“BEING BLACK IS SO BEAUTIFUL”: EXPLORING THE MEDIATION POTENTIAL OF RACIAL IDENTITY ON THE RELATIONSHIP BETWEEN SCHOOL RACIAL CLIMATE AND ACADEMIC SELF-CONCEPT, A MIXED METHODS INVESTIGATION

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ABSTRACT

According to the phenomenological variant of ecological systems theory (PVEST; Spencer, 1997), school racial climate is an environmental factor that can impact the lives of Black youth and adolescents in a multitude of ways, including their academic self-concept. One's racial identity has been mostly viewed as a positive, protective factor. Still, it has influenced a range of outcomes in school-aged youth, such as one's perceptions of stress, depressive symptoms, and psychological well-being in both positive and negative ways (Chavous et al., 2003; Seaton et al., 2019, Sellers et al., 2006). Through a mixed-method, explanatory sequential design, correlation- and regression analyses were utilized cross-sectionally to examine the mediating role of racial identity on the relationship between school racial climate and academic self-concept. One hundred and one high school- and college students reflected on their high school experience across the United States (e.g., Texas, Pennsylvania, Michigan, etc.). Racial identity (e.g., private regard, public regard, centrality) was not found to mediate the relationship between school racial climate and academic self-concept. However, statistically significant relationships were found between school racial climate and academic self-concept, as well as between the racial identity subscale, public regard, and school racial climate. A total of nine students with varying school racial climate perspectives were interviewed to provide a comprehensive understanding of Black youth's perspectives on their racial identity, school racial climate, and academic self-concept. Implications of the study inform schools on how to promote racial identity within the school environment via an equity, fairness, and diversity lens.

This dissertation is dedicated to my late grandparents, James Poole, Ollie Sandifer Sr., Pearlie Sandifer, and solely living grandparent, Ida B. Poole.

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CHAPTER 1: INTRODUCTION

Youth and adolescents spend a substantial number of their awake hours in school. School climate is purported to be the best indicator of school outcomes, including academic achievement, future student success such as graduation rates, and academic self-concept (Schneider & Duran, 2009; Thapa et al., 2013). According to the National School Climate Council (2007) a "positive school climate, by definition, is characterized by strong collaborative learning communities and promotes cooperative learning, group cohesion, respect, and mutual trust." It has been positively associated with positive psychosocial development and mental health outcomes; and is known to reduce negative trajectories such as bullying, dropout, and suspensions (Konold et al., 2017). With that said clear racial differences in perceptions of school climate are evident (Voight et al., 2013; 2015).

Issues with unfair treatment in policies and disproportionate suspension rates are common for racial and ethnic minority (REM) students who report their school experiences. For instance, Black and Hispanic/Latino students report they are seven times more likely to get in trouble for lesser offenses than their White counterparts; and are three times more likely to get suspended or expelled (Penn-Staff et al, 2019; Ruck & Wortley, 2002; Skiba et al., 2011). Not only are these findings disparate from White/European students but they affect how students internalize and attribute their sense of belonging to their school environment. For example, Black students viewed their teacher's discriminatory classroom treatment as implicit bias specifically toward minoritized racial groups. They held this belief from previous experiences of their teachers interpreting their behaviors differently from their White peers (Sheets, 2002). These negative experiences have been known to correlate with academic failure, negative feelings towards school, increased alienation, decreased learning opportunities, and dropout from school

thus warranting intervention (Ruck & Wortley, 2002). More recently, Black and Biracial students reported being 12 times more likely, and Latino students reported being four times more likely to be targeted for suspension compared to White students (Pen-Staff et al., 2019). Also, it was reported REM students receive less support from their teachers and adults and feel less respected overall. If students perceive there to be racial differences at the school-, teacher-, and peer levels, this is concerning to the acclaimed positive school climate that school districts strive to create.

School communities need to encapsulate all student experiences, yet many school climate measures do not capture race-related experiences within their school-based assessments. REM youth's perceptions of what constitutes a positive school climate must be acknowledged and enveloped in school climate measures (Scheider & Duran, 2010). School districts can use this information to inform practices addressing all student needs. As a result, these efforts can help schools facilitate healthy psychosocial development and the promotion of positive academic outcomes in totality for the students they serve.

School Racial Climate

School districts assess their school climate on dimensions of interpersonal relationships, physical and emotional safety, learning and organizational practices, and overall engagement as healthy indicators of student development within their school environment (National School Climate Council, 2007). Evidence to date suggests that Black students report less favorable perceptions of school climate compared to other racial groups even within the same school posing why this might be the case (Bottani et al., 2016; Mattison & Aber, 2007; Montoro et al., 2021; Voight et al., 2015; Watkins & Aber, 2009). Nascent literature (Byrd, 2015; Smith et al., 2020; Voight et al., 2015) seeks to examine school climate more critically to explain these

differences through *school racial climate*. It is speculated that less rigorous academic expectations including tracking, inequities in discipline, and a lack of cultural diversity contribute to Black students' lower reports of school climate. According to Voight et al. (2015), gaps in academic achievement differ between White/European and REM students, and these gaps are experiences within the same school or across different schools regardless of the racial composition or financial resources of the schools, known as the *racial climate gap*. It was found that White and Asian students were more likely to report a positive school climate inclusive of high levels of safety, support, and connectedness compared to Black students, American Indian, and Hispanic students (Voight et al., 2013). More specifically, the racial-climate gap highlights the double negative nature of school climate and academic outcomes specifically for REM students when unaddressed (Jones et al., 2021; Voight et al., 2015). Keeping this in mind, the findings of the study determined that when respect for cultural diversity was evident in the school culture, REM students felt safer and more supported by their school environment, and simultaneously their academic outcomes improved narrowing racial gaps (Voight et al., 2015). This information suggests there are aspects within the school environment that are not captured in the "traditional" school measures which may contribute to REM students' feelings of connectedness and academic performance. Schools that assess their school racial climate from the perspective of different racial groups are in a better position to have a holistic understanding of how to foster a positive school climate for all students, which can improve academic outcomes in the long term (Voight 2013, 2015).

School racial climate refers to perceptions of race relations, racial fairness, racial treatment, and experiences of racism within a given school environment (Watkins & Aber, 2007). It can also encompass cultural diversity embedded within the course curriculum and pedagogical

practices as well (Brand et al., 2013). When examining school racial climate, special attention is given to the integrated systems that impact not only the experiences of students of color but students overall. At the school level, this might resemble variation in teachers' academic expectations and implementation of discipline practices (Butler-Barnes et al., 2020; McNeil & Finchman, 2016), where acts of peer aggression, bullying, and discrimination might reflect issues at the peer level (McNeil & Finchman, 2016; Tynes et al., 2015). Lastly, general feelings of safety, engagement, and belonging are affected because of structural differences at the individual level. Further exploration of racial school climate across culturally diverse youth, specifically Black high school students may address components of climate that are often unaddressed yet contribute to overall impressions and diminishing outcomes.

Academic Self-Concept

Academic achievement (e.g., grades, GPA, test scores) is the most frequently assessed outcome variable studied with school-based variables, including school climate. In fact, positive student-teacher relationships, general safety, student engagement, school physical environment, academic support, and school social environment are various aspects of the school climate that have consistently shown significant effects on academic achievement (Daily et al., 2019, Thapa et al., 2013). As school racial climate seeks to tease out areas that are separate or integrated with school climate, other academic outcomes aside from academic achievement are important to consider. School engagement, school belonging, and intrinsic motivation are other academic outcomes that have been assessed historically to gauge student performance in schools that provide a more holistic understanding of the school experience (Chavous et al, 2003; English et al., 2016; Golden et al., 2018; Smith et al., 2020). Another variable that is often overlooked is academic self-concept.

Academic self-concept is derived from general self-concept which is defined as a compositive view of oneself in a multidimensional way and generally reflects one's perceptions of themselves as well as how others may view them (Bong & Skaalvik, 2003; Rosenburg, 1995). In the school setting, academic self-concept provides precursor information of how a student might perform academically (e.g., grades, test scores, etc.), based on one's perceptions of their capabilities. Oftentimes, academic self-concept and achievement are examined in tandem. The Acosta (2001) and Awad (2007) studies found academic self-concept to be highly correlated with academic achievement. The Acosta (2001) study examined the relationship between school climate, academic self-concept, and academic achievement in elementary students and found that academic self-concept explained a significant amount of the variance. The Awad (2007) study examined the impact of self-concept and self-esteem on academic outcomes (e.g., grades, GRE scores) in Black college students. The findings determined that academic self-concept was a predictor of GPA (β=.49, p=<.001), where individuals who reported higher self-concepts also reported higher GPAs. These findings are also supported by metanalytic data that highlights the reciprocal relationship between academic self-concept and academic achievement as well (β = .16, .08, p=<.001; Wu et al., 2021). Due to the contextual nature of the school racial climate, academic self-concept may be a better indicator of school performance with the recognition that both academic achievement and academic self-concept are conceptually connected.

Racial Identity

Racial identity is a strength-based, protective factor that has the potential to circumvent the negative implications of a school climate on Black students. Despite the ramifications of an unfavorable school climate, Black youth do not always fare more negatively in terms of psychological distress and academic outcomes when embedded in environments that are not

promotive of positive experiences (Greene et al., 2006; Paradies et al., 2015). There is evidence to show that Black youth and adolescents cope with negative racialized experiences in culturally responsive ways (Gaylord-Harden et al., 2012). Positive attribution to one's racial group, or racial identity is thought to be one of many prosocial change agents that can help to combat negative racialized experiences, and if properly cultivated can contribute to an adaptive, emergent identity. (Camacho et al., 2018, Spencer, 1995; Stein et al., 2016). While there are many racial identity development models (e.g., Cross, 1991; Phinney,1989; etc.), racial identity is generally attained through an exploration-to-achievement process where an individual solidifies their connection to their racial identity which is known to be a multidimensional construct (Sellers et al., 1998). Specific racial identity profiles have been shown to combat negative experiences (e.g., low private regard) and overcome negative environmental influences (Sellers et al., 2006), while others are in alignment with their surrounding environment and may reflect either a positive, promotive relationship (e.g., high private regard; Chavous et al., 2003; Sellers et al, 2006) or a negative, hindering relationship (e.g., centrality; Burrow & Ong, 2010; Seaton et al., 2009, 2019). On occasion, some racial identity profiles have shown mixed results (e.g., low public regard) and warrant additional investigation (Seaton et al., 2019). The general notion though is that racial identity contributes to how adolescents process and adapt to their surrounding contexts. Thus, examining how one's academic self-concept is affected by one's school racial climate based on varying racial identity profiles can be very informative.

Theoretical Framework

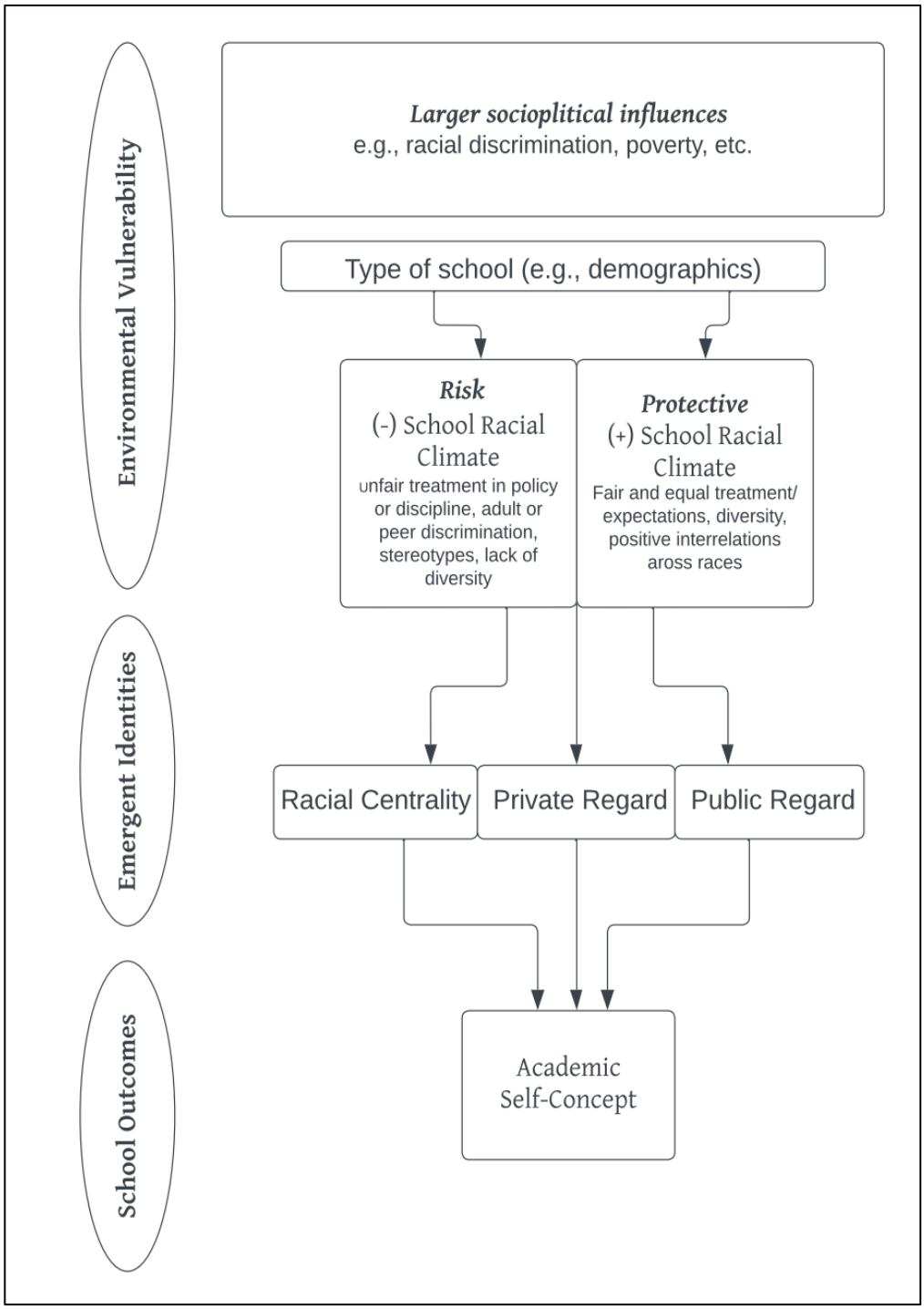
The Phenomenological Variant of Ecological Systems Theory model is derived from Bronfenbrenner's (1989) ecological systems theory. It stresses the importance of an individual's environmental context in shaping youth and adolescents' overall development using a social-

cognitive, self-appraisal process. More specifically, one's proximal context including their school racial climate informs how Black youth and adolescents provide meaning to their sense of self, including their racial identity. Like Garcia Coll and colleagues' (1996) integrative developmental model, PVEST places a greater emphasis on the larger sociopolitical contexts (e.g., racial school climate) that impact youth and adolescents' psychosocial development from an individualistic perspective (Spencer, 1997). This model consists of the following five stages: risk contributors, stress engagement, reactive coping, emergent identity, and life outcomes. Collectively, these different stages highlight components within an individual's immediate context that can have an impact on a variety of outcomes. As it pertains to the current study, stressors within the school context can be reflective of a negative racial climate and thus fuel a negative experience for Black students compared to other racial groups. This concept is known as *risk contributors* and/or *stress engagement*. Other examples of the risk contributor and stress engagement relationship might include individual characteristics such as race, SES, and sex. Other environmental stressors outside of the scope of this study may include, community violence, police brutality, and other forms of systemic oppression (Spencer, 1997). The general notion is that Black youth and adolescents may engage in stress through *reactive or stable coping methods* in response to these different types of risk contributors they are exposed to. A reactive coping method might consist of a maladaptive response and can negatively influence one's self-appraisal process, whereas an adaptive response could lead toward an *emergent identity* (e.g., positive racial identity) despite a negative environment. The notion of adapting positively to a negative environment is known as *resilience* (Spencer, 1995). More commonly though, a negative racial climate may result in a negative association with one's racial identity (e.g., low public regard, low private regard), while a consistent, positive racial climate may

contribute to a stable, emergent identity and positive racial identity (high private regard, high public regard). This environment-identity relationship ultimately influences *school outcomes* including one's self-perceptions of their academic abilities (e.g., academic self-concept) along with other academic outcomes (e.g., grades).

Youth and adolescents' experiences are not homogenous and vary widely based on the contexts they are embedded in, as well as their individual experiences (Spencer 1995, 1997). Further exploration of the relationship between one's school racial climate and their racial identity, and the relationship between one's racial identity and academic self-concept can provide useful information. Specifically, examining these relationships can help to validate the mediating role of racial identity between one's school racial climate and academic self-concept which in turn will help to better understand Black youth and adolescents' school outcomes (see Figure 1).

Figure 1. Conceptual Study Map based on the PVEST model



Note. This conceptual model reflects the components of the PVEST model that are captured within this study

School Racial Climate, Racial Identity, Academic Self-Concept

School environments that promote cultural diversity, fairness in policies, and positive interracial relationships can help to build a sense of belonging and connectedness in Black students. In turn, this can influence long-term outcomes like psychological and emotional safety (Byrd & Chavous, 2011; Camacho et al., 2018; Fisher et al., 2020; Griffin et al., 2020; Smith et al., 2020). Black boys and girls have also had different experiences as it pertains to their school climate as well, where in some instances girls view the school racial climate more positively than boys (Gale & Dorsey, 2020). Despite the positive indicators associated with the relationship between school racial climate and racial identity (Camacho et al., 2018; Smith et al., 2020), academic self-concept is rarely examined as an outcome of interest. It is more common to see studies that examine aspects of school racial climate (e.g., school discrimination) in relation to other academic outcome variables such as grades or standardized test scores (English et al., 2016; Gale & Dorsey, 2020). There is research to suggest academic self-concept is equivalent to examining achievement (Acosta, 2001, Awad, 2007). It can be argued that academic self-concept provides different information from self-reported grades or test scores that can be useful in sharing how students respond to their school environment.

In terms of the relationship between school racial climate and racial identity, there is very limited research that examines specific racial identity profiles in a mediating fashion to examine the relationship between school racial climate with other academic outcomes, despite evidence to demonstrate there to be a meaningful potential. For instance, private regard, an individual's internal, affective self-appraisal of their racial identity has been shown to act as a buffer against racial discrimination and to have a positive association with school racial climate (Byrd & Chavous, 2011; Camacho et al., 2018; Fisher et al., 2020; Sellers et al., 2006). Additionally,

positive teacher and peer relationships, another indicator of school climate have been shown to buffer the effects of racial discrimination for Black youth/adolescents (Butler-Barnes et al., 2018; Golden et al., 2018; Griffin et al., 2020). These studies provide insight into the relationship between racial identity and school racial climate overall, however, there are minimal studies that explore the relationship between racial identity and academic self-concept as well (Evans et al., 20011; Okeke et al., 2009; Witherspoon et al., 1997). How Black students view their academic self-concept is a missing component in both relationships that shares the effect one's environment can have on their life outcomes (Spencer, 1995). Studies that examine the mediating role of racial identity on the relationship between racial climate and academic self-concept would contribute significantly to the literature from the perspective of Black students.

Rationale of the Study

According to the PVEST model, schools reflect the larger sociopolitical structures embedded within society. The cumulation of unfair treatment in discipline and policy, school discrimination, poor race relations, and lack of diversity in pedagogy and teaching practices are risk contributors that can have a significant impact on Black students' school experiences including their academic self-concept. Investigating multiple school environments helps to create an understanding of the school climates overall, but specifically negative climates experienced by Black students (e.g., Lea III et al., 2022) and the resulting impact on academic outcomes. Further phenomenological examination using the PVEST model to explore the mediating role of racial identity on the relationship between school racial climate and academic self-concept from Black students' perspective is needed. Especially with consideration to how one's racial identity may influence the impact that a negative school climate may have on academic outcomes. For example, students whose racial identity is stable and positive in nature can combat a negative

racial climate as well as contribute to a positive academic self-concept. A thorough investigation provided with quantitative and qualitative data can provide the necessary insight to intercede potential negative trajectories associated with school racial climate and academic outcomes for Black students. There are a few studies that have utilized college students to reflect back on their high school experience (Brown, 2023). Garnering retrospective accounts of racial identity, school racial climate, and academic self-concept can provide a more holistic understanding of its impact on high school experiences and inform intervention with greater depth.

CHAPTER 2: LITERATURE REVIEW

This literature review utilizes the PVEST model to highlight both risk and protective factors within Black youth and adolescents' school environments that can impact school-based outcomes. The purpose of this review is to highlight the historical, empirical relationships between school racial climate, racial identity, and academic self-concept (e.g., school racial climate and academic self-concept; racial identity and academic self-concept, etc.). Together, this literature review provides an important rationale for exploring student perspectives on the ways that school racial climate links to racial identity, as well as the dual influence on academic self-concept.

First, implications of negative, stress-inducing contributors of racial discrimination and negative racial school climate are presented. Following, literature with an emphasis on school racial climate and racial identity is discussed as positive contributors. Lastly, gaps in studies on school racial climate, racial identity, and academic self-concept are highlighted to help stress the need for further investigation through both quantitative and qualitative means.

Risk Contributors for Black Youth and Adolescents in Schools

Immediate Environmental stressors

There is substantial literature that examines the effects of racial discrimination on REM adolescents' psychological outcomes including depression, anxiety, and other life satisfaction indicators (Green et al., 2006, Paradies et al., 2015, Rosenbloom & Way, 2004). From these studies, there is an indication that racial discrimination harms youth and adolescents' psychological well-being. Additionally, several studies sought to uncover how various hardships within one's environment can impact how one copes with such stressors (Gaylord-Hayden & Cunningham, 2012; Lanier et al., 2017; Williams et al., 2014).

Through an examination of Black and Latino males' responses to stress in low-income neighborhoods, Williams et al. (2014) sought to assess the role of racial identity (see Table 1, Phinney, 1992) on the relationship between multiple stressors (e.g., discrimination stress, family hardship, economic, and violence) and maladaptive coping responses (aggression, delinquency, and serious criminal behaviors). It was found that when multiple stressors were present, more maladaptive coping responses were reported when one's affirmation of their racial identity was low. Other maladaptive ways of coping with stressful environments found in other studies included avoidant and distractive coping responses. Avoidant responses entail using tactics to dismiss or not address the stressor, while distractive responses include engaging in an activity to keep from thinking about the feelings associated with the stressor (Ayers 1996; Gaylord-Hayden & Cunningham, 2009). It was also found that the racial identity profile of achievement which is comparative to centrality (Sellers et al., 1998) tended to exacerbate these multiple stressors, especially when discrimination stress and family hardship were present (Williams et al., 2014). Generally, the cumulation of these negative experiences place ethnic minority youth at risk of feelings of aggression, anxiety, depression, and a lack of social connectedness over time as they become college-age or adults (Liang & Borders, 2012; Thomas et al., 2009)

Stress that stems from racial discrimination is a grave risk for REM youth and adolescents. Specifically in the school setting, it may range from being called a racial slur, threatened by peers, or given a lower grade by teachers because of one's race or ethnicity (Fisher et al., 2000). It generally occurs from peers and/or adults which can have differing effects. Discrimination from peers is thought to have more psychological effects, while discrimination from teachers tends to affect academic outcomes more negatively (Benner et al., 2018). Outside of the school environment, more overt, general experiences of racism for youth and adolescents

may include being followed in grocery stores or harassed by police officers. On social media, it may entail receiving hate messages, name-calling, rude comments, or racial jokes (Tynes et al., 2015). Each form of discrimination highlights its pervasiveness within everyday functioning.

Gender Differences

There is an abundance of research that highlights differences in Black males and females' experiences with the school environment. Not only do these differences highlight heterogeneity within the same race, but also highlight key gender differences when examining sociopolitical constructs, such as racial discrimination, school racial climate. In reviewing several studies, Black males reported higher instances of discrimination from adults within the classroom setting compared to Black females (Chavous et al., 2008; Leath et al., 2019; Seaton et al., 2008). When Black male youth were examined by gender, SES, and place of residence starting at the ages of 10-12 years old and were followed for up to18 years as adults, Assari and colleagues (2018) found that the Black males who became adults living in predominately white areas and with higher SES, reported more experiences of discrimination over time. When examining Black male experiences within the school setting similar results were found. Black males from lower SES backgrounds were more likely to experience racial discrimination both from their teachers and peers compared to their Black female counterparts (McNeil-Smith & Fincham, 2016). Black males regardless of SES status reported higher instances of racial discrimination in their respective settings. On the contrary, Black girls did not report school discrimination to be of major concern when compared to Black boys (Gale & Dorsey, 2020) except for a few studies (Watkins & Aber, 2007). These differences in reports between Black males and Black females allude to aspects of the school racial climate that may explain differences in behavioral treatment, and student-teacher relationships within the school environment.

Academic Achievement

Generally, studies that examined the effects of school discrimination tend to emphasize the negative impact of these experiences on one's psychological well-being. However, academic outcomes are greatly affected as well. There are a few studies that focused on the impact of discrimination on academic achievement aside from examining grades. English et al. (2016) found that racial discrimination in the 7th grade was positively associated with depressive symptoms in the 8th grade and had a negative effect on academic achievement in the 9th grade. Academic grades were the only assessment of achievement gathered in this study and were obtained from teacher reports, whereas racial discrimination and depression were assessed by the students. This study confirmed that higher reports of racial discrimination mediated high reports of depression which in turn resulted in lower academic performance in following years. It is important to note that while the psychological impact of discrimination is important, there is potential for a negative academic impact as well which can lead to other detrimental outcomes such as dropping out, poor engagement, and low connectedness/belonging within their respective schools (Greene et al., 2006; Williams et al., 2014).

Negative School Racial Climate

Racial discrimination or unfair treatment is one area of the school's racial climate that can contribute to poor psychological and academic outcomes. However, there are studies that discuss other aspects of school racial climate (e.g., discrimination by peers/teachers, cultural diversity, other structural inequities), and its impact on Black youth and adolescents' school experiences. Two qualitative studies asked Black students, as well as other REM youth their perspectives of racial equity and racial climate in the school setting (Hope et al. 2015; Lea III et al., 2022). Racial equity can be defined as,

> "Acknowledging the many ways racial bias, prejudice, and stigmatization influence inequitable outcomes and process for REM students as well as integrating cultural heritages, experiences, and history into practice" (Lea III et al., 2022, pg. 464).

From this inquiry, students' definition of equity resembled heavily researched components of school climate, such as interpersonal relationships with teachers and students, how students feel they are treated by others, how rules are applied, and how systematic structures such as curriculum, teacher pedagogy, and school discipline are executed (Lea III et al., 2022). A deeper rationale to solicit student input regarding school climate was provided and centered on these experiences more directly (Hope et al. 2015; Lea III et al., 2022). Detailed experiences on the bias from teachers according to gender and race, negative stereotyping from peers and teachers, lower academic expectations, and differences in equity were identified using qualitative themes. Black students spoke about the lack of institutional support for a positive racial climate and the lack of cultural diversity represented in the curriculum (Hope et al., 2015). These inclusive accounts of school racial climate from the perspective of Black and other REM students are a starting point for understanding how racial identity might be influenced by one's school racial climate, and how that may impact one's academic self-concept.

