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> Unlocking Potential: The Presence of African American Educators and its Impact on Student Achievement

Introduction

Try to picture a future where unique and important voices that inspire, and foster student achievement are suddenly silenced. This picture is slowly becoming a reality as the number of African American teachers in schools throughout America is declining, threatening the success of future generations. The loss of African American teachers has been detrimental to the success of African American students but has had a negative impact on all students (Milner, 2006, p. 13). My research attempts to answer the question: does having African American teachers in schools lead to higher academic achievement on standardized tests for all students? Specifically, my research focuses on analyzing the relationship between the percentage of African American teachers employed at each middle school throughout the Los Angeles Unified School District (LAUSD) and the percentage of students that met or exceeded the standard for the math section on the California Assessment of Student Performance and Progress (CAASPP) test for the 2018-2019, 2021-2022, and 2022-2023 school years. To see if there is a correlation, I compare the percentage of African American teachers at all 71 middle schools present to the average percentage of students that met the standard or exceeded in math over 3 school years.

Context and Significance

The presence of Black educators in America has been declining due to factors such as low pay, lack of support, and disrespect. According to the National Center for Education Statistics, in 2020-2021 Black teachers accounted for 3.8% of all teachers in California, while the California Department of Education (CDE) reports that Black students made up about 5.2% of the state's population, representing a significant gap between the presence of Black student and Black teachers. This is an issue because research has consistently shown that having Black teachers has a positive impact on Black students' lives and academic achievements. According to Will (2020), COVID-19 played a huge role in hurting teacher diversity. Research shows that districts choose what teachers to lay off by seniority, poor schools, and schools with large Black and Latino students are affected the most. Having teachers of the same race increases Black students' chances of college enrollment by 19 percent compared to their Black schoolmates who are not assigned a Black teacher and 13 percent more likely to graduate from high school (Gershenson, 2021, pp. 16, 20). The role-model effect is one reason Black students do so well with Black teachers (Ahébée, 2021). Having a Black teacher makes Black students more aspirational, and Black teachers tend to have higher expectations for their Black students, often using references that tap into experiences that Black students can relate to as well.

In my research, I am exploring the correlation between the percentage of African American teachers and the percentage of students that exceeded or met the standard for the math section of the CAASPP assessment in LAUSD. LA Unified is losing Black teachers at a rapid rate (Bersecker and Thomas, 2022, p. 2). The school district has one of the most diverse student populations and looking at the percentage of Black teachers and whether the loss and shortage of Black teachers is impacting the standardized test scores of all students can help us recognize and reveal strategies to

close any achievement gaps and enhance equity in education. Researching the underrepresented Black teachers in LAUSD would also highlight whether it is beneficial or not to increase diversity by recruiting and retaining them to address disparities.

Literature Review

This literature review looks at existing research on the influence of the race of instructors on students, specifically how Black educators impact education, student achievement, and the role of race congruency on student achievement. It also analyzes Black educators' struggles and why Black teachers are declining throughout America. The common theme throughout the research is the positive impact that having Black instructors has on young students, beginning in the classroom and even throughout their lives. All articles highlight themes of role modeling, mentorship, support, and improved academic outcomes for specifically Black students. There are conflicting findings on whether race congruency has as strong of an influence, if any, amongst white students and teachers, and whether Black teachers have the same kind of impact on all students as they do with Black students.

Black Teachers and Their Impact on Black Students

In Blazar's research (2024), he emphasizes the pivotal role that Black instructors play in the educational achievements and experiences of Black students. His study pulls data from the National Center for Teacher Effectiveness (NCTE), and narrows in on the instruction of math, finding that Black teachers directly boost the engagement, happiness, and self-efficacy of Black students. Blazar's research demonstrates that Black teachers serve as deeply influential role models for Black students, which contributes to these students' success in the classroom. Strikingly, Blazar's research underlines that Black teachers have a positive impact on the academic performance and school attendance of *all* students, although this impact is more pronounced in the case of Black pupils.

