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School Connectedness as a Moderator between Racial Microaggressions and Academic

Performance for African American High School Students

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ABSTRACT

Racial microaggressions are subtle, often unconscious, words or actions that demean African Americans (Sue et al., 2007). The impact of racial microaggressions may not be seen, and so it is important to study potential long-term consequences such as academic performance. This study addressed an identified gap in the literature on the relationship between racial microaggressions and academic performance among African American high school students. A quantitative design was used to study the relationship between racial microaggressions and academic performance, and school connectedness as a moderating variable of this relationship. There were 417 high school students who completed the surveys. Of those students, 81 were used for the data analysis in this study because they identified as African American or Black. Results indicated that experience of racial microaggressions (from peers or from school staff) did not correlate with academic performance (GPA). Additionally, school connectedness was not found to moderate this relationship. Female students indicated more experiences with racial microaggressions than male students. Also, school connectedness was correlated with racial microaggressions such that the more racial microaggressions that students reported, the less connected they felt to the school. Furthermore, perceived racial microaggressions by school personnel were correlated with microaggressions by peers, indicating the more experiences students had of microaggressions by adults, the more they had by their peers. These results illustrated the importance of understanding students' experiences and their environment in the school setting. Counseling implications and areas for future research are addressed and discussed.

Keywords: Racial microaggressions, academic performance, school connectedness, high school

DEDICATION

This dissertation is dedicated to my husband, Derrick, who has supported me for over half of my life. He has been there for me through my entire doctorate program, which required a lot of love and patience. He even provided the time and support for me to work on this dissertation on our honeymoon. His support and encouragement through this process has meant the world to me and I will forever be grateful.

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CHAPTER I: INTRODUCTION

In 1848, educational reformer Horace Mann declared that education should be the great equalizer of all people (Mann, 1848). Contrary to the idealism of this statement, African Americans have experienced a long and harsh history of educational discrimination in the United States with schools being both the environmental context, and at times the tool, of oppression (Fisher, Wallace, & Fenton, 2000; Shaunessy & McHatton, 2009). Mann's vision has yet to come to fruition. The achievement gap between African American and White students has troubled Americans for decades and countless reforms have attempted to reduce or eliminate the inequality in educational performance. However, the achievement gap in the United States has continued unabated for more than 167 years (Bower, 2013). Understanding what contributes to the achievement gap will help us lessen it. Students experience racial discrimination in schools through their interactions with staff, the curriculum, and with peers. The goal of this study was to understand how students perceive their interactions in the school and how these experiences relate to their academic performance.

The term "achievement gap" refers to the disparity in performance of groups of students, especially groups defined by race (Murphy, 2009). Although the achievement gap in education typically focuses on students' scores on standardized tests, it also applies to other areas of achievement, such as student graduation rates, college decisions, and career attainments (Milner, 2013). In the United States, African American high school students are particularly impacted by achievement gaps. They are more likely to drop out of school as compared to White peers and ACT score averages are higher for White students than African American students (U.S. Department of Education, 2015).

Student outcomes vary in part on the basis of their experiences with learning

opportunities and instruction (Milner, 2012).

Unfortunately, there are many negative outcomes from this gap that result in the

continuation of this cycle. For instance, if school personnel believe their students are

incapable of academic success, they may accept mediocre performance. Teachers may

not teach with high expectations and therefore students may not learn, causing their test

scores to suffer (Milner, 2012). Additionally, African American students are

overrepresented in special education (Zhang, Katsiyannis, Ju, & Roberts, 2014), are

underrepresented in gifted and advanced classes (Ford, 2014), are expelled or suspended

at higher rates than White students (Fenning & Rose, 2007), and are underrepresented in

school-wide clubs, organizations, and activities such as homecoming court and student

government (Milner, 2010). Educators often wonder about the reasons for these

disparities, yet our educational systems and structures may not be examined.

Unfortunately, the achievement gap reinforces stereotypes and biases about the way

African American students achieve, and these stereotypes may lead to racial

microaggressions by the staff.

Microaggressions are subtle forms of discrimination that African Americans

experience on a daily basis. It is hypothesized that microaggressions negate African

American students' contributions, communicate low expectations, and exclude their

participation within school environments (Solórzano, Ceja, & Yosso, 2000). Sue,

Capodilupo, and Holder (2008) indicated that microaggressions leave students with self-

doubt, low self-esteem, and a constant feeling of being emotionally drained and

exhausted, resulting in lower classroom performance. Using Critical Race Theory as a

conceptual lens, Huber, Johnson, and Kohli (2006) discussed how students who are

exposed to racism in schools experience reduced academic aspirations and

accomplishments.

In a positive direction, researchers have examined ways to help students be

successful in schools. One target intervention is examining school connectedness, which

is the belief held by students that the adults and peers in their school care about them

(Centers for Disease Control and Prevention [CDC], 2010). Feeling connected includes

being known by staff (Chhuon & Wallace, 2014), the feeling of being cared for, and the

perception that one has relationships with people at school (Shochet & Smith, 2014).