Discrimination and racial inequity are detrimental to racial climate. Unfair, punitive school discipline practices and poor academic achievement are also related to a negative school racial climate (Hope et al., 2015). Perceptions of school climate were found to be connected to high suspension rates (Mattison & Aber, 2007), and it was found that Black students who reported a negative racial climate exerted more effort and had lower academic performance (Golden et al., 2018). These critical aspects of the school environment may be contributing to the racial achievement gap where higher reports of poorer racial climate are in turn negatively

affecting academic performance (Voight et al., 2015). However, a positive racial climate can help to yield more positive academic outcomes for Black students.

Positive Contributors for Black Youth/Adolescents in Schools

Positive School Racial Climate

When schools endorse racial fairness and diversity, it promotes feelings of connectedness and belongingness for students of diverse cultural backgrounds. A positive racial climate is an extension of a school climate commonly described as a school atmosphere where norms, values, interpersonal relationships, teaching, learning, and organizational practices promote an environment that is emotionally, socially, and physically safe for students (National School Climate Council, 2007). Furthermore, a positive racial climate embeds racial equity, fairness, and diversity within such norms and practices (Lea III et al., 2022). When these aspects of the school environment coexist, a sense of belonging and school connectedness, positive psychosocial functioning (e.g., self-esteem, self-concept), teacher and student retention, reduction in discipline problems, and positive academic outcomes are promising (Thapa et al., 2013).

Individual aspects of the school environment such as student-teacher relationships contribute to a positive school climate. The global school experience has been found to make a substantive lasting impression on students (Mitchell et al., 2010). Generally, students desire to feel supported and cared for by their teacher, to engage in interesting and challenging activities with reasonable expectations (Conderman et al., 2013), and they desire culturally responsive teachers who can facilitate school engagement for racially, and ethnically minority students (Bottani et al., 2020; Love & Kruger, 2005). However, in many instances when data is disaggregated those general reports of climate tend to be reported by White, dominant racial

groups and less from racial-ethnic minority students. That is not to say that REM/Black students do not desire these same experiences, it suggests that without the intentional cultivation of a positive racial climate, school environments may be less inviting.

There are school programs such as the Comer School Development Program (Comer, 1980) that seek to improve the overall climate of the school by integrating structural teams including mental health teams, parent groups, and policy changes that promote positive child development as well as academic outcomes, specifically in low-income- and predominately African American schools across the United States (Anson et al., 1991). This is one example of many that demonstrates how building blocks and adjustments can be made to improve the school environment to enhance student outcomes both psychologically and academically. More student perspectives on school racial climate can help to cultivate and preserve a positive school climate that contributes to positive outcomes for all.

School Racial Climate and Academic Self-Concept

Academic self-concept is a domain-specific phenomenon that resembles one's self-perceptions of academic abilities (Guay, Marsh, & Bolvin, 2003). It has longer-term implications for motivation and achievement, especially when considered within the context of other factors, such as social comparison, prior achievement experiences, and one's social environment (Prince & Nurius, 2014; Sewasew & Schroeders, 2019). According to the reciprocal effect model, academic self-concept and academic achievement mutually co-exist. Therefore, enhancing self-concept can also improve academic achievement and vice versa. This is very important considering Black youth are exposed to school- and racial climates that may not contribute toward a positive academic self-concept, which affects their academic achievement and can impact longer life outcomes, including future aspirations (Prince & Nurius, 2014).

Theoretically, self-concept can be vulnerable to environmental contexts, including those with negative racial stereotypes that can undermine one's self-perceptions and self-worth (Sotomayor, 1977). With that said, the immersion of one's ethnic affiliation and cultural connection (i.e., racial identity) can provide subjective meaning that promotes a sense of belonging and positive implications. Oftentimes discrimination and racial climate literature seek to investigate psychological well-being or academic achievement (e.g., grades, test scores), and seldomly academic self-concept, despite the suspected reciprocal relationship between achievement and academic self-concept (Sewasew & Schroekers, 2019). This creates a missed opportunity to uncover the impact the schools can have on multiple aspects of academic outcomes. Very few studies examine the relationship between school racial climate and academic self-concept, however, Acosta (2001) found a significant relationship for elementary students, other studies were at the collegiate level. Hurtado (1994) found an indirect relationship between parental SES and pre-college academic self-concept attitudes, those who reported higher parental SES had a higher academic self-concept. It was also found that Black graduate student women reported lower academic self-concept in their writing ability compared to Black males, and these perceptions remained low. When academic self-concept remained high even in lower racial climates, racial identity showed great potential to be a protective factor. Therefore, explicitly examining the relationship between school racial climate on academic self-concept, as well as racial identity and academic self-concept in high school students can mend this gap.

Racial Identity

Overview of racial identity from multiple perspectives. How individuals process, commit to, and accept the variations and makeup of their racial identity is very nuanced, especially for Black Americans. There are a variety of racial identity models that seek to explain how Black

Americans might understand their racial-ethnic group membership (see Table 1). Many of these models agree that racial identity is a multidimensional construct that can change over time with great variability across individuals, and to some degree aligns with developmental identity explained by Erickson's (1968) and Marcia's (1966) theories. Additional foundational theories include Tajfel's social identity theory (SIT) and self-categorization theory (SCT) which are embedded within conceptual structures of racial/ethnic identity of three very prominent models, *Nigrescence model*, *Ethnic Identity Development*, and the *Multidimensional Model of Racial Identity*. According to these theorists, one's ethnic/racial identity formation heavily relies on the process of commitment and exploration of their racial identity. Additionally, both proximal and societal influences can impact how youth and adolescents relate to their racial identity. Their experiences within the larger society, including schools, can impact whether they attribute their racial group membership in a negative or positive way.

Table 1. Racial/Ethnic Identity Models

Ethnic Identity Development Phinney (1989, 2007)/Multigroup Measure of Ethnic Identity (MEIM; Phinney, 1992)	Nigrescence model (Cross, 1991)/Cross Race Identity Scale (CRIS; Vandiver et al., 2002)	Multidimensional model of racial identity (MMRI; Sellers et al., 1998)/ MIBI (Sellers	Ethnic and Racial Identity Model during middle childhood/adolescence (ERI; Umana-Taylor et al., 2014)
Ethnic Affirmation and Belonging assesses one's attitude and sense of belonging to their racial/ethnic group	***Pre-Encounter*** recognizes that a black person initially views the world from a white frame of reference, and will likely minimize or devalue their Blackness (e.g., Assimilation, Miseducation, Self-Hatred)	***Salience*** one's identification to their race in each moment or situation	***Content*** Beliefs and attitudes surrounding one's racial group in the context of other racial groups
Ethnic Identity Achievement incorporates one's exploration and resolution of their racial/ethnic identity involving awareness of sociopolitical issues (e.g., racism, white dominance) along with realistic views of one's racial group	***Encounter*** a significant personal or social event that is inconsistent with one's initial frame of reference where the individual makes a shift in their sense of racial identity.	***Centrality*** the extent to which a person defines themselves according to their race	***Process*** The processes in which youth/adolescents explore, develop, and maintain their ethnic-racial identity
Ethnic Behaviors, practices related to one's racial/ethnic identity	***Immersion-Emersion*** involves the turning point from one' old frame of reference to a new one where one begins to immerse themselves into their Blackness, including outward cultural practices, but internalization of blackness may be minimal (Anti-White)	***Regard*** one's affective, evaluative perceptions of what it means to be Black both internally and with consideration to larger societal perceptions (i.e., private regard, public regard)	***Social & Environmental contexts*** Recognizes the proximal influences such as family, peers, media, transitions, puberty etc. that may influence how one ascribes to their racial group and the cultural traditions that follow
Other Group Orientation involves one's attitudes and orientation toward other racial/ethnic groups in which they interact with in the larger society	***Internalization*** one's sense of inner security and self-confidence with one's Blackness, where resolution from previous conflicts is found. Involves a decline in anti-white feelings, leading to a more pluralistic, non-racist perspective with an activism perspective (Black Nationalism, Multiculturalist Inclusive)	***Ideology*** refers to one's belief on how African Americans should act in a larger society includes assimilationists, nationalist, and humanist.	***Cognitive milestones*** Recognizes the development of socio-cognitive abilities which allow this age group to process and explore their ethic-racial identity differently compared to younger age groups

Racial Identity Dimensions. There are four dimensions identified in the Multidimensional Model of Racial Identity (MMRI; Sellers et al., 1998), *salience, centrality, regard*, and *ideology*. *Salience* refers to the relevance of one's self-concept in terms of their race at a particular moment or situation, whereas centrality refers to the extent a person defines themselves according to their race. Generally, regard refers to one's affective, evaluative perceptions of what it means to be Black, which can be positive or negative. In many ways, racial regard is associated with self-esteem (Sellers et al., 1998). There are two types of regard, public and private regard. Private regard refers to the extent an individual feels positively or negatively about being Black, whereas public regard refers to how Black people are viewed by others in the broader society. Lastly, ideology refers to one's belief on how Black people should act in a larger society. There are three dimensions of ideology, such as assimilationists, nationalists, and humanists. Collectively, these varying dimensions of racial identity result in an emergent identity that may also be reflective of the climate and school contexts (Spencer, 1995).

Moderation and Mediation Outcomes using MMRI. Current research examining the moderation or mediation effect of Sellers et al. (1998) conceptualization of racial identity on discrimination and school racial climate and their associated outcomes varies. In some instances, a moderation relationship was in support of racial identity as a protective factor, or as a buffer to discrimination. In other studies, a moderation relationship was not found, or a negative impact was shown. Sometimes, the difference was due to the type of study (i.e., longitudinal vs. cross-sectional), or how the constructs were assessed.

Seaton and colleagues (2011) examined racial identity longitudinally as a potential moderator for racial discrimination and psychological well-being for three time points. It was found that

when discrimination was high at Time 1, psychological well-being was statistically low at Time 1 (b= -.06, p<.01); though, a significant change was not found over time (Seaton et al., 2011). Racial identity did not demonstrate a moderation effect when assessing the relationship between the frequency of racial discrimination at Time 1, discrimination bother, or the rate of change in psychological well-being over time. Researchers posited capturing the effects of racial identity in an immediate or short-term fashion may have yielded different results compared to examining the effects of racial identity (in one-year increments) which did not seem to harm psychological well-being over time. Additionally, racial discrimination was measured incrementally across various domains rather than in the accumulation of discriminatory events over time as seen in other studies.

Later racial identity, discrimination, and depressive symptomology were assessed using daily diary accounts to examine within-person, as well as within-and across-day analyses (Seaton et al., 2019). It was found that when participants endorsed negative societal perceptions of Black people (i.e., low public regard) on the previous day, there was an increase in depressive symptoms on the days when participants experienced racial discrimination demonstrating a moderation effect. A negative moderation effect of racial identity (i.e., racial centrality, private regard) was found in the relationship between discrimination and depressive symptoms. Racial identity (e.g., low public regard) exacerbated the depressive symptoms associated with high reports of discrimination. With that said, in another study racial identity positively moderated the relationship between racial discrimination and several psychological measures (i.e., depression, perceived stress, and psychological well-being; Sellers et al., 2006). For instance, individuals who reported high public regard experienced less racial discrimination and depression (b= .08, p<.01), perceived stress (b= .06, < p .05), and positive psychological well-being (b= -.11, p<.01),

demonstrating a buffering effect. Additionally, those who reported low public regard experienced high instances of discrimination yet reported a low level of psychological stress indicating it to be a protective factor. Although societal perceptions of Black people were reported to be negative (i.e., low public regard) there was an increase in discrimination reported. This did not harm their psychological well-being (high reports of psychological well-being). Lastly, it was found that those who hold positive self-evaluative judgments about being Black (i.e., high private regard) were significantly related to psychological well-being (b= .28, p<.01) regardless of one's experiences with discrimination (high or low).

Overall, high private regard has shown great promise in the reduction of perceived stress and preservation of psychological well-being when assessed individually and grouped with other racial identity profiles (e.g., high centrality, low public regard). In these instances, high private regard was a common racial identity profile that had positive associations with positive academic outcomes. For instance, Chavous and colleagues (2003) clustered private regard with many different racial identity profiles (e.g., high centrality/low private regard vs. low centrality/low public regard) and found high private regard offered buffering and high-affinity effects to otherwise negative perceptions of one's race.

Few published studies have examined the relationship between discrimination and academic outcomes when the racial identity of black youth/adolescents was present. In one study, teacher discrimination was negatively related to academic achievement, and for Caribbean Black students, low public regard buffered the relationship between teacher discrimination and academic achievement (Thomas et al., 2009). These students reported high discrimination and higher academic achievement as well. Other hypotheses related to racial identity (high centrality, high public regard) were not supported, however, those with low centrality reported lower

discrimination and higher achievement. These findings were evident for both Black and Caribbean youth (β= .15, β= .31). Aside from these few studies, most racial identity literature commonly refers to outcomes such as racial discrimination and psychological outcomes although preliminary connections can be made for academic outcomes as well. Keeping this in mind, there are a few studies that examine racial identity in conjunction with school racial climate (Camacho et al., 2018; Smith et al., 2020).

Racial Identity and School Racial Climate

While school climate literature highlights ethnic-racial differences in reported outcomes on a positive school climate, components of a positive racial climate have shown great promise in forming healthy racial identities. When examining the relationship between racial identity and racial climate in a racially diverse middle school, Camacho and colleagues (2018) found that Black and Latino students reported more exploration (t (312) = 5.62, p=.029) and resolution (t (313) =3.65, p=.01) of their racial identity across time points. Cross-lagged analyses showed that when greater reports of perceived cultural pluralism (e.g., school racial climate) were seen at Time 1 for both white and students of color, greater exploration (e.g., racial identity) was reported at Time 2 (b= .23). This means that a positive racial climate promoted racial identity exploration for all students. Additionally, higher perceptions of cultural pluralism at Time 2 predicted greater levels of resolution at Time 3 (b= .14) demonstrating stronger attachment to one's racial identity in more positive school racial climates over time. Similarly, positive reports of teacher-student relationships (i.e., teacher supportiveness) at Time 1 predicted greater exploration (b=.30) at Time 2 for all youth. These findings support the influence of school racial climate on racial identity over time, with some indication of an influence of racial identity on school racial climate as well. In this study the racial identity profiles of exploration and

resolution predicted support for cultural pluralism for White students, however, this was not the Black and Latino students. For this sample, racial identity did not influence school racial climate and might suggest that Black and Latino students need to feel safe and secure in their school environment before engaging in the identity development process. Overall, the study suggests that schools can properly nourish racial identity development over time by fostering a positive racial school climate for all students. Although Black and Latino differences in experiences were not parsed out in comparison to White students, the study shed light on the importance of cultivating a positive learning environment for everyone.

Similarly, Smith and colleagues (2020) examined racial identity as a mediator to the relationship between cultural pluralism (e.g., school racial climate), and school climate within Black students across three-time points. Findings determined that positive school racial climate predicted positive perceptions of school climate for the next school year after controlling for the previous years' ratings of racial identity (commitment, β= .32; exploration, β= .30). One's commitment to their racial identity significantly mediated the relationship between cultural pluralism and school climate (β =.01), however, this was not the case for the exploration. It was found that Black males and females benefitted differently from cultural diversity within their schools, thus acting as a moderator. For Black females, there was a direct, significant relationship between positive school racial climate and school climate (exploration, β =.35; commitment, β =.33), however, ethnic identity did not mediate that relationship. Contrarily, for Black boys, an indirect relationship was found between reports of support for cultural pluralism and racial identity (exploration, β = .18; commitment, β = .24), and those who were committed to their racial identity reported greater school climate (β = .26), however, a mediation relationship was not found. This study aligns with previous findings indicating that one's racial

identity development is impacted by how youth/adolescents perceive their environment and whether that environment fosters their racial identity development.

Racial Identity & Academic Self-Concept

There is very minimal literature support examining the relationship between racial identity and academic self-concept, although other academic outcomes are more pronounced. For instance, specific racial identity profiles (e.g., high private regard, high public regard) were positively related to school attachment, school relevance, and school efficacy (Chavous et al. (2003). Although there are studies that begin to explore racial identity and academic self-concept (Evans et al., 2011; Okeke et al., 2009; Witherspoon et al., 1997), there are no studies to date that examine the mediating role of racial identity on school racial climate and academic self-concept.

There are several studies with meaningful findings that would promote further investigation of academic self-concept to other constructs (e.g., school racial climate, racial identity) as it relates to Black youth and adolescents. Okeke and colleagues (2009) examined Black adolescents' perceptions of their academic self-concept (e.g., math/science, reading/writing) amid social group perceptions (gender and racial academic stereotypes) and the impact comparatively on their academic self-concept. Both in-group and out-group comparisons of race and gender competencies were conducted to compare self-concept and academic achievement (e.g., grades, etc.). Generally, gender and racial stereotypes did not impact Black girls' academic self-concept. As long as the girls' perceptions of their academic abilities aligned with traditional views of girls' abilities in reading/writing abilities, then their academic self-concept and academic achievement reflected this notion as well (β= .29; .40). However, for Black boys, gender, and racial stereotypes, in fact, impacted their individual self-concept and academic achievement placing them to be more vulnerable. This finding is consistent with other

studies that highlight the differential experiences between Black girls and boys as it relates to the school environment. However, this study provides a unique perspective by highlighting the internal, self-evaluative effects that can result from external factors such as the school environment.

Similarly, researchers investigated the role of racial identity (e.g., racial centrality) on the relationship between students' endorsement of racial stereotypes and their academic self-concept (Evan et al., 2011). It was hypothesized that racial stereotypes would negatively impact academic self-concept, and this relationship would be buffered by racial centrality as a moderator. Racial stereotypes were beliefs that Black people were not as academically inept as their European/White counterparts. This hypothesis was not confirmed, while racial centrality moderated the relationship between racial stereotypes and academic self-concept it was in a negative way. It was found that students who believed in the traditional, academic racial stereotypes had lower academic self-concept, and this relationship was exacerbated for students who believed their race was central to their identity (i.e., high centrality) demonstrating an inverse relationship (β= -.45; p<.01). With that said, the relationship between racial stereotypes and academic self-concept was insignificant for youth whose race was not central to their identity, suggesting that these racial threats had no impact on their self-perceptions. These findings were tested and confirmed within two sets of study participants. Generally, centrality has been known to exacerbate outcomes in other studies, it would be interesting to see if other racial identity profiles might yield different outcomes.

Another study examined the various relationships between academic self-concept, racial identity, and self-esteem on GPA (Witherspoon, 1997). Racial identity was not examined as a moderator or mediator in this study. It was found racial identity and academic self-concept were

significant predictors of GPA. Students who reported a high Immersion racial identity profile (see Table 1) had lower GPAs which can be interpreted as those who explored and accepted their Black identity had lower GPAs in this study. However, a positive academic self-concept was associated with high GPAs. Other studies found similar relationships between academic self-concept and GPA (β=.49, p=<.00; Awad, 2007), but did not find an association between racial identity and academic self-concept or GPA.

The findings of this review suggest there to be a weak relationship between racial identity and academic self-concept. There are a few racial identity profiles that have not been studied yet (e.g., private regard, public regard) in relation to academic self-concept, nor has other dimensions of school racial climate aside from racial stereotypes been explored in tandem with racial identity. Based on prior research, it may be expected that high private regard might have a positive effect on one's academic self-concept, while public regard (low public regard) may yield mixed results. Further understanding of these relationships may create the foundational knowledge necessary to support how racial identity may be a mediator to the relationship between school racial climate and academic self-concept which has been very minimally explored.

School Racial Climate, Racial Identity, and Academic Self-Concept

Thus far, we have discussed the impact school racial climate has on the psychological and academic outcomes of Black and REM youth, along with a brief discussion on the moderation and mediation potential of racial identity on discriminatory experiences and emotional outcomes. There has yet to be much discussion on the relationship between racial identity and school racial climate and its impact on academic outcomes (i.e., academic self-concept). According to the PVEST model, racial identity expressed through adaptive reactive

coping and/or an emergent identity can influence and circumvent school racial climate (e.g., net vulnerability) depending on whether the climate is positive or negative.

In Byrd & Chavous (2011), researchers took a person-context congruence approach to assess the direct interactions between various racial identity profiles (i.e., centrality, private regard) and school racial climate on school belongingness. The general belief was that one's environment is directly connected to their racial identity, therefore the match between racial identity and racial school climate (i.e., peer climate, teacher/staff climate) could impact one's intrinsic motivation (i.e., school belonging). It was hypothesized that higher reports of centrality, private regard, and positive school climate would be related to a higher intrinsic motivation report. Also, the researchers hypothesized that higher centrality and low public regard would lead to higher reports of school motivation even when experiencing negative racial climates in comparison, thus acting as a protective factor. Peer and teacher discrimination as well as other student variables such as, GPA, SES, and gender were controlled variables to minimize alternative explanations from the aims of the study.

Findings of this study confirmed that a positive school climate (i.e., teacher/staff climate) was associated with higher school belonging (β=.41, .34), however racial centrality, nor public regard were associated with school belonging. Researchers provided rationale regarding distal versus more proximal contextual influences in the study (Byrd & Chavous, 2011). It was also found that youth who experience a positive school racial climate (i.e., teacher climate, peer climate) were positively associated with private regard while also still strongly related to school belongingness (β =.57, .43). Therefore, the racial identity context congruence was related to intrinsic motivation. A mediation-moderation analysis was used to examine school belonging as a mediator to the relationship between racial climate and intrinsic motivation, with racial identity

also acting as a moderator as well. It was found that teacher support and acceptance (i.e., school belonging) mediated the relationship between school racial climate and intrinsic motivation, and high private regard strengthened the relationship between teacher/staff climate and teacher acceptance/support. This study demonstrated high private regard to be a moderator of the mediation between school racial climate and intrinsic motivation. In total, a strong racial identity-congruence match resulted in positive outcomes for Black adolescents especially when positive racial identity was present. This study also highlighted the importance of school environments that exhibit a fair and respectful racial climate in terms of teacher support and acceptance.

Finally, a cross-sectional examination of school racial climate, private regard, and school engagement (e.g., behavioral, emotional, and cognitive) found that Black students who perceived their school racial climate to be impartial/fair reported higher ratings in engagement across all three dimensions (β= .32; Griffin et al., 2020). It was also found that private regard moderated the relationship between teacher discrimination and both school and emotional engagement (β= .16, .18). In this case, low private regard revealed higher perceptions of teacher discrimination (e.g., school racial climate) and lower school and emotional engagement (β= -.67). Additionally, private regard moderated the relationship between peer discrimination and cognitive engagement (β= .25). Low private regard revealed higher perceptions of peer discrimination (e.g., school racial climate) and lower cognitive engagement (β = -.16; SE= .17). Private regard did not moderate any of the hypothesized relationships of this sample in a positive way, with that said, individuals with high private regard did not report any significant associations with negative school climate or school engagement.

In the first mediation-moderation study (Byrd & Chavous, 2011), racial identity was found to be a positive moderator to the school racial climate and intrinsic motivation relationship, however in the latter study (Griffin et al., 2020) racial identity acted as a negative moderator in that it worsened the outcomes instead of improving outcomes. A key difference between these studies was the outcome variables (e.g., school belonging, school engagement), and neither examined academic self-concept. Additionally, the qualitative component of the study may provide additional insight into the research findings that have not been captured yet.

Integrative Summary

The literature to date provides a thorough understanding of the many ways school racial climate, racial identity, and academic self-concept have been examined with a variety of outcome variables. In this close examination, there are limited studies that examine racial identity as a mediating or moderating variable (e.g., Smith et al., 2020; Griffin et al., 2020) despite its positive influence on both positive and negative school environments (Sellers et al., 2006; Chavous et al., 2003). Additionally, there is evidence to show that school racial climate can facilitate healthy racial identity development over time (Camacho et al., 2018) meaning that fostering a positive school racial climate can also promote positive racial identity as well. There aren't enough studies that examine school racial climate, racial identity, and academic self-concept in tandem, however, this information can inform how the school environment influences Black high school students 'perceptions of their academic capabilities. Examining the mediating role of racial identity on the relationship between school racial climate and academic self-concept will help to better understand at which point intervention is necessary to facilitate the improvement of Black and REM youth experiences within their general school climate environment.

Current Study

The purpose of this cross-sectional, mixed-methods study will be to better understand how racial identity informs black adolescent experiences in schools through school racial climate and the impact this has on their academic self-concept. More specifically, this study will be examining the mediating role of racial identity on the relationship between school racial climate and academic self-concept. An explanatory sequential approach will be utilized. Quantitative data will be collected first, followed by qualitative data to provide a more comprehensive understanding of these constructs. First, racial school climate was measured using racial interpersonal relationships, fairness and equity, and stereotypical/discriminatory behaviors to assess a positive or negative racial school climate and its association with academic self-concept. Then, racial identity (e.g., centrality, private-, public- regard) was used to determine whether a mediating effect exists between these two variables and specific racial identity profiles will be examined more closely. Thereafter, a small selection of participants was chosen to provide greater depth in analyzing these outcomes as they relate to one's specific racial school climate through an individual, semi-structured interview conducted virtually. Both qualitative and quantitative data were collected to empower student voices and to assist in making informed interpretations of the quantitative components of the study. Without such exploration, ethnic minority youth are at grave risk for negative long-term effects that historically have gone unnoticed.

Mixed Methods Research Questions and Hypotheses

Quantitative Research Question

Question 1: Is there a statistically significant relationship between perceived school racial climate and academic self-concept?

Understanding the relationship between school racial climate and academic self-concept is important to uncover how one's environment might impact individual perceptions about their academic self-concept. According to previous research (Golden et al. 2018; Mattison & Aber, 2007), negative reports of racial school climate are often associated with lower academic performance (e.g., grades) and psychological well-being within Black populations. This also holds true for other studies of Black students utilizing more general school climate measures as well (Jones et al, 2021). Yet, there are fewer empirical studies that seek to examine how school racial climate might impact one's academic self-concept, except for one study which found significant relationships between school climate, academic self-concept, and academic achievement (Acosta, 2001). Other studies that closely examine school racial climate and academic self-concept tend to be at the collegiate level and showed indications of racial identity to be a buffer and protective factor against negative racial climates (Hurtado, 1994).

According to self-concept theory (Bong & Skaalvik, 2003; Muenks et al., 2018; Rosenburg, 1979), one's environmental context collectively influences how one views their overall abilities. It is suspected that a student embedded within a school environment with a negative racial climate will likely report a negative academic self-concept. Likewise, a student who reports a positive school racial climate is more likely to report a positive academic self-concept. In both instances, school racial climate determines how one perceives their academic capabilities (i.e., academic self-concept).

Previous studies have examined the relationship between school racial climate and other academic outcomes (e.g., school- engagement, connectedness, belongingness) and found positive associations (Byrd & Chavous, 2011; Griffin et al., 2020). When a positive school racial climate was reported higher school belonging (Byrd & Chavous, 2011) and school engagement (Griffin et al., 2020) were reported as well. In these studies, outcomes associated with academic self-concept were missing, thus highlighting the need for further exploration. With that said, it is expected that a positive school racial climate will also be positively correlated with a positive academic self-concept based on conceptual and theoretical support (Prince & Nurius, 2014; Sewasew & Schroeders, 2019).

