the purposes of this study, the following definitions apply.

*Chronically Absent Students*: Students who miss 10% or more of the school year. For example, a student who misses 18 or more days of school in the Commonwealth of Virginia would be chronically absent) (United States Department of Education, 2020).

*End-of-Course (EOC) Tests*: Tests given in core subject areas to assess content proficiency for students in the Commonwealth of Virginia (VDOE, 2020a).

*Impoverished School*: School that has a free and reduced lunch rate of 25% or higher.

*Individual Education Plan (IEP)*: A plan created to provide students eligible for special education services interventions and accommodations.

*On-Time Graduation Rate*: The percentage of students in a cohort who earn a Board of Education-approved diploma within four years of entering high school for the first time (VDOE, 2020a).

#### **Limitations of Study**

This study has multiple limitations. Because the study is not truly experimental in nature, it is impossible to prove causation among variables. The researcher did not manipulate the independent variable in this research, nor were the research participants randomly selected with the inclusion of a control group and an experimental group. In addition, there are potential weaknesses and limitations in the analyses of data. For example, while variables may be significantly related, that relationship does not necessarily indicate causation.

It is difficult in this type of research to account for confounding or extraneous variables. The study does not account for certain factors that might influence the findings, such as: student household parental style differences; the role of students mentored by other family members, such as grandparents; the influence of middle school teachers and administration on student academic and behavior paradigms; and the influence of spirituality and how religious service may impact academic success or school behavior.

## **Overview of Study**

Data from the NCES and VDOE indicated that a disproportionate number of African American high school students dropped out of school, had behavior problems in school that led to suspensions, had lower on average EOC scores in mathematics and

reading, and were more likely be chronically absent. The current research investigated the way in which schools with African American administrators differentiated from schools without an African American administrator regarding several student measurable outcomes.

#### **Chapter 2. Review of Literature**

Varied studies reported that African American high school students underperformed when compared to their White counterparts on average end-of-course testing assessments, higher chronic absenteeism, and increased school suspensions. Therefore, this literature review highlights research into interventions that impact Black high school student performance compared to those schools in which such interventions were not used. In addition, this review details gaps in research and data regarding the impact of Black administrators on Black student performance measures throughout the Commonwealth of Virginia.

#### **Theoretical Assumptions**

A key assumption in the current research was that learning was best accomplished through social and interactive processes. The late 19th- and early 20th-century educational reformer John Dewey developed the concept as an educational paradigm. Dewey believed in the ideals of social reform and democracy, and posited that true education was not the memorization of facts but preparation for a life of sound decision making (Talebi, 2015). According to Dewey, education was the fundamental method for social progress and reform (Gibbon, 2019).

A second theoretical assumption was that students could be successful learners, regardless of genetics and race. According to Callier and Bonham (2015), the suggestion that people were predisposed to an intelligence ceiling due to genetics or that certain groups, racial and others, had an inherent genetic advantage in cognitive ability, was divisive and not backed by research. Callier and Bonham also noted that not one single gene was responsible for giving human beings an advantage based on IQ. Rather, a human being's overall environment and experiences played a significantly influential role

on academic measures and IQ scores. Callier and Bonham (2015) further stated that underprivileged children subjected to racism with little academic and social support would show great improvements on IQ tests and other academic measures when adopted into middle class homes.

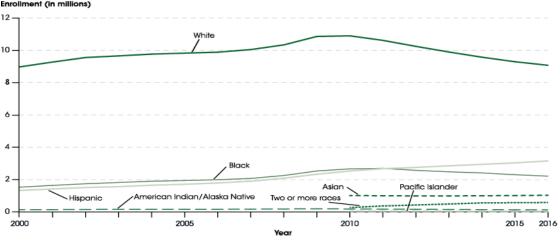
#### **Disproportionality in Student Performance Measures for Black Students**

Disproportionality in school discipline regarding African American students compared to other subgroups was well documented during previous decades (Skiba et al., 2002). Currently, data reveal disproportionately low African American student growth based on various indicators at the local, state, and federal levels (Skibe et al., 2002). According to Tefera et al. (2019), 20% of Black students in the central Virginia region received an out-of-school suspension, compared with only 5% of White students. Also, Tefera et al. reported that national rates of suspensions by race are approximately 15% and 5%, respectively. The suspension disparity in Virginia seems to worsen as students age. Black students were three times more likely to be suspended in high school than in elementary school (Tefera et al., 2019). In 2016, African American students made up 23% of the student population demographic across Virginia but accounted for 50% and 58% of the short-term and long-term suspensions, according to data gathered by the Virginia Department of Education (Virginia Department of Education, 2020b). Due to apparent racial biases and implicit racism (Rosen, 2018), Black students in Richmond made up about 36% of the student population but accounted for 75% of subjective out-ofschool suspensions based on such factors as defiance or disrespect (Tefera et al., 2019). As these data indicate, there are many examples of disproportionality among African American students in the Commonwealth of Virginia in terms of suspension, attendance,

and academic measures. Welsh and Little (2018) reported that disproportionality in school discipline could not be overcome with simple solutions. Educational inequity is a multifaceted problem that, at its core, educators can blame on different perspectives and different variables such as race.

Disproportionality of Black student performance has been a problem at the national and state levels for quite some time. According to Riddle and Sinclair (2019a), data from over 32 million students from 96,000 schools found in the 2013-14 Civil Rights Data Collection (CRDC) clear evidence of disproportional data. In addition, as noted in Figure 1, Black students trail their White peers in undergraduate enrollment, which further exacerbates the earning potential disparity between African Americans and Caucasians in the United States (Hanks et al., 2018).

#### Figure 1



Undergraduate Student Enrollment by Race/Ethnicity: Fall 2000-2016 Enrollment (in millions)

(NCES, 20020a)

According to Daggett and Atkinson (2018), disproportionality in student discipline and academic performance linked to a breakdown in efforts to achieve the rigorous instruction necessary for students to succeed on end-of-course tests but, more importantly, educators failed to teach students to think deeply and to deliver instruction relevant to students and their future careers. Some schools had minimal issues with disproportional discipline and other schools struggled in this area (VDOE, 2020a). Multiple variables contribute to the issue of disproportionality in public schools. As indicated in Table 1, the disproportionality of school discipline and race existed and was problematic for school officials who sought equitable and proportional discipline (Balfanz et al., 2014).

#### Table 1

#### Disciplinary Action by Race

Type of Discipline	Black	White
School arrests	0.28%	0.08%
Expulsions	0.51%	0.18%
Law-enforcement referral	0.91%	0.34%
In-school suspension	11.22%	4.23%
Out-of-school suspension	13.46%	3.5%

#### (Riddle & Sinclair, 2019a)

These data clearly indicated disproportionate use of disciplinary measures for Black high school students. At the time of data collection, 51% of all students in the United States identified as White and 15% identified as Black (NCES, 2019). Consequently, the long-term ramifications for disproportionate discipline could be continuation of the achievement gap between Black and White students in many academic and school climate measures (Balfanz et al., 2014). As noted in Table 2, research indicated that the suspension of students directly correlated with student dropout rates. Because Black students had disproportionate suspensions, they were more adversely affected. The National Center for Research Statistics (2014) indicated that Black students were more likely to drop out than were their White Counterparts, at 6.6% compared to 4.3%.

#### Table 2

#### School Suspensions and Graduation Rates

Number of School Suspensions	High School Graduation Percentage
0	75%
1	52%
2	38%
3	30%
4	23%

(Balfanz et al., 2012)

Suh et al. (2014) also indicated that suspensions negatively affected school achievement. Using data from two longitudinal studies conducted by the National Longitudinal Surveys of Youth (NLSY), Suh et al. noted school dropout rates began to show a disproportionate trend relating to African American students in the early 2000s and determined that primary reason for this trend among Black students was school suspensions. The first NLSY cohort included a group of students tracked in 1979 with the second cohort group was from 1997. The NLSY cohort groups included 12- to 22-yearolds of various demographic makeup. To compare dropout rates between Black and White students, Suh et al. extracted data for non-Hispanic Black and White students from both cohorts. Desegregation of the data from the 1979 cohort showed the school dropout rate as 17.1% for Black students and 15.2% for White students, resulting in a 1.9% racial gap. The rate decreased to 14.4% and 9.1%, respectively, for the 1997 cohort and the racial gap increased to 5.3%. As a result, the Black-White dropout gap widened by 3.4%, even though the dropout rate for Black students declined by 2.7% during this period. According to Suh et al., the largest percentage of increase in the Black-White gap was due to the suspension variable. The portion of Black students suspended from school increased by more than 30% while, for White students, it increased by less than 5% in the same period. Suh et al. found that an increase in the number of suspended Black youths combined with a rising regression coefficient for suspensions contributed to a 7.5% increase in the dropout gap, which perpetuated the achievement gap between Black and White students.

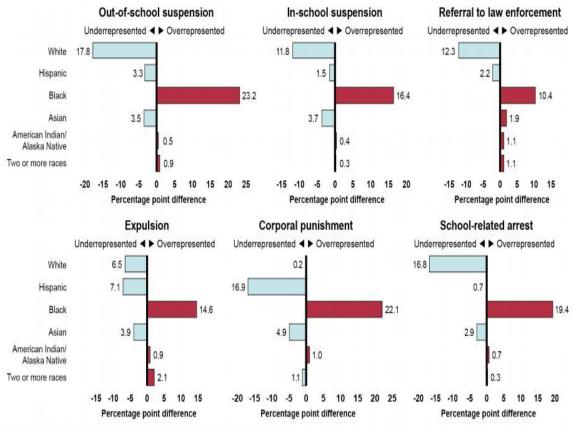
Researchers, such as Riddle and Sinclair (2019), consistently show Black students are disproportionately suspended when compared to White students, which maintained achievement gap discrepancies in graduation percentages, academic achievement, and school behavior between the racial divisions. For example, Black students were far more likely than were White students to be sent to the principal's office or subjected to a law enforcement referral for a behavior incident. Lopez (2018) also found that the disproportionality of punishment for Black students compared to White students was true regardless of discipline consequence. As indicated in Figure 2, the data clearly indicate disproportionality regarding school suspension and marginalized student groups.

#### Figure 2

#### Student Suspension and Discipline Among Student Groups

# Figure 2: Representation of Students Who Received Disciplinary Actions Compared to Overall Student Population, by Student Race or Ethnicity, School Year 2013-14

This chart shows whether each race or ethnicity was underrepresented or overrepresented among students who received six types of discipline. For example, White students were underrepresented among students suspended out of school by approximately 18 percentage points, as shown in the chart, because they made up about 50% of the overall K-12 student population, but 32% of the students suspended out of school.



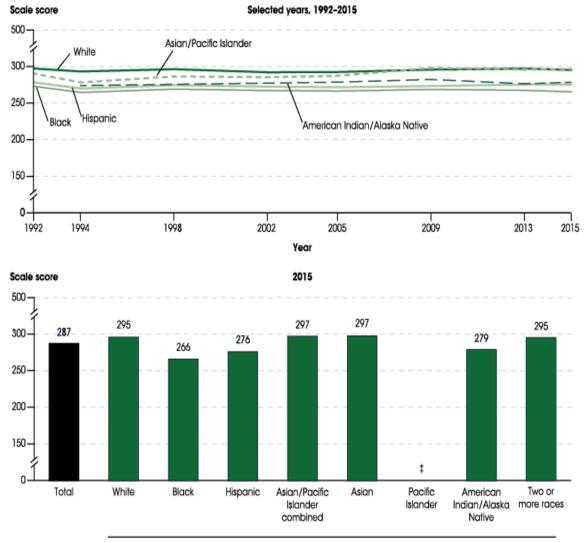
Source: GAO analysis of Department of Education, Civil Rights Data Collection. | GAO-18-258

Systemic racism takes many different forms and modalities. Data from state and federal sources reflect a continuing situation in which a disproportionate percentage of African American students receive suspensions (out of school and in-school), perform at lower levels of proficiency on EOC testing, and have a lower graduation rate than do their White counterparts (Balfanz et al., 2014).