Englund, Egeland, and Collins (2008) conducted a longitudinal quantitative study and

found that a positive student-teacher relationship helped prevent students from dropping

out of school. When students feel like they are "known" in the school, then they feel

more connected. Racial microaggressions are one factor that can interfere with this type

of bonded relationship. A student's lack of connectedness to the school may inhibit his or

her relationships with the staff and his or her academic success.

Many researchers have explored the relationship between students' perceptions of

the school environment and their academic success. The research shows that the school

environment matters as people are trying to understand student achievement (Wang &

Degol, 2015). If students have a positive view of the school and the classroom climate,

they are more engaged and achieve to their ability, as compared to those who are not

satisfied with the school environment (Fraser, 1994; Voelkl, 1995).

There are several theories of school climate that support the research. For

instance, Bronfenbrenner's (1979) bioecological framework explains that humans

develop through complex reciprocal interactions with the environment. Bronfenbrenner's theory defines identifies the complex layers within a child's environment ranging from the microsystem to the macrosystem that all influence their development. Another theory, social control theory also has been applied to school climate and emphasizes the importance of the environment on educational involvement (Wang & Degol, 2015). The quality and safety of the school strengthens a student's attachment to the environment. This bond encourages a student to conform to conventional norms and decreases deviant behaviors (Wang & Degol, 2015). Social control theorists posit that delinquency is a result of a lack in social and cultural constraints (Wang & Degol, 2015). Social cognitive theory illustrates the process of meaning and behavior as it relates to person and environment (Bandura, 1986). The environment is seen as an influence on how people think of themselves within that context; in this case, social cognitive theory would focus on how students view themselves as learners in the classroom. Finally, researchers have used stage-environment fit theory to explore the fit between students' needs and their school environment (Eccles et al., 1993). Stage-environment fit implies a person's behavior, emotions, and cognitions are influenced by their individual characteristics and by the environment. This theory provides a theoretical perspective for how the school environment may or may not support the psychological needs of students (Wang & Degol, 2015). All of these theories stress the importance of the environment on student success.

Bronfenbrenner's (1979) bioecological framework has been used to study school engagement in several studies (Boon, 2008; Cavanagh, 2015; Marjoribanks, 2006; Pinder-Amaker & Bell, 2012). This perspective implies each system (microsystem,

exosystem, macrosystem) influences an individual's development in various ways. Additionally, each system also affects each other in a bidirectional way, meaning each system can impact one of the others (Pinder-Amaker & Bell, 2012). A student's immediate environment, the mircosystem, consists of their peers, parents, and the school community. The mesosystem includes interactions between aspects of the microsystem. An example is the relationship between a child's family and their school. These aspects are nested within, and influenced by, the larger exosystem. This system encompasses aspects within the microsystem, such as a family's financial difficulties or parental job loss. The exosystem components are likely to affect a student through their influence on peers, family, and school community. Larger economic, political, and cultural factors, including societal beliefs about students' academic abilities, exist within the macrosystem. The macrosystem is similar to a societal blueprint for a culture (Bronfenbrenner, 1979). Laws around education are incorporated into the macrosystem. Bioecological theory asserts that everything from the conditions of the school, to the disciplinary and curriculum practices, to the relationships between the faculty and students, will influence the development of the students (Way, Reddy, & Rhodes, 2007). For this reason, bioecological theory is one of the theoretical pillars in school environment research and the theoretical lens for this study (Wang & Degol, 2015).

The connection between school climate and achievement has encouraged others to explore this relationship (Fraser, 1986, 1994). Even though school climate has been examined in relation to academic outcomes, it is essential to explore different dimensions of the environment and how they relate to student achievement. The goal of this study was to further understand student achievement from an environmental perspective by

exploring school connectedness as a moderator of the relationship between racial

microaggressions and academic performance.

Racial Microaggressions

Race has been used to include and exclude specific groups of people from equal

participation, resources, and opportunities in society (Huber et al, 2006). The discourse

on racism has shifted from one of overt acts, such as legal segregation, to a more

contemporary and subtle form of discriminatory behaviors and expressions (Henfield,

2011). These implicit forms of racism have been described as racial microaggressions.

Harvard University professor Chester M. Pierce (1970) first developed the term

microaggressions in 1970 to describe African Americans' experiences with contemporary

racism. He introduced the concept of microaggressions as "offensive mechanisms."

Pierce (1974) later described these experiences as racial assaults perpetrated in a never-

ending way. Pierce, Carew, Pierce-Gonzalez, and Willis (1978) further described

microaggressions as subtle, stunning, and automatic "put downs" towards African

Americans. Sue et al. (2007) elaborated on the term by defining microaggressions as

"brief and commonplace daily, verbal, behavioral, and environmental indignities, whether

intentional or unintentional, that communicate hostile, derogatory, or negative racial

slights and insults to the target person or group" (p. 273). The subtle nature leaves the

target of these indignities questioning the intent behind the act and whether or not it was a

form of racism. In addition, the unconscious component may leave perpetrators unaware

of their actions being perceived as racist (Sue et al., 2007). White people like to believe

they no longer participate in racism, but as products of a racist cultural environment,

there can be a deep unconscious awareness of the racial biases that exist.