Question 2: Are specific racial identity profiles (i.e., centrality, private regard, public regard) associated with perceptions of their school racial climate?

Although it is expected that students' perceptions of their school's racial climate will impact academic self-concept, there is research to suggest that racial identity may potentially affect or strengthen this relationship (Sellers et al., 2006).

Public Regard. Public regard refers to the individual's perceptions of whether they believe Black people are viewed negatively or positively within the larger society (Sellers et al., 1998). Reports of high public regard would reflect a positive perception of Black people from the perspective of other racial groups, whereas low public regard would reflect negative perceptions of Black people. While public regard will be assessed in the school setting as an indicator of societal views about Black people, this does not discount the larger societal implications of systemic racism embedded within larger society and will be taken into consideration when reviewing analysis. Since school racial climate reflects interactions with others, it is hypothesized that high public regard will be associated with a positive school racial climate, and

students who report low public regard will also have negative reports of their school racial climate. There is research to show that low public regard can demonstrate positive outcomes (decreases in psychological distress, increases in psychological well-being) despite being embedded in a negative environment (Sellers et al., 2006). Additionally, youth who reported low public regard also reported a low level of psychological stress in high instances of discrimination in this study. In another study, low public regard buffered the relationship between teacher discrimination and academic achievement in Caribbean students despite high instances of teacher discrimination (Thomas et al., 2009). Lower reports of public regard can be indicative of unfair treatment and poorer interpersonal peer and/or student-teacher relationships associated with racial climate (Watkins & Aber, 2007), however, we suspect that racial identity (low public regard) will act as a buffer to the negative school racial climate in this study based on findings from previous studies. Although associations with racial identity have typically been rationalized by experiences of racial discrimination and psychological outcomes (Seaton et al., 2019), similar outcomes are expected as it pertains to school racial climate as well. The positive association between high public regard and a positive school racial climate can be justified through interpersonal relationships and fair treatment in policies embedded within the school racial climate.

Private Regard. High private regard, the positive internal attribution one has to their racial identity has been shown to thrive in both positive and negative school environments (Sellers et al., 2006; Chavous et al., 2003). Therefore, it is suspected that those who report high private regard regardless of their school racial climate.

Centrality. Many of the studies reported negative associations between racial centrality and psychological or academic outcomes specifically as it related to racial discrimination (Seaton

et al., 2019). Therefore, it is hypothesized that high centrality will have a negative influence on racial climate. Individuals who score high on centrality will report a negative school racial climate as well.

Question 3: To what extent does specific racial identities mediate the relationship between school racial climate and academic self-concept?

Both private regard and public regard have been found to moderate the relationship between racial discrimination, psychological well-being, and positive racial climate (Byrd & Chavous, 2011; Chavous et al., 2003; Sellers et al., 2006). Additionally, various school racial climate studies have also found an indirect relationship connecting racial identity (i.e., private regard) to school racial climate and academic performance (e.g., school bonding, connectedness) (Byrd & Chavous, 2011; Camacho et al., 2018). There are a few studies that have examined the relationship between racial identity and academic self-concept (Evans et al., 2011; Witherspoon, 1997). Evan and colleagues (2011) found that students with high centrality were more likely to believe negative stereotypes about Black students' academic capabilities which resulted in a lower academic self-concept. In the Witherspoon et al. (1997) study, GPA was influenced by racial identity and academic self-concept. Black students explored and accepted their black identity reported lower GPA overall. Lastly, Awad (2007) did not find any associations between racial identity on academic self-concept or GPA. In total, there is evidence to suggest that racial identity will mediate the relationship between school racial climate and academic self-concept. Although there are no previous studies to support this notion, it is hypothesized that high private and public regard will mediate an inverse relationship between negative school racial climate and positive academic self-concept.

Qualitative Research Questions

Question 4: How do Black adolescents and young adults describe their high school educational environment (i.e., school racial climate)?

Several studies indicate Black youth have less favorable experiences in their school environment than their white counterparts (Aber & Watkins, 2009; Mattison & Aber, 2007). This cross-sectional study would like to better understand how Black student perspective relates to and differs from previous studies regarding school racial climate and the school environment as a whole. The Hope et al. (2015) and Lea III et al. (2022) studies explain student perspectives of racial equity as a baseline of comparison for the current sample. It is important to contextualize how students perceive their school environment in a broader context as this might highlight salient components of the school environment that is not captured through quantitative measures. Therefore, semi-structured interviews will be utilized to provide additional perspectives.

Question 5: Are there pattern differences between students who report positive and negative school racial climates?

For schools to better understand what contributes to a positive racial climate, both a positive and negative racial climate must be better understood. While there are clear definitions of a negative racial climate (Mattison & Aber, 2007) and positive racial climates (Hope et al., 2015) more in-depth understanding is necessary and should be replicated. Although, student perceptions will be collected quantitatively at one-time point, selecting students who can provide additional qualitative input from across different schools can add a more comprehensive understanding of positive and negative racial climates from the perspective of Black students (Hope et al., 2015; Lea III et al., 2021; Thapa et al., 2013). It will be important to evaluate these findings with previous literature.

Question 6: What role does racial identity play in school racial climates?

In Research Question 2, it is hypothesized that high private regard and high public regard may combat negative racial climates and promote positive academic associations with self-concept (Chavous et al., 2003; Sellers et al., 2006). In instances of racial discrimination, participants with high private regard and public regard racial identities were shown to report fewer instances of discrimination, perceived stress, and higher psychological well-being (Sellers et al., 2006). Additionally, high private has been promotive of positive outcomes in both positive and negative racial climates. Additionally, those with a low public regard racial identity profile reported high instances of discrimination, but high appraisals of psychological well-being or academic achievement indicating a buffering effect (Sellers et al., 2006; Thomas et al, 2009). Each of these findings alludes to racial identity facilitating positive outcomes in different school environments. The qualitative input from students with these racial identity profiles can shed insight into what aspects of racial identity inform the potential mediation effect that cannot be explained by quantitative data alone.

Mixed Methods Research Questions

Question 7: In what ways can racial identity inform improvements to one's school racial climate with the hope of improving Black students' academic self-concept?

Cumulatively, racial identity is an important precursor to student experience in a variety of school racial climates. Based on school climate literature, there is a dire need to encapsulate all student experiences, including race-related experiences that are promotive of racial fairness and cultural diversity. These measures are necessary to account for discrepant accounts of positive school climates from REM youth, and once determined should be incorporated into school climate measures (Scheider & Duran, 2010). The combined collection of quantitative and

qualitative data regarding the mediation relationship of racial identity between school racial climate and academic self-concept is a preliminary step in this school appraisal process. School districts can use that information to inform practices that will address all REM students' needs. These efforts can help schools to facilitate healthy development and the promotion of positive academic outcomes in the students they serve (National School Council, 2007) using crucial information about race-related experiences that is not typically captured as comprehensively. The summative patterns from this study will inform schools on not only practical contributors to a positive racial climate but also components of a negative racial climate to steer away from, as well as highlight the reciprocal nature of racial identity and school racial climate.

CHAPTER 3: METHODOLOGY

Recruitment Procedures

Participants

Approximately 441 parents, adult-aged high school-, and college students initiated the consent process to express interest in participating in this study. Following vetting and verification procedures (see Figure 3), a total of 133 consent and assent forms were completed and deemed eligible to participate in this study. Of those who provided consent and assent, 101 students completed the quantitative portion of the study, and of the 22 students invited to participate in the qualitative portion of the study, 9 participants completed the individual interview. Students were recruited from both high schools and colleges across the United States from states such as California, Texas, Michigan, and New York. There were 40 high school students and 61 college students who reflected on their high school experience. The average age of the study participants was 18.39.

A priori analysis was conducted to assess how many participants would be necessary to assess a mediated effect, and it was determined that to examine a medium-large mediation effect using two path diagrams, 88 participants were required for this study to achieve .8 power (Fritz & MacKinnon, 2007).

High School. In this cross-sectional study, data was collected at one time point as opposed to multiple time points often found in longitudinal studies. Participants were recruited using purposive, convenient sampling methods using a myriad of approaches approved by Michigan State University's IRB (April 2024 and October 2024). First, several district-wide IRB processes were completed (N=3) in the states of Texas and Michigan. A second approach called for approximately seven teachers, school psychologists, and other educational staff within the

primary researcher's professional network to operate as a school broker to facilitate a school partnership in participating in the study, pending approval of the principal at their school. Additional recruitment efforts included flyer postings on social media (e.g., Facebook, X formerly Twitter), and within the community (e.g., various public places). Finally, student-affiliated groups for Black high schools (N=2) were also invited to participate in the study pending the appropriate district-level- and/or principal approval. All participants received a $10 electronic gift card for completing the survey portion of the study, and selected participants received an additional $15 electronic gift card for their participation in the qualitative interview.

Based on these recruitment efforts, two school districts in Michigan and Texas provided approval to recruit for this study. Following district-level approval, the researcher reached out to principals and administrators to participate in the study. Three principals between the two districts agreed to post flyers in their parent- or community newsletters and/or within the campus building. Recruitment efforts continued until the appropriate threshold was met (at least 100 participants) which lasted from April 2023 through January 2024. Of approximately 441 potential participants, a total of 40 high school students completed the quantitative survey, and 2 of the 9 participants who completed the virtual, individual interview were currently enrolled high school students.

College-Level. There were three primary methods for recruiting college participants for this study. The researcher obtained approval through IRB exemption status to recruit participants using a myriad of methods. All prospective college-level participants had to meet the following criteria: Black/African American, current status as a student at an undergraduate course or university, at least 18 years or older, and currently residing in the United States. All participants were provided adult consent forms and were asked to complete the survey by reflecting on their

high school experiences. There were a total of 61 college students overall, five participants were recruited from colleges/universities in Michigan, 8 participants from colleges/universities in Pennsylvania, and 48 participants from Prolific and attended colleges/ universities across the United States.

Prolific. Prolific is a platform of vetted research participants who complete a variety of research tasks set up by the researcher. For this study, a pre-screener (equivalent to the college-level criteria) was established. Following, participants were anonymous and given a completion code, as long as there were no problems with their entry (e.g., completion time > 5 minutes), participant data was included in the study. There was a total of 51 college students who expressed interest in this study using this method, however after vetting processes there were 48 participants included in the study (see Figure 2).

Pennsylvania. Similarly, the researcher reached out to professional networks within Drexel University and the University of Pennsylvania to distribute flyers to prospective participants. Flyers were also posted in high-frequency areas on campuses including Drexel, University of Pennsylvania, Temple University, and LaSalle University. Eight participants completed the survey from these institutions.

Michigan. The researcher reached out to several professional networks at her current graduate institution to recruit participants for the study. An oral presentation to an undergraduate student affiliate group, Black Student Alliance (BSA) was conducted, and the researcher asked graduate teaching assistants to provide the flyer to prospective students who met eligibility in their undergraduate courses. Additionally, a graduate-level research assistant posted flyers in high-frequency areas across the college campus to generate participants. There was a total of five participants who completed the survey from these institutions.

Inclusion and exclusion criteria

To participate in the study, students had to self-identify as Black or African American. Individuals who self-identified as mixed (bi-racial, multi-racial with Black) were also eligible as long as one biological parent was reported as Black/African descent. Students had to be enrolled in a high school (grades 9-12) or a college/university (1st-5th year undergraduate). Students in graduate school were not allowed to participate in this study. If a participant did not meet these criteria, they were ineligible to participate in this study. This age group was chosen to reflect a more mature, developed sense of identity (Umaña-Taylor, 2014) that can provide meaningful insight into the findings, especially in the qualitative interview.

Consent

The researcher obtained IRB approval to enact both active and passive consent procedures for students 17 years old and younger, and adult consent for participants 18 years old and older through electronic forms on the Qualtrics data management platform. Before selecting an active or passive consent procedural process, the researcher reviewed district and school-wide policies regarding external research. If it was determined by a school and/or district that active parent consent was required, then the *active consent process* was utilized, and if it was not indicated, then the researcher retrieved formal permission from the school-based administrator to enact the *passive consent process*. There was one high school that completed the passive consent process, which yielded the highest response of high school student participation in this study (n=22).

For participants under the age of 17 years old to participate in this study both parent and student assent was required.

Active Parent Consent

Quantitative portion. The active consent process garnered recruitment support from school-based administrators and teachers by way of showcasing a templated study flyer to parent audiences within the school. This varied by school but included parent newsletters, direct emails, and other electronic means of communication. Interested parents were able to provide consent for their child to participate in the quantitative portion of the study, parents also provided their child's email information for assent forms to be sent electronically. Once parent consent was received, the researcher reached out to the prospective student participant via email to obtain student assent. Once both parent consent and student assent were obtained, the high schooler (17 years or younger) received access to the quantitative survey for completion. For participants 18 and older, an adult consent form was provided and once completed, participants were able to participate in the study.

Qualitative portion. A similar process was utilized for the qualitative portion of the study. All students who completed the survey were able to indicate their interest in participating in the qualitative portion. If selected, and the participant was 17 years or younger parent consent was obtained before the interview was scheduled. Student assent was obtained before conducting the interview. If the participant was 18 years or older, completed the quantitative survey, and indicated interest in the qualitative portion, if selected, they were given a separate consent form (see Appendix Form N) to participate in the qualitative interview. An equal number of participants who reported a positive racial climate and negative racial climate were invited to participate in the interview portion, approximately 22 students. There were several high school participants (n=8) in which parent consent was obtained, however, the student did not schedule or participate in the interview.

Passive Parent Consent

Quantitative portion. The passive consent process was utilized to allow students to contribute to this important study, without the barriers of obtaining active parent consent**.** The passive consent process entailed providing parents with study flyer information as well as a written letter describing the study in more detail. The letter notified the parent of the school's participation in this study, and the automatic consent approval unless the parent did not want their child to participate in the study. If this were to be the case, they could revoke passive consent by completing the parent opt-out form (see Appendix Form H). Parents were notified at least three times using multiple modes of communication (e.g., email, phone call, in person, etc.) with efforts including their child's teacher/staff as well as the student to share information about the study. After five business days and these multiple attempts were executed, passive consent was honored, and students were able to provide student assent to participate in the study. One high school in Michigan utilized the passive consent process, 22 participants were recruited using this method.

Qualitative portion. For participants who provided consent to participate participated in the study using the passive consent process, if interested in the qualitative portion of the study was indicated, and if selected, the active consent process was initiated. For participants 17 and younger, parent consent to participate in the qualitative portion of the study was obtained, the interview was scheduled, and student assent was obtained before conducting the interview. If the participant was 18 years or older, they completed the survey and indicated interest in the qualitative portion, and if selected, they were given a separate consent form within that session to participate in the qualitative interview.

Vetting and Verification process

Procedures were embedded within the electronic consent and survey process within Qualtrics to screen for individuals who did not meet the criterion of the study, assess for faulty entries, and monitor duplicate responses along with other attempts to ensure the credibility of responses that might invalidate the results. Many of these features were embedded within the Qualtrics system and manually assessed for errors. If there were concerns about participant eligibility or the credibility of results, then the researcher obtained IRB approval to verify the identity of the participant to ensure their entry was valid and representative of the targeted sample. Verification of identity included providing a school-based email and/or school-based photo identification card. In the event this this information was not provided; the participant was deemed ineligible and was not allowed to participate in the study.

Figure 2. Recruitment Flowchart Diagram

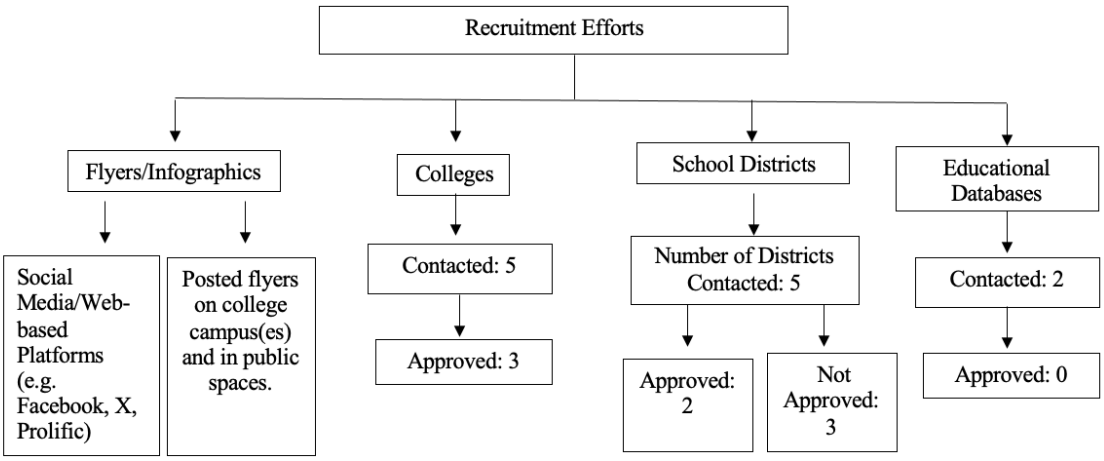
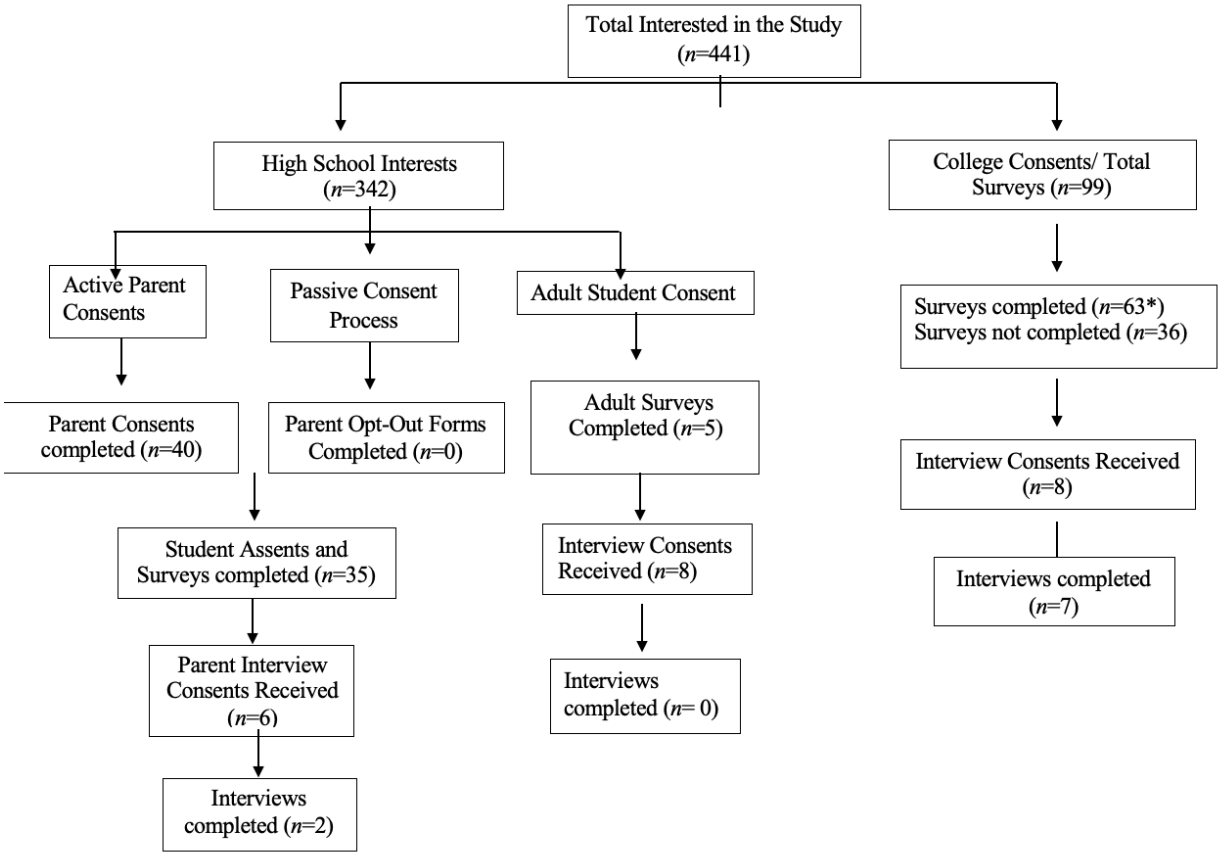


Figure 3. Participant Flowchart of Active and Passive Consent and Assent Processes



*Note two surveys were not included due to concerns within the vetting process

Quantitative Methodology

Measures

Demographic questionnaire

The demographic questionnaire (see APPENDIX A) asked participants for information about their sex, gender, race, age, grade/education level, parent level of education, number of individuals living in their home, the city/state of their high school, the name of their high school, if they attended their high school the prior year and the racial make-up of their high school. School-level data was collected and used to account for confounding variables. All information provided from the student demographic section was upheld using confidentiality measures to ensure participants' anonymity and privacy.

Racial Identity

MIBI. Racial identity was assessed using the *Multidimensional Inventory of Black Identity-Teen* (MIBI-T; Scottham et al., 2008). For college students who completed the surveys were asked to reflect on their high school experiences at the beginning of the survey. The MIBI-T is an adapted version of the Multidimensional Inventory of Black Identity (MIBI; Sellers et al., 1997) which measured Black youth and adolescents (ages 12-16) perceptions of their racial group membership from a multidimensional perspective. This original measure includes 10 subscales; however, the MIBI-T version contains seven subscales of centrality, private regard, public regard, and ideology scales of nationalists, oppressed minorities, assimilationists, and humanists. Centrality (3 items) refers to the extent a person defines themselves according to their race, private regard (3 items) refers to the extent an individual feels positively or negatively about being Black, while public regard (3 items) refers to how Black people are viewed by others in the broader society. Lastly, ideology refers to one's belief on how Black people should act in a

larger society. There are three dimensions of ideology, such as assimilationists, nationalists, and humanists (12 items). The MIBI-T consists of 21 items using a 5-point Likert scale of 1 (Strongly Disagree) to 5(Strongly Agree). It has been found that MIBI-T has good construct validity and coincides with the MMRI (Scottham et al., 2008).

The original MIBI has construct validity with other racial identity measures (e.g., MEIM, 1992). The internal consistency for MIBI (Sellers et al., 1997) ranged from (α= .60-.79), while internal consistency for the MIBI-Teen version ranges from (α = .5-.76). A Spearman-brown formula was utilized to estimate Cronbach alpha to account for fewer items being used compared to the original number of items of MIBI and the newer estimated range was (α = .75-.80). Because there has been prior construct validity confirmed with the MEIM, a revised version of the MEIM measure will be utilized to confirm construct validity. The revised version of the MEIM sought to examine a briefer version with adolescents of diverse backgrounds which coincides with the work of other researchers (e.g., MEIM-R; Phinney & Ong, 2007; Seaton et al., 2006) which will be administered to further confirm the validity of this current measure. Centrality, private regard, and public regard are the subscales that will be used for this study. Average scores from each subscale will be assessed individually, and an average item score of 3.0 and below will be coded as low status, while item scores of 3.1 and above will be coded as high status for each racial identity subscale. Each racial identity subscale profile will be used to examine mediation analysis.

Reliability and Validity of MIBI.

Exploratory Factor Analysis. The psychometric properties of the nine items of the MIBI-Teen were assessed through exploratory factor analysis (EFA) and Cronbach alpha estimates using SPSS Software (Version 27, IBM Corp) to determine their likely connection to

constructs of racial identity (Scottham et al., 2008). First, factorability was assessed using a variety of measures before conducting the EFA. A correlation matrix determined at least one association with another item which was above .40. Next, the Kaiser-Meyer-Olkin (KMO) determined an adequate sampling based on a KMO value of .79, which is above the threshold of 0.60. The Bartlett Test of Sphericity was significant, $\chi 2(36) = 479.53$, $p < .001$, indicating that the correlation structure was adequate for analysis. Finally, collinearity diagnostics were conducted, and no evidence of multicollinearity or singularity was found within the dataset. Based on this information, further analysis using an EFA for all nine items was sufficient**.**

A visual inspection of the scree plot suggested a three-factor solution with factor variances of 46%, 21%, and 10% accounting for a cumulative 77% of the variance (see Table 2). The factor loadings of each item ranged from .51 to .91 using a Varimax rotation, and the total internal consistency between all 9 items was .89. Factor I labeled *public regard* consisted of three items (M=2.55, SD=.995) and included an internal consistency was .865. Factor II, labeled private regard consisted of three times (M=4.04, SD=.718) with an internal consistency of .855. Finally, Factor III labeled *centrality* (M=3.88, SD=.854) consisted of adequate internal consistency with .763. All reliability measures were above the threshold of .7 suggesting adequate reliability. Based on this analysis, this racial identity measure demonstrated adequate reliability and validity to be used to measure the construct of interest for this study.

Table 2. Factor Loadings and Communalities for items on the Racial Identity Scale, MIBI-Teen Version

(N=101)		Three-factor component loadings			
Item #	Item Statement (M, SD)	PuG	PrG	CEN	Communalities
1	I am happy that I am Black (4.48, .768)		.913		.890
2	I am proud to be Black (4.49, .831)		.917		.884
3	I feel good about Black people (4.23, .847)		.599		.640
4	I feel close to other Black people (3.88, .972)			.720	.691
5	I have a strong sense of belonging to other Black people (3.91, .950)			.684	.670
6	If I were to describe myself to someone, one of the first things I would say is that I'm Black (3.86, 1.18)			.855	.749
7	Most people think that Black people are as smart as people of other races (2.41, 1.16)	.862			.832
8	People think Black people are as good as people as other races (2.44, 1.18)	.867			.803
9	People from other races think that Black people have made important contributions (2.80, 1.02)	.863			.757
Eigenvalues		4.10	1.93	.892	
% of variance		46%	21%	10%	

Note. PuG= public regard, PrG= private regard, CEN= centrality

MEIM. The Multi-Ethnic Identity Measure (Phinney, 1999) measures the individualized process of racial identity achievement through the lens of ethnic behaviors and affirmations of belonging to a specific racial/ ethnic group. The MEIM has strong reliability and validity for a wide range of ethnic populations (Roberts et al., 1999; Worrell, 2000) and consists of 12 items using a Likert scale of 1-5 of Strongly Disagree to Strongly Agree. These items address an individual's high and low status of exploration and commitment which forms distinct categories of diffused, foreclosed, moratorium, and achieved stages of racial identity which are derived from Maria's (1966) theory. This model reflects a longitudinal, linear progression of racial identity formation while recognizing the multidimensional dynamic of racial/ethnic identity as well. The MEIM measure was used as a secondary measure to ensure strong construct

validity between the MIBI-T racial identity measure supported by prior studies (Allwood, 2012). The Cronbach alpha for this study was .83, very similar to the MIBI-T. Due to the MIBI-T's examination of psychometric soundness using multiple methods (e.g., exploratory analysis), the MEIM-R was not utilized to generate results related to the research questions and hypotheses of this study.