According to longitudinal data assembled by the NCES in 2016, Black students had a cumulative all-grades retention percentage of 2.7%, compared to 1.7% for White students. Black male students were more than three times as likely to receive suspensions as were White male students (17.6% vs 5.0%) and Black female students were over five times more likely to receive an out-of-school suspension as were White female students (9.6% v 1.7%) (Virginia Department of Education, 2020a). According to the VDOE's four-year state cohort statistics from 2019, the four-year on-time graduation percentage rate was almost five points higher for White students than it was for Black students (94.68% v 89.73%), and Black students had a 10% higher chronic absenteeism rate than did White students over the same four-year cohort study (30% v 20%) (Virginia Department of Education, 2020a).

According to the NCES (2018), the White-Black achievement gap in reading was wider in 2015 (30 points) than in it was in 1992 (24 points), while the White-Hispanic gap in 2015 (20 points) was not measurably different from the corresponding gap in 1992. The fact that the White-Black achievement gap had not narrowed was troubling and reflected the fact that interventions and policy changes were not effective enough. As reflected in Figure 3, marginalized groups performed disproportionally poorer than did their White counterparts.

## Figure 3



Reading Achievement Gap Comparison among United States K-12 Students

Race/ethnicity

## (NCES, 2020a)

Data continue to reveal disproportionately low student growth, according to various indicators at the local, state, and federal levels. According to Tefera et al. (2019), 20% of Black students in the central Virginia region (predominately in the Richmond area) received an out-of-school suspension, compared to only 5% of White students in the same area. Tefera (2019) added that, nationally, the rates were approximately 15% and 5%, respectively. In Virginia, the suspension disparity appeared to worsen as students aged (Legal Aid Justice Center, 2018), with Tefera et al. adding that Black students were three times more likely to be suspended in high school than they were in elementary school. In 2016, African American students made up 23% of the student population demographic across Virginia but accounted for 50% and 58% of the short-term and long-term suspensions, according to data gathered by the Virginia Department of Education (Virginia Department of Education, 2020b). Perhaps, due to apparent racial biases and implicit racism surrounding the Richmond area, Black students, who made up about 36% of the student population, accounted for 75% of subjective out-of-school suspensions for defiance or disrespect (Tefera et al., 2019).

Implicit biases that affect administrative decision-making and discipline paradigms are important elements in attempting to understand these disproportionate percentages (Riddle & Sinclair, 2019). According to Weir (2016), although Black students were 54% less likely than were White students to have recommendations for gifted education programs, they were three times more likely to receive those recommendations if their teacher was Black. Weir noted that systemic racism and implicit biases affected some educators' expectations regarding student performance potential. Weir added that teachers' personal concerns about grading biases could affect their instruction and grading strategies. Harber et al. (2012) agreed that teachers' selfreflection could affect their grading due to implicit biases, adding that teachers sometimes graded Black students more leniently, so as not to appear overly critical of their work.

Educational biases could also affect student discipline. According to the U.S. Department of Civil Rights (2016), Black K-12 students were almost four times as likely to be suspended as were their White counterparts. Weir (2016) noted that students suspended out of school or expelled were far more likely to be involved in the juvenile justice system and prison system later in life. Implicit racial biases could affect some students early in life (Armstrong, 2019). Weir (2016) observed that, according to U.S. Department of Education statistics (2013-14), pre-school Black students made up 47% of students given out-of-school suspensions but accounted for only 19% of the pre-school enrollment.

When only 10% of school administrators nationwide are African American, it can be difficult to design interventions to dispel implicit biases in the United States' educational climate and culture. Anderson (2016) noted the role of school principals changed over the years. In the past, principals were primarily school managers, but their role expanded to include aspirational leader, student and staff coach, climate and cultural pacesetter, and school visionary (Anderson, 2016). Given this new paradigm for school leaders, it became apparent that Black school leaders could make a positive impact in mentoring Black students (Adkins-Sharif, 2020). As a case in point, Anderson (2016) lauded the impact Chris Johnson had on his students as the Black founding principal of the Science Leadership Academy in Philadelphia. Johnson reported that his experiences as a Black student in Philadelphia, including 25 suspensions in the 5th and 6th grades, affected his leadership style and his view of discipline and school leadership through a different lens. As a principal, Johnson did not criminalize students for non-criminal offenses; for example, he would not suspend a child for wearing a hat or inappropriate

clothing. Johnson believed in relationship building and connectivity between Black students, Black teachers, and administrators, which could be instrumental in improving a school's culture and climate and affect students' academic and behavioral successes.

In 2019, only 5% of Virginia school administrators in rural areas were African American (Virginia Department of Education, 2020c). This absence of administrative role models and mentors might account for the data on Black students in rural Virginia. Bristol, a small rural city located in southwest Virginia on the Virginia/Tennessee border, reported in their public schools (BVPA) that 26.2% of Black students were chronically absent, compared to 17.4% of White students during the 2018-19 academic year (Virginia Department of Education (2020b). In other comparative data, Black students scored 20% less than did White students on English EOC proficiency testing and scored 22% less than White students did on EOC proficiency in mathematics (Virginia Department of Education (2020b).). Bristol had no Black administrators and reflected other divisions in southwest Virginia. Although not particularly diverse—about 14% of students in BVPS were Black or mixed race—the division was somewhat more diverse racially than other locales in rural southwest Virginia, while the administrative and instructional staff makeup in each system was Caucasian (Virginia Department of Education (2020b).

The likelihood of Black school administrator appointments in rural areas was unlikely because principal candidates were usually teachers who completed master's degree programs and seek administrative roles locally (Anderson, 2016). In addition, the percentage of Black teachers in the United States dropped from 8% in 2000 to 7% in 2018. These data reflected the fact that there was a small pool of African American teachers available to pursue administrative roles. In rural areas, this problem is

exacerbated because of a lack of racial diversity (National Center for Education Statistics, 2020a).

Implicit racial biases and systemic racism can create a climate of distrust among African American students because of real and perceived unequal treatment (Adkins-Sharif, 2020). According to Anderson (2016), Black administrators tended to implement policies that promoted a climate and culture of racial tolerance and cultural sensitivity more predominately than their White administrative counterparts.

Adkins-Sharif (2020) explained the importance of creating incidents of intersectionality between Black and White students who were *segregated* along racial lines due to underlying scheduling problems with at-risk students. In their study, Adkins-Sharif implemented a before-school mentoring program for Black students using attendance, behavior, and academics as drivers for policy decisions. Adkins-Sharif increased opportunities for Black students to access accelerated math courses and implemented weekly professional development programs to improve knowledge of implicit racial biases and emphasize cultural proficiency. The middle school at which Sharif was principal had a Black student population of 60%, which accounted for a disproportionate number of behavior incidents, poor attendance, and low student growth and achievement. His interventions helped facilitate behavioral and academic student improvements (Adkins-Sharif, 2020).

The National Center for Education Statistics (2019) indicated that a disproportionate number of African American students had behavioral issues and attendance problems, and that their academic achievement measures fell below those of their White counterparts. Data from the NCES (2019) and VDOE (2019) also revealed a

disproportionately low number of African American administrators, considering the diversity of student populations. Data between 2000 and 2017 from the VDOE and NCES consistently showed that African American high school students underperformed compared to their White counterparts on several different school performance measures, such as chronic absenteeism, school suspensions, and EOC testing performance in math and reading. Although some students excelled in school and others inevitably struggled for a variety of reasons, statistically, no race should perform more poorly than another race (Callier & Bonham, 2015).

It has become increasingly important for educational leaders to investigate achievement gaps among student groups to ascertain areas of academic deficits that may affect state and federal accreditation status (Gottfried, 2010). According to Gutierrez (2008), *Gap-Gazing* research could be short-sighted and problematic. Often, achievement gap research investigated gaps between student groups but failed to investigate differences in performance among students in the same group. Gutierrez posited that, while ignoring deeper societal and equitable issues, researchers emphasized instructional methodology rather than exploring a deeper understanding of broad, societal issues that perpetuated myths regarding student achievement limited to end-of-course testing scores. The current research did not investigate educational pedagogy paradigms that make a difference in achievement gaps among marginalized groups, but instead focused on the way in which administrative race might translate into statistically significant differences among student groups from similar and dissimilar demographic makeup.

#### **Black Teachers' Effect on Black Students' Performance Measures**

Lindsey and Hart (2017) found there was a correlation between teachers' race and Black students' discipline. They reported that Black students exposed to same-race teachers were less likely to receive in-school or out-of-school suspensions or expulsion. Their findings also showed a reduced rate of exclusionary discipline among African American students consistently exposed to same-race teachers. These results held true for students in K-12 and for students who received free or reduced lunch and those who did not. Lindsey and Hart also noted the greatest difference as in-office referrals for willful disobedience, which was subjective among teachers. Their research revealed that African American teachers were considerably less likely than were White teachers to send Black students to the office for willful disobedience or defiance.

Camera (2018) observed that, a Black student with one Black teacher in elementary school was 13% more likely to graduate from high school and enroll in college than was a Black student without Black teachers in elementary school. A Black student with two or more elementary school Black teachers was significantly (32%) more likely to graduate from high school and take post-secondary courses (Camera, 2018). Past research also indicated that Black students assigned to a Black teacher for at least one year between kindergarten and third grade had math scores improved by 3%-5% and reading scores increased by 3%-6% (Mahnken, 2015).

Often, Black students were not given the benefit of the doubt regarding their behavior characterized as willfully defiant or disobedient. Okonofua and Eberhardt (2015) determined that, because of implicit biases and cultural racism, White teachers were more likely to recommend harsher punishments for students with stereotypically

*Black-sounding* names, such as Darnell or Deshawn, even when the hypothetical school violations were no different than those committed by White students. According to Bryan et al. (2012), race, more than socioeconomic status, was the number one predictor for discipline referrals in all school settings involving suspension and expulsions. According to Holbrook (2016), White principals might stereotype Black Americans as more violent, larger, and imposing, and less conforming to societal norms and rules, thus making Black students far more susceptible to discipline referrals and harsher punishments than were their White counterparts. Holbrook acknowledged the possibility of an embedded, long-established unconscious and unfounded fear of Black Americans by many White people, which obviously could account for the disproportionate number of suspensions of Black students. The awareness of racial biases and implicit cultural insensitivity along with the proliferation of equity initiatives across the country could bring about a paradigm change (Gregoire, 2017).

Having schools hire more African American instructors should solve several problems regarding Black students' disproportionate discipline referrals and enhance their likelihood of academic success. However, according to Grissom and Bartanen (2019), the lack of teaching diversity in American schools began with the lack of Black school leadership; Black principals were 5%-7% more likely to hire Black teachers. Grissom and Bartanen also found that Black principals had a 2%-3% positive impact on Black teacher mobility. In other words, Black students were more likely to have samerace teachers and be exposed to those teachers over a longer period, which could positively affect their measurable outcomes in academics and behavior. The researchers

concluded race was significant race in establishing a culture and climate most conducive to Black student success.

Grissom and Bartanen's 2019 research gave credence to the effectiveness of racial diversity in schools, both from leadership and instructional perspectives. There would likely be a positive effect on Black student outcomes in math after a Black principal was in place for one year or longer. This effect on math performance appeared due to climate and culture rather than to the indirect consequence of a Black principal possibly hiring a Black teacher.

There was a gap in the literature regarding the effect of Black principals on student performance statistics in Virginia. However, in the adjacent state of Tennessee, then-Governor Lamar Alexander instituted Project Star in 1985. Project Star was a threeyear, federally funded research project to study the effects of class size on student performance. Researchers utilized the data found in the Project Star study and generalized that information to other studies. According to Mosteller (1995), Project Star researchers found that Black students taught by a Black teacher for a year associated with a statistically significant 3%-5% increase in math scores. On the reading test, the scores of Black students (both male and female) placed with a White teacher scored 4%-5% higher in math. In reading, White males scored 2%-6% higher when learning from a teacher of their own race, while White females showed no significant difference. The Project Star study illustrated the significance of same race instruction for student performance. Figures 4 and 5 assimilated data from Project Star to assess the relationship between African American teachers and academic performance measures for African American students. As evidenced, there was a correlation between student performance

and teacher race. As indicated in Figure 4, the impact of learning from a teacher of the same race could make a substantial impact on student performance, especially students from marginalized groups. Figure 5 reflects longitudinal data that reflects the impact of student performance when students have a shared race with their instructors over a longer period.