Blazar's findings heavily align with Gershenson et al (2018), who looked at the impact of Black teachers on Black and white students in the long run, utilizing data from the Tennessee STAR class-size experiment. This experiment was a fully randomized trial conducted to examine the impact of class sizes on K-3 students. Their findings indicate that Black students who were assigned at least one Black instructor in grades K-3 were roughly 13% more likely to graduate from high school and 19% more likely to enroll in college. The study, however, found no significant influence on white students, proposing that the advantages of same-race teachers are mainly salient for Black students. The authors used student-level data from North Carolina and replicated the Tennessee STAR results there which further authenticated their findings. The findings from this article differ from the Project STAR experiment done by Gershenson et al (2018) in "The Long-Run Impacts of Same-Race Teachers" which says that Black teachers impact only Black students. This may be because the non-black students analyzed in this study consist of more Hispanic and Asian students while the non-Black students in the Gershenson study are Whiter. This paper looks at data from the academic year of 2012-13, which is not as recent, and this is something I explore in my research. I looked at a more local level through the LAUSD in California, which has a diverse student body but struggles with effectively representing Black educators.

The Broader Implications of Same-Race Teachers

Egalite et al (2015) further explore the idea of race congruency in the classroom by examining the implications of same-race instructors on students' academic achievement by looking at grades 3-10. Based on data collected from Florida's public schools, their research finds small but significant positive effects for Black and white students when they are assigned to teachers of the same race. This partially answers my research question, but I narrow this down to LA County and specifically the diverse LAUSD with its shortage of Black instructors, specifically focusing on middle school students' performance on math standardized testing. Fascinatingly, the study suggests that previously lower-performing students benefit more from same-race teachers, showing that struggling students can be supported through race congruency. The authors also point out, however, that the benefits of white teachers for white students is less consistent across their findings, highlighting the need for more research in this area.

Ladson-Billings and Anderson (2021) provide a historical and policy-based perspective on why Black teachers are declining throughout the United States. Their conversation focuses on the long-standing impacts of segregation and discriminatory policies on the declining number of Black educators in America today, which has a significant impact on Black students. The researchers argue that to address the growing shortage of Black teachers it is critical to understand this decline of Black teachers. The dialogue between these two adds to the discussion by putting the current challenges that Black educators are facing in a broader historical context, accentuating the significance that policy has in molding the demographic makeup of the teaching workforce.

Early Evidence and Continuing Debates

Dee (2004) showcases some of the early work and studies that found a stark association between race congruency and student academic achievement. They utilized data from Tennessee's Project STAR experiment which was later utilized by Gershenson et al (2018) to look at the differences in exposure to same-race teachers for Black and white students. Dee discovered that assigning students to teachers who share the same race significantly increased math and reading scores for Black and white students, especially math scores.

Although this study provided a foundation for subsequent research, it also reveals the complexities associated with measuring the influence of race congruency, particularly regarding white students. The contradictory findings in later studies such as Egalite et al (2015) that suggest there is a positive impact of same-race assignments for white students and Gershenson et al (2018) that suggests there is no proof that the relationship between race congruency and educational outcomes is multifaceted and further research would be beneficial. My research attempts to analyze the impact of African American teachers on all students, narrowing it down to one school district in California, which is different from what was done in this study, so these factors could lead to different findings.

Conclusion

The existing research reviewed showed how the race of instructors influences students, looking at the impact of Black teachers on education, student achievement, and the role race congruency plays in student success. The research continuously highlights the influence of Black teachers on young students, including key themes of support, improved academic outcomes, and role modeling in the presence of Black teachers. The research does not provide definitive findings on whether race congruency improves outcomes for white students. There is also not much research done on whether Black teachers impact *all* students in the way they do those of the same race, which I will explore. Through my research, I will focus on the diverse middle schools in

LAUSD, looking at the distribution of African American teachers throughout, and whether there is any positive correlation with the percentage of students that exceeded or met the standard for the CAASPP standardized math test scores.

Theory & Hypothesis

I hypothesize that a higher percentage of African American teachers at a school will lead to more students meeting or exceeding the standard for standardized tests. Schools with a higher percentage of Black teachers will show improved academic achievement among all students through the measurement of standardized test scores when compared to schools with lower percentages of Black teachers. I believe this will be the case because past research has shown that Black teachers serve as role models for minority students, boosting their engagement and achievement levels, and bringing diverse perspectives and teaching practices that I think can be relevant to *all* students, as studies have shown the benefits of cultural diversity and different teaching methods in the classroom.

Research Design

My independent variable is the presence of African American teachers. I am measuring it by looking at the percentage of Black teachers at each middle school. I chose to look at the percentage of Black teachers because I wanted to see if having more Black teachers led to higher test scores. I got the data for this variable from the California Department of Education's Dataquest tool which provides a list of the number of African American teachers at each school in the Los Angeles Unified School District. I took these numbers and calculated the percentages by dividing the number of Black teachers at the school by the total number of teachers at each school. My dependent variable is the CAASPP standardized test scores in the math section for the 2018-2019, 2021-2022, and 2022-2023 school years. I am measuring this variable by looking at the percentage of students at each middle school that either met the standard or exceeded it for the math section. I got the data for the scores from the CAASPP website which provides data on how students from each middle school in LAUSD performed on the mathematics section of the test.

One control variable is the quality of the school. This is significant because a school's quality can affect students' academic achievement because of factors like funding, educational resources, opportunities, and support systems. I measured this by looking at the scores and ratings for each of these middle schools on GreatSchools, making sure to compare schools that had similar resources and accessibilities. Another control variable is socioeconomic status because this can also be a predictor of academic achievement. Looking at how many students qualify for free or reduced-price lunch is an indicator of the SES of students at the schools. I will measure this by using CDE's Dataquest tool which provides the percentage of students at each school in LAUSD that qualify for free or reduced-price meals.

I am studying students' scores in 71 middle schools in LAUSD and comparing them to the percent of African American teachers at each of the schools. I looked at the percentage of students that exceeded or met the standard for the CAASPP standardized math test scores over the 2018-2019, 2021-2022, and 2022-2023 school years.

Research Methods

To test a relationship between the percentage of African American teachers at middle schools in LAUSD and the percentage of students that exceeded or met the standard for the CAASPP standardized math test scores over the 2018-2019, 2021-2022, and 2022-2023 school

years. I conducted a correlational study to examine the relationship between my two variables: the percentage of African American teachers in LAUSD middle schools and the percentage of students that met or exceeded the standard on the math section of the CAASPP test. I conducted this study to see if there was a relationship and how strong it is. I analyzed my data by using the statistical technique of Pearson's correlation coefficient. I ran a Pearson's r correlation test.

Results

After conducting my research, I found no correlation between Black teachers and overall high standardized test scores in math for all students. I also found no correlation after controlling for socioeconomic status and school quality. This is most likely because of other factors that are influencing how students are performing on these tests more significantly.

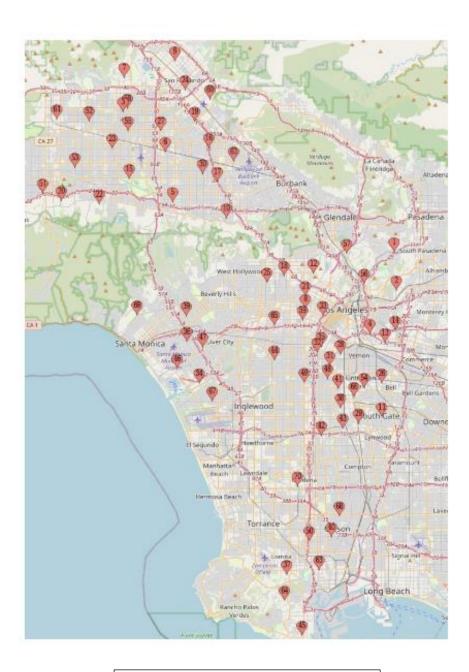
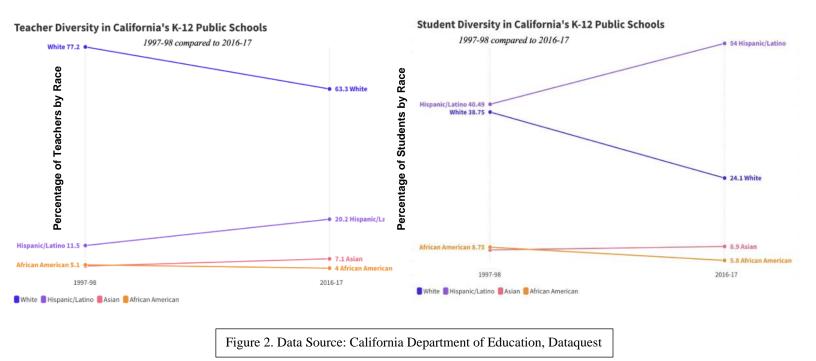


Figure 1. Data Source: Middle schools looked at through LAUSD

To provide context and show the breadth of my sample size, I created a map. This map shows all 71 middle schools in LAUSD that I analyzed. I utilized a website called MapQuest to create this map. I looked at the percentage of Black teachers at each of these middle schools and the percentage of students that met or exceeded the standard on the CAASPP test at these schools. This map shows the diversity of the schools I looked at. My data accounted for top middle schools in the district like Robert Frost Middle School located in Granada Hills, CA as well as Title 1 schools with the most low-income families like Palms Middle School in Los Angeles, CA. Conducting my research while being wary of the socioeconomic diversity in this school district allowed me to better isolate the effect of having African American teachers from the confounding influence of socioeconomic status.