School Racial Climate

The subdimensions of school racial climate examined in this study were quality of interaction, equal status, and stereotyping behavior. Based on the findings of the literature review as it pertains to school racial climate these three constructs encapsulate both positive and negative aspects of one's school racial climate and can be informative of strength and growth areas. These subdimensions can be found in the larger school climate measure, The *School Climate for Diversity- Secondary Scale.* The School Climate for Diversity-Secondary Scale (SCD-S, Byrd, 2015, 2017) is a 35-item instrument that has been normed for youths ages 12-18. Given that college participants were asked to reflect back on their high school experiences this version of the instruments was deemed the most appropriate. The SCD-S is comprised of two core domains: intergroup relations and school racial socialization. The intergroup relations domain consists of 13 items examining student perceptions of interpersonal relationships among races within one's school with subscales of ***quality of interaction***, *frequency of interaction*, ***equal status***, and *support for positive interactions*. The school socialization domain consists of 22 items that measure racial ideology messages within schools and include subscales of ***stereotyping****, promotion of cultural competence*, *cultural socialization*, *mainstream socialization*, and *colorblind socialization*. The three subscales in bold were chosen because they were strongly correlated to one another and provided a brief conceptualization of the school's racial climate.

Because items will be used from the three separate domains, and the measure was designed to examine subscales individually, conceptual, and psychometric considerations were made to facilitate the use of these measures in a combined fashion (McNeish & Wolfe, 2020). Most items on the SDC-S are rated on a Likert scale of (1) *not true at all* to (5) *completely,* however, the frequency of interactions subscale is rated on a Likert scale of (1) *never* to *every day* (5).

Two independent studies were conducted and confirmed that the SCD-S converges with other general school climate constructs (i.e., positive interactions, equal status) and a racial school climate measure (cultural pluralism, Brand et al., 2003) with correlations ranging from .62-.65 and above .43 respectively (Byrd, 2017). The general internal consistency of the 10 subscales was above .70 (Byrd, 2015, 2017). Although the SCD-S was designed to measure each construct individually, the psychometric properties (e.g., examination of the correlation matrix of the EFA) of three subscales (in bold) were closely examined to support the use of a combined score. **Quality interactions** (3 items) measure how well people of different races interact with one another, **equal status** (3 items) measure whether people of different races are treated fairly, and **stereotyping** (5 items) measure the extent stereotypes and prejudice exist within the school environment. Both equal status and stereotyping demonstrated statistically significant correlations with quality interactions (r= .44, -.42, p<.001), while stereotyping showed significant associations with equal status as well (r= .24, p<.05) making the three subscales suitable for combined analysis. The internal consistency for the three subscales ranged from .80-.87 demonstrating reliability that the items within the construct accurately reflect the construct (Byrd, 2017). A combined SDC-S score from these three subscales will be used to assess students' perceptions of their racial school climate with a maximum of 55. Items of stereotyping subscale will be reversed scored. Overall, a higher score reflects a more positive racial climate;

scores of 33.0 and below were indicated to be a negative racial climate, while scores of 33.1 and above were indicative of a positive racial climate. The average school racial climate score for this study was 35.91 (SD=9.00).

Academic Self-Concept

Academic Self-Concept (ASCS; Reynolds, 1988). The Academic-Self Concept scale is a 40-item questionnaire that has been normed for college students but has been validated for children as young as 10 years old. The ASCS measures students' perceptions of their ability to attain academic success within their school environment. Sample items on the measure include, "Most of the time while taking a test, I feel confident", "I consider myself a very good student", and "It is hard for me to keep up with my schoolwork" all of which are rated on a 4-point Likert-scale ranging from 1(*strongly disagree*) to 4 (*strongly agree*). The following items were reverse scored: 4, 5, 8, 11, 12, 14, 18, 19, 21, 24, 29, 30, 34, 38, 39, 40. Items are averaged for a total score and higher scores reflect a more positive academic self-concept. Internal consistency has been adequate in previous studies ranging from .9-.92 (Awad, 2007, Reynolds, 1988, Lent et al., 1997), and content, construct, and criterion validity were confirmed to meet adequate thresholds. There is also correlational evidence indicating the ASCS is associated with GPA (r= .40-.52), SAT scores (r= .12-.22), and the Rosenburg Self-Esteem scale (r= .45; Reynolds, 1988). The average academic self-concept score for this study was 112.17 (SD= (18.94). Participants in this study who were college students, and completed the surveys were asked to reflect on their high school experiences at the beginning of the survey.

Qualitative Methodology

Interviews

Students were allowed to opt-in for an interview based on their responses to the school racial climate measure (i.e., SDC-S); an equal number of students who reported a negative and positive school climate were selected. Portions of the interview protocol were edited before administration to reflect the feedback of six doctoral peers before administration to students.

Up to 25 students (approximately 25% of the overall sample) were considered for interviewing until saturation of themes was established (Glasser & Strauss, 1967). The semi-structured interview was created using rigorous qualitative techniques such as soft-, probing-, and hypothetical questions (Jacob & Ferguson, 2012; Merriam & Tisdell, 2016). The purpose of the semi-structured interviews (see interview protocol, APPENDIX F) was to provide a more detailed, comprehensive understanding of Black student experiences within a variety of school contexts. Verbal consent was acquired to audio record the session. First, students were asked very general questions about themselves and their schooling experience to build rapport. Thereafter, questions about racial identity and school racial climate were administered

Data Analytic Procedures

Regression Model

To answer research questions and hypotheses 1 and 2, bivariate correlations were generated to test the associations between variables, including specific profiles relevant to the study (e.g., high-, low-status). For research questions 1 and 3 regression analyses including mediation analyses were used to test hypothesized questions. The parallel mediation model illustrated in Figure 4 was tested using model 4 of the PROCESS Macro SPSS [Version 27] (Hayes, 2017). Using the SPSS extension PROCESS Macro, the direct and indirect pathways in

the relationships between the independent-, dependent-, and mediating variables were investigated. The relationship between the independent variable (school racial climate) and dependent variable (academic self-concept), controlling for the mediating variable (racial identity subscales), was examined first (direct effect). Then the relationships between the mediator (racial identity subscales) and independent variable (school racial climate), and mediator (racial identity subscales) and dependent variable (academic self-concept) were examined. Next, the pathways from the school racial climate to the academic self-concept through each of the sub-scales of racial identity (i.e., centrality, private regard, public regard) were tested (indirect effects). Finally, the significance of the total effect, which is the sum of the indirect and direct effects was tested. This approach was processed simultaneously using the bootstrapping method. Bootstrapping is a resampling method used to generate estimates for smaller samples to get a better estimate of a population parameter. It is the most optimal method compared to the Sobel tests because it makes no assumptions about the sampling distribution of the indirect effects (Hayes, 2009). This study utilized 5,000 bootstrap samples with a 95% confidence interval.

Both the structural equation model and PROCESS macro were heavily considered to determine the most suitable analysis for this study. Ultimately, it was found that when conducting both SEM and PROCESS regression models using the same data, both tests created similar findings as they relate to OLS regression and SEM coefficients (Hayes et al., 2017). The largest structural difference found between PROCESS Macro and SEM was measurement error due to their conceptual and theoretical differences. With that said, researchers found these differences to be minimal. There was a great benefit in terms of measurement error for large

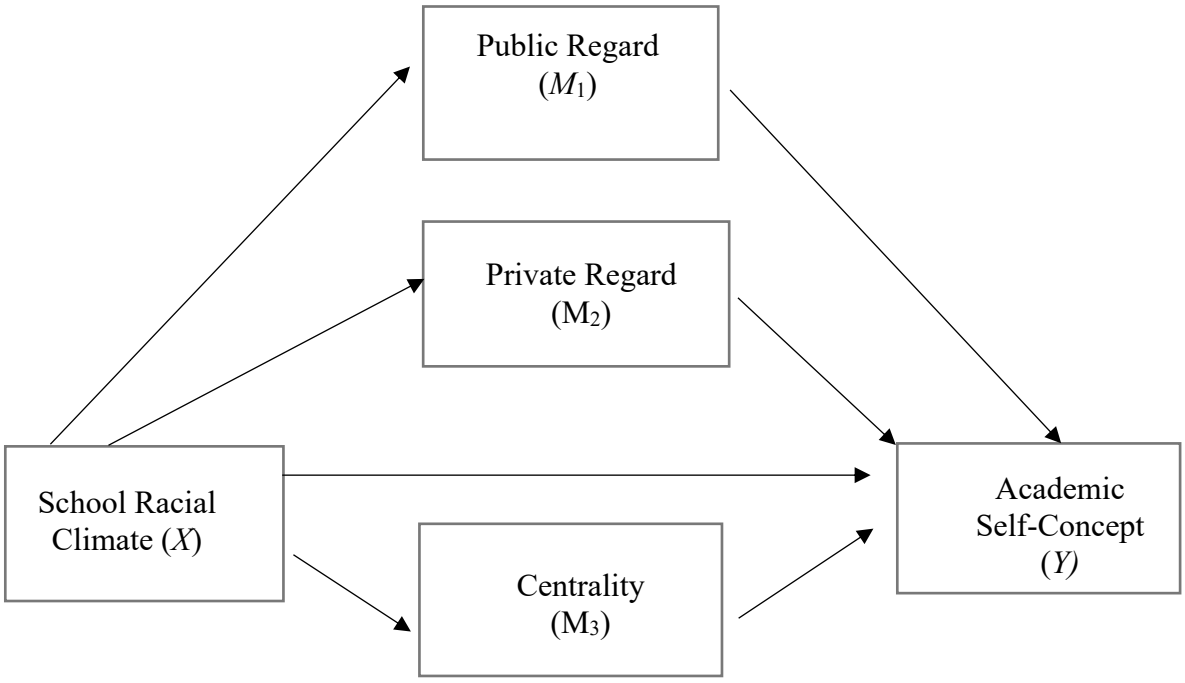
sample sizes in favor of SEM, however in smaller sample sizes the measurement error in SEM were very distinct which presented concerns for downward bias (Hayes et al., 2017).

A single-level analysis using individual students' perceptions of their school racial climate, racial identity, and academic self-concept was selected for this study. The use of multi-level modeling to examine second-level, school characteristics was considered in terms of aggregated data by school. However, to meet the assumptions of multi-level analysis, a large number of schools and an adequate number of sample participants from each school would be needed to properly assess the data which does not fit this study's scope. Although multi-level modeling was considered, treating school of attendance was used as a fixed effect, covariate to address the needs of this study.

Thematic Analysis & Integration

A total of nine interviews were transcribed using the computer-based software, Otter AI. All identifying information was removed before thematic analysis was utilized. Thematic analysis was used to identify repeated thematic coding patterns through an iterative process, and interrater reliability was conducted (Vaun & Clarke, 2006). Multiple raters coded the interviews independently, twice to minimize bias in interpretation, and to ensure qualitative reliability. Once both quantitative and qualitative data were collected, the information from both sources was integrated using mixed methods strategies of *connecting* and *merging* and then interpreted in a joint fashion that summarizes the findings concerning the research questions (Guetterman et al., 2015).

Figure 4. Process Macro Parallel Mediation Model 4



Qualitative Reliability and Validity

Qualitative reliability was administered using a thematic synthesis process (Thomas & Harden, 2008), a type of intercoder reliability that incorporates three stages of inductive coding. First, the principal researcher and graduate research assistant completed line-by-line coding independently for each of the nine interviews. Following, each individual generated descriptive themes based on the transcripts. Finally, in group discussion, descriptive themes were discussed and compared between the two researchers before analytic themes were discussed. Member checking was utilized to ensure adequate summation of themes was determined based on the qualitative interviews when deemed necessary.

Researcher Positionality Statement. As a Black, female researcher, I recognize my passion for penetrating systematic barriers that impact the well-being of culturally minoritized groups reflects my social justice worldview. My upbringing as a Black woman and professional experience working as a school psychologist with school-age youth has contributed to my interest in this area. With that said, I constantly engaged in reflexivity throughout this process to discern how my background and worldview might impact the research process. I was intentional about taking measures to minimize subjectivity and to take a broad and exploratory approach to the research process. I remained reflexive as I digested previous literature and formed research questions and the design of this study.

There are instances where my culture and identity can be a huge help in my interest in amplifying black youth voices, such as pinpointing specific topic areas that need further investigation. However, it is important not to perpetuate the various processes I wish to dismantle, especially during the interpretation process which was carefully considered. While I may have similar experiences and can relate to various issues experienced by Black people, I

recognize that I benefit from a level of privilege. Additionally, I cannot assume I fully understand anyone else's experiences due to a shared ethnic and racial background. The research questions were developed to ensure the participants' voices tell the story, as opposed to my own. Infiltrating qualitative themes can help provide a different, more complete perspective to begin to dismantle perceptions that promote Eurocentric and deficit model approaches to research. In quantitative research, I was mindful of the instrument selection, sample selection, and recruitment procedures that I utilized during the development of a study. All in all, I am contributing toward strength-based, solution-oriented research that can benefit culturally diverse children, youth, and families across a multitude of experiences. I understand that to do so, I must function with the lens of minimizing my subjectivity throughout the research process.

CHAPTER 4: RESULTS

Quantitative Results

Preliminary analyses

A pre-cleaning process was utilized to assess for missing data and outliers to ensure optimal accuracy of the data in preparation for regression analysis. Methods such as imputation (i.e., the process of replacing missing data with estimated values), and scatterplot visualization for identifying outliers were implemented to ensure the data was adequate for analysis. Based on this evaluative process, approximately 1-2% of the data were missing at random, thus having a minimal impact on the overall conclusions of the data. Serial means was a method used to replace the data and to ensure data points that were included would not greatly impact the data.

Participant Data

Descriptive analyses were conducted using the demographic information of the study participants (see Table 3). There were 101 (68% female, 30% male, 2% non-binary) Black participants of which 40 participants were currently enrolled in high school (i.e., current perceptions of high school racial climate), 61 were enrolled in college (i.e., retrospective reporting of high school racial climate). While all students self-identified as Black, there were 14 students (14% of the sample) who identified as bi-racial including self-identification as Black/African American. Approximately 17% of participants were 4th year undergraduate students, and 15% were 12th-grade students. The majority of the students were enrolled in public high schools across the United States. Most students attended schools with a racial make-up of 75% racially mixed students and staff and 75% racially white/European students and staff (n= 48, 47%; n=42 42% respectively). Participants reported one parent had a bachelor's degree (n=31, 31%), and if information for a second parent was provided a high school diploma (n=30,

30%) was reported. The average number of individuals living per household was 3.5. Additionally, demographic information based on high school- and college student school status can be found in Table 3.

Table 3. Participant Demographic Information

Demographic Characteristics	Total	High School	College
Total Participants	N=101	*n*= 40	*n*=60
Age M (SD)	18.33 (2.99)	15.20 (1.15)	20.38 (1.79)
Gender n (%)			
Man	30 (29.70)	16 (40)	14 (23.3)
Woman	68 (68.3)	23 (57.5)	45 (75)
Non-Binary	2 (2.0)	1 (2.5)	1 (1.7)
Grade n (%)			-
9th grade	-	4 (4.0)	-
10th grade	-	9 (9 .9)	-
11th grade	-	8 (6.9)	-
12th grade	-	19 (14.9)	-
1st year undergraduate	-	-	7 (6.9)
2nd year undergraduate	-	-	10 (8.9)
3rd year undergraduate	-	-	14 (5.0)
4th year undergraduate	-	-	26 (16.8)
5th year undergraduate	-	-	4 (9.9)
School Type n (%)			
Public	90 (89)	37 (92.5)	53 (86.9)
Private	6 (5)	1 (2.5)	5 (8.2)
Charter	3 (3)	1 (2.5)	2(3.3)
Other	2 (2)	1(2.5)	1 (1.6)
School Racial Make-up			
More than 75% of staff/students are Black	11 (10.9)	4(10)	7(11.4)
More than 75% of staff/students are Mixture of races	48 (47.5)	21(52.5)	27(44.3)
More than 75% of staff/students are White/European	42 (41.6)	15 (37.5)	27 (44.3)
Recruitment Type			
Social Media	12	12	-
Prolific	48	-	48
School/College-Based	41	28	13
Parent Race n (%)			
Black	87 (86.1)	32 (80)	55 (90.2)
Bi-Racial	14 (13.9)	8 (20)	6 (9.8)

Table 3 (cont'd)

Parent 1 Education Level n (%)	N=100	*n=39*	*n=61*
High School	20 (20)	10 (25.6)	10 (16.4)
Some College	18(18)	7 (17.9)	11 (18)
Associates Degree	7 (7)	1 (2.6)	6 (9.8)
Bachelor's Degree	31 (31)	12 (30.8)	19 (31.1)
Master's Degree	15 (15)	3 (7.7)	12(19.7)
Doctoral Degree	3 (3)	2 (5.1)	1 (1.7)
Other	6 (6)	4 (10.3)	2 (3.3)
Parent 2 Education Level n (%)	*N*=101	*n=40*	*n=61*
High School	30 (29.70)	15 (37.5)	15 (24.6)
Some College	22 (21.80)	11 (27.5)	11 (18)
Associates Degree	8 (7.90)	3 (7.5)	5 (8.2)
Bachelor's Degree	17 (16.80)	2 (5)	15 (24.6)
Master's Degree	12 (11.8)	3 (7.5)	9 (14.8)
Doctoral Degree	2 (2)	1 (2.5)	1 (1.6)
Other	10 (10)	5 (12.5)	5 (8.2)
Number Living in the Household M(SD)	3.50 (1.26)	3.68 (1.16)	3.38 (1.32)

Descriptive data based on independent, dependent, and mediation variables

Data were disaggregated to reflect the total sample, as well as high school and college student responses on various measures in the study, including School Racial Climate (SCD-S; retrospectively reported, if participant identified as being in college), Academic Self-Concept (ASCS; based on one's current perceptions of students' academic abilities), and Racial Identity (MIBI-T; based on one's current perceptions of their racial identities). The average score reported on the Academic Self-Concept Scale (ASCS) was 112.76 out of a maximum score of 160 across participants, and no notable differences were found when disaggregated between high school and college students (see Table 4.) For school racial climate (SCD-S), of the total sample, 63 of the participants reported a positive racial climate, whereas 38 participants reported a negative racial climate. Notably, there was a higher percentage of negative school racial climate (*n*=23; 57%) from high school students compared to college students (*n*=15; 25%). An independent t-test was conducted utilizing an alpha level of .05 to evaluate the mean differences

between high school- and college students' reports of school racial climate, variances were homogenous, thus equal variances were assumed. A statistically significant difference was found t(99)=-3.36, p=.001 between the two groups, and a large effect size was noted, *d*=1.99 indicating a strong effect size. Additionally, mean group differences between high school and college students' reports of the school racial climate measure were examined using an independent sample t-test, variances were homogenous, and thus equal variances were assumed. A statistically significant difference was found t (99)=-5.26), p<.001, and a large effect size was noted, *d*=1.62 indicating a strong effect size. Finally, for the racial identity subscales, 95% of the sample reported a mean score of private regard within the high-status range (M=4.40, SD=.718), and 75% of the sample reported a mean score representative of low public regard (M= 2.55, .718), finally 82% reported mean scores reflective of high centrality (M=3.88, SD=.854). Further comparison between high school and college student reports can be found in *Table 4*.

Table 4. Participant Means, Standard Deviations by Measure and School Type

School Type	All	High School	College
n=	101	40	61
ASCS Total M (SD)	112.17 (18.94)	110.81 (18.61)	114.02 (19.21)
SCD-S Total M (SD)	35.91 (9.00)	32.38 (9.60)**	38.23 (7.82)**
Positive SCD-S n (%)	63 (62)	17 (42)	46 (75)
Negative SCD-S n (%)	38 (38)	23 (57)	15 (25)
SCD-S Subdomains			
Quality Interactions M (SD)	3.31 (.875)	2.81(.860)**	3.64 (.817)**
Stereotypes M (SD)	3.32(.950)	3.01 (.953)*	3.52 (.894)*
Equal Treatment M (SD)	3.13(1.10)	2.97 (1.14)	3.23 (1.07)
MIBI Total			
Private Regard M (SD)	4.40 (.718)	4.41 (.669)	4.34 (.754)
High (n, %)	95 (94)	38 (95)	57(93)
Low (n, %)	6 (6)	2(5)	4 (7)
Public Regard M (SD)	2.55 (.718)	2.65 (.990)	2.49 (1.00)
High (n, %)	25 (25)	14 (35)	11(18)
Low (n, %)	76 (75)	26 (65)	50 (82)

Table 4 (cont'd)

Centrality M (SD)	3.88 (.854)	3.86 (.758)	3.90 (.917)
High (n, %)	83 (82)	33 (83)	50 (82)
Low (n, %)	18 (18)	7 (17)	11 (18)

Note. The subdomains of SCD-S were included for analysis purposes. Quality Interactions=3 items, Equal Treatment=3; Stereotypes= 5 items, was reverse scored, item range 1-5. *indicates p<.01, **p<.001

Research Question 1: School Racial Climate, Academic Self-Concept

Table 5. Bivariate Correlation between Racial Identity Subscales, School Racial Climate, and Academic Self-Concept

Variable	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*
1. SRC	-							
2. QuI	*.680***	-						
3. ST	*.926***	*.470***	-					
4. ET	*.854***	*.382***	*.712***	-				
5. PuR	*.395***	*.306***	*.335***	*.353***	-			
6. PrG	-.088	*.041*	*-.013*	*-.085*	*.230**	-		
7. CEN	-.083	*.105*	*-.154*	*-.088*	*.359***	*.607***	-	
8. ASC	.373**	*.161*	*.352***	*.384***	*.065*	*.062*	*-.012*	-

Note. *p<.05, **p<.001, SRC= School Racial Climate, QuI=Quality Interactions, ET= Equal Treatment, PuR=Public Regard, PrG=Private Regard, CEN=Centrality, ASC= Academic Self-Concept, the *ST* subscale was reverse scored, higher scores reflected lower instances of stereotyped behavior.

A Pearson regression coefficient was analyzed to evaluate the relationship between school racial climate and academic self-concept. As shown in Table 5, a statistically significant association was found ($r\ [99] = .373$, $p < .001$) with a medium strength of association. Additionally, subscales that make up school racial climate were examined along with academic self-concept, statistically significant associations were found between equal treatment- and academic self-concept, as well as stereotypes and academic self-concept (see Table 5). Additionally, for participants who reported a positive school racial climate, a positive association

was found between academic self-concept and the school racial climate dimension, equal treatment r=.307, p<.05.

Furthermore, regression analysis was conducted to determine whether a linear relationship existed between participants' perceptions of their school racial climate and academic self-concept scores. A statistically significant positive linear relationship was found between school racial climate and academic self-concept (b= .786; F (1,99) = 16.01, p=<.001) with R^2 value of .0139 indicating that 13.9 % of the variance could be explained by the two variables. Linearity between the two variables was assessed, as well as the standardized residuals which were examined and normally distributed, multicollinearity and homoscedasticity were also assessed and confirmed, thus meeting the assumption for linear regression. Additionally, when current high school students' reports on school racial climate were isolated, the relationship with academic self-concept remained statistically significant (b=.807; F(1, 39)=7.98, p<.01.

Research Question 2: Racial Identity and School Racial Climate

Public Regard

As shown in Table 5, a Pearson correlation coefficient was performed to evaluate the relationship between the racial identity subscale, public regard, and school racial climate. A positive significant relationship was found between public regard and school racial climate r [99] = .395, p=<.001, with a medium strength of association. When participants who reported high levels of public regard were isolated, the positive correlation with school racial climate increased to r [23] =.498, p< .05 level. When participants who reported low levels of public regard were isolated, a significant correlation was not found regardless of reported levels of school racial climate. Thus, low public regard was not influenced by perceptions of the school's racial climate in this study.

For participants who reported a positive school racial climate, public regard was positively associated with each dimension of school racial climate, quality interactions r=.400, p<.01, stereotypes r=.365, p<.05 and equal treatment r=.280, p<.05; while participants who reported a negative racial climate, public regard was positively associated with equal treatment r=.363, p<.05.

Private Regard

A Pearson correlation coefficient was performed to evaluate the relationship between the racial identity subscale, private regard, and school racial climate. There was a weak negative association that was not statistically significant between private regard and school racial climate *r* [99] =-.088, *p*=.382. When participants who reported high levels of private regard and low levels of private were isolated, there was no change in statistical significance regardless of reported levels of school racial climate (see Table 5).

Centrality

A Pearson correlation coefficient was performed to evaluate the relationship between the racial identity subscale, centrality, and school racial climate. There was a weak negative relationship that was not statistically significant between centrality and school racial climate *r* [99] =-.083, *p*=.411. When participants who reported high levels of centrality were isolated, the relationship was not statistically significant. For participants who reported a positive racial climate, centrality was positively associated with the school racial climate dimension, quality interactions r= .332 p<.01. For participants who reported a negative racial climate, centrality was negatively associated with school racial climate overall r= -.346, and specifically with the school racial climate dimension, stereotypes r= -.409, p<.015.

Research Question 3: Racial Identity as a Mediator Variable

Parallel mediation analyses were utilized to assess the mediating potential of racial identity subscales (public regard, private regard, centrality) on the relationship between school racial climate and academic self-concept. The PROCESS Macro (Hayes, 2022) path analysis of ordinary least squares with a bootstrapping method of 5,000 samples and 95% confidence intervals was utilized. As shown in *Table 6* and *Figure 5,* a total effect between school racial climate and academic self-concept was found (*B*= .786, *p<.001*). When examining the direct relationship between the independent variable (SRC) and mediator (M_1), a statistically significant relationship was found between school racial climate and public regard (a_1= .0437; F (1,99) = 18.35, *p*= .001) with R^2 value of .0156 indicating that 15.6 % of the variance. On the contrary, the relationship between the mediator (M_1) and dependent variable (ASCS), public regard, and academic self-concept was not statistically significant (*b_1=-2.60, p=.228).* When examining the direct relationships between the independent variable (SRC) and mediators (M_2, M_3), a significant relationship was not found (a_2=-.007, p=.382; a_3=-.008, p=.411). Similarly, a direct relationship between mediators (M_2, M_3) and the dependent variable (ASCS) was examined, a significant relationship was not found (*b_2*=3.65, p=.243; *b_3*=-.227, p=.935). When holding all mediators constant, a direct effect was found (c'= .923*, p*=.001). Finally, an indirect effect of public regard on the relationship between school racial climate and racial identity was not found (a_1b_1=-.1136, 95% CI -.3162- .0879. Similarly, private regard or centrality did not mediate the relationship between school racial climate and academic self-concept (a_2b_2=-.0260, 95% CI -.1340- .0352: a_3b_3=.0018, 95% CI -.0580- .0829). Based on these results, racial identity subscales did not meet the criteria to be considered mediator(s). Only two of the three assumptions were met: school racial climate significantly predicted academic self-concept and

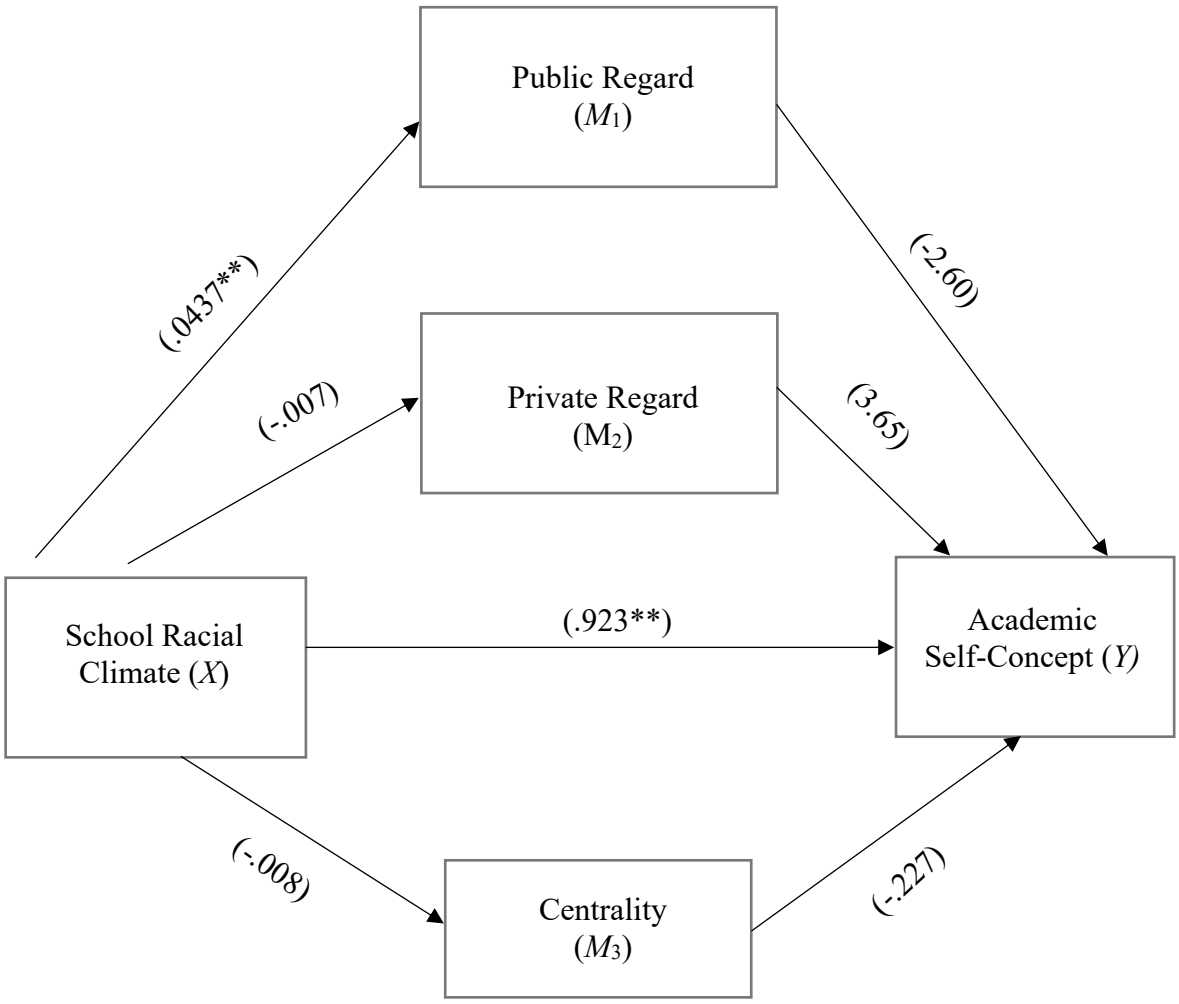
school racial climate significantly predicted one racial identity scale, public regard, however, racial identity did not significantly predict academic self-concept after controlling for school racial climate (Baron & Kenny, 2006).

Table 6. Parallel Mediation Results

	M_1 (PUR)			M_2 (PRG)			M_3(CEN)			Y (ASC)		
Antecedents	*B*	SE	*p*	B	SE	*p*	*B*	SE	*p*	*B*	SE	*p*
X(SRC) a_1	.0437	.0102	*<.001****	a_2 -.007	.008	.382	a_3 -.008	.0095	.411	c' .923	.222	<.001***
M_1(PUR)	-	-	-	-	-	-	-	-	-	b_1 -2.60	2.14	.228
M_2(PRG)	-	-	-	-	-	-	-	-	-	b_2 3.65	3.11	.243
M_3(CEN)	-	-	-	-	-	-	-	-	-	b_3 -.227	2.76	.935
	R^2= .156 F (1,99)= 18.35, p= <.001			R^2= .0077 F (1,99) =.772, p=.382			R^2=.0068 F (1,99)=.6827, p=.411			R^2=.1393 F (4,96)= 16.02, p=.0001		

Note. SRC= school racial climate, PUR= public regard, PRG= private regard, CEN=centrality, ASC= Academic Self-Concept *p<.05, **p<.01, ***p<.001

Figure 5. Parallel Mediation Analysis of the Current Study



Qualitative Results

Nine participants completed a virtual interview describing their direct experiences within the school environment as it related to their general school environment, racial identity, and school racial climate of their high school experience, see Table 7 for demographic information of the qualitative interview participants. Two students were enrolled in high school at the time of the study, and 7 participants who were enrolled at an undergraduate institution at the time of the study reflected on their high school experiences. Additionally, six participants (Participants 003, 005, 006, 007, 008, and 009) rated their school racial climate positively, while three participants (Participants 001, 002, 004) rated their school racial climate negatively. These direct reports were analyzed to provide more insight into the following research questions. The average interview length was 39.25 minutes.

Research Question 4: How do Black adolescents and young adults *(retrospective accounts)* describe their high school educational environment *(e.g., school racial climate)*?

Socialization/Peer Dynamics

Many participants highlighted the friendships and bonds that were developed at their high school to be an integral part of their current and/or past high school experience. Not only did this translate in the classroom, but outside of the classroom as well. Participant 003 stated, "Besides getting my work done and stuff just kind of like connect[ing] with people who you have a connection with, we have like certain things in common". Students commented on connecting with other students based on shared academic interests, as well as their involvement in extracurricular activities, such as sports, clubs, and other forms of connection outside of the classroom setting. Participant 008 stated, "My favorite part was definitely being part of the track team, and meeting so many of my friends through that, and just being able to have so many cool

experiences of traveling for me and being able to actually build a community". She later provides the context of the importance of community as a student in a predominately white, high-income school by saying, "Track was that one spot that there were a lot of Black athletes and Black students overall. So that was a great way for me to connect more with those who come from similar backgrounds". Her perspective (along with others) insinuates how the importance of social connectedness can fluctuate based on the racial make- up of one's school setting and provides in-depth meaning to the peer dynamics highlighted by Black students in this study.

Academic Enrichment

Academic enrichment was another common theme that was discussed in a very nuanced fashion within this sample of Black high school- and college students who reflected back on their high school experience. While some students had positive reports of the advanced academic opportunities their school provided inclusive of advanced courses, robust electives, and trade school opportunities, other students highlighted discrepancies in their knowledge of advanced course opportunities. Participant 007 stated, "Yeah, they never push dual enrollment a lot. And I didn't know until my junior year that I could like actually go and do it like this could have saved so much…And it was really annoying because I could have gotten a few more credits to take now but it could have easily done in high school". In this instance, this student expressed frustration that some educational opportunities were not clearly disclosed to students so that they could make informed plans about their future aspirations. On the one hand, academic opportunities were discussed as a way of influencing future decisions, such as an interest in graphic design, or STEM-related careers, while for other students it was limited and stifled due to a lack of consistent communication

Table 7. Demographic information of qualitative interview participants and exemplary quotes

#	School Status	Grade	School Racial Make-up	Climate	Recruitment Type	Exemplary Quotes
001	HS	12th	75% of students and staff are White	Negative	School Flyer	"I realized that I was the only Black person at my school, and it was very weird and different from what I was used to. I'd have people be like, oh, oh my gosh, you're smart. Oh my gosh, your English is so good. Oh, wow. Your writing is amazing and just… comments that are just like, oh my gosh, I didn't expect this from you because you're Black"
002	CS	1st yr.	75% of students and staff are White	Negative	School Flyer	"I think being Black is so beautiful. Like we have so many things of our culture that are US and US only. And I think that there's a beauty in that. I think what may be more like distressing is how people view blackness and how it's so like how the world is so Black and white with its thinking."
003	HS	11th grade	75% of students and staff are White	Positive	School Flyer	"We do have like a Black student union. I was a part of it back in sophomore year…it's kind of a really big thing."
004	CS	2nd yr.	75% of students and staff are of White race	Negative	School Flyer	"I didn't have like my first like…teacher of color I feel like until like my senior year, and it was like an English class. And I remember I wrote a paper on white passing and what that means in this day

Table 7 (cont'd)

						and age for like my college essay, and he read it and he actually gave me like feedback on it. And I was like, I don't think I've ever had a teacher give me like genuine feedback on like, something that has to do with race, because it's like, there's such a disconnect like these, with the white teachers"
005	CS	4th yr.	Mixed	Positive	Prolific	"I would think the teachers were fairly unbiased. And I think like, if it were like a violent interaction will be handled the same if they were like different races. But I will say, I do believe dress code was kind of handled a little. Not on purpose, racially, but a little. Definitely, it was a little biased towards black girls, in particular, because I remember I used to get dress coded almost every other day."
006	CS	2nd yr.	75% of students and staff are of White race	Positive	School Flyer	"…like, from what I was able to see, I think, like, everything was like, handled fairly. So, I also just think like, our, my high school was, like, equally diverse. So, like, it was just naturally, it was just natural to treat everyone the same."
007	CS	5th yr.	75% of students and staff are White	Positive	Prolific	"I saw a lot of honors students like me, they didn't have the opportunity to take APs or they weren't encouraged. And they were definitely smart enough to take them. I didn't like it that wasn't like an emphasis like you can move up, you don't have to stay in your class type, you can go take an AP, you can go take an honors, you can go to dual enrollment and do college…a lack of pushing for upward mobility, I guess something I'd like to see more."

Table 7 (cont'd)

008	CS	1st yr.	75% of students and staff are White	Positive	Prolific	"I definitely felt insecure about my race and about my culture and ethnicity. So being able to kind of like learn to embrace it and have like a community of those who are similar, has helped me learn more about what my race what my ethnicity is, and how I can start showing pride in it rather than to melt, not humility, but like, embarrassment and shame."
009	CS	2nd yr.	Mixed	Positive	Prolific	I definitely think my experience or like exposure to the way students of different races were treated definitely like, just kind of closed off by the fact that I was like, those like older AP classes. I definitely think like the treatment of maybe certain black students was different by certain staff, admin or like teachers."

Indicators of School Racial Climate

Students had very mixed perceptions as it related to the general school environment. Some students reported a positive relationship with their teachers and identified characteristics that communicated to them that their teacher was there for the students (e.g., passionate, caring for- or helping students), while other students reported not feeling heard or cared for by the larger administration and posited that diversifying administrative staff could improve this. It is important to note several students spontaneously mentioned elements of school racial climate in their broad general reflections about their schooling experience which will be discussed later more in-depth. Black students' broader reflections of their school experiences included a lack of diversity within the course curriculum as well as microaggressions experienced by students. Participant 008 identified one of her least favorite things about high school, "I would definitely say microaggression in my school. That was definitely really hard. Because a lot of my fellow peers were just not very open-minded. So that definitely affected me in a lot of ways all throughout high school".

Research Question 5: Are there pattern differences (e.g., student interactions, fair treatment, stereotypes, etc.) between students who report positive and negative school racial climates?

This research question sought to hear directly from Black students about their perceptions of their high school based on their ratings of a positive- or negative school racial climate. In the broader study, a large percentage of students (63 of 101; 62%) from the quantitative portion of the study reported a positive school racial climate, although more high school students (23 of 40; 57%) reported a negative racial climate. Of the nine participants, three participants' experiences were reflective of a negative school racial climate, while 6 participants' experiences were

reflective of a positive school racial climate. Participants were asked questions specifically about their school racial climate to provide a deeper understanding of various characteristics of the school racial climate within their respective schools (see Appendix F). First general themes highlighted by individuals who reported a positive school racial climate were discussed, and then themes identified across participants regardless of school racial climate will be discussed. In Figure 8, themes have been distinguished by setting type with exemplary quotes included to further illustrate students' experiences.

Positive School Racial Climate Themes

Cultivation of diversity, Respect for different cultures

In schools that were more representative of positive school racial climate, students highlighted system-wide efforts that promoted diversity and culture building. This not only included diversity of ethnicities, but also gender identity. Students discussed school-wide celebrations of events such as, Black History Month.

Representation of staff and administrators of color

Many students highlighted the positive implications of having a diverse representation within their administration, including principals, guidance counselors, teachers, and other school staff who were representative of diverse racial and ethnic backgrounds. As a result of having leadership and support staff of differing backgrounds, students noted school staff were more willing to discuss racial topics that occurred both within the school, as well as more locally and globally. By having Black and other racial and ethnic minority teachers, students felt there were no taboo topics that could be discussed for their class assignments, which allowed them to discuss topics of interest and importance to them. The academic freedom to center their written assignments on race-related topics without shying away from the racial discussion was gleaned

highly upon. Students commented on how diverse representation in staff administration also resulted in more fair and equal treatment in larger school- and class-wide policies. Participant 006 stated, “I think just like having like a diverse administration helped, just like, when I first started at the high school, or like, the principal was black, and like, the VP was like, I don't know, she's like black or like, mixed with something. And I'm like, the students of color, like respected those administration, administrators. So, I think that like played a big role in things.” Lastly, by having academic counselors of differing backgrounds, students felt supported in the career exploration process. Based on these students’ accounts, broader representation can impact the overall schooling experience from class assignments to school-wide policies and career-based discussions.

Benefits of Equal Treatment

When asked directly about equal treatment in their school, individuals with more positive reports of school racial climates reported concerns with equality in terms of punishment, dress code violations, as well as access to academic-related materials. The immediacy in school-wide recognition was also highlighted as important in this domain. Participant 009 shared, “I think it's a privilege definitely. That I really don't I really can't think of an experience where I felt I was treated unfairly” when asked directly how she felt about being treated fairly as if she recognized that this is not always the case in other schools or settings.

Negative School Racial Climate Themes

Inaction/lack of administrative support on racial issues

On the contrary, students in school environments that did not have adequate diverse representation within their school administration reported dissatisfaction with inaction from their administration as it related to racial conflicts between students as well as larger diversity

programming. Additionally, it was reported that many of the teachers did not know how to handle racial conflicts at school, and there were no systematic procedures in place to address these issues. In general, they felt more negative racial climate dynamics resulted from a lack of interest, engagement, and modeling from higher administrative staff. Many students spoke to their desire to have more direct conversations about race, the importance of acknowledging racial differences within the student body, and how this support from administration trickles down in setting a precedent for celebrating diversity, ensuring equity in policies, etc.

Identified trusted staff and teacher by Black students.

With that said, several participants who reported a negative racial climate identified a trusted adult that they felt comfortable with to bring their concerns about racial conflicts with students or teachers. Additionally, they identified teachers regardless of their race who made efforts to bring in diversity into their classroom through symbolism and other subtle actions. Participants 002 stated, “she was the teacher that kind of sponsored…my school [has a] Black American Culture Club. And she also sponsored, you know, like, a group for women's rights and everything…even like, during Christmas time, she would put like a Christmas tree in her room, and she would put for the top of the tree… she put a hijab”. It was apparent that having these individuals they could go to was pivotal in terms of their feelings of safety and belonging. It also highlights in which schools who are not able to hire diverse staff, can ensure students feel more accepted and seen by their teachers and school staff. Despite the greater negative aspects of the environment, students identified an adult that helped them to safe, protected, and respected all aspects of themselves.

Limited genuine student interactions with different races

Regardless of climate type, one of the major themes many students reported regarding genuineness from both students and teachers. Sometimes genuineness was discussed in terms of direct interpersonal interaction, but on a school-wide basis as well (See Figure 6). Many students also reported they seldomly interacted with students of different races at their school; stating that their White peers generally kept to themselves or in cliques. Another student reported that the interactions were fake and often led to microaggressions. Not only did students express interest in expanding school-wide diversity, but for all social identities to represented in a more inclusive environment. In instances where student-initiated efforts to incorporate diversity, equity, and inclusion were not well attended to, more administrative-led support and efforts were proposed.

Overlap between Climate Types

While there were specific themes that were distinct by climate type, there was some overlap between both climate types as well which means although participant scores fell within a range of a specific climate type, these qualitative themes were discussed in several participants' individual interviews regardless of their climate type.

Equity concerns and disparities in discipline practices

Consequently, students who did not believe their school exercised equal treatment reported bias specifically as it related to dress codes and suspensions. In instances of student conflict, participants felt Black students received harsher punishments, or Black, female students would get more code violations for dress codes compared to their white, female peers for similar violations. Most students in the sample clarified that they had not experienced these inequalities but observed it happening either on a larger school-wide scale or by secondhand information that was provided by their peers and friends provided, Participant 004 shared, "I noticed that the

students that were getting dress coded, were usually the Black girls, like the fact that their white female peers would be wearing the same or similar clothing." Finally, there were reports of equity issues in terms of knowledge about things like advanced classes or dual enrollment. One student highlighted what it felt like to be the only student of color in her AP course given majority of the student body reflected diverse ethnic and racial backgrounds, highlighting disproportionality inversely, "Um, I definitely say… like, AP program that was more proportional to like the makeup of the student body. There [we]re definitely times where like I was the only Black student in an AP class, but there's probably half of our school over half of our school is Black". When students were asked for ways their school could improve, students provided suggestions for practicing equality in terms of punishment and equity in terms of advanced learning opportunities, Participant 008 stated, "I would say for the most part, the schools definitely offered those programs, but they didn't really implement equity. So, to ensure that, you know, students of color were actually able to be informed about these programs and actually know how to get into them".

Student- and teacher perpetuated microaggressions

Microaggressions were more commonly referenced by both participants who reported a negative racial climate, but also by students from a positive racial climate as well. Microaggressions were perpetuated by both teachers and students and occurred during unstructured times (e.g., within the hallway), within the classroom, as well as on social media. Students described student microaggressions to include remarks about physical features such as their hair texture, skin tone, and their use of language. Participant 002 recounted, "I have had, like, other students, say things like calling me a monkey or throwing things in my hair when I

had it down and curly". While the teacher perpetuated microaggressions including questioning of intelligence, etc. Participant 001 stated,

> (In reference to students) they'd ask us like, questions about Black history. And I remember I was answering most of the questions just because I'm knowledgeable, you know. But the students at my school aren't really knowledgeable about this. So, as I was answering the questions, student in my team was like, oh, my goodness, you know, so much. And then a teacher commented, "yeah, because they know themselves". And that kind of, that kind of made me uncomfortable".

Offering Space for [Black]Student Voice

Many of the participants referenced Black student groups, such as Black Student Union, as well as other DEI-related councils that acted as havens of support ---a place of community and could be heard. Students discussed the benefit of having these specific groups regardless of the support level of diversity within their school climate. These groups were also helpful in providing tangible ways to improve elements of the climate. For instance, in one student-led group, a brief curriculum to address microaggression were discussed. Another student described a DEI council supported by the county where broader objectives and policies were established to support an inclusive environment across the school district inclusive of many schools as opposed to one school. This council included the superintendent as well as other school board members, and students. These spaces offered direct support and community for students, but also contributed towards making shifts in the climates at their schools.

Pattern differences between climates

In summary, students who reported a positive school racial climate were more likely to report positive interactions between students of diverse racial backgrounds whereas students

from negative racial climates attended predominately white schools, and shared students minimally interacted with one another. Although racially based incidents occurred in both settings, there were notable differences in how those situations were handled. In positive school racial climates, racially based harms (e.g., addressing the display of the Confederate flag) were addressed directly by the administration. In some cases, to the entire student body, whereas students in negative school racial climates felt peer-based racial conflicts and/or teacher-based related conflicts were not addressed appropriately if at all. Many students in negative racial climates recalled perceived racist remarks, or other racial slights made by their teachers, that when compounded by microaggressions made by peers contributed to feelings of loneliness and isolation by students. This was a stark contrast from participants in positive racial climates, where students reported their racial background was not as salient; these students were typically from schools with 75% of students and staff who were racially mixed. Both settings were not without issues related to equality in terms of conduct, discipline, and access to resources. Participants from positive racial climates reported more issues with access to advanced placement opportunities, whereas students from negative school racial climates reported having harsher punishments for dress code violations and- out-of-school suspensions for similar infractions. All in all, students were very cognizant of the action and inaction of their school administration, and opportunities for Black student voices and support groups for Black students were both desired and appreciated in both climate settings.

Research Question 6: What role does racial identity play in school racial climates?

Research question 2 analyzed the relationships between school racial climate and various racial identity subscales along with their high and low status. Based on the quantitative findings of this study, a statistically significant direct relationship was found between public regard and

school racial climate. With this information in mind, it is helpful to uncover the relatedness between school racial climate and racial identity by discussing racial identity more in-depth with keeping the qualitative themes previously identified for positive and negative school climate in mind. First, common themes of each racial identity subscale will be discussed following the integration of qualitative school racial climate findings.

Centrality

Almost all nine participants interviewed identified their race to be an important aspect of their identity and who they are as a person. However, the reasons for its importance varied by participant. Some participants discussed how its salience increased with age and in the context of discriminatory experiences, while others discussed the physical visibility of being a Black person from one's outward appearance and the implications of being Black from the perceptions of others. Some participants commented on the historical significance of being Black and the impact of other intersecting identities on everyday life. For instance, Participant 001 highlighted, "I don't really think about my race. It's only in small, rare circumstances ... maybe in a situation where I feel like I've been discriminated. That's when I acknowledge that oh, yeah, I'm just different. Some people don't like that" whereas, Participant 002 acknowledged its importance in the context of her mixed identity and sexual orientation, "I'm very big on my identity, I think that's how I that's I feel like what determines my interests and everything. So, I identify as a lesbian, and I am mixed. And I feel like, I hold a lot of I'm trying to find the word I guess, like, respect, and, you know, I, for my black heritage, I think and for being, you know, a part of the LGBTQ plus community". Many of the participants highlighted other important aspects of their identity to include gender, sexual orientation, and student status. The intersection of race and gender greatly impacted their aspirational goals, but there was also acknowledgement of feelings

of isolation in predominately white environments, participant 006 states, “But like, as I got older, I started to realize that like, I’m the only one in the room.” Racial identity was central to many of the participants and intersected with other social identities that shaped their perceptions and way of navigating the world.

Private Regard

Participants of this study highlighted both positive and mixed internal feelings associated with being a Black person. In terms of positive attributions, participants used language such as “being Black is so beautiful” as well as Black people are “dedicated” and “powerful” and a general sense of pride was expressed. Simultaneously, participants highlighted some of the difficulties of being a Black person and their internal feelings in those instances. Participant 005 recognized the current sociopolitical, historical climate and anti-Blackness messaging:

> “I’m not gonna lie it kind of gets a little discouraging. I will say especially…in America, it’s a little discouraging when you see things on the news, or you see, regardless of if they’re like a minority on social media, like the people that go out of their way to be like extra racist on social media, but it’s also discouraging when you want to…move around a lot and it seems like a lot of places also globally that do not like Black people”.

This participant honed in on their feelings with being a Black person given the national and global implications of perceptions of Blackness described, and she discussed her hesitancy to explore historical interests (e.g., Greece, Rome) as a result. Participant 008 described how her feelings towards her Blackness shifted from negative to positive given prior experiences:

> “I would say definitely more positive now than before. Before I used to have this negative mindset about being Black, especially because of all the stereotypes that I would hear around me, like, even from my Hispanic side of the family, you know, just hearing a

> lot of micro aggressive things being said to me and about other black people, it really made me have this closed-minded mindset about being proud about being Black. And then finally, it was only honestly, just two years ago, when I actually started to close, you know, that side of me that I was viewing, being black in such a negative way, and actually started to view it in a positive way, which now it's much more positive than how it was before".

Although a substantial number of participants reported high private regard on the quantitative portion of the study, these qualitative results highlight some of the nuance, and it is evident that how the world views Black people also impacts participants' internal feelings of being Black.

Public Regard

In terms of how non-Black people perceive Black people, the participants of this study highlighted two major themes, the general societal perceptions of Black people and direct individual experiences with Black people. Many of the participants highlighted that non-Black people's perception of Black people generally tend to be negative and centered around issues like implicit biases, stereotypes, and prejudice. Participant 004 highlighted,

> "Um, I feel like I see a lot of people just kind of casually ascribing to like, very anti-black narrative, and thought processes. So, it's like, my relationship to my campus is very different to my peers that are not familiar [with a] predominantly Black area. And they're like, oh, there's like a bunch of crime. And I'm like, there's a lot of crime here. But also, I feel like, it's important to recognize how the things we say…because I'm like, There's crime in every major city".

Another Participant 002 stated, "I feel like they have a lot of internal racism towards people who

> are Black. I think it's something that a lot of people don't work on, or they don't

acknowledge. And I think it shows up a lot on day-to-day life, like with, you know, maybe like, just microaggressions or simple comments, you know, I feel like people, non- Black people still have a lot of like, self-education to do."

A few participants highlighted how one's individual experiences with Black people could contribute toward a more accurate portrayal of Black people compared to some of the societal and cultural messages, however, it was also shared that's one's upbringing can heavily influence these types of negative assumptions.

The role of racial identity on school racial climate

Based on the qualitative reports of racial identity and school racial climate, being a Black person was central and an important aspect of one's identity for the majority of the participants of this study. With that said direct experiences of microaggressions as well as negative societal perceptions of Black people appeared to weigh heavily on many of the participants of this study. Additionally, participants' internal feelings (i.e.., private regard) of being Black seemed to have been negatively impacted albeit high ratings for this subscale in the quantitative portion of the study. This information suggests that aspects of one's racial identity, especially private regard may be susceptible to one's environment within this sample of interviewees, however, quantitative findings did not confirm this outcome for the larger sample. Quantitative findings did support the notion that one's school racial climate can directly impact Black students' racial identity development given its environmental proximity whether positive or negative. These perceptions of non-Black people and the larger society are taken into consideration. In this sense, school racial climate is influenced by one's racial identity. This is important to highlight given schools can cultivate positive school racial climates and positively influence racial identity development.

Mixed Method Research Question 7: In what ways can racial identity inform improvements to one's school racial climate with the hope of improving Black students' academic self-concept?