#### Figure 4

Ö

Impact of Learning from a Teacher of the Same Race

The Impact of Learning from a Teacher of the Same Race (Figure 2) When taught by a teacher who shares their race, African-American and white students experienced, in one year, increases in test scores equal to about one-third of the test-score gap in the Tennessee data. Impact on Test Scores (in Percentile Points) for Students in Grades K-3 9 African-American/White Test-Score Gap in Math = 8.9\*\*\* 8 7 -6 African-American/White Test-Score Gap in Reading = 5.6\*\*\* 5 4 3

\* Results significant at the .1 level. \*\*\* Results significant at the .01 level. Note: Test-score gap in Project STAR sample. SOURCE: Anthor

Math

(Harvard Dataverse, 2008)

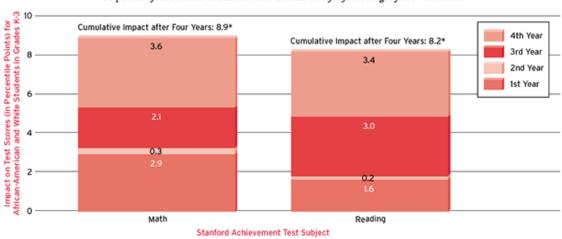
*Note.* Percentile improvement in math and reading when students receive instruction from teachers of the same race.

Stanford Achievement Test Subject

Reading

### Figure 5

Cumulative Impact of Sharing a Teacher's Race



### Cumulative Impact of Sharing a Teacher's Race (Figure 3)

The benefits of being taught by a teacher of the same race appear to be cumulative over time. Note, however, that 96 percent of the students who shared their teachers' race for four straight years were white.

Results significant at the .01 level. Additional gains in the second year are not statistically significant.
 SOURCE: Author

#### (Harvard Dataverse, 2008)

Students perform better academically and behaviorally and have better attendance when they feel a connection to their school's climate and culture (Truby, 2020). According to Lindsay and Hart (2017), Black teachers are more culturally responsive and sensitive to students of color, have fewer racial biases, and have higher expectations for Black students. While research asserted the impact of same-race instructors, in Virginia only 11% of teachers are Black and 22% of the school student population is African American (National Center for Education Statistics, 2019). This could pose an educational dilemma (Bryan et al., 2012) because the lack of available Black administrative candidates decreases opportunities for diversity in school administration, which can adversely affect Black student performance.

#### **Black Administrators Effect on Student Performance**

When accounting for all factors that contributed to student success, leadership was second only to classroom instruction (Leithwood et al., 2019). Leithwood et al. noted that school leaders played a vital role in student performance by assessing students' needs according to four distinct paths: rational, emotional, organizational, and family. According to Leithwood et al., each of these paths was populated by key variables, which could be influenced by school leaders and significantly affect students' measurable performance indicators. Thus, principals could assist in building a culture and climate conducive to optimum learning (Coelli & Green, 2012).

According to the National Association of Secondary School Principals (NASSP) (2013), principals are almost solely responsible for five key functions important for the cultivation of an optimum learning environment. These key functions are:

- Shaping a vision of academic success for all students, one based on high standards.
- Creating a climate optimally suited to education in order that safety and cooperation are prevailing attitudes across a school.
- Cultivating leadership in others so that teachers and other adults assume their part in realizing the school vision.
- Managing people and shaping a vision of academic success for all students, one based on high expectations academically and behaviorally.

• Making sure differentiated instruction is at the forefront of educational paradigm. According to NASSP (2013), a principal's impact was not as significant as a teacher's might be but a teacher's impact was limited to their classroom, while a principal's influence was school-wide. Principals played a huge role in determining which teachers were hired for their respective schools, thus directly influencing the diversity present in the school. According to Grissom and Bartanen (2019), the race and ethnicity of the principal might play a role in student outcomes and teacher retention. Grissom and Bartanen previously examined data from Mosteller (1995) in Tennessee and Missouri and found that the number of Black teachers hired increased when schools were led by Black principals, and that, even when Black principals did not hire Black teachers, Black students' math scores improved. Virginia is somewhat more racially diverse than Missouri or Tennessee. Virginia has an African American population of 19.9%, compared to 17.1% in Tennessee and 11.8% in Missouri, which might aid in increasing those percentages.

Assessing the effect size a principal had on student performance could be difficult to quantify because a principal's influence was indirect (Grissom et al., 2021). However, Grissom et al. (2021) found that an increase of single standard deviation in principal effectiveness increased a typical student's (both Black and White Students) achievement in both math and reading. Grissom et al. further revealed that the estimated impact of replacing a below-average elementary school with an above-average principal would result in an additional 2.9 months of math learning and 2.7 months of reading learning each year for students in that school.

In similar findings, Coelli and Green (2012 found that hiring a principal (regardless of race) one standard deviation better than the current (using a complex time invariant model of principal effectiveness) would increase graduation rates and English exam scores by approximately 2.5 percentage points. Also, Dhuey and Smith (2014)

concluded that principals substantially impacted both math and reading scores. They found that high-quality principals (regardless of race) could increase average student (all racial makeups) performance in reading and math 1-3% compared to average-performing principals.

According to Branch et al. (2013), results from a Texas study on the effectiveness of principals indicated that highly effective principals raised the achievement of a typical student by between two and seven months in a single school year, while ineffective principals lowered achievement by the same amount. Those researchers measured principal effectiveness by investigating the average gains in achievement, adjusted for individual student and school characteristics, and the way in which student achievement data differed across principals in different schools and in the same school at different points in time. In this way, Branch et al. were able to determine the differences in principal effectiveness. According to their findings, achievement gains were less than those associated with having a highly effective teacher, but they noted the impact of teachers was isolated in a classroom while principals could impact an entire school. As Figure 6 indicates, effective principals (versus ineffective principals) can impact student achievement between 4 and 14 percentile points.

### Figure 6

### Texas Principals Effect on Student Achievement

#### Methods and Results (Table 1)

All three methods find that school principals have a substantial impact on student achievement.

Method used to estimate the impact of school principals	Sample used to estimate the impact of school principals	Standard deviation of principal effects	Annual impact of having an effective rather than an ineffective principal	
<ol> <li>Average math achievement gains adjusted for student background characteristics and school mobility rates</li> </ol>	Texas principals in their first three years of leading the school	0.21	+ 16 percentile points of student achievement	
2. Difference in average adjusted math achievement gains between students attending the same school under different leaders	All Texas principals	0.11	+ 8 percentile points of student achievement	
3. Additional year-to-year fluctuation in average adjusted achievement gains surrounding a leadership transition	All Texas principals	0.05	+ 4 percentile points of student achievement	

Note: The standard deviation of principal effectiveness is reported in standard deviations of student achievement. An effective principal is one at the 84th percentile of the quality distribution; an ineffective principal is one at the 16th percentile. The impact of an effective principal is reported for the median student.

SOURCE: Authors' calculations based on Texas Education Agency data

### (Branch et al., 2013)

#### Black Students Compared to White Students in Chronic Absenteeism, Math and

#### **Reading Scores, and Suspensions**

There was conflicting research and ideology behind the achievement gap between Black and White students. However, research indicated that, regardless of the reasons behind the achievement gap, Black students performed better with Black teachers (Camera, 2018). According to Mayowa (2019), Black students often gained inspiration from their Black teachers who served as role models and acted as tangible examples of the benefits of educational attainment.

Overall, research demonstrates that relationships between students and teachers mattered, especially when it involved academic success for some marginalized groups, and this was particularly true for African American students (Mayowa, 2019). According to Mayowa, African Americans tended to have economic and social stressors, which meant that academic achievement was not always a priority. In 2015, 38% of African American children lived below the poverty line, which was four times higher than their White or Asian counterparts (Bowman et al., 2018a). In addition, Black students were often less likely to be in a home environment that emphasized school-related language acquisition to benefit the students in learning Standard English, science, and mathematics. The reasons for this were unclear but might relate to centuries of systemic racism and cultural insensitivity (Soloman et al., 2019). Many Black families and students might not consider education a benefit due to societal racial exclusion. In other words, some African American students may expect to struggle academically and behaviorally in public school because they see a system set up against them (Bowman et al., 2018a). African American teachers might understand the past social and economic hardships facing Black families and students because of years of racial biases, systemic racism, and cultural insensitivity. Black students could feel a connection with teachers of their race and respond better academically and socially which could help offset some of the effects of systemic racism White students have not had to confront.

According to Callier and Bonham (2015), the suggestion that people were predisposed to an intelligence ceiling due to genetics, or that certain groups, racial and others, had an inherent genetic advantage in cognitive ability, was divisive and not backed by research. Callier and Bonham also explained no single gene was responsible

for giving human beings an advantage of IQ. Various studies, such as B.F. Skinner's research on operant conditioning indicate (e.g., McLoud, 2018), a human being's environment and experiences played a significantly influential role in academic measures and IQ scores. More specifically, studies (e.g., Camera, 2018; Garcia, 2020) consistently revealed that underprivileged children subjected to racism with little academic and social support would show great improvement on IQ tests and other academic measures when adopted into middle class homes.

In the past, school systems and government entities often used racial segregation, school funding disparities, and Black student poverty as rationale behind the achievement gap between Black and White students. However, as school funding became more equitable and segregation more circumstantial (Riddle & Sinclair, 2019), the search for the true reasons behind the achievement gap continued. Phillips and Jencks (1998) indicated that the most promising school-related strategies for reducing the Black-White test score achievement gap involved changes like reducing class size, setting minimum standards of academic competency for teachers, and raising teachers' expectations for low-performing students. These changes would benefit both Black and White students but appeared especially beneficial for Black students (Phillips & Jencks, 1998).

The Project Star longitudinal study showed that a reduction in class size helped close the achievement gap between Black and White students (Grissom & Bartanen, 2019). Focusing on psychological and cultural influences and differences as the primary reasons behind the achievement gap created a new paradigm. Quantifying and measuring cultural and psychological differences was difficult. It was much easier to measure and compare income, education, and living arrangements, but cultural differences based on

generations of racial biases and cultural insensitivity affected the way in which students of color conformed to a prescribed set of expected norms by a society that, in many ways, still placed a premium on European ideology (Cokley, 2016).

An experiment, Project Star, conducted in Tennessee from 1985-1989 found that reducing class size in the early grades raised test scores for both Black and White children and that those gains became sustainable even after children moved to larger classes (Grissom & Bartanen, 2019). The experiment also noted that academic gains were much larger for Black students than they were for White students. Historical evidence also supported the hypothesis that the Black-White test score gap fell when class size fell (Camera, 2018). When low birth rates reduced school enrollment in the 1970s, the pupilteacher ratio decreased, and class sizes shrank (Phillips & Jencks, 1998). Consequently, according to Phillips, a marked decline in the Black-White test score gap followed this change in class size.

Bowman et al. (2018a) suggested that differences in parenting practices contributed to the test score gap. Thus, improving parenting education and skills might be as important as improving schools, but addressing this situation could prove difficult because parents might resent suggestions that their parenting style inhibited their child's ability to succeed (Bowman et al., 2018b). This was especially true of African American parents due to racial bias and culturally insensitive insinuations (Phillips & Jencks, 1998). In addition, some African American students tended to be particularly passive or aggressive, which were cultural survival attributes encouraged by caregivers to respond to racist biases (Bowman et al., 2018b).