The slope graphs I created above were crucial to the research I conducted and are the reason why I decided to look at the impact of the presence of African American educators for my project. I collected this data using CDE's Dataquest tool which breaks down student and teacher racial diversity by numbers—which I then turned into percentages. The graphs compare the breakdown in the 1997-98 school year and show the trends 20 years later in 2016-2017. The graph on the left shows the breakdown of teachers based on racial demographics, and the one on the right represents student's demographics based on racial demographics. They display the decline of African American educators amongst other racial groups. After researching race congruency and its countless benefits on Black students and learning that Black teachers are declining in America due to multiple factors such as disrespect, low pay, and lack of support (Lambert 2024), these graphs I created inspired me to see whether Black educators similarly benefit all students. Furthermore, I wanted to explore policy solutions to address this issue after accounting for the effects it may be having on other students as well if there was a correlation found between my variables.

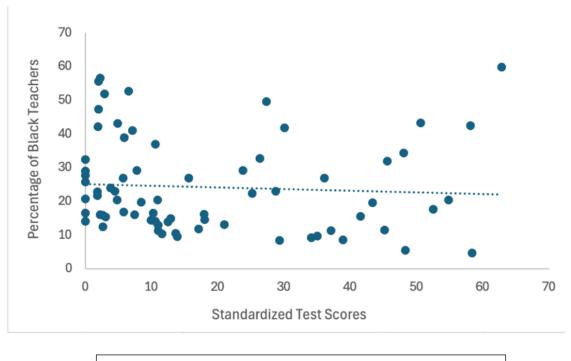


Figure 3. Data Source: California Department of Education, California Assessment of Student Performance and Progress

The scatterplot above shows my findings from the data I collected. I took the average percentage of Black teachers at all 71 middle schools I looked at over 3 school years—represented

on the y-axis, and the average percentage of middle school students that met or exceeded the standard on the math section of the CAASPP test over 3 school years—represented on the x-axis. After running a Pearson's r correlation test on my two continuous variables, I found a very weak negative correlation (r=-0.06), so there is little to no linear relationship between the two variables. I did not find a significant relationship between the percentage of Black teachers and standardized test scores, as represented by the trend in the scatterplot.

Discussion and Research Implications

My research explores whether the presence of Black teachers affects overall student achievement. The original hypothesis I presented suggested that more African American teachers at a school lead to higher academic achievement for all students. I hypothesized that higher levels of student academic achievement would be exhibited if a school had a higher percentage of Black teachers, reflecting the potential advantages of diversity in fostering student success in classrooms. The results from the data analysis showed no significant correlation between the percentage of African American educators in schools and student achievement on standardized test scores. The correlation coefficient was negative and weak (r=-0.06), and the p-value was very high and above the standard threshold for statistical significance (p=0.6). This suggests that the relationship is more likely due to random chance rather than any possible meaningful effect.

These results are most likely due to other factors that influence student scores more significantly. Academic achievement can be influenced by many complex factors that go beyond teacher demographics. Parental involvement, school funding and resources, personal student motivation, and previous academic performance are only some variables that play a huge role. Teacher demographics' impact on student achievement may be overshadowed by factors such as

these. Standardized tests may also not be an accurate measurement to capture student academic performance or the range of advantages of having a Black teacher. A teacher may have a greater influence on self-esteem, long-term academic achievement, and student engagement which may not directly be reflected through a standardized test. There could also be a lag in the impact of Black teachers that could manifest over time as students continue through their academic journeys.

The absence of a correlation is a surprising finding because of the existence of several studies I looked at showing that the presence of Black teachers positively influences student outcomes and success. My findings of no correlation highlight the necessity of more nuanced research that explores under what situations teacher demographics directly affect student achievement.