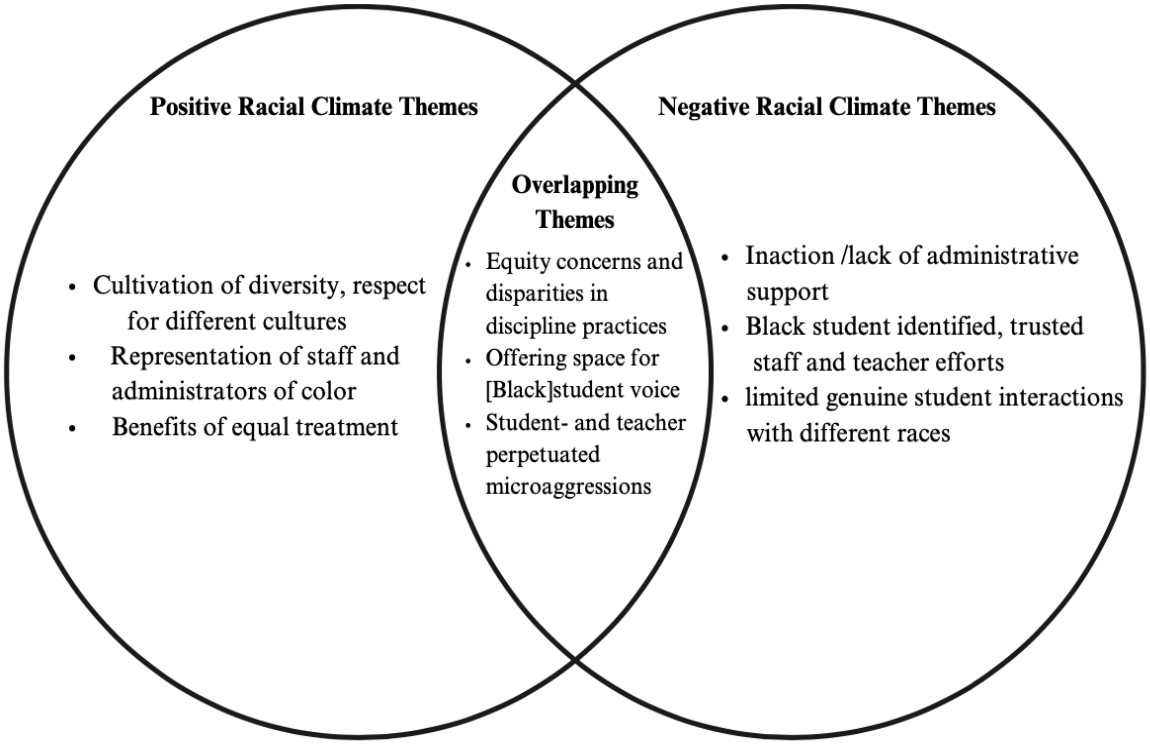
In terms of racial identity, based on the findings of this study majority of the participants reported a low public regard (n=76), suggesting Black students believe that non-Black people have negative views of Black people. In terms of their internal, self-appraisal of being Black, private regard, most students reported a high private regard (n=95) reflecting positive feelings associated with being Black, despite public regard status. Qualitative interviews provided more context to the nuanced fashion in which private regard and public regard are both integrated. The findings highlight how one can hold positive feelings about their race, but also recognize society's views and perceptions of their race which may be negative, without those messages impacting their overall racial identity. With that said, more positive environmental influences (e.g., school racial climate) can cultivate positive racial identity formation. For those who reported a positive school racial climate (n=63), public regard was positively associated with quality interactions, equal treatment, and low reports of stereotypes suggesting a reciprocal relationship. Lastly, the majority of the participants reported their race to be very central to their everyday life, and qualitative interviews highlighted both the physical features that cannot be ignored, and the cultural aspects of its importance to their identity.

Most students reported their school racial climate to be generally positive in the quantitative portion of the study. With that said, high school students (individuals reflecting on their current experiences) reported more negative school racial climate experiences than college students (reflecting on their high school experience). The qualitative portion of the study highlighted several aspects of a positive school racial climate such as, diversity,

teacher/administrative support, equal treatment, Black-centered spaces, and voice, etc. as areas of further improvement, especially for schools with more negative climates. Both quantitative and qualitative data suggested that quality interactions between students of different races is an area of improvement for schools with a negative racial climate. Statistically significant mean differences between high school and college student reports of quality interactions were found, current high school students reported more limited opportunities for positive interactions than college students (reflecting on their high school experience).

In sum, racial identity was heavily influenced by the school's racial climate, especially as it pertains to public regard. Centrality and private regard were still high despite a large majority of participants reporting of low public regard, suggesting a bidirectional relationship between school racial climate and racial identity. Given most students' perceptions of non-Black people's views are negative, improving aspects of one's school racial climate can be one avenue for buffering society's broader negative view. Finally, although a significant relationship between school racial climate and academic self-concept was found, the relationship between all racial identity subscales and academic self-concept was insignificant for the current study. Further investigation is necessary to better understand this study outcome.

Figure 6. Pattern comparisons of themes between participants who reported a positive- and negative school racial climate



Positive Exemplary Quotes

Participant 005 "I remember my high school would hold a cultural fair every February."

Participant 006 "From what I was able to see, I think, like, everything was like, handled fairly. So I also just think like, our, my high school was, like, equally diverse. So like, it was just naturally, it was just natural to treat everyone the same."

Negative Exemplary Quotes

Participant 001 "The students I don't feel because they're not really exposed to different races. I don't feel like they're very aware or appreciative."

Participant 002 "I think then the administration needs to focus on not creating an environment or upholding an environment where things like that are okay."

Overlapping Exemplary Quotes

Participant 008 "I was actually part of a equity organization for my county that really worked towards that ... each high school had one to two ambassadors representatives. That worked with county ... we worked towards implementing a lot of equitable ... policies or procedure ... so that we could really just work towards diversity and inclusion, and of course, equity."

CHAPTER 5: DISCUSSION

The purpose of this study was to examine the relationships between school racial climate, racial identity, and academic self-concept using correlation-, regression-, and mediation analyses. Prior research studies have examined these constructs in pairs or isolation, however, there were very few studies that examined all three together in tandem. By conducting a mixed methods study, it allowed for a more in-depth analysis using both quantitative and qualitative data to inform future outcomes.

Academic Self Concept as an Academic Outcome Variable

Academic self-concept reflects one's internal beliefs regarding their academic capabilities. Before this study, this construct had been very minimally studied especially when examining school climate or school racial climate. It was important to understand the relationship between school racial climate and academic self-concept as a preliminary step before examining the mediation potential of the racial identity subscales later in the study. Additionally, examining academic self-concept was exploratory given grade point average and standardized test scores are the more common academic outcome measures typically studied in school settings (Acosta, 2001; Awad, 2007; Wu et al., 2021).

Based on the findings of this study, a significant direct relationship was found between school racial climate and academic self-concept. For every one-unit increase in school racial climate scores, there was a .786 increase in the academic self-concept mean score while holding other variables constant. Additionally, positive associations were found between academic self-concept and school racial climate subdimensions---stereotypes and equal treatment. For instance, low reports of stereotypes (reverse scored to higher scores in the measure) were positively associated with academic self-concept, and equal treatment was also positively related to

academic self-concept. Equal treatment was especially significant for participants who reported a positive school racial climate. On the contrary, academic self-concept was not associated with any of the three racial identity subscales within this study. With that said, regression analyses examining racial identity subscales and academic self-concept showed an inverse trend of an increase in public regard and centrality and lower scores of academic self-concept, albeit a nonsignificant relationship. Similarly, a positive trend of increased scores on the private regard subscale and increased scores in academic self-concept, although this relationship was not significant. Cumulatively, these findings are important given there have been minimal research studies that examined the relationship between academic self-concept and other school-based factors, such as school racial climate and racial identity.

To date, only one study has examined academic self-concept and school climate which occurred in the collegiate setting (Acosta, 2001). The current study adds to the literature by examining the relationship between school racial climate and perceptions of academic self-concept from current high school and college students (who reflected back on the high school experience). Based on the findings of this study, the relationship between school racial climate and academic self-concept remained statistically significant only when high school perceptions were examined. Although previous studies found a significant relationship between racial identity and academic self-concept (Evan et al., 2011, Witherspoon et al., 1997), this was not the finding of the current study. In the Evans et al. (2011) study, there was an inverse relationship between high centrality and academic self-concept, while in the Witherspoon et al. (1997) study academic achievement scores (GPA) were negatively impacted by racial identity. As previously mentioned, in the current study, there was an inverse trend observed between centrality and academic self-concept, however, this association was not statistically significant. While this

study did not confirm negative associations between racial identity and academic self-concept, the proposed hypothesis that positive aspects of racial identity, such as high private regard and high public regard would influence academic self-concept was not confirmed based on the findings of this study.

The PVEST model indicates one's environmental setting, inclusive of risk contributors and stress engagement can impact how adolescents and young adults react to and cope with their surroundings. In this study, school racial climate and racial identity were environmental contributors that had the potential to influence one's perceptions of their academic capabilities (e.g., academic self-concept). This study highlighted the importance of academic self-concept as a life outcome variable that can be bi-directionally by such environmental factors positively or negatively according to stages of the PVEST model (Spencer, 1995).

Implications of the PVEST model and academic self-concept

The PVEST model is a great reminder that the environmental factors within schools can either improve or exacerbate Black students' response to their immediate environmental surroundings and thus impose coping responses that are adaptive or maladaptive to their overall well-being (Spencer, 1997). More specifically, the quantitative portion of this study determined that 63% of the participants reported positive reports of their school's racial climate which suggests a large majority of the schools attended by the participants in this study cultivated positive dimensions of quality interactions between students of different races, experienced fewer stereotypes, more equal treatment, and in turn was positively associated with Black students' perceptions of their academic abilities in this study. With that said, qualitative interviews completed by a small subset of participants highlighted a positive climate is not

without areas for improvement as well. There were still various aspects of the environment that students reported as concerning such as microaggressions and access to advanced courses.

Additionally, there were other risk factors found in this study that can negatively impact one's academic self-concept as well that were not intentionally examined. Based on both quantitative and qualitative data in this study, the racial composition of the school (e.g., racially mixed-, predominantly White schools), lack of diversity and representation in administrative staff and teachers, the perpetuation of racial stereotypes, student-and teacher initiated microaggressions, and unequal fair treatment for infractions and conduct were risk- and stress contributors within this study that can impose a negative self-perceptions of one's academic abilities. This is especially important given academic self-concept is also associated with academic achievement (e.g., GPA). The Cokely et al. (2000) study examined Black college students' academic achievement and academic self-concept within colleges of different racial compositions (e.g., historically Black colleges and universities (HBCUs) and predominately white colleges and universities institutions (PWCUs)). It was determined that academic self-concept was correlated with- and predicted by quality of student-faculty interactions (a school climate measure) and grade point average. Although outcome differences in academic self-concept scores were not found between Black students who attended HBCUs and Black students who attended PWCUs, there were group differences found in outcomes related to cumulative GPA, positive faculty-student relationship, and academic evaluation of students. In this study, Black students from HBCUs reported higher on academic achievement- and school climate measures compared to Black students attending PWCUs further highlighting the importance of the school environment on various academic outcomes. Although academic self-concept was not directly influenced by the racial composition of the school in the study, there were notable

differences in academic achievement and environmental factors within the school (e.g., school climate). The Cokely et. al., (2000) study aligns with the current study in that school-based factors can impact academic outcomes, including academic self-concept. The unique contribution of this study was that changes in academic self-concept were connected to race-based factors within the school climate which can inform other studies.

Assessing School Racial Climate

There is a wide range of school climate measures that seek to better understand students' overall experiences in their school environment which expect to impact longer-term outcomes, including higher GPAs and standardized test scores (Thapa et al., 2013, Wang & Degol, 2016). However, fewer school climate measures address domains of school racial climate (Aber & Mattison, 2007, Byrd et al., 2015) and examine the behavioral and academic outcomes associated with these findings. Although some general school climate measures incorporate elements of school racial climate, (e.g., fair discipline practices and equal treatment) examining racial relations between students and teachers is less common. It was hypothesized that school racial climate would be related to academic self-concept and racial identity. This hypothesis was partially supported. There was a statistically significant relationship found between school racial climate and academic self-concept, as well as a statistically significant relationship found between school racial climate and the racial identity subscale, public regard. Each of the school's racial climate dimensions of equal treatment, quality interactions, and stereotypes were also associated with public regard, although this was a weak relationship, the quality of interactions remained prominent. Finally, five interviews of 9 out of the 101 participants helped to shed light on aspects of the school's racial climate that are most salient to those students. Three of the participants reported their school racial climate as negative, while six participants

scored their school racial climate as positive. Pattern differences from the qualitative interviews highlighted distinctions between the two setting types, while also acknowledging areas for improvement regardless of school racial climate type.

The average score for school racial climate in this study was a score of 35.23 out of 55 which is two points above the cut-off score for a positive school racial climate. The average score for school racial climate for high school students fell just below the cut-off score at 32.98, while the college mean was 38.23, five points above the cut-off score. The proximal nature between negative and positive school climate scores may explain why there was an overlap between the two climate types, highlighting that schools with elements of a positive racial climate can still benefit from additional repairment in addressing school racial climate needs. With that said, 63% of participants in this study reported a positive school racial climate, with higher reports from college students who reflected back on their high school experience compared to current high school students. Although few studies dichotomized school racial climate as positive or negative, further examination of average item scores for the dimensions of equal treatment, quality interactions, and stereotypes align with previous studies. For instance, in this study, there were significant differences between current high school participants and college participants (reporting on their high school experiences) reports on the school racial climate dimensions of quality interactions and stereotypes. Between both groups, high school students' reports were generally lower respectively. When comparing scores with prior studies, generally mean item scores of equal treatment in this study were comparable to several prior studies (Griffin et al., 2020; Watkins & Aber, 2007), however were not aligned with lower scores reported by high school students in the Smith et al. (2020) study, with even lower scores reported by middle school students in the Golden et al. (2018) study. Dimensions of stereotypes and

interpersonal relationships were also much lower than scores reported in the Golden et al. (2018) study, this notable difference in reports of school racial climate may be attributed to different ages for the sample, where middle school students were the subject focus, rather than the high school experiences emphasized in this study, along with an emphasis on diverse racial perspectives rather than an emphasis on Black perspectives. Although the school racial climate subdimension of quality interactions was seldom studied in other studies, comparisons such as interpersonal relationships and cultural pluralism were reported with similar item averages (Smith et al., 2020). Finally, scores on the school racial climate subdimension of stereotypes varied by study. In total, high school scores were much lower compared to college and this difference was notably lower compared to other studies, however, as a whole participant scores of this study were relatively similar to previous studies except for student reports on stereotypes which varied by study.

School Racial Climate and Race-Based Stress and Trauma.

One very prominent finding of the qualitative portion of the study is that regardless of school racial climate reported scores, Black students within this study reported instances of discrimination based on their race and gender (e.g., dress code violations, suspensions), as well as covert microaggressions perpetuated by both students and teachers. This is important to note given the negative implications of race-based stress on Black students' overall mental health and the development of racial trauma. Racial trauma consists of race-based events of discrimination that hurt one's physical and psychological health and well-being (Saleem et al., 2022) that can be exacerbated by repeated offenses and/or the accumulation of direct and vicarious experiences. Both the PVEST as well as the Developmental Ecological Model of Youth Racial Trauma (Saleem et al., 2022) recognize the negative implications of these race-based incidents on the

development and psychological outcomes of youth/adolescents. Given the ongoing racial insults and discriminatory actions that occur within schools, as well as outside of the school setting, Black students may begin to internalize these instances which can impact how they perceive and interact with these various systems (Henderson et al., 2019). It has been found that alienation can be connected to school connectedness and belonging in these instances (Henderson et al., 2019; Saleem et al., 2022) which has been shown to cause psychological distress. In attempts to circumvent these very real experiences of Black students, various models seek to address racial trauma by incorporating reflectivity and addressing implicit bias amongst school staff, as well as integrating cultural responsiveness in school-wide initiatives and policy. Not only is it important for various race-based events to be addressed directly, especially by teachers to mitigate the perpetuation of these psychologically harmful instances that can impact Black students' overall well-being. On the contrary, if this does not occur it can further exacerbate the way Black students attribute to their school environment (e.g., safety) as well as internalize their racial identity (Saleem et al., 2022).

Striving Towards a Positive School Racial Climate

Previous literature indicates that positive racial climates can lead to a higher sense of school belonging and connectedness, stronger student-teacher relationships, and fewer discipline problems (Thapa et al., 2013). The quantitative findings of this study indicated that the majority (63%) of the students reported a positive school racial climate. It was also noted that item-level scores were relatively comparable to prior studies, however there was a higher proportion of high school students (57%) who reported a negative school racial climate compared to the college student participants (25%). These differences were also acknowledged in their item-level scores. Given high school students are currently enrolled, these findings are important when compared

to previous research. Additionally, only two participants were current high school students who participated in the qualitative interview. While the qualitative portion of the study highlighted many general themes of positive- and negative racial climates that can be used to improve school racial climate, current high school student experiences may not fully be captured. General themes of a positive school racial climate for this study included school-wide diversity efforts, administrative support in addressing diversity and racial issues, and the benefits of equal treatment. Prior literature indicates that fairness in policies, caring adult relationships, and high academic expectations can have a positive psychological impact on students (Conderman et al., 2020). Finally, although schools may have higher levels of positive racial climate, there are still areas of improvement that only direct assessments of school racial climate and/or qualitative input from students can identify target areas of intervention for a more improved positive school racial climate. The qualitative portion of the study helped to identify important aspects of school racial climate that schools can address to cultivate a positive racial climate based on the cumulative themes generated by the participants of this study.

Building a more diverse workforce, and supportive administration.

Given that schools are microcosms of larger society, global and local issues of diversity, equity, and inclusion are not exempt from school-based settings. Based on this study, student reports of their experiences suggest that supportive administration inclusive of diverse teachers and staff can help to address these concerns. Pattern differences between students who reported a positive school racial climate and a negative racial climate showed that schools without diverse representation or intentional professional development in culturally relevant practices are more susceptible to imposing implicit bias, microaggressions, and the perpetuation of stereotypes. Without intervention, Black students have harmful academic outcomes (Haynes, 2023). Building

a more diverse workforce with principals and administrators of different cultural backgrounds is one way students reported to be in support of a positive racial climate. However, when an increase in racial diversity in school staff was not possible, many participants discussed specific staff members who provided a place of solitude in school environments that may be less inviting. It is also important to note that diverse settings do not guarantee instances of discrimination and/or microaggressions will not occur which can negatively impact Black students' self-esteem (Seaton & Yip, 2009). Ongoing attention to racial diversity within administration and staff can be a system-wide approach to supporting respect for diversity and managing racial issues that occur both in school and in the larger community. Without this outlet, Black students reported feelings of loneliness and isolation that can continue to cause detrimental outcomes long-term.

Addressing Equity in Discipline and Conduct

High school students in this study reported low scores on the school racial climate dimension, equal treatment. Further, equity in discipline was highlighted by participants who reported a positive- and negative school racial climate indicating that it is an area of need that should be addressed more intentionally. Equity in discipline and conduct was defined as implicit biases that occur when implementing code of conduct violations including behavioral infractions and dress code violations, specifically for Black students. The Wang et al. (2023) study defines inappropriate language, dress code violations, etc. as minor infractions. In their longitudinal study, Black students were disproportionally suspended for minor infractions compared to their White counterparts. Similarly, in the current study, Black students reported a higher likelihood of getting an out-of-school suspension, while their White peers were more likely to get a verbal warning and/or no follow-up at all. In this study, students generally expressed frustration when describing unequal treatment at their schools. These qualitative findings align with several

studies (Bottani et al., 2016, Skiba et al., 2002, Wang et al., 2023). As found in these studies, if these issues of equity go unaddressed, it can negatively impact how Black students' perceptions of- and relationships with school staff (especially teachers) progress in terms of perceived trust and caring beliefs (Bottani et al., 2016) which can have other negative effects.

It is important to note that on the quantitative portion of the study school racial climate dimensions of equal treatment and stereotypes were highly correlated with one another. Given previous discussion regarding equity in the qualitative portion of the study, unequal treatment may be fueled by stereotypes or vice versa. Therefore school-based interventions that address equity in discipline practice may also positively influence perceived stereotypes about Black students as well. Like the Wang et al. (2023) study, participants of the current study offered schools suggestions on ways to improve equity in discipline and conduct problems at the systems level. Their suggested approach encompassed school staff and administration taking a holistic approach such as modeling empathy and matching infractions appropriately and equally across all students.

Expanding Black-Centered Student Needs

Given students' reports of a lower likelihood of having Black- or diverse school staff and inequitable treatment in policies, it is important to recognize the magnitude of positive spaces specifically for Black students. Many of the nine participants interviewed acknowledged student-centered spaces, such as the Black Student Union (BSU), where Black students can convene, and express their experiences in predominately white spaces, including the perils of microaggressions, while also celebrating positive aspects of Black culture proved to be very meaningful to students. In schools that do not have these types of student support groups, administrative support for ensuring these types of groups are formed is essential (Harrison et al,

2020). It has been shown that groups such as BSU not only provide a place of refuge for Black students but also allow Black students to initiate and engage in social activism efforts that can promote social change for more inclusion in larger institutional environments (Harrison et al., 2020). In the current study, there were several examples of student groups such as a diversity, equity, and inclusion (DEI) council, Black Student Union, and DEI task forces that promoted representation and voice in school-wide efforts.

Racial Identity as a Potential Mediator

It was hypothesized that racial identity would mediate the relationship between school racial climate and academic self-concept. Although racial identity did not act as a mediator, it proved to be a very important predictor of school racial climate. For instance, it was hypothesized that public regard would be associated with school racial climate, this relationship was confirmed. As mean scores of public regard increased, reports of a positive school racial climate increased as well, similarly lower mean scores of public regard reflected more negative school racial climates. Additionally, exploratory analyses revealed higher mean scores of public regard were associated with school racial climate domains of lower perceptions of stereotypes, [higher] reports of fairer/equal treatment, and more positive interactions between individuals of different races at their school. These findings are similar to previous literature where high public regard was associated with fewer reports of discrimination, lower levels of depression, and higher reports of psychological well-being (Sellers et al., 2006). On the contrary, other racial identity subscales such as private regard were not statistically associated with school racial climate. Higher reports of private regard were not positively associated with school racial climate as predicted based on prior studies (Chavous et al., 2003, Sellers et al., 2006) there was an inverse relationship between centrality and school racial climate. As mean scores of centrality

increased, perceptions of school racial climate decreased indicating an unsubstantial relationship given the relationship was not statistically significant.

As previously mentioned, a significant relationship between racial identity (i.e., public regard, centrality, private) and academic self-concept was not supported. Given these insignificant findings, it will be beneficial to examine the mediation potential of racial identity and/or school racial climate on the relationship between academic self-concept and academic achievement for future studies.

Limitations of the Study

While several promising results will inform future school racial climate studies, several limitations should be considered when interpreting the results of this study. First, this study was primarily a cross-sectional survey design and did not incorporate control- or treatment groups to compare outcomes. Cross-sectional studies help examine outcomes associated with one-time points but are less conclusive compared to longitudinal studies that can examine outcomes across time. Additionally, this sample was representative of a much wider age group obtained using social media and other web-based platforms to whom participants' high school experiences varied from many schools across the United States which can impact the interpretation of the results. Using a convenience sample and prioritizing self-report perspectives of Black students increased emic perspectives, though solely using self-report information prevents obtaining multiple forms of data from a variety of stakeholders (e.g., teachers, administrators) and from a variety of students (e.g., other racial minorities, white students). Finally, there was a subsample of college participants who reflected on their past high school experiences of their school's racial climate. Although participants were directed to reflect on their high experiences for both racial identity and academic self-concept, it is difficult to determine whether their current perceptions

of racial identity and/or academic self-concept might interfere with the interpretation of the results. Additionally, retrospective studies can help reflect on past experiences, however, the interpretation of distal reports of one's high school experiences should be acknowledged, especially given some of the stark differences between reporting types. There was a higher representation of college retrospective accounts for high school experiences in the quantitative and qualitative portions of the study which may skew the results toward more distal experiences of school racial climate.

CONCLUSION

There were many important findings as it relates to the relationships between racial identity, school racial climate, and academic self-concept. First, this study confirmed a statistically significant relationship between school racial climate and academic self-concept. Before this study, academic self-concept had been minimally studied concerning school racial climate based on high school experiences. This relationship confirms that other academic outcomes aside from academic achievement can help examine student outcomes. With that said, academic achievement continues to be an important variable that should be examined in tandem with academic self-concept in future studies. The dimensions of school racial climate of quality interactions, equal treatment, and stereotypes provided additional insights on the pulse of racial climate in schools. Both quantitative and qualitative data highlighted its relationship with academic self-concept, and the racial identity subscale, public regard. A large majority of participants in this study reported school racial climate more positively (63%), and when disaggregated by current school status, current high school students reported more negative racial climates (57%) thus calling for more group comparisons between current- and retrospective experiences about school racial climate outcomes. With that said, item averages on the school racial climate subscales were mostly comparable to prior studies. Finally, the qualitative component of the study helped to shed additional insights into the context of school racial climate scores. Although a much smaller subsample of interviewees, was more representative of college students' retrospective experiences of high school racial climate, the qualitative patterns between positive and negative school racial climate still shed light on the varying needs of Black students in school settings. There was an overlap in general qualitative themes between positive school racial climates and negative school racial climates including

addressing microaggressions, equity concerns with discipline, and increasing Black student groups for high school students. These areas should be addressed to minimize the development of racial trauma and/or negative racial identity formation. These findings suggest ongoing cultivation of a positive racial climate is warranted. Given that a positive school racial climate can also be beneficial to students of all races, future studies should incorporate students from a variety of racial backgrounds to demonstrate its benefits.

Racial identity did not mediate the relationship between school racial climate and academic self-concept for this sample. More specifically, there was not a significant linear relationship between academic self-concept and racial identity, and significant associations were not found. Higher reports of private regard were not positively associated with school racial climate as predicted based on prior studies (Chavous et al., 2003, Sellers et al., 2006), in fact there was an inverse relationship between centrality and school racial climate, however, this relationship was insignificant. Academic self-concept needs further exploration in tandem with racial identity, it may be helpful to examine racial identity formation longitudinally in comparison to academic self-concept, given the nuanced way identity was described in the individual interviews. Finally, mixed methods studies continue to offer in-depth understanding that can be replicated in quantitative-qualitative studies alone. Using this methodology helps to provide richer findings about school racial climate and racial identity that would not have been captured in a quantitative study alone.

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APPENDIX A: STUDENT DEMOGRAPHIC QUESTIONNAIRE

This form should only be completed if both parental opt-out consent has not indicated they would not like their student to participate and student assent has been obtained. The information provided on this form will be confidential and used for research purposes only.

Student First Name: (fill in the blank)
Student Last Name: (fill in the blank)

Age (dropdown- ages 13-24 and older)
Grade (dropdown grades 9-12th, 1st year- 5th year undergraduate, Other)
Race (dropdown, Black, White/Caucasian, Asian/Asian American, Middle Eastern, Native American, Bi-racial/Multiracial—fill in the blank)

City/State of your high school (fill in the blank)

Name of High School (fill in the blank)
(Note. Sensitive school information will be coded and unidentifiable after completing this questionnaire)

School Type (private, public, charter, other—multiple choice)

School- Racial Make-up (dropdown- more than 75% of students/staff are Black, more than 75% of students/staff are a mixture of different races, 75% of students/staff are white/European students)

Did you attend this high school last year? (yes/no-only provided to high school students)

Parent 1 Race (dropdown, Black, White/Caucasian, Asian/Asian American, Middle Eastern, Native American, Bi-racial/Multiracial—fill in the blank)—this will be used to pre-screen parent racial/ethnic backgrounds

Parent 2 Race (dropdown, Black, White/Caucasian, Asian/Asian American, Middle Eastern, Native American, Bi-racial/Multiracial—fill in the blank) ---this will be used to pre-screen parent racial/ethnic backgrounds

Parent 1 Education Level (dropdown- completed high school, some college, associate degree, bachelor, masters, doctoral, other—fill in the blank)

Parent 2
Parent 1 Education Level (dropdown- completed high school, some college, associate degree, bachelor, masters, doctoral, other—fill in the blank)

Number of people living in the household (fill in the blank)

APPENDIX B: MULTIDIMENSIONAL INVENTORY OF BLACK IDENTITY-TEEN

Directions: Please answer the following statements about your racial identity based on the following scale 1= strongly disagree, 2=disagree, 3=neutral, 4=agree, and 5 strongly agree.

Public Regard

1. Most people think that Black people are as smart as people of other races

1- *Strongly Disagree* 2- *Disagree* 3- *Neutral* 4- *Agree* 5- *Strongly Agree*

2. People think Black people are as good as people as other races

1- *Strongly Disagree* 2- *Disagree* 3- *Neutral* 4- *Agree* 5- *Strongly Agree*

3. People from other races think that Black people have made important contributions

1- Strongly Disagree 2- *Disagree* 3- *Neutral* 4- *Agree* 5- *Strongly Agree*

Private Regard

4. I am happy that I am Black

1- *Strongly Disagree* 2- *Disagree* 3- *Neutral* 4- *Agree* 5- *Strongly Agree*

5. I am proud to be Black

1- Strongly Disagree 2- *Disagree* 3- *Neutral* 4- *Agree* 5- *Strongly Agree*

6. I feel good about Black people

1- Strongly Disagree 2- *Disagree* 3- *Neutral* 4- *Agree* 5- *Strongly Agree*

Centrality

7. I feel close to other Black people

1- Strongly Disagree 2- *Disagree* 3- *Neutral* 4- *Agree* 5- *Strongly Agree*

8. I have a strong sense of belonging to other Black people

1- Strongly Disagree 2- *Disagree* 3- *Neutral* 4- *Agree* 5- *Strongly Agree*

9. If I were to describe myself to someone, one of the first things I would say is that I'm Black

1- Strongly Disagree 2- *Disagree* 3- *Neutral* 4- *Agree* 5- *Strongly Agree*

APPENDIX C: MULTI-ETHNIC IDENTITY MEASURE

Directions: These questions are about your ethnicity or your ethnic group and how you feel about it or react to it. Please answer the following statements about the climate of your school based on the following scale 1= Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, and 5=Strongly Agree.

	Strongly Disagree	***Disagree***	***Neutral***	***Agree***	***Strongly Agree***
1. I have spent time trying to find out more about Black people, such as history, traditions, and customs.	1	2	3	4	5
2. I have a strong sense of belonging to being a Black person.	1	2	3	4	5
3. I understand pretty well what being Black means to me.	1	2	3	4	5
4. I have often done things that will help me to better understand being a Black person.	1	2	3	4	5
5. In order to learn more about my ethnic background, I have often talked to other people who are Black.	1	2	3	4	5
6. I feel a strong attachment towards my racial group.	1	2	3	4	5
7. I am active in organizations or social groups that include mostly members of my own ethnic group.	1	2	3	4	5
8. I have a clear sense of my ethnic background and what it means for me.	1	2	3	4	5
9. I think a lot about how my life will be affected by being Black.	1	2	3	4	5
10. I am happy that I am a member of the group I belong to.	1	2	3	4	5
11. I have a lot of pride in being Black.	1	2	3	4	5
12. I participate in cultural practices of my own group, such as special food, music, or customs.	1	2	3	4	5

APPENDIX D: SCHOOL CLIMATE FOR DIVERSITY-SECONDARY SCALE

Directions: Please answer the following statements about the climate of your school based on the following scale 1= not true at all, 2=a little true, 3=somewhat true, 4=very true, and 5 completely true.

	Not at all true	***A little true***	***Somewhat true***	***Very true***	***Completely true***
1. Students of different races/ethnicities trust each other.	1	2	3	4	5
2. Students here like to have friends of different races/ethnicities.	1	2	3	4	5
3. People of different races/ethnicities get along well.	1	2	3	4	5
4. Students of all races/ethnicities are treated equally at your school.	1	2	3	4	5
5. The principals treat students of all races/ethnicities fairly.	1	2	3	4	5
6. At your school, teachers are fair to students of all races/ethnicities.	1	2	3	4	5
(Reverse scoring below)					
7. Your racial or ethnic group is seen in stereotypical ways here.	5	4	3	1	1
8. Students here have a lot of stereotypes about your racial or ethnic group.	5	4	3	1	1
9. Teachers and principals believe negative stereotypes about your racial/ethnic group.	5	4	3	1	1
10. Teachers are prejudiced against certain racial/ethnic groups.	5	4	3	1	1
11. Your racial or cultural group is represented in stereotypical ways in textbooks and class materials.	5	4	3	1	1

APPENDIX E: ACADEMIC SELF-CONCEPT SCALE

Directions: Please answer following statements about your academic abilities based on the following scale 1= strongly disagree, 2=disagree, 3=agree, 4=strongly agree.

	Strongly Disagree	***Disagree***	***Agree***	***Strongly Agree***
1. Being a student is a very rewarding experience	1	2	3	4
2. If I try hard enough, I will be able to get good grades	1	2	3	4
3. Most of the time, my efforts in school are rewarded	1	2	3	4
4. No matter how hard I try, I do not do well in school	4	3	2	1
5. I often expect to do poorly on exams	4	3	2	1
6. All in all, I feel I am a capable student	1	2	3	4
7. I do well in my courses given the amount of time I dedicate to studying	1	2	3	4
8. My parents are not satisfied with my grades	4	3	2	1
9. Others view me as intelligent	1	2	3	4
10. Most courses are easy for me	1	2	3	4
11. I sometimes feel like dropping out of school	4	3	2	1
12. Most of my classmates do better in school than I do	4	3	2	1
13. Most of my teachers think I am a good student	1	2	3	4
14. At times, I feel school is too difficult for me	4	3	2	1
15. All in all, I am proud of my grades in school	1	2	3	4
16. Most of the time while taking a test I feel confident	1	2	3	4
17. I feel capable of helping others with their class work	1	2	3	4
18. I feel my teachers' standards are too high for me	4	3	2	1

19. It is hard for me to keep up with my classwork	4	3	2	1
20. I am satisfied with the class assignments that I turn in	1	2	3	4
21. At times, I feel like a failure	4	3	2	1
22. I feel I do not study enough before a test	4	3	2	1
23. Most exams are easy for me	1	2	3	4
24. I have doubts that I will do well in my schoolwork	4	3	2	1
25. For me, studying hard pays off	1	2	3	4
26. I have a hard time getting through school	4	3	2	1
27. I am good at scheduling my study time	1	2	3	4
28. I have a fairly clear sense of my academic goals	1	2	3	4
29. I'd like to be a much better student than I am now	4	3	2	1
30. I often get discouraged about school	4	3	2	1
31. I enjoy doing my homework	1	2	3	4
32. I consider myself a very good student	1	2	3	4
33. I usually get the grades I deserve in my classes	1	2	3	4
34. I do not study as much as I should	4	3	2	1
35. I usually feel on top of my work by finals week	1	2	3	4
36. Others consider me a good student	1	2	3	4
37. I feel I am better than the average student	1	2	3	4
38. In most of my classes, I feel that my classmates are better prepared than I am	4	3	2	1
39. I feel that I do not have the necessary abilities for certain courses	4	3	2	1
40. I have poor study habits	4	3	2	1

APPENDIX F: INTERVIEW PROTOCOL

Hello,
My name is Lindsay Poole. I am a graduate student at Michigan State University. First, I want to thank you for taking the time to complete the survey questions. As a reminder, the purpose of this study is to learn more about your experiences at school in ways that cannot always be captured in a survey*. It is important to understand student experiences and perspectives. With that said, I invite you to share as much or little as you feel comfortable. Everything discussed in this interview will only be used for the purposes of the study. Your identity will remain anonymous, and your responses will not be traceable back to you or the school you attend. The interview will take approximately 60 minutes, and the information used in this interview will contribute to a greater understanding of the overall study. Before you get started, do you have any questions? Lastly, is it okay if I audio record this session to be able to refer back to it in a more detailed manner (Document if the participant says yes/no).

*Added for college students-. As a reminder, the purpose of this is a retrospective study to reflect on your high school experience in ways that cannot always be captured in a survey.

Okay, great let's get started.

1. Tell me a little bit about yourself?
    - What are your goals/aspirations after high school?
    - What are some things you are really proud of about yourself?
2. What types of things do you like to do in your free time?
    - Are you involved in any hobbies, sports, other interests, etc.
3. Who do you feel/receive the most support from?
    - Follow-up: what specifically do they do that makes you feel supported?

School environment/Academic self-concept

4. What is your favorite/least favorite thing about school?
    - How do you typically manage the academic demands of school?
5. If you could change one thing about school, what would it be?

Racial identity

6. What are the most important aspects of who you are as a person? (Salience)
    - Gender, race, student, child/sibling, athlete, etc.?

Note. If race is not mentioned: People use many terms to describe their race. How would you describe your race?

7. How important is your race to you? (racial centrality)
    - Do you feel your race is more or less important in your everyday life?
    - Why?
8. How do you feel about being a black person? (private regard)
    - Do you have mostly positive, negative, or mixed feelings in terms of being black?
    - Follow-up: What makes you think/feel that way?
9. How do you feel non-Black people view Black people? (public regard)
    - Do you feel others have mostly positive, negative, or mixed in feelings about black people?

- Follow-up: What makes you think/feel that way?

School Racial Climate refers to how well your school creates relationships between students from different races, how well discipline and other teaching practices or expectations are implemented equally across races, and to the extent that other cultures are celebrated throughout the school year. I would like to discuss more information about your school's climate.

10. What is the general racial makeup of your school (i.e., mostly white, mostly black, mixed?
    - Administrators?
    - Teachers?
    - Students?
11. Do you feel like students and teachers of different races respect one another or get along?
12. If there is a conflict between students of different races at your school, how is it handled? What are the current processes/protocols?
    - Are you satisfied with this approach?
        i. If not, what would be a better approach?
13. Are students of different races treated fairly at your school?
    - In terms of school resources (gifted programs, class schedules), discipline, academic/behavioral expectations?
        i. Explain or give examples
14. How does it make you feel to be treated fairly or not be treated fairly at your school?
15. Have you ever felt picked on or isolated based on your race?
    - Explain or give examples
    - (if applicable) What are some things you would like your school to do to address this?
16. What are other things you would like to see added, changed, or continued at your school to address any of the things we have discussed so far?
    - Quality of interactions between races
    - Equal/fair treatment across races
    - Feeling picked on or isolated because of your race

Thanks so much for taking the time to share your thoughts. Is there anything you would like to share before we conclude? If I have any additional questions or clarifications, will you be available for a brief follow-up interview?

Thanks so much!

APPENDIX G: QUANTITATIVE ACTIVE PARENT CONSENT FORM

Your child has been selected by their teacher as a great candidate to participate in this research study! The purpose of the study is to provide Black high school students with an opportunity to share their school experiences with others. If your child does not self-identify as Black and at least one of their biological parents does not identify as Black, then your child would be ineligible to participate in this study.

Researchers are required to inform you about their research study and allow the opportunity to consent to your child's participation in the study. This consent form is for parents of students under the age of 18 years old, as students 18 or older can consent for themselves. It will explain the risks and benefits of participating in the study and will empower you to make an informed decision. Participation is voluntary and you should feel free to ask the researcher if any questions arise. Your child will also have the opportunity to learn about the study before they agree to participate.

Study: The Role of Racial Identity on School Racial Climate and Academic Self-Concept from the Perspective of Black High School Students

Researchers: Lindsay Poole, Doctoral Candidate in School Psychology
John S. Carlson, Professor, School Psychology
Department of Counseling, Educational Psychology, and Special Education
Michigan State University

PURPOSE OF THE STUDY:
There is an abundance of research that examines the relationship between school climate and academic outcomes for school-age youth and adolescents nationally. Within that research, racially minoritized groups (including Black students) tend to report less favorable experiences as it pertains to school climate and academic performance compared to their white peers. There are minimal research studies in school psychology that obtain both survey (quantitative) and interview (qualitative) information from students about their experiences in schools. This study seeks to better understand the relationships between Black students' self-perceptions (in terms of their racial group membership and racial pride, as well as their academic abilities) and how that may relate to their experiences with the climate in their school. Participation in the quantitative portion of the study will take about 20-25 minutes to complete, while participation in the qualitative portion of the study may take between 30- 60 minutes.

WHAT YOUR CHILD WILL DO:
There are two portions of this study, the survey portion and the virtual interview portion. For the survey portion, your child will be asked to provide some brief background information, and then complete three surveys consisting of 73 items that discuss their racial identity, their school experiences as it relates to the racial climate (e.g., relationship with peers/staff, etc.), and their general beliefs about their academic abilities. At the end of the survey, your child may be asked if you would like to participate in the interview portion of the study. In order to participate, parental consent must be obtained. You will have the opportunity to indicate whether you would like your child to participate in the second portion of the study at a later time.

The purpose of the interview is to provide additional context and information about your child's experiences. Individuals who participate in the interview will be given a stipend of $10. The interview will be conducted by one research team member and will cover topics such as your general experiences at school (e.g., future aspirations), racial group membership (e.g., pride), and specifics about your school environment (e.g., interpersonal relationships, fair treatment). The interview portion of the study will take between 30- 60 minutes to complete.

The questionnaire, survey, and interview (if selected) will be used for research purposes only, and the results will not be shared with you or your child until a later date/time. Additionally, your child's information will be concealed by an ID code that will not be traceable back to them when the results are shared.

POTENTIAL BENEFITS:
You and your child will not directly benefit from participating in this study; however, participation will contribute to a greater knowledge of Black student experiences across a variety of school environments with the hope of informing school policy potentially in the future. This information may result in a research manuscript publication or other professional conferences that can be used to inform other schools across the United States and globally.

POTENTIAL RISKS:
This study poses minimal risk to you and your child. While some of the survey questions or interview prompts may cause discomfort on topics such as fair treatment and stereotypes in school, your child may opt to skip any question they feel uncomfortable with.

PRIVACY AND CONFIDENTIALITY:
Maintaining your privacy as a participant in this study is incredibly important to the research team. To ensure your child's answers are kept private and confidential, your child will be completing this survey online through a safe and secure link. Only a select few people (a research assistant and myself) will have access to your survey once it is submitted, and only the principal investigator (me) will be able to identify which survey is your child's. This information will not be disclosed or shared with anyone.

For the interview portion, which will take place virtually only the audio portion will be stored and saved. The transcript will not include any personal or school-identifiable information. Once the interview is transcribed, general patterns and trends across other interviews will be identified and direct quotes will be used very minimally and with discretion to confidentiality.

Your child's survey responses and interview audio file will be securely kept for up to 5 years, this is to ensure the researchers have access to your survey data while they interpret the survey results and complete the research report. The report will not talk about any one individual survey but will instead highlight trends across all participants. Additionally, the research report will not identify your child or your child's school, and their information will be kept within the research team only.

YOUR RIGHTS TO PARTICIPATE, SAY NO, OR WITHDRAW:
Participation is voluntary. You/your child may refuse to participate without penalty or loss of benefits at any time. You have the right to say no. Whether you choose to participate or not will have no effect on your child's grade or evaluation from the teacher.

WHAT TO DO IF YOU GET INJURED
If you or your child gets injured as a result of your participation in this research project, Michigan State University will assist you in obtaining emergency care, if necessary, for your research-related injuries. If you have commercial insurance for medical care, your insurance carrier will be billed in the ordinary manner. As with any medical insurance, any costs that are not covered or in excess of what are paid by your insurance, including deductibles, will be your responsibility. The University's policy is not to provide financial compensation for lost wages, disability, pain or discomfort, unless required by law to do so. This does not mean that you are giving up any legal rights you may have. You may contact, me, Lindsay Poole at (248) 221-1846 with any questions or to report an injury.

COSTS AND COMPENSATION FOR BEING IN THE STUDY:

All child participants who complete the quantitative survey will receive a $10 gift card, and if your child is selected and completes the virtual interview, they will be given an additional $10 gift card.

FUTURE RESEARCH

You and your child's personal information (e.g., email) collected as part of the research, even if information that identifies you is removed, **will not** be used or distributed for future research studies.

CONTACT INFORMATION FOR QUESTIONS AND CONCERNS:
If you have any concerns or questions about this study, reach out to me, Lindsay Poole, directly if you have any questions related to the study by email at poolie2@msu.edu, phone at (248) 221-1846, or mailing address: 620 Farm Lane, Room 435 Erickson Hall East Lansing, MI, 48824-1034. If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at 4000 Collins Rd, Suite 136, Lansing, MI 48910.

DOCUMENTATION OF INFORMED CONSENT

By completing this form before, you are giving permission for your child to participate in the survey portion of the study.

- ◊ Yes, my child may participate in the survey portion of the study
- ◊ No, my child may not participate in this study.

Child's Name _____ Child Email: _____

Parent Signature _____ Date _____

You will be given a copy of this form to keep.

APPENDIX H: QUANTITATIVE PASSIVE PARENT CONSENT

Your child's school has agreed to participate in a research study and their teacher believes they are a great candidate for this research study! The purpose of the study is to provide Black high school students with an opportunity to share their school experiences with others. If your child does not self-identify as Black and at least one of their biological parents does not identify as Black, then your child would be ineligible to participate in this study.

Researchers are required to inform you about this study and allow you the opportunity to decline your child's participation in the study. This form conveys that participation is voluntary, will explain the risks and benefits of participation, and aims to empower you to make an informed decision. You should feel free to ask the researchers any questions you may have.

This form is an opt-out form for this research study. If you DO NOT want your child to complete survey questionnaires, you must sign this form and return it to your child's teacher. Please note that if your child is over the age of 18, they will be able to provide consent to participate in the study regardless of this form being completed. However, they will be encouraged to discuss their decision with trusted individuals. If you do not complete this form and return it within 5 school days from the identified date (see top right corner), you are "opting in" and agree that your child CAN be given the opportunity to assent to participate in this study. Again, if you would like your child to participate in this study, you do not need to sign below, however, please keep this form for your records. Please read below for more information about this study.

Study: The Role of Racial Identity on School Racial Climate and Academic Self-Concept from the Perspective of Black High School Students

Researchers: Lindsay Poole, Doctoral Candidate in School Psychology
John S. Carlson, Professor, School Psychology
Department of Counseling, Educational Psychology, and Special Education
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PURPOSE OF THE STUDY:
There is an abundance of research that examines the relationship between school climate and academic outcomes for school-age youth and adolescents nationally. Within that research, racially minoritized groups (including Black students) tend to report less favorable experiences as it pertains to school climate and academic performance compared to their white counterparts. There are minimal research studies in school psychology that obtain both survey (quantitative) and interview (qualitative) information from students about their experiences in schools. This study seeks to better understand the relationships between Black students' self-perceptions (in terms of their racial group membership and racial pride, as well as their academic abilities) and how that may relate to their experiences with the climate in their school. Participation in the quantitative portion of the study will take about 20-25 minutes to complete, while participation in the qualitative portion of the study may take between 30- 60 minutes.

WHAT YOUR CHILD WILL DO:
There are two portions of this study, the survey portion and the virtual interview portion. For the survey portion, your child will be asked to provide some brief background information, and then complete three surveys consisting of 73 items that discuss their racial identity, their school experiences as it relates to the racial climate (e.g., relationship with peers/staff, etc.), and their general beliefs about their academic abilities. At the end of the survey, your child may be asked if they would like to participate in the interview portion of the study. In order to participate, parental consent must be obtained. Your child will be asked to provide your contact information to provide consent before a virtual interview is scheduled with a research team member.

The purpose of the interview is to provide additional context and information about your child's experiences. The interview will be conducted by one research team member and will cover topics such as your general experiences at school (e.g., future aspirations), racial group membership (e.g., pride), and specifics about your school environment (e.g., interpersonal relationships, fair treatment). The interview portion of the study will take between 30- 60 minutes to complete.

The questionnaire, survey, and interview (if selected) will be used for research purposes only, and the results will not be shared with you or your child until a later date/time. Additionally, your child's information will be concealed by an ID code that will not be traceable back to them when the results are shared.

POTENTIAL BENEFITS:
You and your child will not directly benefit from participating in this study; however, participation will contribute to a greater knowledge of Black student experiences across a variety of school environments with the hope of informing school policy potentially in the future. This information may result in research manuscript publication that can be used to inform other school climates across the United States and globally.

POTENTIAL RISKS:
This study poses minimal risk to you and your child. While some of the questions may cause discomfort on topics such as fair treatment and stereotypes in school, your child may opt to skip any question they feel uncomfortable with.

PRIVACY AND CONFIDENTIALITY:
Maintaining your child's privacy as a participant in this study is incredibly important to the research team. To ensure your child's answers are kept private and confidential, your child will be completing this survey online through a safe and secure link. Only a select few people (a research assistant and myself) will have access to your child's survey once it is submitted, and only the principal investigator (me) will be able to identify which survey is your child's. This information will never be disclosed or shared with anyone.

For the interview portion, which will take place virtually only the audio portion will be stored and saved. The transcript will not include any personal or school-identifiable information. Once the interview is transcribed, general patterns and trends across other interviews will be identified and direct quotes will be used very minimally and with discretion to confidentiality.

Your child's survey responses and interview audio file will be securely kept for up to 5 years, this is to ensure the researchers have access to your survey data while they interpret the survey results and complete the research report. The report will not talk about any one individual survey but will instead highlight trends across all participants. Additionally, the research report will not identify your child or your child's school, and their information will be kept within the research team only.

YOUR RIGHTS TO PARTICIPATE, SAY NO, OR WITHDRAW:
Participation is voluntary. You/your child may refuse to participate without penalty or loss of benefits at any time. You have the right to say no. Whether you choose to participate or not will have no effect on your child's grade or evaluation from the teacher.

WHAT TO DO IF YOU GET INJURED
If you or your child gets injured as a result of your participation in this research project, Michigan State University will assist you in obtaining emergency care, if necessary, for your research-related injuries. If you have commercial insurance for medical care, your insurance carrier will be billed in the ordinary manner. As with any medical insurance, any costs that are not covered or in excess of what are paid by your insurance, including deductibles, will be your responsibility. The University's policy is not to provide financial compensation for lost wages, disability, pain or discomfort, unless required by law to do so. This does not mean that you are giving up any legal rights you may have. You may contact, me, Lindsay Poole at (248) 221-1846 with any questions or to report an injury.

COSTS AND COMPENSATION FOR BEING IN THE STUDY:

All child participants who complete the quantitative survey will receive a $10 gift card, and those who are selected for and complete the virtual interview will be given an additional $10 gift card.

FUTURE RESEARCH

You or your child's personal information collected as part of the research, even if information that identifies you is removed, **will not** be used or distributed for future research studies.

CONTACT INFORMATION FOR QUESTIONS AND CONCERNS:
If you have any concerns or questions about this study, reach out to me, Lindsay Poole, directly if you have any questions related to the study by email at poolie2@msu.edu, phone at (248) 221-1846, or mailing address: 620 Farm Lane, Room 435 Erickson Hall East Lansing, MI, 48824-1034. If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at 4000 Collins Rd, Suite 136, Lansing, MI 48910.

DOCUMENTATION OF OPTING OUT OF PASSIVE CONSENT

Your signature below means that you DO NOT want your child to complete the survey questionnaires of this study. If you would like your child to participate in this study including completing the survey questionnaires, you do not need to complete this form and your child will automatically be included in the study. Keep in mind, if your child is selected for an interview, a separate consent form requesting permission for your child's participation will occur at that time. Thank you!

Child's Name:

_____

Parent Signature: Date:

_____ _____

APPENDIX I: QUANTITATIVE CHILD ASSENT FORM

Your teacher has identified you to be a great candidate for this research study, and your parent(s) have allowed you to participate in the study. This study aims to allow Black high school students to share their school experiences. To participate in the study, you must self-identify as Black and have at least one biological parent who also identifies as Black. If you do not meet these criteria, then you are not eligible to participate in this study.

This form is to help you decide if you would like to participate in this study as well. It will explain the risks and benefits of participation and aims to empower you to make an informed decision; participation is voluntary. You should feel free to ask the researchers any questions you may have.

Study Title: The Role of Racial identity on School Racial Climate and Academic Self-Concept from the Perspective of Black High School Students

Researchers: Lindsay Poole, Doctoral Candidate in School Psychology
John S. Carlson, Professor, School Psychology
Department of Counseling, Educational Psychology, and Special Education
Michigan State University

WHAT IS A RESEARCH STUDY?
A research study is when someone collects information about a specific topic to find out more information about it. Before deciding if you want to participate in this research study, it is important to understand why you're doing the research and what's involved.

Please read this form carefully. Feel free to discuss it with your parents or anyone else. If you have questions don't hesitate to reach out using my email address listed on this form.

WHAT IS THE PURPOSE OF THIS RESEARCH STUDY?
There is an abundance of research that examines the relationship between school climate and academic outcomes for school-age youth and adolescents nationally. Within that research, racially minoritized groups (including Black students) tend to report less favorable experiences as it pertains to school climate and academic performance compared to their white counterparts. There are minimal research studies in school psychology that obtain both survey (quantitative) and interview (qualitative) information from students about their experiences in schools. This study seeks to better understand the relationships between Black students' self-perceptions (in terms of their racial group membership and racial pride, as well as their academic abilities) and how that may relate to their experiences with the climate in their school. Participation in the quantitative portion of the study will take about 20-25 minutes to complete, while participation in the qualitative portion of the study may take between 30- 60 minutes.

WHAT WILL YOU BE ASKED TO DO?

There are two portions of this study, the survey portion and the virtual interview portion. For the survey portion, you will be given a student questionnaire inquiring about general information along with three brief surveys consisting of 73 items that discuss your racial group membership, your interactions between peers and teachers of different races, and your beliefs in your academic abilities. In total, the questionnaire and survey will take approximately 20-25 minutes.

At the end of the survey, you may be asked if you would like to participate in the interview portion of the study. In order to participate, parental consent must be obtained. You will be asked to provide a parent's email and your email to get permission to participate in the second portion of the study. This will be an opportunity to provide additional context and information about your experiences.

The interview will be conducted by one research team member and will cover topics such as your general experiences at school (e.g., future aspirations), racial group membership (e.g., pride), and specifics about your school environment (e.g., interpersonal relationships, fair treatment). A research team member will schedule the interview once both your assent and parent consent has been obtained.

ARE THERE ANY BENEFITS?

You will not directly benefit from participating in this study; however, participation will contribute to a greater knowledge of Black student experiences across a variety of school environments with the hope of informing school policy potentially in the future. This information may result in research manuscript publication that can be used to inform other schools across the United States and globally.

ARE THERE ANY RISKS OR DISCOMFORT ABOUT THE STUDY?

This study poses minimal risk to you. If you experience some discomfort when answering items related to fair treatment and stereotypes in your school, you are welcome to skip those items.

WHAT ABOUT PRIVACY?

The survey responses and questionnaires will be completed online through a secure survey program called Qualtrics. Qualtrics ensures data is kept confidential once it is entered, when used for analysis, and is stored on the platform. The researchers are the only people who will know the details of your study participation. Your name and survey responses will be concealed with an ID code that will not be traceable back to you when the results are shared. Only a select few people (a research assistant and myself) will have access to your survey once it is submitted, and only the principal investigator (me) will be able to identify which survey is yours.

The interview will be recorded, only the audio portion will be stored and saved. The transcript will not include any personal or school-identifiable information, and your information will be concealed by an ID code that will not be traceable back to you. Only a select few people (a research assistant and myself) will have access to the audio file for transcribing purposes. Once the interview is transcribed, general patterns and trends across interviews will be identified and direct quotes will be used very minimally and with discretion to confidentiality.

The questionnaire, survey, and interview (if selected) will be used for research purposes only, and the results will not be shared with you until a later date and time. The report will not talk about any one individual survey but will instead highlight trends that occur across all participants. The research report will not identify you or your school, your information will be kept within the research team only.

This assent form and your questionnaire/survey, and your interview (if selected) will be kept for up to 5 years to ensure the researchers have access to your survey responses while they interpret the results and complete the research report.

CAN I SAY "NO"?

Yes**,** you are not required to participate in this study if you do not want to. It is completely your decision if you decide to participate or not.

WHAT SHOULD I DO IF I GET INJURED

If you get injured as a result of your participation in this research project, Michigan State University will assist you in obtaining emergency care, if necessary, for your research-related injuries. If you have commercial insurance for medical care, your insurance carrier will be billed in the ordinary manner. As with any medical insurance, any costs that are not covered or in excess of what are paid by your insurance, including deductibles, will be your responsibility. The University's policy is not to provide financial compensation for lost wages, disability, pain or discomfort, unless required by law to do so. This does not mean that you are giving up any legal rights you may have. You may contact, me, Lindsay Poole at (248) 221-1846 with any questions or to report an injury.

COSTS AND COMPENSATION FOR BEING IN THE STUDY:

All participants who complete the quantitative survey will receive a $10 gift card, and those who are selected for and complete the virtual interview will be given an additional $10 gift card.

FUTURE RESEARCH

Your personal information (e.g., email) collected as part of the research, even if information that identifies you is removed, **will not** be used or distributed for future research studies.

WHO DO I TALK TO IF I HAVE ANY QUESTIONS?

You may reach out to me, Lindsay Poole, directly if you have any questions related to the study by email at poolie2@msu.edu, phone at (248) 221-1846, or mailing address: 620 Farm Lane, Room 435 Erickson Hall East Lansing, MI,48824-1034. If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at 4000 Collins Rd, Suite 136, Lansing, MI 48910.

◊ Yes, I would like to participate in the survey portion of the study
◊ No, I am not interested in participating in the study

Name:

Signature: Date:

You will be given a copy of this form to keep.

APPENDIX J: QUANTITATIVE ADULT CONSENT FORM

Your teacher has identified you to be a great candidate for this research study. This study aims to allow Black high school students to share their school experiences. To participate in the study, you must self-identify as Black and have at least one biological parent who also identifies as Black. If you do not meet these criteria, then you are not eligible to participate in this study.

You are receiving this adult consent form because you are 18 years old or older and are currently enrolled in high school. Because you are no longer a minor, traditionally required parental permission will now be your personal decision although it is recommended that you discuss your participation with trusted individuals (e.g., parents). Researchers are required to inform you about their research study and allow you the opportunity to consent to participation in the study. This form conveys that participation is voluntary, will explain the risks and benefits of participation, and aims to empower you to make an informed decision. You should feel free to ask the researchers any questions you may have.

Study Title: The Role of Racial Identity on School Racial Climate and Academic Self-Concept from the Perspective of Black High School Students

Researchers: Lindsay Poole, Doctoral Candidate in School Psychology
John S. Carlson, Professor, School Psychology
Department of Counseling, Educational Psychology, and Special Education
Michigan State University

WHAT IS A RESEARCH STUDY?
A research study is when someone collects information about a specific topic to find out more information about it. Before deciding if you want to participate in this study, it is important for you to understand why we're doing the research and what's involved.

Please read this form carefully. You can discuss it with your parents or anyone else. If you have questions don't hesitate to reach out using my email address listed on this form.

PURPOSE OF THE STUDY:
There is an abundance of research that examines the relationship between school climate and academic outcomes for school-age youth and adolescents nationally. Within that research, racially minoritized groups (including Black students) tend to report less favorable experiences as it pertains to school climate and academic performance compared to their white counterparts. There are minimal research studies in school psychology that obtain both survey (quantitative) and interview (qualitative) information from students about their experiences in schools. This study seeks to better understand the relationships between Black students' self-perceptions (in terms of their racial group membership and racial pride, as well as their academic abilities) and how that may relate to their experiences with the climate in their school. Participation in the quantitative portion of the study will take about 20-25 minutes to complete, while participation in the qualitative portion of the study may take between 30- 60 minutes.

WHAT WILL YOU BE ASKED TO DO:

There are two portions of this study, the survey portion and the virtual interview portion. For the survey portion, you will be given a student questionnaire to obtain general information and *three* brief surveys consisting of 73 items that discuss your racial group membership, your interactions between peers and teachers of different races, and your beliefs in your academic abilities. In total, the questionnaire and survey will take approximately 20-25 minutes.

At the end of the survey, you may be asked if you would like to participate in the interview portion of the study. This will be an opportunity to provide additional context and information about your experiences. The interview will be conducted by one research team member and will cover topics such as, your general experiences at school (e.g., future aspirations), racial group membership (e.g., pride), and specifics about your school environment (e.g., interpersonal relationships, fair treatment). The interview portion of the study will take between 30- 60 minutes to complete.

POTENTIAL BENEFITS:

You will not directly benefit from participating in this study; however, participation will contribute to a greater knowledge of Black student experiences across a variety of school environments with the hope of informing school policy potentially in the future. This information may result in a research manuscript publication or other professional conferences that can be used to inform other schools across the United States and globally.

POTENTIAL RISKS:

This study poses minimal risk to you. While some of the survey questions or interview prompts may cause discomfort on topics such as fair treatment and stereotypes in school, you may opt to skip any question you feel uncomfortable with.

PRIVACY AND CONFIDENTIALITY:

The survey responses and questionnaires will be completed online through a secure survey program called Qualtrics. Qualtrics ensures data is kept confidential once it is entered, when used for analysis, and is stored on the platform. The researchers (a research assistant and myself) are the only people who will know the details of your study participation. Your name and survey responses will be concealed with an ID code that will not be traceable back to you when the results are shared. Only a select few people (a research assistant and myself) will have access to your survey once it is submitted, and only the principal investigator (me) will be able to identify which survey is yours.

Although the interview will be recorded, only the audio portion will be stored and saved. The transcript will not include any personal or school-identifiable information, and your information will be concealed by an ID code that will not be traceable back to you. Only a select few people (a research assistant and myself) will have access to the audio file for transcribing purposes. Once the interview is transcribed, general patterns and trends across interviews will be identified and direct quotes will be used very minimally and with discretion to confidentiality.

The questionnaire, survey, and interview (if selected) will be used for research purposes only, and the results will not be shared with you until a later date and time. The report will not talk

about any one individual survey, it will not identify you or your school, and your individual information will be kept within the research team only.

This consent form and your questionnaire/survey, and your interview (if selected) will be kept for up to 5 years to ensure the researchers have access to your survey responses while they interpret the results and complete the research report.

YOUR RIGHTS TO PARTICIPATE, SAY NO, OR WITHDRAW:
Participation is voluntary. You may refuse to participate without penalty or loss of benefits at any time. You have the right to say no. Whether you choose to participate or not will have no effect on your grade or evaluation from your teacher.

WHAT TO DO IF YOU GET INJURED
If you get injured as a result of your participation in this research project, Michigan State University will assist you in obtaining emergency care, if necessary, for your research-related injuries. If you have commercial insurance for medical care, your insurance carrier will be billed in the ordinary manner. As with any medical insurance, any costs that are not covered or in excess of what are paid by your insurance, including deductibles, will be your responsibility. The University's policy is not to provide financial compensation for lost wages, disability, pain or discomfort, unless required by law to do so. This does not mean that you are giving up any legal rights you may have. You may contact, me, Lindsay Poole at (248) 221-1846 with any questions or to report an injury.

COSTS AND COMPENSATION FOR BEING IN THE STUDY:

All participants who complete the quantitative survey will receive a $10 gift card, and those who are selected for and complete the virtual interview will be given an additional $10 gift card.

FUTURE RESEARCH
Your personal information (e.g., email) collected as part of the research, even if information that identifies you is removed, **will not** be used or distributed for future research studies.

CONTACT INFORMATION FOR QUESTIONS AND CONCERNS:
You may reach out to me, Lindsay Poole, directly if you have any questions related to the study by email at poolie2@msu.edu, phone at (248) 221-1846, or mailing address: 620 Farm Lane, Room 435 Erickson Hall East Lansing, MI,48824-1034. If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at 4000 Collins Rd, Suite 136, Lansing, MI 48910.

DOCUMENTATION OF INFORMED CONSENT

By completing this form, you are agreeing to participate in this study.

◊ Yes, but I would like to participate in the survey portion of the study

◊ No, I am not interested in participating in this study.

Name:

_____

Signature: _____ Date: _____

You will be given a copy of this form to keep.

APPENDIX K: PRE-SCREENING INTERVIEW

Thank you so much for completing the survey questions of this study! Your participation is much appreciated. Approximately 1 out of every 4 participants who completed the surveys and provide their email information below will be invited to engage in a brief follow-up interview about the topics covered in the survey you just completed.
If you are interested in being considered among those who are selected for that additional interview portion of the study, please provide your email and your parent's email address to provide them with a consent form. If you are 18 years old or older, parental permission will not be required and just your email is needed.

Those selected to be interviewed (and their parents if under 18) will be emailed the appropriate consent/assent forms. Once both parent consent (if applicable) and child assent/adult consent have been completed, the researcher will reach out to schedule the interview. All interviews will be conducted via Zoom and will take approximately 30-60 minutes. Those who are involved in the interview portion of this study will be provided a $10 gift card for their time and participation.
Have a great day! - Lindsay (contact me through email at pooleli2@msu.edu with any additional questions you might have)

Parent email:

Student email:

- ◊ I am not interested in participating in the interview portion of the study.

APPENDIX L: QUALITATIVE ACTIVE PARENT CONSENT FOR INTERVIEW

Study: The Role of Racial Identity on School Racial Climate and Academic Self-Concept from the Perspective of Black High School Students

Researchers: Lindsay Poole, Doctoral Candidate in School Psychology
John S. Carlson, Professor, School Psychology
Department of Counseling, Educational Psychology, and Special Education
Michigan State University

PURPOSE OF THE STUDY:
You are receiving this form because your child has been selected to participate in the individual interview portion of this study. Prior to this invitation, your child completed the survey portion of the study which consisted of 73 items that discussed their racial group membership, their interactions between peers and teachers of different races, and their general beliefs about their academic abilities. For the next portion of the study, they will have the opportunity to provide additional context and information about their school experiences.

You must first consent to their involvement in the study by completing this consent form and providing permission for them to participate. This form will explain what the interview will entail, along with the potential risks and benefits of the study to help you make an informed decision.

This research study seeks to combine both survey (quantitative) and interview (qualitative) information from students about their experiences in schools in order to help to improve school climate and policies. While the quantitative survey responses will help to better understand trends and patterns across various schools, the student interview will allow for a deeper understanding that cannot be explained by survey responses alone.

WHAT YOUR CHILD WILL DO:
The virtual interview will be conducted by one research team member via Zoom and will cover topics such as your general experiences at school (e.g., future aspirations), racial group membership (e.g., pride), and specifics about your school environment (e.g., interpersonal relationships, fair treatment). The interview portion of the study will take between 30- 60 minutes to complete.

POTENTIAL BENEFITS:
Your child will not directly benefit from participating in this study; however, participation will contribute to a greater knowledge of Black students' experiences across a variety of school environments with the hope of informing school policy potentially in the future. Information from this study may result in a research manuscript publication and/or other professional conferences that can be used to inform other schools across the United States and globally.

POTENTIAL RISKS:
This study poses minimal risk to your child. If any interview question causes discomfort on topics such as fair treatment and stereotypes in school, your child may opt to skip any question they feel uncomfortable with.

PRIVACY AND CONFIDENTIALITY:
Maintaining your child's privacy as a participant in this study is incredibly important to the research team. Although the interview will be recorded, only the audio portion will be stored and saved. The transcript will not include any personal or school-identifiable information, and your child's information will be concealed by an ID code that will not be traceable back to them. Only a select few people (a research assistant and myself) will have access to the audio file for transcribing purposes. Once the interview is transcribed, general patterns and trends across interviews will be identified and direct quotes will be used very minimally and with discretion to confidentiality.

Your child's audio file will be securely kept for up to 5 years, this is to ensure the researchers have access to your survey data while they interpret the survey results and complete the research report. The results will not be shared with you or your child until a later date and time.

YOUR RIGHTS TO PARTICIPATE, SAY NO, OR WITHDRAW:
Participation is voluntary. You have the right to say no. You may refuse your child's participation at any time without penalty or loss of benefits. Whether you choose to participate or not will have no effect on your child's grade or evaluation from their teacher.

WHAT TO DO IF YOU GET INJURED
If you get injured as a result of your participation in this research project, Michigan State University will assist you in obtaining emergency care, if necessary, for your research-related injuries. If you have commercial insurance for medical care, your insurance carrier will be billed in the ordinary manner. As with any medical insurance, any costs that are not covered or in excess of what are paid by your insurance, including deductibles, will be your responsibility. The University's policy is not to provide financial compensation for lost wages, disability, pain or discomfort, unless required by law to do so. This does not mean that you are giving up any legal rights you may have. You may contact, me, Lindsay Poole at (248) 221-1846 with any questions or to report an injury.

COSTS AND COMPENSATION FOR BENG IN THE STUDY:
Individuals who are selected for and complete the virtual interview will be given a $10 gift card.

FUTURE RESEARCH

Your personal information collected as part of the research, even if information that identifies you is removed, **will not** be used or distributed for future research studies.

DOCUMENTATION OF INFORMED CONSENT
By completing this form, you are giving permission for your child to participate in the interview portion of the study.

◊ Yes, my child may participate in the virtual interview.
◊ No, my child may not participate in the virtual interview.

Child's Name:

_____

Parent Signature: Date:

_____ _____

You will be given a copy of this form to keep.

APPENDIX M: QUALITATIVE CHILD ASSENT FOR INTERVIEW

Study: The Role of Racial Identity on School Racial Climate and Academic Self-Concept from the Perspective of Black High School Students

Researchers: Lindsay Poole, Doctoral Candidate in School Psychology
John S. Carlson, Professor, School Psychology
Department of Counseling, Educational Psychology, and Special Education
Michigan State University

PURPOSE OF THE STUDY:
You are receiving this form because you have been selected to participate in the second phase of the study which consists of an individual interview conducted over Zoom. Prior to this invitation, you completed the survey portion which consisted of 73 items that discussed your racial group membership, interactions between peers and teachers of different races, and your general beliefs about your academic abilities. For the next portion of the study, you will have the opportunity to provide additional context and information about your school experiences.

You must first agree or disagree to participate in this study by completing this assent form. This form is meant to explain what the interview will entail, along with the potential risks and benefits of the study so that you can make an informed decision.

This research study seeks to combine both survey (quantitative) and interview (qualitative) information from Black students about their experiences in schools to help improve school climate and school policies. While the quantitative survey responses will help to better understand trends and patterns across various schools, the student interview will allow for a deeper understanding that cannot be explained by survey responses alone.

WHAT YOU WILL DO:
The virtual interview will be conducted by one research team member and will cover topics such as your general experiences at school (e.g., future aspirations), racial group membership (e.g., pride), and specifics about your school environment (e.g., interpersonal relationships, fair treatment). The interview portion of the study will take between 30- 60 minutes to complete and individuals who participate in the interview will be given a gift card of $10.

POTENTIAL BENEFITS:
You will not directly benefit from participating in this study; however, your participation will contribute to a greater knowledge of Black students' experiences across a variety of school environments with the hope of informing school policy potentially in the future. Information from this study may result in research manuscript publication and/or other professional conferences that can be used to inform other schools across the United States and globally.

POTENTIAL RISKS:
This study poses minimal risk to you. If there are any interview questions that cause discomfort (e.g., topics on fair treatment or stereotypes in school) you may opt to skip any question you feel uncomfortable with.

PRIVACY AND CONFIDENTIALITY:
Maintaining your privacy as a participant in this study is incredibly important to the research team. Although the interview will be recorded, only the audio portion will be stored and saved. The transcript will not include any personal or school-identifiable information, and your information will be concealed by an ID code that will not be traceable back to you. Only members of the research team (e.g., myself, research assistant) will have access to the audio file for transcribing purposes.

Once the interview is transcribed, general patterns and trends across interviews will be identified and direct quotes will be used with discretion to confidentiality.

Your audio file will be securely kept for up to 5 years, this is to ensure the researchers have access to your survey data while they interpret the survey results and complete the research report. The results will not be shared with you until a later date and time.

YOUR RIGHTS TO PARTICIPATE, SAY NO, OR WITHDRAW:
Participation is voluntary. You have the right to say no. You may refuse participation at any time without penalty or loss of benefits. Whether you choose to participate or not will have no effect on your grade or evaluation from your teacher.

WHAT TO DO IF YOU GET INJURED
If you get injured as a result of your participation in this research project, Michigan State University will assist you in obtaining emergency care, if necessary, for your research-related injuries. If you have commercial insurance for medical care, your insurance carrier will be billed in the ordinary manner. As with any medical insurance, any costs that are not covered or in excess of what are paid by your insurance, including deductibles, will be your responsibility. The University's policy is not to provide financial compensation for lost wages, disability, pain or discomfort, unless required by law to do so. This does not mean that you are giving up any legal rights you may have. You may contact, me, Lindsay Poole at (248) 221-1846 with any questions or to report an injury.

COSTS AND COMPENSATION FOR BENG IN THE STUDY:
Individuals who are selected for and complete the virtual interview will be given a $10 gift card.

FUTURE RESEARCH

Your personal information collected as part of the research, even if information that identifies you is removed, will not be used or distributed for future research studies.

CONTACT INFORMATION FOR QUESTIONS AND CONCERNS:
You may reach out to me, Lindsay Poole, directly if you have any questions related to the study by email at poolie2@msu.edu, phone at (248) 221-1846, or mailing address: 620 Farm Lane, Room 435 Erickson Hall East Lansing, MI,48824-1034. If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-

432-4503, or e-mail irb@msu.edu or regular mail at 4000 Collins Rd, Suite 136, Lansing, MI 48910.

DOCUMENTATION OF INFORMED ASSENT

By completing this form, you agree to participate in the interview portion of the study.

- ◊ Yes, I would like to participate in the virtual interview.
- ◊ No, I would not like to participate in the virtual interview.

Name:

Signature: Date:

APPENDIX N: QUALITATIVE ADULT CONSENT FOR INTERVIEW

Study: The Role of Racial Identity on School Racial Climate and Academic Self-Concept from the Perspective of Black High School Students

Researchers: Lindsay Poole, Doctoral Candidate in School Psychology
John S. Carlson, Professor, School Psychology
Department of Counseling, Educational Psychology, and Special Education
Michigan State University

PURPOSE OF THE STUDY:
You are receiving this form because you have been selected to participate in the second phase of the study which consists of an individual interview conducted over Zoom. Prior to this invitation, you completed the survey portion which consisted of 73 items that discussed your racial group membership, interactions between peers and teachers of different races, and your general beliefs about your academic abilities. For the next portion of the study, you will have the opportunity to provide additional context and information about your school experiences.

You must first agree or disagree to participate in this study by completing this assent form. This form is meant to explain what the interview will entail, along with the potential risks and benefits of the study so that you can make an informed decision.

This research study seeks to combine both survey (quantitative) and interview (qualitative) information from students about their experiences in schools to help improve school climate and school policies. While the quantitative survey responses will help to better understand trends and patterns across various schools, the student interview will allow for a deeper understanding that cannot be explained by survey responses alone.

WHAT WILL YOU DO:
The virtual interview will be conducted by one research team member and will cover topics such as your general experiences at school (e.g., future aspirations), racial group membership (e.g., pride), and specifics about your school environment (e.g., interpersonal relationships, fair treatment). The interview portion of the study will take between 30- 60 minutes to complete and individuals who participate in the interview will be given a gift card of $10.

POTENTIAL BENEFITS:
You will not directly benefit from participating in this study; however, your participation will contribute to a greater knowledge of Black student experiences across a variety of school environments with the hope of informing school policy potentially in the future. Information from this study may result in research manuscript publication and/or other professional conferences that can be used to inform other schools across the United States and globally.

POTENTIAL RISKS:
This study poses minimal risk to you. If there are any interview questions that cause discomfort (e.g., topics on fair treatment or stereotypes in school) you may opt to skip any question you feel uncomfortable with.

PRIVACY AND CONFIDENTIALITY:
Maintaining your privacy as a participant in this study is incredibly important to the research team. Although the interview will be recorded, only the audio portion will be stored and saved. The transcript will not include any personal or school-identifiable information, and your information will be concealed by an ID code that will not be traceable back to you. Only a select few people (a research assistant and myself) will have access to the audio file for transcribing purposes.
Once the interview is transcribed, general patterns and trends across interviews will be identified and direct quotes will be used with discretion to confidentiality.

Your audio file will be securely kept for up to 5 years, this is to ensure the researchers have access to your survey data while they interpret the survey results and complete the research report. The results will not be shared with you until a later date and time.

YOUR RIGHTS TO PARTICIPATE, SAY NO, OR WITHDRAW:
Participation is voluntary. You have the right to say no. You may refuse participation at any time without penalty or loss of benefits. Whether you choose to participate or not will have no effect on your grade or evaluation from your teacher.

WHAT TO DO IF YOU GET INJURED
If you get injured as a result of your participation in this research project, Michigan State University will assist you in obtaining emergency care, if necessary, for your research-related injuries. If you have commercial insurance for medical care, your insurance carrier will be billed in the ordinary manner. As with any medical insurance, any costs that are not covered or in excess of what are paid by your insurance, including deductibles, will be your responsibility. The University's policy is not to provide financial compensation for lost wages, disability, pain or discomfort, unless required by law to do so. This does not mean that you are giving up any legal rights you may have. You may contact, me, Lindsay Poole at (248) 221-1846 with any questions or to report an injury.

COSTS AND COMPENSATION FOR BENG IN THE STUDY:
Individuals who are selected for and complete the virtual interview will be given a $10 gift card.

CONTACT INFORMATION FOR QUESTIONS AND CONCERNS:
You may reach out to me, Lindsay Poole, directly if you have any questions related to the study by email at poolie2@msu.edu, phone at (248) 221-1846, or mailing address: 620 Farm Lane, Room 435 Erickson Hall East Lansing, MI,48824-1034. If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at 4000 Collins Rd, Suite 136, Lansing, MI 48910.

DOCUMENTATION OF INFORMED CONSENT
By completing this form, you agree to participate in the interview portion of the study.

- ◊ Yes, I would like to participate in the virtual interview.
- ◊ No, I would not like to participate in the virtual interview.

Name:

Signature: Date:

You will be given a copy of this form to keep.

APPENDIX O: RECRUITMENT FLYERS

Figure 8. Recruitment Flyer for School Partnerships

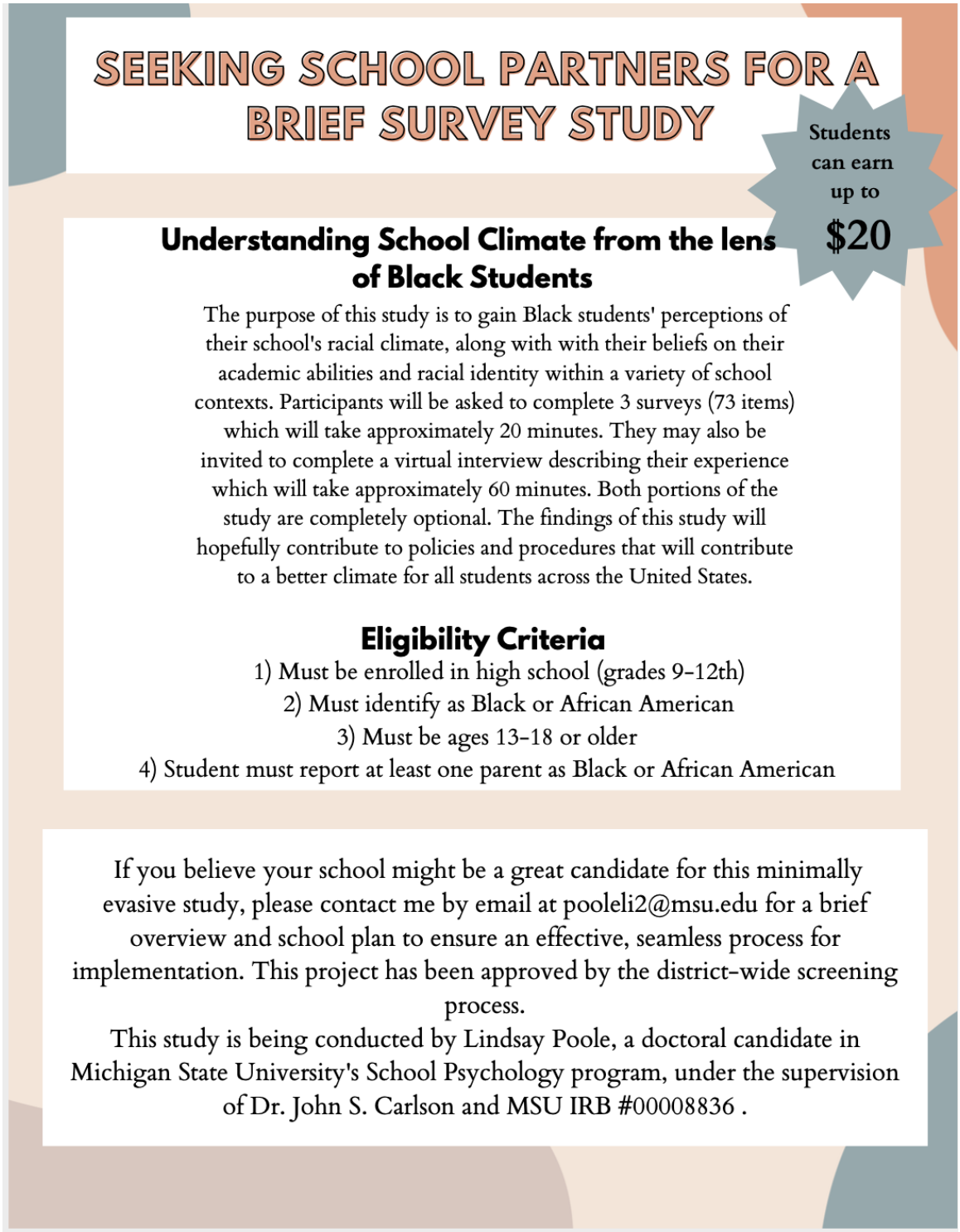

Figure 8. Recruitment Flyer for Black College-Aged Students

Figure 9. Recruitment Flyer for Black College-Aged Students, Brief Version