Going beyond the expected Standard English proficiency dictated by the educational system, Black students needed interventions sensitive to African American culture and tradition and the recognition that some Black students were making linguistic milestones. Black English slang, often used in poverty stricken, segregated communities, hindered perceived academic milestones under the current educational framework (Bowman et al., 2018b). When dealing with linguistic issues, Black educators tended to be more culturally responsive and sensitive regarding the needs of Black students (Bowman et al., 2018b). Because Black teachers were more likely to be hired by Black administrators, various research studies (e.g., Anderson, 2016) indicated that the presence of Black administrators could enhance a Black student's likelihood of academic and social success.

Boschma and Brownstein (2016) reported the difference in the rate at which Black, White, or Hispanic students attended low-income or poorly performing schools was the most significant achievement gap predictor. According to data from NCES (2018), three-fourths of Black and Hispanic students attended low-income schools compared to only one-third of their White counterparts. Statistically, children who spend half their childhood in poverty subjected to the toxic stress that comes with poverty are 68% less likely to graduate from high school. Poverty alone would not make someone less likely to succeed academically or socially, but it could serve as a proxy indicator for the quality of a school. Poorer communities had fewer local resources and tax bases for school funding, fewer parents with college degrees, and fewer two-parent families with parental engagement in their child's education (Boschma & Brownstein, 2020).

Teacher quality was often an issue in poorer school districts because compensation was less competitive and poverty-stricken areas were often breeding grounds for criminal activity, which could discourage highly qualified teacher applications (Harrell et al., 2014). People living in households at or below the Federal Poverty Level (FPL) had more than double the rate of violent victimization (39.8 per 1,000) as did people in high-income households (16.9 per 1,000). According to Harrell et al., 18.8% of African Americans live in poverty compared to 7.3% of White Americans (Basic Statistics on Poverty in the United States, 2019). These data reflected the greater likelihood that African Americans would attend lower-performing, lower-funded schools than would their White counterparts. Coupled with being in environments where violent crime was more prevalent added to student and family stress and, in turn, could negatively affect academic and social performance measures for Black students (Harrell et al., 2014). These factors could explain the disproportionality of achievement between Black and White students.

Disproportionate discipline measures and underperformance in academic performance indicators were problems that American educators disparately attempted to solve and mitigate (Bryan et al., 2012). Black students were more likely to suffer longterm negative life outcomes because of disproportional discipline and poor academic performance. Identifying significant relationships among variables that mitigate and diminish this problem could slow the school-to-prison pipeline and achievement gap discrepancies among marginalized groups, most notably African American students (Riddle, 2019).

#### Gaps in Research

A quantity of research exists regarding the relationship between improved academic performance and school behavior when African American teachers influence African American students (Lindsay & Hart, 2017). Studies noted that an African American student with an African American teacher in kindergarten was 18% more likely to enroll in college than a peer who did not have an African American kindergarten teacher. African American students with two African American teachers during elementary school were 32% more likely to go to college than were their peers who did not have African American teachers (Rosen, 2018).

Assessing whether the race of high school administration, specifically Black school administrators, is associated with a significant improvement in Black student performances was paramount in the current study. Relationships must play a vital role in influencing student outcomes (Lindsay & Hart, 2017), and students who deemed their teacher as unsupportive might have less interest in learning and less engagement in the classroom (Rimm-Kaufman & Sandilos, 2010). A gap existed in the literature on administrative race and differences in student measurable academic and behavioral outcomes. While causality between administrative race and student performance was difficult to determine, the presence of Black high school administrators could reflect trends. Determining the reasons behind differences in Black student performance measures could be important for school leaders in their pursuit of providing an equitable and culturally responsive school culture. Little available research regarding the influence of African American administration on the improvement of African American student performance measures existed. In fact, it was difficult, if not impossible, to find examples

of quantitative research regarding student performance and racial makeup of administrators.

#### Long-Term Effects of the Gap in Educational Achievement

As this literature review detailed thus far, the disparities in academic achievement and inequities in school discipline for African American high school students, nationwide and particularly in the commonwealth of Virginia, were problematic to say the least. This issue provided the impetus for the current study. The perpetuation of social and racial biases, cultural insensitivity, and economic roadblocks stemming from hundreds of years of racial discrimination and prejudice are still prevalent, and societal attempts to rectify this issue have thus far not been effective enough (Bowman et al., 2018b).

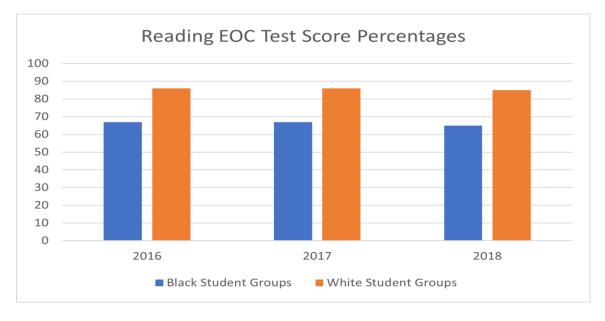
A lack of academic success and inequities in school suspensions could limit future opportunities for many African Americans. The gap in educational achievement between African Americans and other groups was substantial (Camera, 2018). African American children tended to score lower on tests and often received lower grades than their Caucasian peers. In their teenage years, Black students were more likely to fail courses and drop out of secondary schools (Camera, 2018). Not only was the achievement gap an issue for African American students and their families and communities, but the *trickle-down* effect was also detrimental to the entire country (Auguste et al., 2020). Researchers have found that "the persistence of the educational achievement gap imposes on the United States the economic equivalent of a permanent national recession" (Auguste et al., 2020, p. 2). For example, if the achievement gap involving marginalized students had been narrowed by 1998, the United States Gross Domestic Product (GDP) in 2008 could have been \$1.3 trillion to \$2.3 trillion higher (Auguste et al., 2020). Achievement gaps in

academic and social performance measures for African American students economically impact the country and the school-to-prison pipeline (Balfanz et al., 2014).

The school-to-prison pipeline describes the relationship between minority students disciplined in K-12 settings through suspensions and expulsions and those who become incarcerated later in life (Balfanz et al., 2014). Nationally, Black students are four times as likely to face school suspensions, either in school or out of school, as their White counterparts, and suspensions of Black high school students increased eleven times more quickly than those of White students since the 1970s (Lynch, 2020). Students suspended during their freshman year were twice as likely to drop out of high school, and almost 68% of Black men in federal prison had not earned a high school diploma (Lynch, 2020). In Virginia, the statistics were similar. White students made up 48% of the total student population in Virginia yet had drastically lower short-term and long-term suspension rates as a percentage of the total student population compared to their Black counterparts.

As Figures 7-10 indicate, White students in Virginia significantly outperformed Black students in reading, writing, and mathematics, according to performance measures over a three-year data reflection period. Black students also had consistently higher occurrences of chronic absenteeism than their White counterparts, had a lower on-time graduation rate, and were less likely to attend college after high school (Virginia Department of Education, 2020a). These data reflect disproportionality in student performance.

# Figure 7

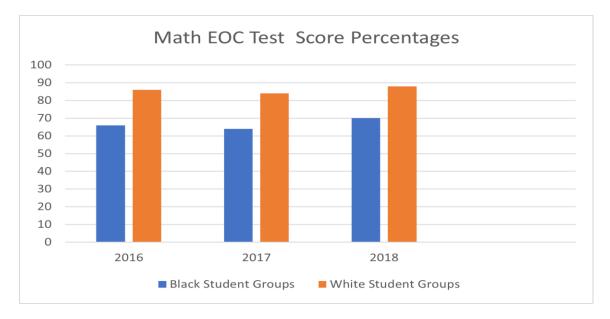


Black and White Student Group Reading EOC Score Percentages

# (VDOE, 2020a)

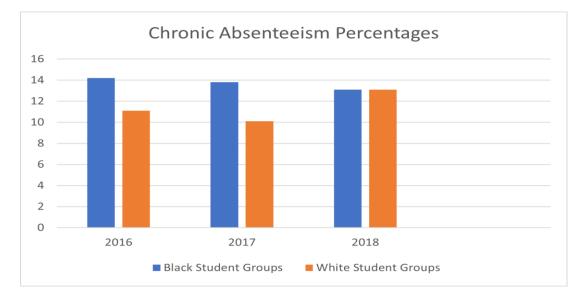
# Figure 8

Black and White Student Groups Math EOC Test Scores



(VDOE, 2020a)

# Figure 9

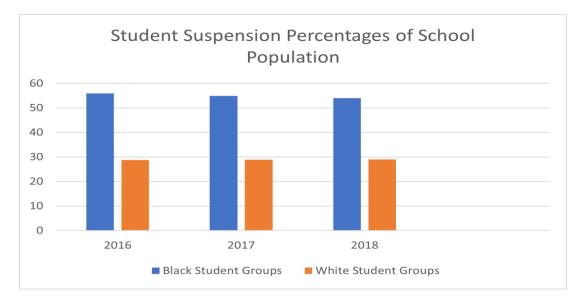


Black and White Student Groups Chronic Absenteeism Percentages

### (VDOE, 2020a)

# Figure 10

Black and White Student Groups School Suspension Rates



## (VDOE, 2020a)

*Note*: Suspension data reflect the percentage of all short-term and long-term suspensions. Black students made up 22% of the total student population in Virginia high schools in the years 2016-2018, and White students made up 48% of the total student populations in Virginia in the years 2016-2018 (VDOE, 2020a). Also, the data offers percent passed in EOC tests reading and math. VDOE data on chronic absenteeism notes the percentage of student groups over the chronic absenteeism threshold (students missing more than 15% of available school days per year), and suspension data notes the percent of total suspensions from each student group.

### **Chapter Summary**

This chapter emphasized data and information that reflected disproportionality between Black and White students regarding student performance measures. Understanding gap disparities between student groups was a pursuit common among education leaders (Gutierrez, 2008). While this study focused on comparing data among high school students throughout Virginia in schools with a Black administrative presence, it could address a gap in research and quantitatively investigate the way in which administrative race and student performance coalesce and might open the door for future, more in-depth studies regardless of the results of the current investigation.

#### **Chapter 3. Research Methods**

The purpose of this investigative study was to analyze Virginia Department of Education (VDOE) and National Center for Education Statistics (NCES) data gathered from the preceding three years and compare student performance indicators in the areas of English (reading and writing), mathematics, short- and long-term school suspensions, chronic absenteeism, and on-time graduation rates among Black and White Students across the commonwealth of Virginia in impoverished and non-impoverished school settings. Data analysis revealed that statistically significant relationships existed among variables.

The design of this study was two-fold, comprising correlational quantitative methods and causal comparative quasi-experimental methods. Correlational studies seek to understand potential significant differences in several naturally occurring variables and seeks to recognize patterns and trends in data. In this study, the correlation research design established whether Black high school students' performance trends and patterns associated with the presence of the variable of at least one Black administrator on the school's staff.

While correlative data analyzes trends and patterns in data, which is important and significant, the causal comparative quasi-experimental research methodology establishes whether significant statistical differences between the dependent variable and independent variable(s) exist. Neither methodological format used in this study design manipulated the variables in any true experimental way, but rather careful analysis sprang from archival data acquired ex post facto and based on naturally occurring scenarios.

#### **Research Questions and Null Hypotheses**

This study addressed the following research questions by testing their respective null hypotheses:

RQ1. For impoverished high schools with at least one Black Administrator was there a significant difference in end-of-course mathematics scores between Black and White students?

 $H_01$ : For impoverished high schools with at least one Black Administrator, there was no significant difference in end-of-course mathematics scores between Black and White students.

RQ2. For non-impoverished high schools with at least one Black Administrator was there a significant difference in end-of-course mathematics scores between Black and White students

 $H_02$ : For non-impoverished high schools with at least one Black Administrator, there was no significant difference in end-of-course mathematics scores between Black and White students.

RQ3. For impoverished high schools with at least one Black Administrator was there a significant difference in end-of-course reading scores between Black and White students?

 $H_03$ : For impoverished high schools with at least one Black Administrator, there was no significant difference in end-of-course reading scores between Black and White students.

RQ4. For non-impoverished high schools with at least one Black Administrator was there a significant difference in end-of-course reading scores between Black and White students?

 $H_04$ : For non-impoverished high schools with at least one Black Administrator, there was no significant difference in end-of-course reading scores between Black and White students.

RQ5. For impoverished high schools with at least one Black Administrator was there a significant relationship between suspension rates and race?

 $H_05$ : For impoverished high schools with at least one Black Administrator, there was no significant relationship between suspension rates and race.

RQ6. For non-impoverished high schools with at least one Black Administrator was there a significant relationship between suspension rates and race?

 $H_06$ : For non-impoverished high schools with at least one Black Administrator, there was no significant relationship between suspension rates and race.

RQ7. For impoverished high schools with at least one Black administrator was there a significant relationship between absenteeism and race?

 $H_07$ : For impoverished high schools with at least one African American Administrator, there was no significant relationship between absenteeism and race.

RQ8. For non-impoverished high schools with at least one Black administrator was there a significant relationship between absenteeism and race?

 $H_08$ : For non-impoverished high schools with at least one African American Administrator, there was no significant relationship between absenteeism and race.

#### Sample

This study was an ex post facto investigation analyzing information acquired from the VDOE School Quality Survey Data from the academic years 2017-2020. The researcher recorded and analyzed academic and social climate data from Black and White students in various high schools throughout all eight designated regions in the Commonwealth of Virginia. Analysis emphasized the diversity of the schools selected in terms of urban or rural demographics, and that the sample included both schools with a high poverty rate among students and schools with students who were more affluent. The study examined 70 high schools (see Appendix), encompassing a cumulative student population of over 20,000. Thirty-five of the high schools (50% of the sample) had Black administrators and 35 schools had non-Black administrators (50% of the sample). The researcher gathered, analyzed, and interpreted data from the VDOE (2020) and NCES (2020).

#### **Data Source**

Individual schools throughout the Commonwealth submitted data collected by the VDOE (2020), following a set calendar schedule four times per year. Schools and school divisions around the Commonwealth used data management systems to gather, record, and submit data to the SSWS-VDOE single login site, which was encrypted and protected by numerous firewall and Internet safety protocols (VDOE, 2020). Only specific school personnel had access to the SSWS single login system for very specific purposes (VDOE, 2020). For example, a school district's foster care and homeless liaison would have the ability to enter record keeping data on foster care and student homelessness at specific points in a calendar year but would not have access to any other data submission (VDOE, 2020). The data obtained from the VDOE and NCES was valid and reliable and assisted

in educational decision making by administrators at the state and local levels across the Virginia Commonwealth.

The Virginia Longitudinal Data System (VLDS) provided state policy makers, authorized researchers, and citizens with access to educational and workforce training data from multiple sources, including data from the VDOE, while protecting the privacy of Virginia students (*The VLDS Privacy Promise*, 2020). VLDS supported critical reporting on the quality of public education—such as accurate graduation and dropout rates for high schools and school divisions—while providing information that could help policymakers improve programs that prepared and connected Virginians with employment opportunities (*The VLDS Privacy Promise*, 2020).

VLDS protected student records in accordance with its obligations as defined by applicable Virginia statutes, including, but not limited to: the *Government Data Collection and Dissemination Practices Act*, Chapter 38 of Title 2.2 of the Code of Virginia (§ 2.2-3800 and 2.2-3803), *Administration of systems including personal information; Internet privacy policy; exceptions* Code of Virginia, § 2.2-3803, the *Virginia Freedom of Information Act* § 2.2-3700, et seq., and by any applicable U.S. federal laws. Any personal information collected and retained complied with the statute (*The VLDS Privacy Promise*, 2020). To ensure the highest levels of privacy, VLDS built on a system that utilized a complex process, which placed private data behind the participating agencies' existing firewalls while merging data for research purposes.

The National Center for Education Statistics (NCES) provided an open source for data acquisition of educational longitudinal data accumulated from school divisions and state departments of education across the United States. The NCES was the primary

federal entity for collecting and analyzing data related to education in the United States. Congress mandated that the NCES collected, collated, analyzed, and reported complete statistics about American education and that it created and published reports available for analysis by a variety of stakeholders.

#### **Data Collection**

Data related to EOC score testing percentages in math and reading, social behavior indicators, and attendance rates were available to the public in the Commonwealth of Virginia via the VDOE website. The researcher recorded longitudinal academic and social climate data from the VDOE (2017-2020) and NCES (2017-2020) into an Excel spreadsheet for eventual statistical testing via SSPS IBM software (2020). The researcher disaggregated the data into Black and White student sub-groups. Individual student identities remained protected and unidentifiable. All data used in this study served the purpose of investigating trends and differences regarding high school performance indicators and how those indicators related to differences in the racial makeup of school administrators throughout secondary schools across the Commonwealth of Virginia.

#### **Data Analysis**

The following statistical procedures addressed the research questions. A series of independent *t* tests examined Research Questions 1-4. The independent *t*-tests in this study assessed whether there were significant differences between Black and White students (the independent variables) regarding end-of-course test scores (the dependent variable) when a Black administrator served within their respective impoverished and non-impoverished schools.

A series of Chi-square tests assessed Research Questions 5-8. Specifically, Chisquare tests determined whether significant relationships between race, absenteeism, and suspension rates existed when a Black administrator worked in their respective impoverished and non-impoverished schools. All data were tested at the .05 level of significance.

### **Chapter Summary**

The purpose of this quantitative study was to analyze ex-post facto data, to analyze and compare variables, to make statistical inferences, and to highlight significant differences that might exist. This study could not prove causation but identified significant differences between Black and White students that could prove helpful to educators and educational administrators. The study was correlational and casual comparative in nature, using independent *t*-tests and Chi-squares to explore the differences between Black and White students regarding end-of-course test scores and the relationships between race, absenteeism, and school suspensions in impoverished schools compared to high schools that were not impoverished.

The data from the VDOE and NCES used in this study were reliable and valid and encompassed approximately 30,000 students from 70 high schools throughout the Commonwealth of Virginia. The data from the VDOE and NCES were publicly available.

### **Chapter 4. Results**

The purpose of this study was to conduct a non-experimental, comparative, quantitative study investigating Black and White student performance in impoverished and non-impoverished high schools throughout Virginia regarding EOC Math and Reading, suspension rates, and absenteeism. The foundation of this study was the analysis of Black and White student data at the high school level, while controlling for the presence of Black administration. The researcher collected and desegregated data from the VDOE (2020) and used statistical analysis (*t*-tests and Chi-squares) to ascertain whether tested data exhibited significant differences or significant relationships among variables (student race, administrative race, suspension rates, and absenteeism rates).

#### **Research Question 1**

RQ1. For impoverished high schools with at least one Black Administrator was there a significant difference in end-of-course mathematics scores between Black and White students?

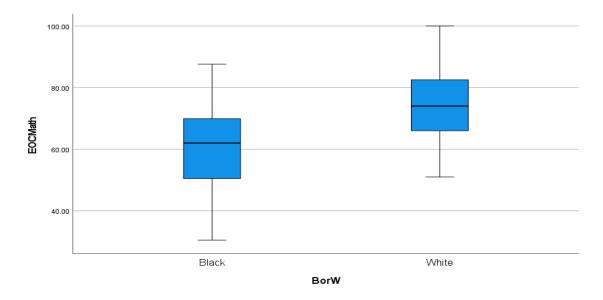
 $H_01$ : For impoverished high schools with at least one Black Administrator, there was no significant difference in end-of-course mathematics scores between Black and White students.

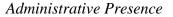
An independent samples *t*-test was conducted to determine whether the mean endof-course math scores for Black and White students were significantly different in impoverished schools with a Black administrative presence. The test variable was the end-of-course scores in mathematics and the grouping variable was race (Black or White). The test was significant, t(62) = 4.08, p < .001; therefore, the null hypothesis was rejected. Black students (M=61.34, SD=12.21) in impoverished school settings with Black administrative presence scored significantly lower than their White student

counterparts (M = 74.71, SD=12.79). The 95% confidence interval for the difference in means was 7.12 to 19.62, and Cohen's d = 1.01 indicating a large effect size. In summary, Black students tended to score significantly lower in EOC mathematics tests than White students. Figure 11 shows the distribution for the two groups, while Table 3 reports means and standard deviations of those test scores.

## Figure 11

Black and White Student Math Score Means in Impoverished Settings with Black





## Table 3

Black and White Student Math Score Means in Impoverished Settings

EOC Math Scores	Ν	Mean	SD	Sig	Mean
					Difference
Black Students	33	61.34	12.21	p < .001	13.37
White Students	31	74.71	12.79		

#### **Research Question 2**

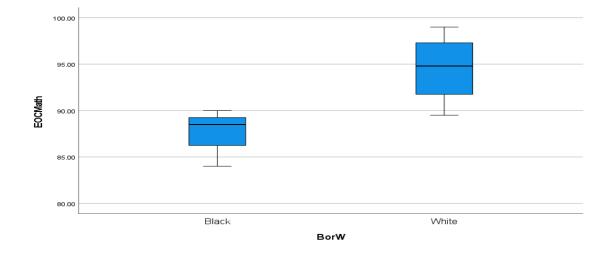
RQ2. For non-impoverished high schools with at least one Black Administrator was there a significant difference in end-of-course mathematics scores between Black and White students

 $H_0$ 2: For non-impoverished high schools with at least one Black Administrator, there was no significant difference in end-of-course mathematics scores between Black and White students.

An independent samples *t*-test was conducted to determine whether the mean endof-course math scores for Black and White students were significantly different in nonimpoverished schools with a Black administrative presence. The test variable was the end-of-course scores in mathematics and the grouping variable was race (Black or White). The test was significant, t(6) = 2.87, p = .028; therefore, the null hypothesis was rejected. Black students (M = 87.75, SD = 2.60) in non-impoverished school settings with a Black administrative presence scored significantly lower than White students (M =94.53, SD = 3.95). The 95% confidence interval for the difference in means was .99 to 12.56, and Cohen's d = 2.03, indicating a large effect size. In summary, Black students tended to score significantly lower in EOC mathematics tests than White students. Caution must be exercised in interpreting these findings due to low group sizes. Figure 12 shows the distribution for the two groups, while Table 4 reports means and standard deviations of those test scores.

## Figure 12

Black and White Student Math Scores in Non-Impoverished Settings with Black



Administrative Presence

## Table 4

Black and White Student Math Score Means in Non-Impoverished Settings

EOC Math Scores	Ν	Mean	SD	Sig	Mean
					Difference
Black Students	4	87.75	2.60	p = .028	6.78
White Students	4	94.53	3.95		

#### **Research Question 3**

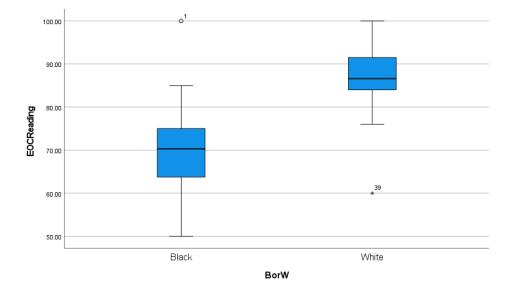
RQ3. For impoverished high schools with at least one Black Administrator was there a significant difference in end-of-course reading scores between Black and White students?

 $H_03$ : For impoverished high schools with at least one Black Administrator, there was no significant difference in end-of-course reading scores between Black and White students.

An independent samples *t*-test was conducted to determine whether the mean endof-course reading scores for Black and White students were significantly different in impoverished schools with a Black administrative presence. The test variable was the end-of-course scores in reading and the grouping variable was race (Black or White). The test was significant, t(59) = 7.22, p < 001; therefore, the null hypothesis was rejected. Black students (M = 70.17, SD = 9.89) in non-impoverished school settings with a Black administrative presence scored significantly lower than their White student counterparts (M = 86.72, SD = 7.85). The 95% confidence interval for the difference in means was 11.96 to 21.14 and Cohen's d = 1.85, indicating a large effect size. In summary, Black students tended to score significantly lower in EOC reading tests than White students. Figure 13 shows the distribution for the two groups, while Table 5 reports means and standard deviations of those test scores.

#### Figure 13

Black and White Student Group Reading Scores in Impoverished Settings with Black Administrative Presence



#### Table 5

EOC Reading Scores	Ν	Mean	SD	Sig	Mean
					Difference
Black Students	31	70.17	9.89	p =.001	16.55
White Students	30	86.72	7.85		

Black and White Student Reading Score Means in Impoverished Setting

#### **Research Question 4**

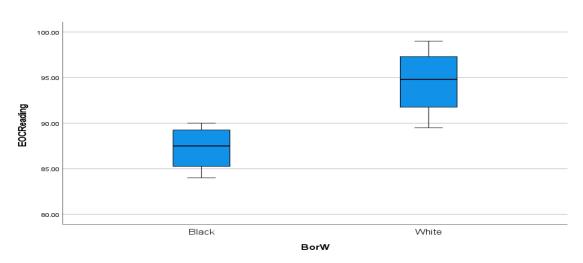
RQ4. For non-impoverished high schools with at least one Black Administrator was there a significant difference in end-of-course reading scores between Black and White students?

 $H_04$ : For non-impoverished high schools with at least one Black Administrator, there was no significant difference in end-of-course reading scores between Black and White students.

An independent samples *t*-test was conducted to determine whether the mean endof-course reading scores for Black and White student were significantly different in nonimpoverished schools with a Black administrative presence. The test variable was the end-of-course scores in reading and the grouping variable was race (Black or White). The test was significant, t(6) = 2.36, p = .022; therefore, the null hypothesis was rejected. Black students (M = 87.25, SD = 2.59) in non-impoverished school settings with a Black administrative presence scored significantly lower than White students (M = 94.52, SD =3.94). The 95% confidence interval for the difference in means was 1.49 to 13.05, and Cohen's d = 2.18, indicating a large effect size. In summary, Black students tended to score significantly lower in EOC reading tests than White students. However, caution must be exercised in interpreting these findings due to low group sizes. Figure 14 shows the distribution for the two groups, while Table 6 report means and standard deviations of those test scores.

## Figure 14

Black and White Student Reading Scores in Non-Impoverished Settings with Black



Administrative Presence

### Table 6

Black and White Student Reading Score Means in Non-Impoverished Settings

EOC Reading Scores	N	Mean	SD	Sig	Mean
					Difference
Black Students	4	87.25	2.59	p = .022	7.26
White Students	4	94.52	3.94		

### **Research Question 5**

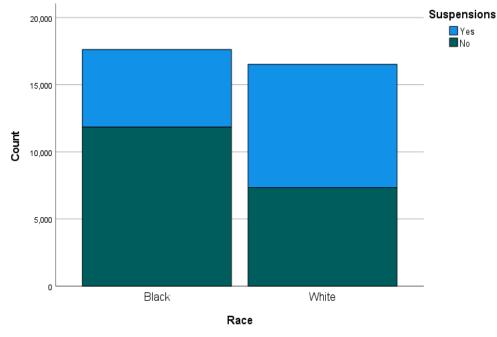
RQ5. For impoverished high schools with at least one Black Administrator was there a significant relationship between suspension rates and race?

 $H_05$ : For impoverished high schools with at least one Black Administrator, there was no significant relationship between suspension rates and race.

A Chi-square analysis was used to determine whether a significant relationship existed between race (Black or White) and school suspensions for students that attended impoverished high schools with a Black administrative presence. The results indicated a significant relationship between school suspension rates and race for students who attended impoverished schools with a Black administrator, Pearson  $\chi^2$  (1, N = 34,145), p< .001; therefore, the null hypothesis was rejected. The  $\varphi$  index was .230, indicating a medium effect size. In summary, Black students were significantly more likely to be suspended than White students in impoverished settings with a Black administrative presence. Figure 15 indicates Black and White student mean scores differences.

#### Figure 15

Black and White Student Suspension Rates in Impoverished Settings with Black Administrative Presence



Cases weighted by Number

#### **Research Question 6**

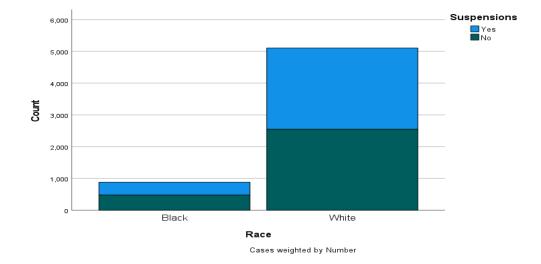
RQ6. For non-impoverished high schools with at least one Black Administrator was there a significant relationship between suspension rates and race?

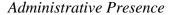
 $H_06$ : For non-impoverished high schools with at least one Black Administrator, there was no significant relationship between suspension rates and race.

A two-way contingency table analysis was conducted to determine whether a significant relationship existed between race (Black or White) and school suspensions for students that attended non-impoverished high schools with a Black administrative presence. The results indicated a significant relationship between school suspension rates and race for students who attended non-impoverished schools with a Black administrator,  $X^2$  (1, *N*=5,989) *p* = .02; therefore, the null hypothesis was rejected. The  $\varphi$  index was .30, indicating a medium effect size. In summary, White students were significantly more likely to face suspension than Black students in non-impoverished schools with a Black administrative mean scores differences.

#### Figure 16

Black and White Student Suspension Rates in Non-Impoverished Settings with Black





#### **Research Question #7**

RQ7. For impoverished high schools with at least one Black administrator was there a significant relationship between absenteeism and race?

 $H_07$ : For impoverished high schools with at least one African American Administrator, there was no significant relationship between absenteeism and race.

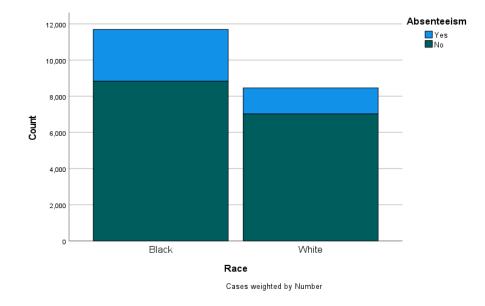
A two-way contingency table analysis was used to determine whether a significant relationship existed between race (Black or White) and chronic absenteeism for students that attended impoverished high schools with a Black administrative presence. The results indicated a significant relationship between Black and White students that attended non-impoverished schools with a Black administrator and chronic absenteeism,  $X^2(1, N = 20,167) p < .001$ ; therefore, the null hypothesis was rejected. The  $\varphi$  index was .80 indicating a large effect size. In summary, Black students tended to be

significantly more chronically absent than White students in impoverished settings with a Black administrative presence. Figure 17 reflects Black and White student groups mean scores differences.

# Figure 17

Black and White Student Groups Chronic Absenteeism in Impoverished Settings with

Black Administrative Presence



## **Research Question #8**

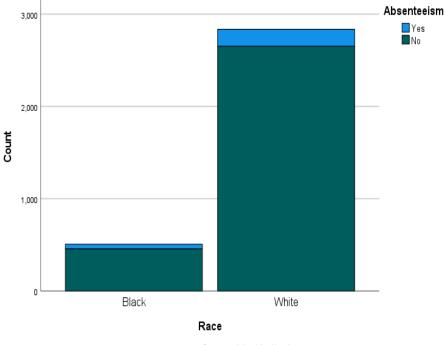
RQ8. For non-impoverished high schools with at least one Black administrator was there a significant relationship between absenteeism and race?

H<sub>o</sub>8: For non-impoverished high schools with at least one African American Administrator, there was no significant relationship between absenteeism and race.

A two-way contingency table analysis was used to determine whether a significant relationship existed between race (Black or White) and chronic absenteeism for students that attended non-impoverished high schools with a Black administrative presence. The results indicated a significant relationship between Black and White student groups and chronic absenteeism that attended non-impoverished schools with a Black administrator,  $X^2(1, N=3,334) p = .004$ ; therefore, the null hypothesis was rejected. The  $\varphi$  index was .05, indicating a small effect size. In summary, Black students tended to be significantly more chronically absent than White students in nonimpoverished settings with a Black administrative presence. Figure 18 reflects Black and White student groups mean scores differences.

### Figure 18

Black and White Student Absenteeism in Non-Impoverished Settings with Black Administrative Presence



Cases weighted by Number

#### **Chapter 5. Summary, Conclusions, and Recommendations**

This investigation provided an in-depth review of literature that highlighted the achievement gap between Black and White students. Although the gap narrowed in recent years (NCES, 2018), longitudinal data collected and analyzed from the VDOE and NCES reflected that disproportional low performance in academic and social climate measures from Black students persisted. Disproportionality regarding student group performance indicators came to the forefront when the Coleman report was commissioned as part of the *Civil Right Act of 1964* (Get the Facts, 2017). Coleman and his team collected data from over 4,000 schools, 66,000 teachers, and over 500,000 elementary, middle, and high school students (Get the facts, 2017). One of the most discouraging implications of the report was that schools had very little success in influencing academic achievement due to the social inequalities of marginalized groups, particularly African American children.

Past studies demonstrated that Black students performed better academically and socially when exposed to Black instructors (Camera, 2018), but there was a lack of empirical research that investigated the race of administrators and student outcomes, which was the rationale for this study. The purpose of this comparative, quantitative, non-experimental study was to investigate whether significant statistical differences between Black and White students existed in math and reading (academic performance) and whether there was a statistically significant relationship between student race and chronic absenteeism and school suspensions when Black administrators were present. Because this study used ex-post facto aggregate data (2018-2020) acquired from the VDOE, determining causation among variables was not possible. The study focused on performance indicators for Black and White high school students from both impoverished

and impoverished schools with a Black administrative presence throughout the Virginia Commonwealth. The performance indicators chosen for this study were EOC scores in math and reading, chronic absenteeism, and school suspensions.

### Summary

The research found that White students scored significantly higher than did their Black counterparts on EOC math and reading tests. In addition, White students had lower instances of chronic absenteeism and student suspension than did Black students when controlling for the presence of Black administrative presence. Some student groups came from impoverished schools, while others were in non-impoverished schools. Some schools had a Black administrative presence (50%), while the other schools did not have Black administrative presence (50%). Research Questions 1-4 investigated whether significant differences in EOC scores in reading and math existed between Black and White students who attended various high schools around the Virginia Commonwealth that had Black administrative presence. Data from this study revealed that Black students with a Black administrative presence scored significantly lower than did their White counterparts in reading and math. White students scored significantly higher than Black students in reading and math EOC testing. In Research Questions 2 and 4, when comparing the average means for Black and White students in math and reading in nonimpoverished schools with a Black administration presence, the results reflected significant differences between student groups. For all differences that were significant, Black students scored lower on math and reading than their White counterparts.

Research Questions 5-8 investigated whether significant relationships existed between race (Black or White students) and absenteeism and student suspension in schools with a Black administrative presence, differentiating between impoverished and

non-impoverished schools. Significant relationships existed between race, chronic absenteeism, and student suspension in both impoverished and non-impoverished schools with a Black administrative presence. However, caution must be exercised in interpreting these findings due to low group sizes and enrollment disparity of student race from the schools investigated.

#### Conclusions

Disproportionality in student performance data based on race was an issue for which school officials sought a remedy since the Civil Rights Movement began in the 1950s (Weissberg et al., 2016). As this study illustrated, Black students in Virginia high schools consistently scored lower on EOC tests in reading and math than their White peers did (VDOE, 2020). Research (e.g., Camera, 2018) noted that Black students with at least one Black teacher in elementary school were much more likely to have academic success, graduate from high school, and go to college than were Black students who did not have a same race teacher in their primary years. Data analysis indicated that both Black and White student performance in math and reading were significantly different with the presence of Black administration. Specifically, Black students scored lower than their White peers in math and reading in schools with a Black administrative presence. Also, data analysis indicated no significant relationship between school suspensions or chronic absenteeism and race in schools, both impoverished and non-impoverished, with Black administrative presence. This finding was significant because it reflected equitable responses regarding interventions that, while not necessarily effective, at least are not biased toward marginalized groups, particularly Black students. The major findings of this study were:

- Black students scored significantly lower on math and reading than their White counterparts in both impoverished schools and non-impoverished schools with a Black and administrative presence.
- 2. There were significant relationships between race (Black or White) in impoverished and non-impoverished schools and chronic absenteeism or student attendance. Black students in impoverished settings with a Black administrative presence tended to be suspended and chronically absent at higher rates than White students. White students in non-impoverished settings with Black administrative presence tended to be suspended and chronically absent more than Black students.

### **Recommendations for Practice**

The results of this study reflected significant differences between Black and White student performance in EOC tests in reading and mathematics with the presence of Black administrators. Black students in this study underperformed their White counterparts in reading and math, which is a trend noted by school officials over the past twelve years (NCES, 2020). Therefore, administrators need to work more diligently to close the achievement gaps between Black and White students by assessing other variables, such as socioeconomic status and a locales composite index on school funding, as predictors of exacerbated achievement gaps. They should also use community resources and early intervention programs to narrow and slow the achievement gap conundrum for Black students.

Results of this study showed that administrative race did not significantly impact student performance in schools with a poverty threshold higher than 25% (VDOE, 2020). Data from this study reflected narrowing of the performance gap between Black and

White students when Black administrators were present in non-impoverished schools. However, because over 90% of schools in this study were impoverished as designated by the VDOE, school officials must be more mindful that systemic poverty affects marginalized groups much more severely than it does White students (The Annie E Casey Foundation, 2014). Because this research indicated that Black students performed significantly better in non-impoverished settings with a Black administrative presence, it is important that administrative leaders across the commonwealth be mindful of this data when considering hiring for administrative openings.

#### **Recommendations for Future Research**

A mixed method research approach that assesses the effectiveness of intervention programs in low-income areas that targets the systemic side effects regarding poverty and Black student performance could prove significantly helpful to educational leaders. Researchers must investigate which interventions have the most statistically significant impact on student performance. Intervention programs that must be investigated include elimination of chronic absenteeism, addressing parent and community engagement, and student transitions from early childhood to kindergarten and middle to high school.

Research indicated that Black students were still largely de facto segregated by race (e.g. Garcia, 2020). According to Garcia, American Black students were more than twice as likely to attend high poverty schools and 6 out of 10 Black students attended schools where most of their peers were impoverished, Students of color, while less than 10% of White students, attended impoverished school in non-diverse racial settings, thus further disadvantaging Black students. Therefore, it is critical that further research investigate interventions necessary to redistrict school districts and make sure student

populations are diverse because, according to Garcia, the gap between Black and White student EOC test scores was larger in impoverished schools with a high percentage of students of color than in low poverty, mostly White, schools. Promoting policies that facilitate a shift away from our current pattern of heavily de facto segregated schools would assist in closing the gap between Black and White students overall Researchers should focus on high poverty areas in Virginia and investigate which areas had students transferred to newly built or consolidated schools, which enhanced overall demographic diversity and how that affected student performance.

Data from this study confirms the need for further study of SES and student performance. Future studies also should include the variable of administrative race and how those variables possibly correlate to student performance, especially in low SES areas. A mixed methods approach using quantitative analysis and qualitative research that emphasizes case study analysis, ethnography, and extensive interviews could give a deeper understanding of what combination of variables most significantly improves student performance and diminishes disproportionally low academic and social climate performance by marginalized groups. Also, in further research, school suspensions and chronic absenteeism data need to account for the racial percentage of student body. The proportion of climate measures regarding student subgroups is a critical element that needs further research and data analysis.

#### References

Achilles, C., Bain, H., Bellott, F., Boyd-Zaharis, J., Finn, J., Folger, J., Johnston, J., &
Wood, E. (1999, April). Tennessee's Student Teacher Achievement Ratio (STAR)
project. *Harvard DataVerse*. <u>https://doi.org/10.7910/DVN/SIWH9F</u>

Adkins-Sharif, J. (2020, January). A Black school leader confronts privilege and power. *ASCD Express*. <u>https://www.smartbrief.com/branded/3E572E12-3FBC-11D5-</u> <u>AD13-000244141872/2B241096-24EC-43CC-A240-36AB9CEAD053</u>

American Civil Liberties Union. (2021). Your right to equality in education.

https://www.aclu.org/other/your-right-equality-

education#:%7E:text=Yes!,%2C%20citizen%20or%20non%2Dcitizen

Anderson, M. (2016, June). Where are all the principals of color.

https://www.theatlantic.com/education/archive/2016/06/principals-ofcolor/488006/

- The Annie E. Casey Foundation. (2014) *Race for results: Building a path to opportunity* for all students. <u>https://assets.aecf.org/m/resourcedoc/AECF-RaceforResults-</u> 2014.pdf
- Armstrong, A. (2019, June 4). *Bias starts as early as preschool but can be unlearned*. <u>https://www.edutopia.org/article/bias-starts-early-preschool-can-be-unlearned</u>
- Auguste, B. G., Hancock, B., & Laboissiere, M. (2009, June,1). *The economic cost of the US education gap*. <u>https://www.mckinsey.com/industries/public-and-social-</u> <u>sector/our-insights/the-economic-cost-of-the-us-education-gap</u>

Balfanz, R., Byrnes, V., & Fox, J. (2014). Sent home and put off-track: The antecedents, disproportionalities, and consequences of being suspended in the ninth grade. *Journal of Applied Research on Children: Informing Policy for Children at Risk*, 5(2), 1-21.
<u>https://digitalcommons.library.tmc.edu/cgi/viewcontent.cgi?article=1217&context</u>

<u>=childrenatrisk</u>

Basic Statistics on Poverty in the United States. (2019). Talk Poverty.

https://talkpoverty.org/basics/

Boschma, J., & Brownstein, R. (2020, August 21). Students of Color Are Much More Likely to Attend High-Poverty Schools. *The Atlantic*. <u>https://www.theatlantic.com/education/archive/2016/02/concentration-poverty-american-schools/471414/</u>

Bowman, B., Comer, J., & Johns, D. (2018a). The power of early childhood education:
Expanding educational equity, shrinking the achievement gap. *National*Association for the Education of Young Children (NAEYC), 73(2), 14-23.
https://www.naeyc.org/resources/pubs/yc/may2018

Bowman, B., Comer, J., & Johns, D. (2018b, May). Addressing the African American achievement gap: Three leading educators issue a call to action. <u>https://www.naeyc.org/resources/pubs/yc/may2018/achievement-gap</u>

Branch, G., Hanushek, E., & Rivkin, S. (2013). School leaders matter. *Education Next*, 62-69.

http://hanushek.stanford.edu/sites/default/files/publications/Branch%2BHanushek %2BRivkin%202013%20EdNext%2013%281%29\_0.pdf

- Bryan, J., Day-Vines, N. L., Griffin, D., & Moore-Thomas, C. (2012). The disproportionality dilemma: Patterns of teacher referrals to school counselors for disruptive behavior. *Journal of Counseling & Development*, 90(2), 177-190. https://doi.org/10.1111/j.1556-6676.2012.00023.x
- Camera, L. (2018). Black teachers improve outcomes for Black students. U.S. News and World Report. <u>https://www.usnews.com/news/education-news/articles/2018-11-</u> 23/black-teachers-improve-outcomes-for-black-students
- Coelli, M., & Green, D. A. (2012). Leadership effects: School principals and student outcomes. *Economics of Education Review*, 31(1), 92-109.
   <u>https://www.sciencedirect.com/science/article/abs/pii/S0272775711001488?via%</u>
   <u>3Dihub</u>
- Cokley, K. O. (2016, October 2). What it means to be Black in the American educational system. https://theconversation.com/what-it-means-to-be-black-in-the-americaneducational-system-63576
- Callier, S., & Bonham, V. (2015). Taking a stand: The genetics community's responsibility for intelligence research. *The Hastings Center Report*, 45(51), 554-558. <u>https://doi.org/10.1002/hast.500</u>
- Data brief: Diversity and representation in PK-12 education administration. (2019, June). Center for Enterprise Strategy.

https://files.eric.ed.gov/fulltext/ED600916.pdf

Dee, T. S. (2020, August 14). *The race connection*. <u>https://www.educationnext.org/the-</u>race-connection/

- Dhuey, E., & Smith, J. (2014). How important are school principals in the production of student achievement? *Canadian Journal of Economics/Revue Canadienne* d'économique, 47(2), 634-663. <u>https://doi.org/10.1111/caje.12086</u>
- Durlak, J. A., Domitrovich, C. E., Weissberg, R. P., Gullotta, T. P., Shriver, T. P.,
  Buffett, J., Comer, J. P., Goleman, D., & Darling-Hammond, L. (2016). *Handbook of Social and Emotional Learning: Research and Practice* (Reprint ed.). The Guilford Press.
- Garcia, E. (2020, February). Schools are still segregated, and Black children are paying a price. *Economic Policy Institute*. <u>https://www.epi.org/publication/schools-are-still-segregated-and-black-children-are-paying-a-price/</u>
- Grissom, J., Egalite, A., & Lindsey, C. (2021, February). How principals affect students and schools: A systematic synthesis of two decades of research. *The Wallace Foundation*. <u>https://www.wallacefoundation.org/knowledge-</u> <u>center/Documents/How-Principals-Affect-Students-and-Schools.pdf</u>
- Get the facts on the achievement gap. (2017, January 17). *Walton Family Foundation*. <u>https://www.waltonfamilyfoundation.org/learning/flash-cards/get-the-facts-on-the-achievement-gap</u>
- Gibbon, P (2019). John Dewey: Portrait of a progressive thinker. *Humanities: The Magazine of the National Endowment of the Humanities*, 40(2).
   https://www.neh.gov/article/john-dewey-portrait-progressive-thinker
- Gottfried, M. (2010). Evaluating the relationship between student attendance and achievement in urban elementary and middle schools: An instrumental variables approach. *American Educational Research Journal*, *47*(2), 434-465.

- Gregoire, C. (2017, December 7). *A psychologist's explanation of why racism persists in America*. https://www.huffpost.com/entry/social-psychology-racism\_n\_7688910
- Grissom, J., & Bartanen, B. (2019, May). School principal race and the hiring and retention of racially diverse teachers. *Annenberg Institute at Brown University*. <u>https://edworkingpapers.com/sites/default/files/ai19-59.pdf</u>
- Gutierrez, R. (2008). A gap-gazing fetish in mathematics education: Problematizing research on the achievement gap. *Journal for Research in Mathematics Education*, 39(4), 1-9.
- Hanushek, E. (2016). What matters for student achievement. *Education Next*, *16*(2). <u>https://www.educationnext.org/what-matters-for-student-achievement/</u>
- Harber, K. D., Gorman, J. L., Gengaro, F. P., Butisingh, S., Tsang, W., & Ouellette, R. (2012). Students' race and teachers' social support affect the positive feedback bias in public schools. *Journal of Educational Psychology*, *104*(4), 1149-1161. <u>https://doi.org/10.1037/a0028110</u>
- Hanks, A., Soloman, D., & Weller, C. (2018, February 21). Systematic inequality. *Center for American Progress*. <u>https://www.americanprogress.org/issues/race/reports/2018/02/21/447051/system</u> atic-inequality/
- Harrell, E., Langton, L., Berzofsky, M., Couzens, L., & Smiley-McDonald, H. (2014, November). *Household poverty and nonfatal violent victimization*, 2008-2012. <u>https://www.bjs.gov/index.cfm?ty=pbdetail&iid=5137</u>

- Haycock, K. (2001). Closing the achievement gap. *Educational Leadership*, 58(1), 6-11. https://www.ascd.org/el/articles/closing-the-achievement-gap
- Holbrook, C., Fessler, D. M., & Navarrete, C. D. (2016). Looming large in others' eyes:
  Racial stereotypes illuminate dual adaptations for representing threat versus
  prestige as physical size. *Evolution and Human Behavior*, *37*(1), 67-78.
  <a href="https://doi.org/10.1016/j.evolhumbehav.2015.08.004">https://doi.org/10.1016/j.evolhumbehav.2015.08.004</a>
- Jarvis, S. N., & Okonofua, J. A. (2020). School Deferred: When Bias Affects School Leaders. Social Psychological and Personality Science, 11(4), 492– 498. https://doi.org/10.1177/1948550619875150
- Leithwood, K., Sun, J., & Schumacker, R. (2019). How school leadership influences student learning: A test of the Four Paths Model. *Educational Administration Quarterly*, 56(4), 570-599. <u>https://doi.org/10.1177/0013161x19878772</u>
- Lindsay, C., & Hart, C. (2017, March). Exposure to same-race teachers and student disciplinary outcomes for Black students in North Carolina. *Educational Evaluation and Policy Analysis*, <u>https://poverty.ucdavis.edu/sites/main/files/file-</u> attachments/exposure\_to\_same-race\_teachers\_and\_student.pdf
- Lopez, G. (2018, April 5). Black kids are way more likely to be punished in school than White kids, study finds. *Vox*.

https://www.vox.com/identities/2018/4/5/17199810/school-discipline-raceracism-gao

Lynch, M. (2017, November 25). How to become an education administrator in California. *The Advocate*. <u>https://www.theedadvocate.org/black-boys-crisis-</u> <u>eliminating-school-prison-pipeline/</u> Lynch, R., & Oakford, P. (2014, November). The economic benefits of closing educational achievement gaps. *Center for American Progress*. <u>https://cdn.americanprogress.org/wp-</u>

content/uploads/2014/11/WinningEconomyReport2.pdf

- Mahnken, K. (2015, August 15). Why diversity matters: Five things we know about how Black students benefit from having Black teachers. <u>https://www.the74million.org/why-diversity-matters-five-things-we-know-about-how-black-students-benefit-from-having-black-teachers/</u>
- Mayowa, A. (2019, January 11). *To get to college, it helps Black students to have a Black teacher early on*. <u>https://www.npr.org/2019/01/11/682194015/-black-teachers-helps-black-students-get-to-college?t=1640451731305</u>
- McLeod, S. (2018, January 28). Skinner Operant Conditioning. *Simple Psychology*. <u>https://www.simplypsychology.org/operant-conditioning.html</u>
- Mosteller, F. (1995, Summer/Fall). The Tennessee study of class size in the early school grades: The future of children. *Critical Issues for Children and Youths*, 5(2), 1-15. https://edsource.org/wp-content/uploads/old/STAR.pdf
- National Association of Secondary School Principals (NASSP). (2013). Leadership matters: What the research says about the importance of principal leadership. <u>https://www.naesp.org/sites/default/files/LeadershipMatters.pdf</u>

National Center for Education Statistics (2019, February). Indicator 15: Retention, suspension, and expulsion.

https://nces.ed.gov/programs/raceindicators/indicator\_rda.asp

- National Center for Education Statistics. (2020a). *Digest of Education Statistics Home*. United States Department of Education. <u>https://nces.ed.gov/programs/digest/</u>
- National Center for Education Statistics. (2020b). *Digest of Education Statistics*. United States Department of Education. <u>https://NCES.ed.gov</u>
- National Center for Education Statistics. (2020, May). *Characteristics of public-school* principals. <u>https://nces.ed.gov/programs/coe/indicator\_cls.asp</u>

Okonofua, J. A., & Eberhardt, J. L. (2015). Two strikes. *Psychological Science*, 26(5), 617-624. <u>https://doi.org/10.1177/0956797615570365</u>

- Phillips, M. & Jencks, C. (1998, March 1). The Black-White test score gap: Why it persists and what can be done. *Brookings*. <u>https://www.brookings.edu/articles/theblack-white-test-score-gap-why-it-persists-and-what-can-be-done/</u>
- Riddle, T., & Sinclair, S. (2019). Racial disparities in school-based disciplinary actions are associated with county-level rates of racial bias. *Proceedings of the National Academy of Sciences*, 116(17), 8255-8260.

https://doi.org/10.1073/pnas.1808307116

- Rimm-Kaufman, S., & Sandilos, L. (2010). Improving students' relationships with teachers to provide essential supports for learning. *American Psychological Association*. <u>https://www.apa.org/education/k12/relationships</u>
- Rosen, J. (2018, November 18). Black students who have one Black teacher are more likely to go to college. *Johns Hopkins University*.

https://hub.jhu.edu/2018/11/12/black-students-black-teachers-college-gap/

- Sanchez, J., Thornton, B., & Usinger, J. (2009, October). Increasing the Ranks of Minority Principals. ASCD Express. <u>http://www.ascd.org/publications/educational</u> <u>leadership/oct09/vol67/num02/Increasing-the-Ranks-of-Minority-Principals.aspx</u>
- Skiba, R. J., Arredondo, M. I., & Williams, N. T. (2014). More than a metaphor: The contribution of exclusionary discipline to a school-to-prison pipeline. *Equity & Excellence in Education*, 47(4), 546-564.

https://doi.org/10.1080/10665684.2014.958965

Soloman, D., Maxwell, C., & Castro, A. (2019, August 7). Systemic Inequality:
 Displacement, Exclusion, and Segregation. Center for American Progress.
 Retrieved June 9, 2021, from

https://www.americanprogress.org/issues/race/reports/2019/08/07/472617/systemi

c-inequality-displacement-exclusion-segregation/

SMART outcomes: The outcomes project. (n.d.).

https://rtc.instructure.com/courses/1152250/pages/smart-outcomes

Starr, J. P. (2019, July 9). Reducing suspensions or building relationships: Reframing the problem. *Phi Delta Kappan*, 99(8), 72-73. https://kappanonline.org/starr-studentdiscipline-suspensions-relationships/

Suh, S., Malchow, A., & Suh, J. (2014). Why did the Black-White dropout gap widen in the 2000s. *Educational Research Quarterly*, 37(4), 19-40. https://files.eric.ed.gov/fulltext/EJ1061933.pdf Superville, D. (2019, July). Many White principals feel ill-equipped to support students of color, poor children. *Education Week*.

https://blogs.edweek.org/edweek/District\_Dossier/2019/07/what\_principals\_and\_t eachers\_think\_about\_prep\_programs.html

Talebi, K. (2015, September). John Dewey: Philosopher and educational reformer. European Journal of Education Studies, 1(1), 1-13. <u>https://files.eric.ed.gov/fulltext/ED564712.pdf</u>

Tefera, A., Naff, D., Siegel- Hawley, G., Lester, A., Senechal, J., Levy, R., Palencia, V., Parry, M., & DeBusk-Lane, M. (2019, July). Understanding racial inequity in school discipline across the Richmond region. *Scholars Compass*. <u>https://scholarscompass.vcu.edu/cgi/viewcontent.cgi?article=1108&context=merc\_pubs</u>

The VLDS privacy promise. (2020) https://vlds.virginia.gov/privacy

- Truby, D. (2020, January 15). 8 ways principals can build positive school culture now. WeAreTeachers. <u>https://www.weareteachers.com/8-ways-build-positive-school-</u> culture-now/
- United States Census Bureau. (2019). *Tennessee vs. Virginia-State Comparison. (2019)*. <u>https://www.indexmundi.com/facts/united-states/quick-</u>

facts/compare/tennessee.virginia

United States Department of Education. (2016, May). *The state of racial diversity in the educator workforce*. <u>https://www.ed.gov/news/press-releases/report-state-racial-</u> <u>diversity-educator-workforce</u> United States Department of Education. (2016a, June). 2013-2014 Civil Rights Data Collection: A First Look. Office of Civil Rights.

https://ocrdata.ed.gov/assets/downloads/2013-14-first-look.pdf

- United States Department of Education (2016b, July). *The state of racial diversity in the educator workforce*. <u>https://www2.ed.gov/rschstat/eval/highered/racial-</u> <u>diversity/state-racial-diversity-workforce.pdf</u>
- United States Department of Education. (2020) *Chronic absenteeism in the nation's schools*. <u>https://www2.ed.gov/datastory/chronicabsenteeism.html#intro</u>
- Vakil, K. (2019). Richmond area schools have racial disparities in school discipline. *Dogwood*. <u>https://vadogwood.com/2019/08/05/richmond-area-schools-have-</u> significant-racial-disparities-in-school-discipline-report-finds/
- Virginia Department of Education (2018). Comprehensive Plan 2018-2023.

https://www.doe.virginia.gov/boe/plan/comprehensive-plan.pdf

Virginia Department of Education. (2020a). Data Collection: Student Record Data

Collection.

https://www.doe.virginia.gov/info\_management/data\_collection/student\_record\_c\_ ollection/index.shtml#2021\_

Virginia Department of Education. (2020b). Virginia cohort reports.

http://www.pen.k12.va.us/statistics\_reports/graduation\_completion/cohort\_reports

/index.shtml

Virginia Department of Education (2020c). Virginia school quality profiles.

https://schoolquality.virginia.gov/

- Weir, K. (2016, November). Inequality at school: What is behind the racial disparity in our education system. *American Psychological Association*. 47(10),42. https://www.apa.org/monitor/2016/11/cover-inequality-school
- Yancey-Bragg, N. (2020, June 19). What is systemic racism: Here's what it means and how you can help dismantle it.*USAToday*.

https://www.usatoday.com/story/news/nation/2020/06/15/systemic-racism-whatdoes-mean/5343549002/

Zahedani, Z., Rezaee, R., Yazdani, Z., Bagheri, S., & Nabeiei, P. (2016, July). The influence of parenting style on academic achievement and career path. *Journal of Advances in Medical Education and Professionalism, 4*(3), 130-134.
 <a href="https://www.semanticscholar.org/paper/The-influence-of-parenting-style-on-academic-and-ZAHEDANI-">https://www.semanticscholar.org/paper/The-influence-of-parenting-style-on-academic-and-ZAHEDANI-</a>
 Rezaee/488667623209c79e82ae68415faafad512ff48c4

# APPENDIX: Virginia High Schools by Region

Region 1

- Altavista
- Amelia
- James River
- Midlothian
- Thomas Jefferson
- John Marshall
- Goochland
- Meadowbrook
- Thomas Dale
- Deep Run
- Armstrong

- Bethel
- Booker T. Washington
- Phoebus
- Lake Taylor
- Jamestown
- Poquoson
- Tabb
- York
- Grafton

• Green Run

Region 3

- James Monroe
- Matthews
- King William
- King George
- Spotsylvania
- Chancellor
- James Monroe
- Northumberland

- Rappahannock
- McLean
- Herndon
- Edison
- Mount Vernon
- Freedom
- John Champe
- Yorktown Region 5
- Waynesboro
- Bath County
- Nelson County

- Harrisonburg
- Heritage
- E.C. Glass
- Albemarle Region 6
- George Washington
- Martinsville
- William Fleming
- Cave Spring
- Salem
- Northside
- Patrick County
- Dan River
- Bassett

- Virginia High
- Abingdon
- J.I. Burton
- Clintwood
- Union
- Tazewell
- Graham
- Marion

- Appomattox
- Prince Edward
- Cumberland
- Halifax
- Greensville County
- Randolf-Henry
- Park View
- Buckingham
- Nottoway

# VITA

# TIM DUNCAN

Education:	Ed.D. Doctor of Education, School Leadership, East
	Tennessee State University, Johnson City, TN, 2022
	M.S. Educational Leadership, Radford University, Radford,
	VA, 2007
	B.S. History & Social Science, Emory & Henry College,
	Emory, VA, 2002
	Washington County Virginia Schools, Emory, VA, 1990
Professional Experience:	Program Director of Student Services/Assistant Principal
	Virginia High School- Bristol Virginia Public
	Schools, 2018- Present
	Coordinator of Alternative Programs- Washington County
	Virginia Schools 2016- 2018
	History Teacher- Union High School- Wise County
	Virginia Public Schools, 2015- 2016
	Principal Northwood Middle School- Smyth County
	Virginia Public Schools, 2012- 2014
	Principal-John I Burton High School, Norton VA Public
	Schools, 2009- 2012
Honors and Awards:	Union High School, Teacher of the Year, 2015
	Abingdon High School, Teacher of the Year, 2004