One explanation for the lack of correlation in my findings is measurement issues. Because I solely looked at standardized test scores as a measurement of academic achievement, looking at other measures such as college enrollment or student engagement might show different results. Also, if the schools I looked at in my student were not an accurate representation of the broader population, the results might not be an accurate representation of the relationship between teacher demographics and student outcomes.

Although there were not any significant findings, the study still offers crucial implications for policy. My research suggests that policymakers should consider utilizing holistic measures of success when looking at the influences of teacher diversity, such as qualitative measures like school environment, long-term academic outcomes, and student satisfaction. Even though my study could not find a link between immediate academic achievement and Black teachers, other studies and literature suggest that Black teachers are extremely valuable for encouraging a supportive learning environment and inclusivity. Retaining and recruiting efforts for Black teachers should persist, especially by providing them with the necessary resources and support so can maximize their impact on students.

My research underlines the need for more wide-ranging research that considers the multifaceted landscape of student success. Examining other outcomes such as how Black teachers affect non-academic elements like civic engagement, student mental health, and resilience is something future research could do. Longitudinal studies could also be conducted to follow students and assess the presence of any long-term influence of having a Black teacher on social and academic outcomes over time.

Limitations and Research Extensions

One limitation of my study is that there was a lack of diversity in the sample I looked at. I looked solely at middle schools in my analysis which possibly did not capture the socioeconomic, demographic, and geographic contexts of the overall population. This shortcoming may have influenced the ability to see any correlation between Black teachers and student achievement. The potentially limited diversity suggests that the findings may not be applicable to other schools that have different characteristics. The relationship between Black teachers and student success may vary based on differing urban versus rural environments, socioeconomic statuses, and racial demographics among students. Another limitation of my study is solely analyzing standardized test scores. This most likely did not capture the breadth of educational outcomes that affect teacher diversity. CAASPP test scores, for example, may not reflect critical thinking skills and student engagement—also crucial indicators of educational success. Focusing only on the scores on the math section of the CAASPP test led to the overlooking of other avenues through which Black

teachers may be influenced. This may explain why no significant correlation was found, as the advantages of teacher diversity might shine in other ways not represented by test scores.

Further research could extent analysis by including a wider range of measures that look beyond standardized test scores. For example, attendance rates, graduation rates, college enrollment rates, and student engagement can be examined by researchers. This may allow them to get a more comprehensive understanding of how Black teachers contribute to student well-being and success. This could pose the research question: how does the presence of African American educators impact non-academic outcomes such as attendance and high school graduation rates? This research could also be extended to look at how the influence of Black teachers varies based on the context of a school. Furthermore, how student achievement differs in schools with different levels of socioeconomic status, different levels of racial diversity, and urban versus rural settings could be researched. This could pose the question: does the impact of Black teachers vary by school context regarding student achievement?

In retrospect, I wish I had included other control variables like class sizes, teacher experience, and school funding. Controlling for these factors could have confounded the relationship between student achievement and teacher diversity, providing a more transparent and clear understanding of the impacts of Black teachers on student achievements. To see if the findings are consistent in other contexts and over time, further research could extend to look at different geographic regions—perhaps across all 50 states. It could be beneficial for researchers to look at the impact of Black teachers in areas with differing educational policies with wide-ranging levels of emphasis on staff diversity.

Conclusion

The research I conducted aimed to determine whether the presence of African American teachers in schools leads to higher academic achievement for all students, focusing on middle schools within LAUSD. My original hypothesis was proven wrong, as my study found no significant correlation between the percentage of students who met or exceeded the standard on the math section of the CAASPP test, and the percentage of African American teachers present at the school. Although there was no significant finding in my study, this research underlines the complexity of the factors that impact student achievement, indicating that the benefits of having a Black teacher may manifest in other ways that are not accurately represented by standardized test scores.

A more nuanced approach is necessary to analyze the vast impacts of teacher diversity beyond one measurement of test scores, considering measures such as engagement and long-term academic achievements. Also, this study points out how important it is to consider factors of context like school climate and socioeconomic status to comprehend how teacher diversity may impact student outcomes.

Although I did not find any evidence to support my original hypothesis that the presence of Black teachers directly elevates standardized test scores of all students, my research still supports the value of teacher diversity to create supportive learning environments and foster inclusivity. My findings and previous literature I reviewed suggest that retaining, recruiting, and maximizing the impact of Black teachers should persist. My research is a direct call to action for policymakers and researchers to further explore and address the complex avenues through which teacher diversity can bolster educational achievements and experiences for every student.

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