Racial Microaggressions in Schools

Schools in the United States are becoming more diversified in terms of race and ethnicity, which makes it even more essential to understand how racial microaggressions may occur and their relationship with academic performance. Even though the student population is becoming more diversified, most youth grow up with predominantly White teachers. Currently, 83% of full-time teachers in the United States are White (Aud et al., 2012). A predominately White staff may adversely affect students, especially if these teachers have minimal cultural competency. Teachers may continue to reinforce the cultural racial hierarchy in both overt and subtle ways (Huber et al., 2006). Unfortunately, discussions of race are often avoided in school, which aids in keeping many aspects of racism hidden (Bernstein, 2011). People are trying to figure out how to address race when it seems that our society prefers to see itself as colorblind and beyond a racial existence (Hughes & Berry, 2012). Consequently, prejudices, stereotypes, and racism continue to exist in the schools. African American students encounter people in schools who covertly and overtly discriminate against them because of their race (Greene, Way, & Pahl, 2006). These racial microaggressions are thought to negatively affect the ability of African American adolescents to achieve academically and socially (Bernstein, 2011; Harper et al., 2011).

Most of the research on racial microaggressions in school has taken place on college campuses with undergraduate or graduate students. This research shows that microaggressions can create a climate that fosters unhappiness and poor performance in school (Meeks, 2010; Sue, Lin et al., 2009). In addition to understanding the experiences of racial microaggressions in higher education, it is also important to understand how

they are experienced in K-12 schools. The research in K-12 schools has increased over the years, but it is still limited. Studies focused on adolescents' experiences with racial discrimination suggest it is a common experience for African American adolescents (Sellers, Copeland-Linder, Martin, & Lewis, 2006). These studies have shown a relationship between racial microaggressions and lower self-esteem, more mental health concerns, lower levels of psychological functioning, and threats to academic motivation (Coker et al., 2009; Fisher et al., 2000; Sellers et al., 2006; Teranishi & Briscoe, 2008; Wong, Eccles, & Sameroff, 2003). Additionally, Brown and Bigler's (2002) quantitative study findings suggest that when children perceive that they, or someone else, are a target of discrimination, it is likely to relate negatively to their academic achievement. Thus, one does not have to be the target of a microaggression to have one's academic achievement affected. This study will add to previous research studies that have been conducted in K-12 schools to strengthen our understanding of how high school students experience racial microaggressions.

School Connectedness

People desire to form social relationships and need to experience positive social interactions. School connectedness has been defined as "the extent to which students feel personally accepted, respected, and supported in the school social environment" (Goodenow, 1993; p. 80). A perceived sense of belonging is a basic psychological need for students, and school connectedness is associated with positive outcomes such as higher GPAs and optimism (Anderman, 2002). Feelings of support and acceptance at school can protect students from adverse effects of racism and microaggressions. In other words, even though students may encounter negative experiences at school, those

experiences may be affected by how connected a student feels to the school. Therefore, one potential moderator for the relationship between racial microaggressions and student achievement may be the feeling of school connectedness. Students are more likely to succeed if they feel connected to their school because that feeling builds resiliency, educational motivation, improved school attendance, and fewer behavioral problems (Blum & Libbey, 2004; Ernestus, Prelow, Ramrattan, & Wilson, 2014; Windspread, 2003). This connection becomes a protective factor, as illustrated in Ernestus et al.'s (2014) study, which is especially important for African American students as they experience racial microaggressions. The authors found when school connectedness increased, students' self-esteem also increased. Their positive self-perceptions may later act as coping resources when the student is under stress, such as when experiencing racial microaggressions.

In June of 2003, leaders in education released the Wingspread Declaration on Student Connections to School. This declaration described how school connectedness is important for academic success (Windspread, 2003). There are a variety of studies with consistent findings indicating how a sense of connection to school is related to positive academic, psychological, and behavioral outcomes during adolescence (Anderman, 2002; Chhuon & Wallace, 2008; Englund et al., 2008). The student-staff relationship is unique, with both positive and negative interactions influencing students' self-perceptions (Chhuon & Wallace, 2008). When school personnel know their students, they are more likely to respond to their individual needs. There are various factors that influence academic achievement among African American students, but the focus of this study was

to understand how school connectedness moderates the relationship of racial

microaggressions and student achievement.

Purpose of the Study

This study examined whether the relationship between racial microaggressions

and student achievement was moderated by school connectedness in a sample of African

American high school students. Negative perceptions and attitudes from teachers, or

microaggressions, are thought to relate to the academic achievement of African American

students (Chhuon & Wallace, 2014; Englund et al., 2008; Shochet & Smith, 2014;

Toldson & Owens, 2010). Prior research on racial microaggressions has illustrated the

negative relationship they have with students' academic success (Burchinal et al., 2011;

Neblett, Philip, Cogburn, & Sellers, 2006; Tyson, Lee, Borman, & Hanson, 2007).

However, exploring school connectedness as a moderator to this relationship has not yet

been explored. This research study was able to shed light on a possible intervention,

increasing school connectedness, which could reduce the relationship between racial

microaggression and student achievement.

Research Questions

The following research questions were proposed:

1. What is the relationship between racial microaggressions and academic

   performance for African American high school students?

2. Does school connectedness moderate the relationship between racial

   microaggressions and academic performance for African American high school

   students?

Research Hypotheses

Based on predictions from a review of the literature pertaining to microaggressions, academic performance for African American students, and school connectedness, the hypotheses for this study were:

1. African American students' perceptions of racial microaggressions perpetrated by school personnel will have a negatively relationship with academic performance.

2. School connectedness will moderate the relationship between racial microaggressions and academic performance, such that, for African American students who feel a greater sense of connection to their school, the relationship will be weaker.

CHAPTER II: REVIEW OF RESEARCH AND RELATED LITERATURE

The research on racial microaggressions has grown over the years. However, most of these studies have occurred on college campuses with adults and few have focused on secondary education. This dissertation study was important because African American students have historically been marginalized and it is essential to understand the role school counselors have on improving the school experience for these students. This chapter is divided into the following sections: achievement gap, school environment, discrimination in schools, history of racial microaggressions, racial microaggressions and academic achievement, racial microaggression in K-12 schools, and school connectedness.

Achievement Gap

Institutional racism and differential treatment of White and African American students has been noted in areas of gifted education (i.e., underrepresentation of African American students), special education (i.e., disproportionately high numbers of African American students), and intelligence testing (Arredondo, Tova-Blank, & Parham, 2008). The disparate treatment is thought to lead to African American students having lower rates of graduation and reduced school commitment than their White counterparts (Curry, 2010). The inadequate resources and opportunities for African American students have fueled the educational disparities. Too many African American students are denied access to school programs to help them reach their academic and intellectual potential that could help close the achievement gap (Ford, 2014). It is paramount to understand what has been tried and what factors contribute to the on-going achievement gap between African American and White students.

Over the years, many strategies have been tried to reduce or eliminate the achievement gap. Bower (2013) examined research from different disciplines and fields to gain a more in-depth understanding of the previous proposals, policies, and strategies implemented to close the achievement gap. This article is important as it reflects on what has been tried over the years to lessen the academic disparities. Bower (2013) identified four broad categories of attempts to reduce the gap. The first category explored ways the government tried to equalize resources (i.e., Plessy v. Ferguson, Brown v. Board of Education). The point of these court cases was to reduce funding inequities between inner-city and suburban schools in order to close the achievement gap. People believed the equalization of resources would also equalize academic performance.

The next category was the concept of integrating schools. The purpose behind these policies was the proposition that when students attended a school with peers who were "better off," their achievement would be higher. As such, busing programs began and some are still continuing today. Additionally, magnet schools were created to draw students of different races and backgrounds to the same school. The goal of promoting integration was to expose all children to the same norms and resources to equalize academic performance.

The next category was the idea of enhancing high-poverty schools. This was the plan to disproportionately give more resources to high-poverty schools to help students overcome the disadvantages of poverty. Policy-makers believed it would cost more for some students than others to receive an adequate education. Therefore, more resources needed to be given to disadvantaged schools.

Finally, the fourth category was the concept of choice and competition, developed through the No Child Left Behind Act which pushed schools to do more with what they had and held them to a high standard. This accountability movement was to ensure that all effort was given and schools that did not succeed were reprimanded. Overall, many reforms and policies have been tried; unfortunately, none of these strategies have closed the achievement gap.

To understand this ongoing achievement gap, Lee (2002) explored the trends over the past 30 years. Similar to Bower (2013), Lee's (2002) article is important as it also explored the changes designed to improve the academic achievement of African American students. The goal of Lee's (2002) study was to understand why this gap narrowed in the 1970s and 1980s, but then remained consistent or widened in the 1990s. Lee defined the achievement gap using the differences among the national average test scores of racial and ethnic groups on the National Assessment of Educational Progress (NAEP) and SAT. The NAEP is a national assessment of what students in the United States know and can do in various subject areas. Lee (2002) considered several factors discussed in the literature as possible influences on the achievement gap. The factors found in the literature included: socioeconomic and family conditions (educational attainment, income, poverty, single household); youth culture and student behaviors (motivation, alcohol and drug use, crime); and schooling conditions and practices (instructional resources, teachers, course taking, dropout, segregation) (Lee, 2002). These factors illustrate the complexity in the issue.

Even though these factors may influence the gap, Lee (2002) suggested there are more factors that account for the variations among African American and White students.

Similarly, the explanation that the gap is due to African American students being more

opposed to achievement has also been dismantled by statistics. The data illustrated both

White and African American students tended to fare better over time in regards to their

motivation for learning, readiness to learn, feelings of safety, exposure to violence, and

drug use (Lee, 2002). The pattern for the dropout gap and school segregation gap also

mirrors the achievement gap. Furthermore, the data showed desegregation contributed to

the narrowing of the gap and, that re-segregation has widened the gap. Beginning in the

1960s, schools became less segregated, but the trend since then has moved towards an

increase in segregation. Overall, this study implies the need to look beyond conventional

measures such as socioeconomic and family conditions of racial inequity in order to

develop a new framework to understand the achievement gap.

It is important to not only look at policies and trends over time, but to also explore

the achievement gap among students directly. A longitudinal study by Burchinal et al.,

(2011) used an integrative contextual approach that started at birth and explored the racial

achievement gap in children's reading and mathematics school performance in 314 lower

income American youth. The children's home and school experiences were assessed with

a focus on low-income Black and White children in order to isolate social factors tied to

race. The study illustrated how the race gap in reading and math was present by age three.

The researchers found school characteristics to be strong predictors of mathematical

gains over time among African American students. The findings suggested that African

American children attend lower quality schools than White children from the same low

socioeconomic status. This is further evidence of the long-term impact of racial

segregation and differential treatment (Coll et al., 1996). Similar to previous studies

(Downer & Pianta, 2006; Hanushek & Rivkin, 2009; Murnane, Willett, Bub, & McCartney, 2006), the researchers found the difference in the school environment for African Americans may account for up to one third of the gap. African American students demonstrated greater mathematical gains over time if they experienced either high quality teaching or smaller child-teacher ratios. Many studies like this have influenced the field of education over time in order to try and eliminate the achievement gap.

In addition, it is helpful to explore research on the role of the school environment on this academic disparity between students. Racial discrimination has been linked to the racial academic achievement gap between African American and White students (English, 2002). To understand this concept, English, Lambert, and Ialongob (2016) investigated the idea of depressive symptoms as mediators of the prospective relationship between racial discrimination and academic performance among African Americans. The researchers used a longitudinal mediation model with students between grades seven and nine attending public schools in Baltimore, MD. The data were drawn from a sample of students who participated in a multi-year intervention trial through the Johns Hopkins Center for Prevention and Early Intervention program. The researchers investigated the link between racial discrimination and depressive symptoms as predictors for academic performance among 495 African American students.

The results indicated that experiencing racial discrimination in seventh grade was positively associated with depressive symptoms in eighth grade, which predicted a decrease in academic performance in ninth grade. The researchers posited that students who experienced racial discrimination and associated mental health outcomes contribute

to the achievement gap. This finding is important because it indicates a process through

which the academic performance of African American students is negatively affected. It

is important to note there was a relatively small effect size of the mediation observed in

the study, which emphasizes there are many causal processes that affect students'

academic performance. There are also limitations found in this study. The participants all

attended an urban, predominately African American school, which limits the

generalizability of the results to other school environments. Also, the academic

performance measure was based on teacher-report which may skew the variables because

it was based on teacher recall and academic subject representation. Despite its limitations,

this study provided valuable insight into the role of racial discrimination on the

achievement gap.

In summary, the achievement gap between African American and White students

has been a concern in the United States for decades and numerous reforms have been

tried to reduce or eliminate this gap. Bower (2013) reviewed several social policies that

have been created over the years to improve the education experiences of African

American students. Unfortunately, none of these social policies have alleviated the

academic disparity. Bower (2013) stated that social policy may work even though there is

little evidence to show that it will or can. Lee (2002) reported the achievement gap

narrowed in the 1970s, but since then it has widened again. Lee (2002) stated that

researchers need to look beyond conventional measures of racial inequities and develop a

new framework on the racial gap patterns to create change. Burchinal et al. (2011) went

beyond policies to understand social factors that relate to the academic gap. They noted

the use of developmental theory extended their understanding of the gap. Additionally,

they identified the need for future research to examine the issues of racism and

segregation more clearly. English et al. (2016) reported the need to understand how racial

discrimination affects African American students in order to mitigate the chronic and

persistent academic achievement gap. The results of their study indicated that

experiencing racial discrimination predicts a decrease in academic performance through

its influence on depressive symptoms among African American students. It is apparent

that exploring the relationship of the school environment on the achievement gap is

central in understanding the disparities.

School Environment

It is important to understand the school environment and how it may influence

academic achievement for African American students. A quantitative study by Byrd and

Chavous (2011) explored racial identity, school racial climate, and school intrinsic

motivation of 263 African American students in the 11th grade. The focus on racial

identity and racial climate congruence draws on ecological theory (Rappaport, 1977) and

organizational theory (Chrobot-Mason & Thomas, 2002), emphasizing person-

environment fit. The focus on congruence was to understand the association between a

student's racial identity beliefs and the meanings associated with race in their

environment. Byrd and Chavous (2011) investigated whether the feeling of belonging at

school mediated the relationship between racial identity-racial climate congruence and

school intrinsic motivation. Results supported prior school climate research in that they

found youth who perceived positive attitudes around race from school staff reported

higher school intrinsic motivation. However, racial identity beliefs showed little direct

association with school intrinsic motivation; only private regard was correlated positively

with intrinsic motivation. The staff racial climate scores were correlated positively with

intrinsic motivation and intrinsic motivation had a positive association with students'

grades. Racial identity and context congruence positively related to motivation.

Furthermore, the results indicated that school belonging predicted school intrinsic

motivation. The findings suggested that school racial climate is an important point of

intervention to improve academic engagement. However, there are other motivational

attributes not assessed that may also contribute to achievement. Furthermore, the racial

climate scales did not refer specifically to the treatment of African Americans so it is

unclear how this may apply specifically to African American students.

Some studies specifically focused on the environment from the perspective of

African American students. This perspective is important because African American

students are more likely to be suspended and/or expelled from school. Specifically, Black

students are suspended and expelled at a rate three times greater than White students

(U.S. Department of Education Office for Civil Rights, 2014). Caton (2012) conducted a

qualitative study with 10 Black males who had dropped out of high school within the

previous year to gain perspectives on their educational experiences in high school. The

interviews illustrated how zero-tolerance policies created an unwelcoming school

environment and led to poor relationships between students and teachers. Zero-tolerance

policies seem to have clear racial overtones, which have affected African American

students. The students in this study felt the school environment was hostile, given the

school's security measures. The men shared how overreactions to student misbehaviors

by the teachers negatively affected the teacher-student relationship. They shared their

need for teacher support and encouragement in order to be successful. Additionally,

exclusion from class because of suspension negatively impacted their schoolwork because they fell behind. These experiences occurred more frequently with African American males, resulting in further alienation of a marginalized population. Thus the environment reduced their feelings of school belongingness. A limitation of the study was the authors did not explore other aspects in participants' lives that may have negatively affected their school experience besides the zero-tolerance policies. Such exploration may have led to insight into other ways the school environment may influence student experiences. Also, the perspective was only from males; therefore, it is difficult to know how the findings apply to the female experience. Overall, this study highlights the need to examine the school environment as a predictor for student achievement.

Most of the literature on the achievement gap and racial discrimination has focused on the relationship between academic beliefs and academic outcomes among African American students. Diemer, Marchand, McKellar, and Malanchuk (2016) advanced this literature by examining unequal treatment based on race by teachers as it specifically related to success in math for African American students. Their study examined the consequences of teacher differential treatment, specifically disciplining students differently based on race, holding lower expectations for students of color, and grading students of color more harshly. All of these aspects are key components of school racial climates (Diemer et al., 2016). The researchers used structural equation modeling to analyze data from the longitudinal Maryland Adolescent Development in Context Study (MADICS). Diemer et al. (2016) focused on data collected from 618 African American students at the end of the students' eighth grade year and in the fall of 11th

grade. The African American students sampled were comparable to the White sample in regard to their socioeconomic status, which allowed the researchers to compare across racial groups without confounding social class.

Diemer et al. (2016) found teacher differential treatment was not invariant over time suggesting students' perceptions of racial mistreatment from teachers changed in the transition from middle school to high school. Students indicated less differential treatment in high school than middle school. Unfortunately, the data analysis cannot identify if students specifically transitioned from an environment with higher differential treatment to one with lower differential treatment because the measure of differential treatment was not equivalent over time. A possible explanation of this from Diemer et al.'s (2016) perspective was students' perceptions of what differential treatment means may change as students mature. Additionally, teacher differential treatment negatively predicted relevant math instruction and state achievement scores. Relevant math instruction was explained as students' perception of how personally relevant their math curriculum was to them. Further, the differential treatment exhibited a statistically significant negative relationship with students' self-concept of math ability. These findings were consistent with previous research that linked negative school racial climates and discriminatory behaviors by teachers to decreases in academic beliefs, values, and achievements (Diemer et al., 2016). Unfortunately, other aspects that relate to the school racial climate such as peer interactions and school-level perceptions were not examined. Overall, this study highlights how the differential treatment by teachers towards African American students corrodes their self-concept of math ability and achievement over time.

Exploration of racial discrimination in schools is needed in order to understand how the school environment relates to student achievement. Benner, Crosnoe, and Eccles's (2015) research was motivated by developmental research on the consequences of discrimination during adolescence. They used data from the National Longitudinal Study of Adolescent Health (Add Health), a nationally representative study of adolescents in grades 7-12. The sample for this study came from 9,765 adolescents in 125 schools, which included 22% African American. They found the public school sector and high school only level had significantly more students who perceived their peers as prejudiced than private schools and high schools with middle school students. Schools with a greater minority representation had fewer perceptions of peers as prejudiced. Furthermore, peer prejudice prevalence rates increased with school size. It was also found that older students perceived more prejudice from peers than younger adolescents. The researchers also explored the potential association of peer prejudice with GPAs. They found school-wide levels of prejudice were related negatively to students' GPAs. Overall, Benner et al. (2015) identified patterns that suggest a negative school environment may be problematic for adolescents' academic performance.

Adolescents spend a considerable amount of time at school, which makes it essential to understand how the school environment matters to the short- and long-term outcomes of students. There are several aspects to a school environment that may positively and negatively influence a student's relationship to the environment. Byrd and Chavous (2011) found positive attitudes from teachers positively related to students' intrinsic motivation. They also identified how a sense of belonging can predict school intrinsic motivation. Structural features within the school, such as tracking, lack of

culturally diverse curriculum, staff biased attitudes, and discriminatory policies, represent

institutional racism (Andrews, 2012). Caton (2012) and Diemer et al. (2016) identified

discriminatory school practices and their negative relationship with students' experiences

in school. This institutional racism can take the form of racial microaggressions. Benner

et al.'s (2015) study highlighted the negative relationship between peer discrimination

and academic performance. Overall, perceptions of discrimination are likely to affect

student identity development, peer relations, academic achievement, occupational goals,

and mental and physical well-being (Brown & Bigler, 2002).

Discrimination in Schools

To fully understand the influence of racial microaggressions, it is essential to

know how discrimination manifests in schools. Assimilation and a racial hierarchy

continue to be a part of the schooling process (Kohli & Solórzano, 2012). Schools uphold

the values of the dominant culture through unequal distribution of resources, lack of

teacher diversity, and the limited representation of minority groups within the curriculum

(Kohli & Solórzano, 2012). The majority of educators entering the teaching profession

are White and middle class (Aud et al., 2012). This may lead to misunderstanding and

misconceptions about the learning capabilities, motivation, and academic talents of

African Americans (Curry, 2010). Even though these perceptions may be unintentional,

the harm can be immense. African American students often report experiences of racial

discrimination in academic and social settings within their school (Andrews, 2012).

It is essential to understand how experiencing racial discrimination in schools can

negatively relate to students' overall wellbeing. An example of this was found in Coker et

al.'s (2009) study with 5,147 fifth grade students to examine the relationship of perceived

racial/ethnic discrimination with mental health disorders. They randomly sampled

students in three metropolitan public schools in the United States that had adequate

sample sizes of Black, Hispanic, and White children. The results illustrated that 15% of

the children reported they perceived racial discrimination and 80% of those events

occurred at school. The children who perceived racial/ethnic discrimination also reported

more symptoms of depression, Attention Deficit Hyperactive Disorder (ADHD),

Oppositional Defiance Disorder (ODD), and Conduct Disorder (CD). The correlation was

strongest for depression. There were limitations to this study. Even though data were

collected from three metropolitan areas, the results may not generalize to other areas in

the United States. Also, this study focused on two questions to measure racial

discrimination. There are other measures that provide more detailed information on these

discriminatory experiences, which would have added more insight. Finally, this is a

correlational study and therefore it is not possible to determine if the experiences of

discrimination caused or preceded the mental health problems. This study did show how

racial discrimination may foster psychological difficulties among students.

Racial discrimination may relate to negative outcomes for students of color.

Greene et al. (2006) continued to explore racial discrimination in schools to further

illustrate the negative consequences of discrimination on African American students'

psychological health. They measured the association of trajectories of perceived ethnic

and racial discrimination with adolescents' well-being and development in a three-year

longitudinal study of 136 high school students in New York City from low-income

families. The results indicated students who experienced more adult and peer

discrimination suffered from lower self-esteem and more symptoms of depression.

Additionally, those who reported higher levels of discrimination experienced an escalation of depressive symptoms over time. They also found African American students reported higher levels of discriminatory treatment from teachers than their peers. The results suggested that students who reported more discrimination by adults also tended to report discrimination by their peers. Greene et al. (2006) expanded previous knowledge of the experiences of racial discrimination, but there were some limitations. The use of questionnaire data alone limits the researchers' understanding of the students' experiences. Additionally, the majority of the students were from low-income families; thus, the results may not generalize to middle-class or suburban adolescents. In addition, the study was conducted in a school composed primarily of racial minority students. It would be helpful to also understand these experiences in a more diverse school.

As Green et al. (2006) studied the relationship of discrimination to psychological functions, it is also important to understand how discrimination is manifested in the school environment. Fisher et al. (2000) explored discrimination distress among 177 adolescents in grades 9-12 in an ethnically diverse and academically competitive urban public school where 21% identified as African American. This quantitative study used a survey to identify adolescent distress in response to perceived instances of racial discrimination in a variety of contexts (i.e. stores, restaurants, school). Students who identified as White reported significantly less discriminatory distress within institutional and educational contexts than African American students. Additionally, African American and Hispanic students indicated they were more likely to feel victimized by institutional racism as compared to their Asian peers. Ethnic minority students perceived they were discouraged from joining advanced level classes.

Furthermore, African Americans felt they had been wrongly disciplined in school because of racial discrimination (Fisher et al., 2000). Between a quarter to one-half of all students thought racial bias was responsible for their receiving a lower grade than deserved. Additionally, 40-80% thought ethnic discrimination was the reason people expected more from them than White peers the same age. A high percentage of students reported being called racially insulting names and excluded from activities because of their race. Additionally, high levels of perceived discrimination were related to lower levels of self-esteem. The results from this study suggested that racial discrimination may be a pervasive stressor in the daily lives of adolescents. Fisher et al. (2000) highlighted how institutional, educational, and peer discrimination negatively relate to students' experiences in school. Understanding these experiences more thoroughly may highlight what could be done to create change. There were some limitations to this study. Student participation rates varied from 30%-70%, but the researchers did not indicate why the participation varied so much and how this affected the sample. Additionally, the researchers created the Adolescent Discrimination Distress Index (ADDI), but they did not clearly describe the process to indicate how they determined reliability and validity. More detail would be helpful in determining how this measure accurately examines the perception and impact of racial discrimination.

Adolescents may encounter a variety of discrimination during their time in school. Another important study by Wong et al. (2003) illustrated how detrimental racial discrimination can be for students. Data from two longitudinal studies were used to understand African American adolescents' experiences with racial discrimination. Only the 629 African American participants in both waves of data collection in both of the

larger studies were used for Wong et al.'s (2003) study. Students answered a

questionnaire that measured perceived discrimination by peers and teachers, the

frequency of these occurrences, student's feeling of positive connection to their ethnic

identity, their achievement motivation, their academic motivation, their mental health,

their selection of friends, and problem behaviors. Wong et al. (2003) found experiences

of discrimination by peers and teachers were negatively related to students' academic

motivation, mental health, and self-esteem. Additionally, an increase in experiences of

discrimination correlated with increased problem behaviors and negative choices in

friends. This study illustrated how discrimination could have long-term negative

implications for adolescents. However, since this is a correlational study it is not possible

to determine causal impact. Another limitation is the use of self-report measures to

identify perceived discrimination. Even though this is a beneficial way to measure

discrimination, these reports may be confounded by perceptual biases of the individual.

Despite these limitations, this study highlights how racial discrimination can relate to

African American adolescents' psychological development.

To understand the consequences of racial discrimination, it is important to explore

research that highlights the ways teachers respond differently to African American

students. Scholars have described a subtle process in which African American students'

behaviors are misinterpreted by White teachers. For instance, White teachers rate African

American students more harshly then White students, emphasizing African American

students' behavior as oppositional (Downey & Pribesh, 2004). African American students

are sometimes puzzled by White teachers being upset about behavior that may typically

go unnoticed or rewarded in the student's homes or neighborhood (Downey & Pribesh,

2004). To understand this further, Downey and Pribesh (2004) explored teachers'

evaluations of students' classroom behavior. The researchers used data sets from

kindergartners and adolescents in eighth grade. They focused on 2,707 Black students

and 10,282 White students in kindergarten and 1,493 Black and 7,388 White students in

eighth grade. The researchers found White teachers may misread African American

students' behavioral styles (i.e. dress, speech, energy level) as being defiant. In this study,

Black students were rated as poorer classroom citizens than their White peers. Teachers

also rated Black students as exhibiting more externalizing problem behaviors and fewer

positive approaches to learning skills than White students. Externalizing problem

behaviors referred to how often students argue, fight, get angry, act impulsively, and

disturb ongoing activities. This study suggests the relationship strain between African

American students and White teachers begins in kindergarten and continues through their

schooling. This study is important as schools examine their teacher practices in

relationship to the school experience of African American students.

　　　The way school personnel interact with students may result in positive or negative

outcomes. Furthermore, Tenenbaum and Ruck (2007) explored how teachers'

expectations may be different for racial minority students than for European American

students. Four meta-analyses showed teachers' expectations, referrals, positive and

neutral speech, and negative speech differed toward racially minority students compared

to White students. The authors found that teachers had more positive expectations for

White students than for African American students. Also, teachers were more likely to

have lower expectations for African American students than White students. Teachers

made more positive (i.e., gifted classes) and less negative (i.e., special education or

disciplinary actions) referrals for White students as compared to African American students. They also directed more positive and neutral speech to White students. Furthermore, the researchers did not find evidence to support the claim that teachers use more negative speech with ethnic minority students than White students. Overall, they did find teachers favored White students compared with African American students with small but statistically significant effects. Receiving fewer positive responses might negatively affect students' learning. These behaviors may leave students feeling as though their teachers do not have high expectations for them, create an inequitable classroom environment, or limit educational opportunities for racial minority students (Tenenbaum & Ruck, 2007). Even though the researchers found differences in teacher perceptions, they were not able to determine the direction of the effects in teachers' expectations and behaviors. For instance, the students' behaviors may influence the teacher's perceptions, or the teacher's perceptions may influence the students' behaviors.

Ever-changing racial and ethnic demographics continue to challenge schools to educate a diverse student population (Lee, 2002). The research on discriminatory experiences toward African American students suggests these experiences are not uncommon for students. Most African American students encounter feelings of discrimination in schools by peers and/or teachers. A common interpretation of the research on teacher expectations is that teachers hold race-based expectations for their students (Tenebaum & Ruck, 2007). These perceptions can ultimately create a negative educational environment for African American students. Scholars have suggested that African American students' behavior is not worse than their White peers, but instead it is different (Downey & Pribesh, 2004). This review of the research illustrates the ways

social stereotypes occur in academic settings and influence academic behaviors (Brown & Bigler, 2002). These perspectives can have detrimental influences on African American students' schooling experience and outcomes.

History of Racial Microaggressions

As obvious discriminatory practices became seen as morally wrong, racism took on a new and less obvious form known as racial microaggressions. The development of contemporary racism theory expands with the revitalization of the term microaggressions. The term was developed by Pierce in the 1970s to describe the experiences of African Americans with contemporary racism (Sue, 2010). Later Davis (1989) defined racial microaggressions as "stunning, automatic acts of disregard that stem from unconscious attitudes of white superiority and constitute a verification of black inferiority" (p. 1576). Solórzano (1997) explored racial microaggressions and created three general categories: Intelligence/Educational Stereotypes, