

5-2023

IS THERE A RELATIONSHIP BETWEEN PROFESSORIAL-STUDENT RACIAL MATCH AND ACADEMIC SATISFACTION OF AFRICAN AMERICAN SOCIAL WORK STUDENTS

Ashlei Armstead

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IS THERE A RELATIONSHIP BETWEEN PROFESSORIAL-STUDENT RACIAL
MATCH AND ACADEMIC SATISFACTION OF AFRICAN AMERICAN SOCIAL
WORK STUDENTS

A Project
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Social Work

by
Ashlei Armstead
May 2023

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Approved by:

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ABSTRACT

Background and Purpose: Although in most recent years, the academic achievement gap between African- American and Caucasian students have slightly decreased, it continues to be a national issue. Previous studies have found that African American students are more likely to receive disciplinary punishment, such as suspension or expulsion, causing them to have lower grades and higher dropout rates, when paired with a Caucasian teacher. On the contrary, when they are paired with an African American teacher, they tend to experience higher rates of academic satisfaction. These findings tend to derive from studies that solely focused on racial match and academic satisfaction in the primary and secondary schools; therefore, this observational study gathered cross-sectional data from 44 African American social work students to examine the relationship between professorial-student racial match and academic satisfaction in higher education. This study hypothesized that African American social work students paired with an African American professor would experience higher rates of academic satisfaction. **Methods:** Participants were recruited using convenience non-probability sampling methods. Eligible participants were self-identified as African American and current or former BASW or MSW social work students during the study recruitment period. Participants completed a short online survey. Data was gathered on the participant's demographics, professorial-student racial match, and academic satisfaction. Participants indicated the number of courses they have taken in which the professor was

African American to measure student-professorial racial match. Academic satisfaction was measured using a 7-item validated scale. Results: The participants' average age was 29.0 (SD = 6.4, range 22-45). Majority of the participants identified as female (72.73%) with an even distribution of BASW and MSW students. Participants on average took 4.4 (SD = 2.3, range 1-10) classes in which the professor identified as African American. The average academic satisfaction score in this sample was 4.4 (SD = 1.2, range = 1-5), suggesting that on average participants had high levels of academic satisfaction. Findings from the Kruskal-Wallis test revealed a statistically significant difference in academic satisfaction between students with low and high levels of student-professorial match, $\chi^2(2,44) = 7.70, p = .021$. Conclusion: Findings underscore the importance of faculty diversity in higher education, which could enhance educational outcomes for African American students and thereby close the academic achievement gap.

ACKNOWLEDGEMENTS

I would like to thank my research supervisor Dr. Lim for providing guidance and support throughout the completion of this research project. You have truly been an inspiration.

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CHAPTER ONE: PROBLEM FORMULATION

Introduction

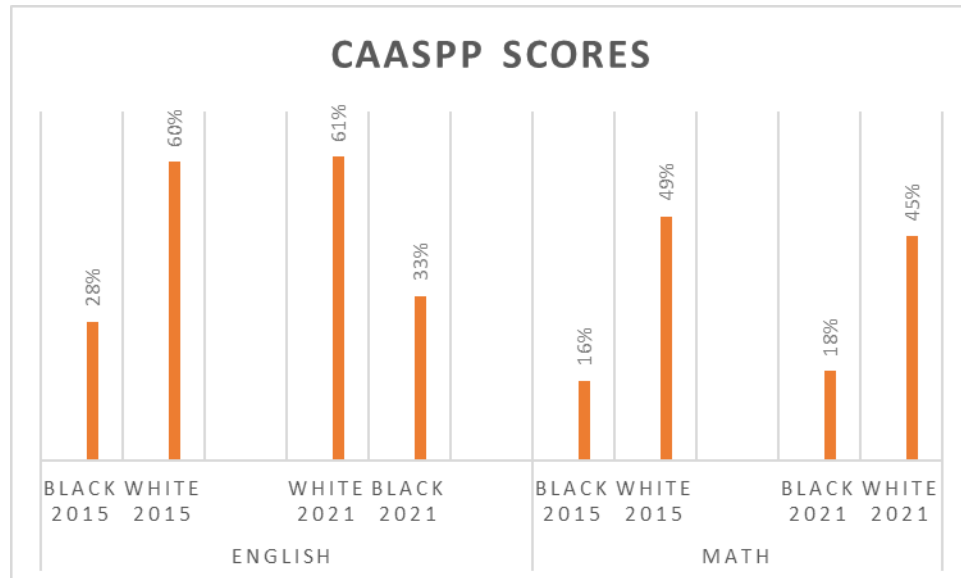
The academic achievement disparity gap is a national issue. The academic achievement gap, also known as the academic performance disparity, is the consistent inequality in academic achievement between Caucasian and minority students (Assari et al., 2021). The term was coined by James S. Coleman. In his 1966 report, known as the Coleman Report, he identified two major problems. The report revealed an enormous academic achievement gap between African American and Caucasian students, it also suggested that the gap varies across families (Downey & Condrón, 2016), due to their socioeconomic status. Although it has been 56 years since the report, there is still a significant academic disparity between African American and Caucasian students. Data suggest that the difference in standardized test scores between African American and Caucasian students approximately equates to two years of education (United Negro College Fund, 2020).

Academic Satisfaction

African American students are performing at higher rates when compared to research from five years ago (see Figure 1). When analyzing the 2015 California Assessment of Student Performance (CAASPP) scores, which is an

academic tool used to measure the performance of students in primary and secondary school in California, 28% of African American students met or exceeded their English level. In 2021, 33% of African American students met or exceeded their English level for CAASPP (KidsData, 2022). Furthermore, similar results were found when analyzing African American students' performance in math for the CAASPP. In 2015, 16% of African American students met or exceed their math level for CAASPP; in 2021, 18% met or exceeded their math level for CAASPP. Despite the improved academic achievement of African American students, they are still lagging behind the performance of Caucasian students (see Figure 1). For example, in 2021, 61% of Caucasian students met or exceeded their English levels for CAASPP, compared to 33% of African American students. Similarly, 45% of Caucasian students met or exceed their Math levels for CAASPP, compared to 18% of African American students. This data suggests that there is still a significant academic disparity between Caucasian and African American students (KidsData, 2022). This data suggest that there is still a significant academic disparity between Caucasian and African American students. Data comparing African American and Caucasian students' scores in history, science, and social studies are lacking, thus less is known about the nature of the academic achievement gaps in other subjects.

Figure 1. California Assessment of Student Performance (CAASPP) Scores of Black and White Students in 2015 and 2021



Contributors of Academic Disparity

Several factors contribute to the lower academic achievement rates in the African American community. Foremost among them is that African American students tend to spend less time in the classroom due to disciplinary issues (Williams, 2020). For example, African American students are not only two times more likely to be suspended but also more likely to receive this severe punishment without educational resources compared to their Caucasian counterparts (Bettag, 2017; Bugbee, 2019; Dhaliwal, 2021). African American students are also 2.3 times as likely to receive a referral to law enforcement or be subjected to a school-related arrest (United Negro College Fund, 2020).

Collectively, these factors hinder African American students' access to a quality education. The academic achievement disparity is also attributable to African American children being concentrated in schools with fewer resources. Minority schools tend to spend \$733 less per student compared to schools that are predominantly Caucasian. Consequently, these schools typically consist of underqualified teachers, fewer access to school counselors, fewer field trips, limited honor courses and school material such as books and laptops (United Negro College Fund, 2020), thereby further compromising the quality of education African American students receive.

Impact of Academic Disparity

Academic achievement gaps affect African Americans on both the micro/macro levels. At the micro-level, the achievement gap translates to a smaller percentage of African American students attending college. The nationwide college graduation rate for African American students is at an appalling rate of 42%. This is 20% below the 62% rate for Caucasian students (National Center for Education Statistics, 2022). At the macro level, low rates of college attendance and graduation is associated with higher rates of incarceration, homelessness, and substance abuse (Bettag, 2017; Bugbee, 2019; Dhaliwal, 2021), resulting in the cycle of poverty within the African American community. The poverty cycle is defined as a phenomenon in which poor families become destitute for at least three generations (Concern Worldwide US, 2022). Research

shows that possessing a college degree results in a higher earning, thus aiding in a higher socioeconomic status (Innovate Public Schools, 2022). Those without a college degree tend to live in poverty-stricken neighborhoods that are high in crime and drug usage, lack competitive employment opportunities, and community resources; hence the poverty cycle.

Interventions of Academic Disparity

Schools that have seen a significant increase in academic performance have certain characteristics. Research has found that these schools focused on college preparation, provided tutoring, conducted frequent assessment of students' progress, provided extra curriculum courses that were focused on English, writing, and math, and emphasized teacher-student collaboration (Miranda, 2007; Williams, 2011).

To help narrow the academic performance gap between African American and Caucasian students, several interventions targeted at the abovementioned characteristics. Many schools have implemented student-focused trainings for novice or underqualified teachers, so they are better equipped to teach. Some schools have also reduced their class sizes to increase their one-on-one student teacher interaction, as well as implemented student-teacher racial matching to encourage closer student-teacher relationships (Assari, 2021; Miranda, 2007; Williams, 2011).

Some limitations of existing studies are worth noting. First, research indicates that these interventions are most effective when trying to narrow the academic performance gap in K-12 (Assari, 2021; Miranda, 2007; Williams, 2011). There is a lack of research analyzing the academic performance of African American college students who have African American professors. In America 74% of fulltime college professors are Caucasian, with only 7% being African American (National Center for Education Statistics, 2020). This potentially contributes to the lower rates of academic performance in African American college students.

Macro-Policy Interventions

In addition to school-based interventions, there are policies that have been implemented like the No Child Left Behind (NCLB) Act of 2002 and Every Student Succeeds Act (ESSA) of 2015. The NCLB stipulates students to be taught at a high academic level, students/schools provided resources to measure students' progress, families were afforded increased accessibility to desirable pre-schools, and increased accountability for schools that showed a lack of progress (Williams, 2020). Although similar, ESSA replaced NBCLB as it modified NBCLB's provisions. Although these policies aimed to narrow the academic achievement gap, they failed to address the core root of the problem. These policies created an overly competitive school environment that solely

focused on test scores, thus changing the overall goal of learning due to it being test oriented.

CHAPTER TWO: LITERATURE REVIEW

Introduction

The absence of faculty diversity in the American education system is a national problem (Garner, 2021; Hart, 2020; Kunemund, 2020; Llamas, 2019; Rasheed, 2019; Redding, 2019; Yarnell, 2017). The majority of students enrolled in U.S. public schools derive from a diverse background (Hart, 2020; Rasheed, 2019), although 80% of U.S. teachers identify as Caucasian (Garner et al., 2021). In 2017, more than half of Caucasian fourth graders were taught by a Caucasian teacher, whereas only 23% of African American fourth graders were taught by a teacher who identified as African American (Yarnell & Bohrnstedt, 2017). This racial disparity is also apparent in higher education as most professors are Caucasian (Llamas et al., 2019). The lack of educator diversity has negative outcomes for students of color; making it an important agenda for education researchers (Hart, 2020; Kunemund, 2020; Llamas, 2019; Rasheed, 2019; Redding, 2019; Yarnell & Bohrnstedt, 2017).

Teacher's Diversity on Students' Academic Performance

One essential factor for determining which students get to participate in certain educational opportunities such as gifted programs, advanced courses, grade promotion, and extracurricular activities, is the teacher's perception of the student (Redding, 2019). Due to possible cultural misunderstandings, Caucasian

teachers are more likely in the classroom to view African American students as disobedient (Kunemund et al., 2020). Therefore, they are more likely to classify African American students as having behavioral and social problems (Hart, 2020; Rasheed et al., 2019). When committing the same offenses, such as the use of vulgar language, persistent tardiness, academic dishonesty, classroom disturbances, or engaging in school fights (Garner, 2021; Hart, 2020; Redding, 2019), African American students are twice as likely to be expelled or sent to the principal office when compared to their Caucasian counterparts (Kunemund et al., 2020), causing higher rates of absences (Garner et al., 2021). As a result of their negative perception, Caucasian teachers are less likely to recommend African American students for advanced courses (Redding, 2019; Yarnell & Bohrnstedt, 2017). In contrast, African American teachers are more likely to recommend African American students for advanced classes (Rasheed et al., 2019), and are less likely to describe them as disruptive (Redding, 2019). In fact, the accessibility of African American teachers at the elementary level is associated with a 2% increase in the uptake of advanced courses for African American middle schoolers (Hart, 2020). These findings underscore how the lack of teacher-student racial matching is negatively associated with the academic opportunity gap between African American and Caucasian students (Kunemund, 2020; Llamas, 2019; Rasheed et al., 2019).

Benefits associated with teacher-student racial matching include fewer absences, closer student-teacher relationship, higher levels of classroom

management and engagement, thus contributing to improved academic performances (Garner, 2021; Hart, 2020; Kunemund, 2020; Rasheed, 2019; Redding, 2019; Yarnell & Bohrnstedt, 2017). For example, Garner et al (2021) examined the association between teacher–child racial congruence, teacher–student relationship quality (closeness, conflict, and dependency), and later school readiness. The study included 303 preschoolers (171 boys, 132 girls) who were identified as either African American or Caucasian, as well as 24 teachers and the 16 co-teachers. Fifty-six percent of them were Caucasian, 35% were African American, and 9% were Latinx. To measure the variables mentioned above, teachers assessed the quality of their relationships with their students, and 16 co-teachers conducted assessments of the students’ school readiness by using the Preschool Behavioral and Emotional Rating Scale (PreBERS). The findings of the study indicated that teacher-student racial match is positively associated with closer teacher-student relationships and academic readiness.

Yarnell & Bohrnstedt (2017) had similar findings as it relates to student-teacher racial match and its effects on academic performance among African American fourth grade students’ English test scores. The study analyzed the English reading scores of the National Assessment for Educational Progress (NAEP) is an academic tool used to measure the academic performance of 4th, 8th, and 12th graders. Their research concluded that African American male students perform higher on the NAEP English test when they are placed with an African American teacher.

While the two previous studies focused on young children, Llamas et al. (2019), focused on college students. Similar to the previous studies, this longitudinal study analyzed the effects of racial matching on college students' academic performance. This study used data from the National Longitudinal Survey of Freshmen (NLSF), which monitored a cohort of freshmen entering 28 different universities in Fall 1999. The study comprised of 959 Asians, 916 Latinos, and 1051 African Americans, with the highest percentage being females (60%). Results revealed that having a diverse group of professors who identified as belonging to the same race as their students, resulted in students earning higher GPAs and achieving higher graduation rates.

Research Question

Is there relationship between professorial-student racial match and academic satisfaction of African American social work students.

Theory

Social identity theory (SIT) is a framework that can be used to understand the association between student-teacher racial/ethnic match and academic performance. Social identity refers to the way individuals view themselves based on their affiliation with a particular group. It asserts that individuals tend to favor those who belong to a similar group (Llamas et al., 2019). Therefore, this

framework can be used examine how student-teacher racial match effects African American social work students' academic satisfaction.

Hypothesis

African American Social work students are more likely to experience higher academic satisfaction when matched with an African American professor.

Research Objective

The study aims to contribute to the existing body of literature on how professorial-student racial match affects African American students' academic satisfaction, by examining this relationship in African American social work students.

Significance of Study

The enrollment of minorities in higher education continue to increase. Understanding the ways to enhance African American students' performance and persistence in higher education has the potential to not only increase their graduation rates but also their socioeconomic opportunities.

CHAPTER THREE:

METHODOLOGY

Study Design

This observational study gathered cross-sectional data from 44 African American social work students to determine if there is a relationship between student-professorial racial match and students' academic satisfaction. Given the cross-sectional nature of this study, in which data is gathered at a specific time, results cannot be inferred as causation, in which conclusions cannot be made that ones' academic satisfaction is solely based on student-professorial racial match.

Participants

Participants were those aged 18 or older, self-identified as African American, could read and write in English, and were current or former BASW or MSW social work students during the study recruitment period. Individuals who graduated before 2020 and those who were enrolled in or graduated from a dual major program were not eligible to participate in the study.

Recruitment

Using convenience non-probability sampling methods, participants were recruited from different social media platforms. Participants were informed of the research opportunity through an online advertisement posted on one of the research investigators personal Facebook page and LinkedIn account. The same research investigator invited individuals in her social network to share the advertisement with their respective acquaintances.

Individuals interested in participating scanned a QR code or clicked on a link provided in the advertisement, which directed them to the online survey. Before completing the survey, participants completed a screening questionnaire to confirm their eligibility for study participation. Once eligibility was established, participants were invited to read informed consent. Participants provided consent to participate by checking a box at the bottom of the informed consent document that read, "I have read and understood the consent document and agree to participate in your study."

Study Procedure

Those who provided consent were invited to complete a survey that gathered data on participants' sociodemographic characteristics, academic satisfaction, and experience with student-professorial racial match. The survey took less than 5 minutes to complete. Participants did not receive monetary

compensation. The study protocol has been approved by the California State University, San Bernardino, Institutional Review Board.

Measures

Demographic Characteristics

Data on participants' age at the time of research, gender (male, female, nonbinary, prefer not to say), marital status (married or in a relationship, previously married, or single), family size, degree status/title (current BASW, current MSW, Former BASW, former MSW), and questions regarding the participant's academic satisfaction were gathered.

Student-Professorial Racial Match

Participants were asked the following question, 'how many courses have you taken in which the professor was African American', to measure student-professorial racial match. This variable was converted to a categorical variable with three levels: low, medium, and high. Low level of professorial-student matched was defined as having two or less courses with an African American/Black instructor. Low level of professorial-student matched was defined as taking 0-3 classes with an African American professor, medium was defined as 4-6, and high is 7 or more classes.

Academic Satisfaction

Academic satisfaction was measured using a 7-item validated scale developed by Lent and Brown (2006). Each item (e.g., "for the most part, I am

enjoying my coursework") is rated on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). The participants' responses were averaged. For instance, a participant who scored a three (undecided), total score were summed to 21 possible points, and then divided by the total number of scale items (seven), to get an average score of three. The highest average score is five, indicating a high rate of academic satisfaction, and the lowest is a one, indicating a low level of academic satisfaction. This scale has been shown to have good psychometric properties when measuring academic satisfaction, such as test-retest reliability, in which participants scores remained consistent. (Lent and Brown, 2006).

Statistical Analysis

Descriptive statistics were derived for sample's group age, gender, marital status, degree status, and family size. The relationship between professorial-student racial match and academic satisfaction among African American social work students was investigated using a Pearson- product moment correlation coefficient. Scatterplot was generated to ensure linearity between the variables. Analyses were conducted using IBM SPSS 28.0, statistical significance was set at $p < .05$.

To determine whether there was a difference in the levels of academic satisfaction among participants of different professorial-student racial match (low, medium, and high match), a one-way between-groups analysis of variance

(ANOVA) was conducted. The Levene's Test for Homogeneity of Variance was used to determine if the variance in scores differed across groups. The assumption of normality was violated; therefore, the Kruskal-Wallis Test was conducted. Statistical significance was set at $p < .05$. All analyses were conducted with IBM SPSS 28.0.

CHAPTER FOUR:

RESULTS

Descriptive Statistics

Demographic Characteristics

The study sample consisted of 44 African American social work students. The participants' average age was 29.0 (SD = 6.4, range 22-45). As displayed in Table 1, majority of the participants identified as female (n =32, 72.73%), with only nine participants (20.45%) identifying as male, and an even lower identifying as nonbinary (n =3, 6.82%). There was an equal distribution between participants who identified as married or in a relationship (n = 22, 55.00%) and those who identified as unmarried (n = 22, 55.00%). The average family size of the study's participants was 2.3 (SD = 1.6, range = 1–7). At the time of the data collection, the majority of the participants obtained or were completing their master's degree in social work (MSW) (n =26, 59.09%), while only 18 (40.91%) participants were enrolled or obtained their Bachelors.

Professorial-Student Racial Match

As displayed in Table 1, participants on average took 4.4 (SD = 2.3, range 1-10) classes in which the professor identified as African American.

Academic Satisfaction

The average academic satisfaction score in this sample was 4.4 ($SD = 1.2$, range = 1-5). This finding suggests that, on average, the participants had high levels of academic satisfaction.

Table 1 Descriptive Statistics of Participants Demographic Characteristics, Professorial- Student Racial Match, and Academic Satisfaction ($N = 44$)

Variable	n (%)
Age, $M(SD)$	29.0 (6.4)
Gender	
Female	32 (72.73)
Male	9 (20.45)
Nonbinary	3 (6.82)
Marital Status	
In a relationship or married	22 (50.00)
Unmarried ^a	22 (50.00)
Degree Status	
BASW ^c	18 (40.91)
MSW ^d	26 (59.09)
Family size, $M(SD)$	2.3 (1.6)
Professorial-Student Racial Match	4.4 (2.3)
Academic Satisfaction, $M(SD)$ ^b	4.4 (1.2)

^aUnmarried comprised of single and previously married

^bAcademic satisfaction was measured with a 7-item scale with higher scores representing higher levels of academic satisfaction

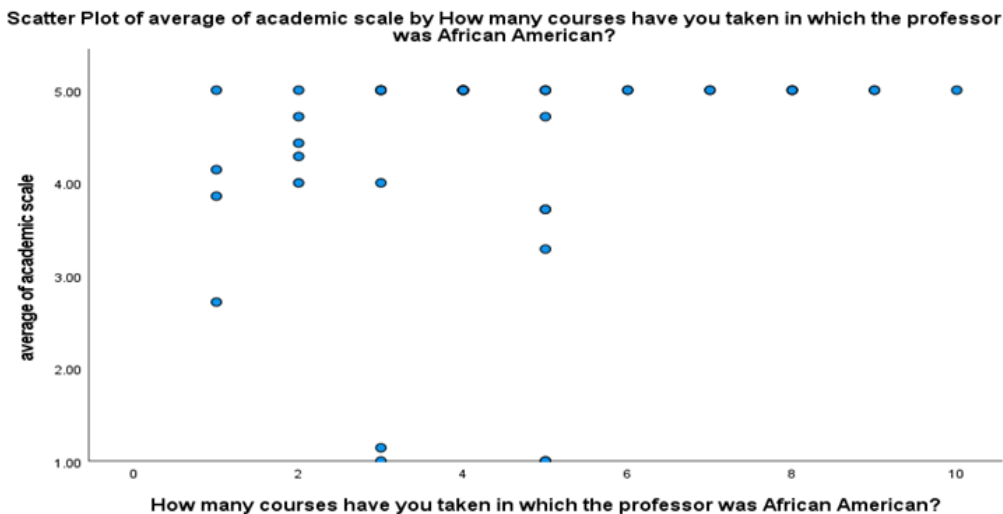
^cComprised of those who are obtaining or previously obtained BASW

^d Comprised of those who are obtaining or previously obtained MSW

Bivariate Analyses

The scatterplot was generated to examine the relationship between professorial-student racial match and academic satisfaction among African American social work students (see Figure 2). The variables appeared to have a weak but moderate positive linear relationship, in which higher levels of professorial-student racial match appeared to be associated with higher levels of academic satisfaction.

Figure 2. Scatterplot of Academic Satisfaction by Level of Professorial-Student Racial Match



Pearson Product-Moment Correlation

Findings from the correlation analysis indicated a weak to moderate correlation between professorial-student racial match and academic satisfaction, $r(44) = .22$, $p = .15$, with higher levels of professorial-student racial match

associated with higher rates of academic satisfaction; however, the correlation coefficient was statistically insignificant.

One-Way Analysis of Variance (ANOVA)

Table 2 displays the mean scores of academic satisfaction among the three different participant groups, those with low, moderate, and high professorial-student racial match. Academic satisfaction was the highest among those with the highest professorial-student racial match ($M = 5.0$, $SD = .0$), followed by participants in the moderate group ($M = 4.4$, $SD = 1.3$), and the lowest among those with the lowest professorial-student racial match ($M = 4.0$, $SD = 1.3$).

Table 2. Academic Satisfaction by Professorial-Student Racial Match

Level of Matching	$M (SD)$	Mdn
Low	4.0 (1.3)	4.36
Moderate	4.4 (1.3)	5
High	5.0 (.0)	5

The variance in academic satisfaction did not appear equal. Indeed, the result of the Levene's Test of Homogeneity of Variance indicated that the

variance in scores were significantly different from each other, $p < .018$.

Therefore, the assumption of homogeneity of variance was violated. The results of the Robust Test of Equality of Mean could not be performed due to the lack of variance of academic satisfaction among those with the highest level of professorial-student racial match. The results of the one-way between-group ANOVA revealed a non-significant difference in academic satisfaction among the three groups of participants, $F(2, 41) = 1.88, p = .16$.

Although the difference in academic satisfaction was statically insignificant, the difference between the group were between medium and large as evidenced by the effect size of 0.08 calculated using eta squared.

Kruskal-Wallis Test

The Kolmogorov-Smirnov and Shapiro-Wilk Test of Normality revealed that the distribution of the continuous variable, academic satisfaction, was not normal, $p = .15$. This finding, coupled with the violation of the homogeneity in variance, indicate that the Kruskal-Wallis test should be conducted.

The test revealed a statistically significant difference in academic satisfaction among the two out of the three groups, $\chi^2(2,44) = 7.70, p = .021$. Individuals with low level levels of academic professorial-student racial match had the lowest levels of academic satisfaction (Mdn = 4.36), while those with moderate (Mdn = 5.00), and the high levels of professorial-student racial match (Mdn = 5.0) had the highest levels of academic satisfaction (see Table 2). Post-hoc comparisons revealed that participants with low professorial-student racial

match had statistically significantly lower levels of academic satisfaction compared to those with high levels of professorial-student racial match, $p = .019$.

CHAPTER FIVE: DISCUSSION

The aim of this research study was to understand the relationship between professorial-student racial match and academic satisfaction among African American social work students. The variables appeared to have a weak but moderate positive linear relationship, in which higher levels of professorial-student racial match appeared to be associated with higher levels of academic satisfaction. Academic satisfaction was the highest among those with the highest professorial-student racial match, followed by participants in the moderate group, and the lowest among those with the lowest professorial-student racial match, suggesting how staff diversity in higher education can help enhance African American students' performance and persistence, which not only has the potential to increase their graduation rates but also their socioeconomic opportunities. Therefore, the findings from this study did support the research study's hypothesis in which African American social work students are more likely to experience higher academic satisfaction when matched with an African American professor.

Furthermore, findings from this study align with previous research studies on racial match and academic satisfaction. Previous research studies found that minority students have higher chances of achieving academic success when paired with instructors of the same racial background (Garner, 2021; Hart, 2020;

Kunemund, 2020; Llamas, 2019; Rasheed, 2019; Redding, 2019; Yarnell, 2017). Data also found that having a diverse group of professors who identified as belonging to the same race as their students, resulted in students earning higher GPAs and achieving higher graduation rates (Llamas, 2019). Some noted benefits of professorial-student racial match include fewer absences, closer student-teacher relationship, higher levels of classroom management and engagement, thus contributing to improved academic satisfaction (Garner, 2021; Hart, 2020; Kunemund, 2020; Rasheed, 2019; Redding, 2019; Yarnell & Bohrnstedt, 2017), hence why the theory, social identity, which asserts that individuals tend to favor those who belong to a similar group (Llamas et al., 2019), can be used to explain why African American students are more likely to experience higher rates of academic satisfaction when paired with an African American professor.

Limitations

This study's sample size consisted of 44 participants; this small sample size could have limited the generalizability of the research findings. Previous research studies have used larger sample sizes providing them with more representative data collection and results. Another limitation to this research study is its cross-sectional nature, in which data is gathered at a specific time, results cannot be inferred as causation, in which conclusions cannot be made

that ones' academic satisfaction is solely based on student-professorial racial match. Thirdly, to measure the variable academic satisfaction, a 7-item validated scale developed by Lent and Brown (2006) was utilized. Although this scale has been shown to have good psychometric properties when measuring academic satisfaction, (Lent and Brown, 2006), it lacked question diversity, in that it only used a few questions to measure academic satisfaction.

Conclusion

This study investigated the relationship between professorial-student racial match and academic satisfaction among African American social work students. Findings underscore the need for diversity not only in primary and secondary schools, but also in higher education. Establishing a more diverse and inclusive educational staff may be a promising step forward in enhancing academic satisfaction in this population. Furthermore, previous research studies tend to examine the relationship between racial match and academic satisfaction in k-12th settings; therefore, to contribute to the existing body of literature further studies can be conducted to examine its effects in higher education, expanding the exploration to include students from more diverse backgrounds (e.g., majors beyond social work).

APPENDIX A:
RESEARCH QUESTIONNAIRE

African American social work students' academic satisfaction

Start of Block: Screener

Q2 Thank you for your Interest in this study, to ensure your eligibility please respond to all of the following questions. If you answer no to any of the first four questions, you will not be eligible to participant and may exist the survey.

Q3 Are you at least 18 years old ?

yes (1)

Q4 Do you self-identify as an African American ?

yes (1)

Q5 Are you a current or former BASW or MSW student ?

yes (1)

Q6 If you were a social work student (BASW/MSW), did you graduate no earlier than 2020 ?

yes (1)

End of Block: Screener

Start of Block: Demographics

Q9 What is your age?

Q12 What is your gender?

- Male (1)
 - Female (2)
 - Nonbinary (3)
 - Prefer not to say (4)
-

Q13 What is your marital status?

- Married or in a relationship (1)
 - Previously married (2)
 - Single (3)
-

Q15 What is your family size?

Q16 What is your degree status?

- Current BASW (1)
 - Former BASW (2)
 - Current MSW (3)
 - Former MSW (4)
-

Q17 How many courses have you taken in which the professor was African American?

End of Block: Demographics

Start of Block: Academic satisfaction

Q10 Using the scale below, indicate your level of agreement with each of the following statements.

Q11 How much do you agree or disagree with the following statements:

	Strongly disagree (1)	disagree (2)	undecided (3)	Agree (4)	Strongly agree (5)
I feel satisfied with the decision to major in my intended field (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am comfortable with the educational atmosphere in my major field (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
For the most part, I am enjoying my coursework (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am generally satisfied with my academic life (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy the level of intellectual stimulation in my courses (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel enthusiastic about the subject matter in my intended major (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like how much I have been learning in my classes (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Academic satisfaction

(Developed by Robert Lent)

APPENDIX B:
INFORMED CONSENT

The study in which you are asked to participate is designed to determine the relationship between student-professor racial matching and African American social work students' academic satisfaction. The study is being conducted by Ashlei Armstead, a graduate student, under supervision of Dr. Caroline Lim, Professor in the School of Social Work at California State university San Bernadino (CSUSB). The study has been approved by the Institutional Review Board Work-Sub-Committee, California State university, San Bernadino

PURPOSE: The purpose of this study is to determine the relationship between student-professor racial matching and African American social work students' academic satisfaction.

DESCRIPTION: Participants will be asked to complete a few screening demographic questions followed by a survey on your experience with student-professor racial match and your academic satisfaction as a social work student.

PARTICIPATION: Your participation is completely voluntary. You do not have to answer any questions you do not wish to answer. You may skip or not answer any questions. You can also freely withdraw from participation at any time. To do so, simply exit the survey. The alternative to participation is not to participate.

CONFIDENTIALITY: We will be gathering anonymous data. This means we will not collect any information that will identify you (e.g., your name, social security number, contact information, video recording). We will only present findings from this study in a group format so that no results will be connected to a participant. We will protect the data against inappropriate access by restricting data access to authorized study personnel. We will store the data on computers or laptops secured with individual ID plus password protection. Additionally, the folder containing the data will be protected with a password known to authorized study personnel. We will destroy the data three years after the project has ended.

DURATION: The survey will take 15 minutes to complete.

RISKS: Although not anticipated, there may be some discomfort in answering some of the questions. You can choose to skip or stop answering any questions that make you uncomfortable. You can also withdraw from participation at any time with no consequences. To do so, simply exit the survey.

BENEFITS: There will not be any direct benefits to the participants. However, findings from the study will contribute to the body of knowledge on promoting African American students' academic success.

CONTACT: If you have any questions about the study, please feel free to contact Dr. Lim at caroline.lim@csusb.edu. You can also contact the California State University, San Bernardino, Institutional Review Board at 909-537-7588.

RESULTS: Results for this study can be found at California State University, San Bernardino, John M. Pfau Library (5500 University Parkway, San Bernardino, CA 92407; 909-537-5090/5091) after July 2023.

CONFIRMATION STATEMENT

- I have read and understand the consent document and agree to participate in your study.

APPENDIX C:
IRB APPROVAL

December 15, 2022

CSUSB INSTITUTIONAL REVIEW BOARD

Administrative/Exempt Review Determination

Status: Determined Exempt

IRB-FY2023-91

Caroline Lim Ashlei Armstead
CSBS - Social Work
California State University, San Bernardino
5500 University Parkway
San Bernardino, California 92407

Dear Caroline Lim Ashlei Armstead:

Your application to use human subjects, titled “How does professor-student racial matching affect African American social work students' academic satisfaction” has been reviewed and determined exempt by the Chair of the Institutional Review Board (IRB) of CSU, San Bernardino. An exempt determination means your study had met the federal requirements for exempt status under 45 CFR 46.104. The CSUSB IRB has weighed the risks and benefits of the study to ensure the protection of human participants.

This approval notice does not replace any departmental or additional campus approvals which may be required including access to CSUSB campus facilities and affiliate campuses. Investigators should consider the changing COVID-19 circumstances based on current CDC, California Department of Public Health, and campus guidance and submit appropriate protocol modifications to the IRB as needed. CSUSB campus and affiliate health screenings should be completed for all campus human research related activities. Human research activities conducted at off-campus sites should follow CDC, California Department of Public Health, and local guidance. See CSUSB's [COVID-19 Prevention Plan](#) for more information regarding campus requirements.

You are required to notify the IRB of the following as mandated by the Office of Human Research Protections (OHRP) federal regulations 45 CFR 46 and CSUSB IRB policy. The forms (modification, renewal, unanticipated/adverse event, study closure) are located in the Cayuse IRB System with instructions provided on the IRB Applications, Forms, and Submission webpage. Failure to notify the IRB of the following requirements may result in disciplinary action. The Cayuse IRB system will notify you when your protocol is due for renewal. Ensure you file your protocol renewal and continuing review form through the Cayuse

IRB system to keep your protocol current and active unless you have completed your study.

- **Ensure your CITI Human Subjects Training is kept up-to-date and current throughout the study.**
- **Submit a protocol modification (change) if any changes (no matter how minor) are proposed in your study for review and approval by the IRB before being implemented in your study.**
- **Notify the IRB within 5 days of any unanticipated or adverse events are experienced by subjects during your research.**
- **Submit a study closure through the Cayuse IRB submission system once your study has ended.**

If you have any questions regarding the IRB decision, please contact Michael Gillespie, the Research Compliance Officer. Mr. Michael Gillespie can be reached by phone at (909) 537-7588, by fax at (909) 537-7028, or by email at mgillesp@csusb.edu. Please include your application approval number IRB-FY2023-91 in all correspondence. Any complaints you receive from participants and/or others related to your research may be directed to Mr. Gillespie.

Best of luck with your research.

Sincerely,

King-To Yeung

King-To Yeung, Ph.D., IRB Chair
CSUSB Institutional Review Board

KY/MG

REFERENCES

- Assari, S., Mardani, A., Maleki, M., Boyce, S., & Bazargan, M. (2021). Black-White achievement gap: Role of race, school urbanity, and parental education. *Pediatric Health, Medicine and Therapeutics*, *12*, 1–11.
<https://doi.org/10.2147/phmt.s238877>
- Bettag, G. (2017). Lizbet Simmons: The prison school: Educational inequality and school discipline in the age of mass incarceration. *Journal of Youth and Adolescence*, *46*(11), 2376–2378. <https://doi.org/10.1007/s10964-017-0761-x>
- Bugbee, B. A., Beck, K. H., Fryer, C. S., & Arria, A. M. (2019). Substance use, academic performance, and academic engagement among high school seniors. *Journal of School Health*, *89*(2), 145–156.
<https://doi.org/10.1111/josh.12723>
- Concern Worldwide US. (2022, April 15). *The cycle of poverty explained | Concern worldwide US*. Concern Worldwide.
<https://www.concernusa.org/what-we-do/cycle-of-poverty/>
- Dhaliwal, T. K., de Gregorio, S., Owens, A., & Painter, G. (2021). Putting homelessness in context: The schools and neighborhoods of students experiencing homelessness. *The ANNALS of the American Academy of Political and Social Science*, *693*(1), 158–176.
<https://doi.org/10.1177/0002716220987830>

Downey, D. B., & Condrón, D. J. (2016). Fifty years since the Coleman report.

Sociology of Education, 89(3), 207–220.

<https://doi.org/10.1177/0038040716651676>

Garner, P. W., Shadur, J. M., & Toney, T. (2021). The effects of teacher–child

racial congruence, child race, and emotion situation knowledge on

teacher–child relationships and school readiness. *Psychology in the*

Schools, 58(10), 1995–2016. <https://doi.org/10.1002/pits.22567>

Hart, C. M. D. (2020). An honors teacher like me: Effects of access to Same-

Race teachers on black students' Advanced-Track enrollment and

performance. *Educational Evaluation and Policy Analysis*, 42(2), 163–187.

<https://doi.org/10.3102/0162373719898470>

Innovate Public Schools. (2022, May 14). *Why are black and latino students*

falling further behind? |Innovate public schools. Innovate Public Schools |

A World-Class Public School for Every Student.

[https://innovateschools.org/research-and-data/learning-loss/why-are-](https://innovateschools.org/research-and-data/learning-loss/why-are-black-and-latino-students-falling-further-behind/)

[black-and-latino-students-falling-further-behind/](https://innovateschools.org/research-and-data/learning-loss/why-are-black-and-latino-students-falling-further-behind/)

KidsData. (2022). *Kidsdata: Data and resources about the health of children*.

Kidsdata.Org. Retrieved June 12, 2022, from <https://www.kidsdata.org/>

Kunemund, R. L., Nemer McCullough, S., Williams, C. D., Miller, C. C.,

Sutherland, K. S., Conroy, M. A., & Granger, K. (2020). The mediating role

of teacher self-efficacy in the relation between teacher–child race

mismatch and conflict. *Psychology in the Schools*, 57(11), 1757–1770.

<https://doi.org/10.1002/pits.22419>

Lent, R. W., & Brown, S. D. (2006). On Conceptualizing and Assessing Social Cognitive Constructs in Career Research: A Measurement Guide. *Journal of Career Assessment*, 14(1), 12–35.

<https://doi.org/10.1177/1069072705281364>

Llamas, J. D., Nguyen, K., & Tran, A. G. (2019). The case for greater faculty diversity: Examining the educational impacts of student-faculty racial/ethnic match. *Race Ethnicity and Education*, 24(3), 375–391.

<https://doi.org/10.1080/13613324.2019.1679759>

Miranda, A., Webb, L., Brigman, G., & Peluso, P. (2007). Student success skills: A promising program to close the academic achievement gap for african american and latino students. *Professional School Counseling*, 10(5), 2156759X0701000. <https://doi.org/10.1177/2156759x0701000506>

National Center for Education Statistics. (2022, February 19). Indicator 19: College participation rates.

https://nces.ed.gov/programs/raceindicators/indicator_rea.asp

Rasheed, D. S., Brown, J. L., Doyle, S. L., & Jennings, P. A. (2019). The effect of Teacher–Child race/ethnicity matching and classroom diversity on children’s socioemotional and academic skills. *Child Development*, 91(3).

<https://doi.org/10.1111/cdev.13275>

- Redding, C. (2019). A teacher like me: A review of the effect of Student–Teacher racial/ethnic matching on teacher perceptions of students and student academic and behavioral outcomes. *Review of Educational Research*, 89(4), 499–535. <https://doi.org/10.3102/0034654319853545>
- United Negro College Fund. (2020, March 20). *K-12 disparity facts and statistics*. UNCF. Retrieved June 12, 2022, from <https://unconf.org/pages/k-12-disparity-facts-and-stats>
- Williams, A. (2011). A call for change: Narrowing the achievement gap between white and minority Students. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 84(2), 65–71. <https://doi.org/10.1080/00098655.2010.511308>
- Yarnell, L. M., & Bohrnstedt, G. W. (2017). Student-Teacher racial match and its association with black student achievement: An exploration using multilevel structural equation

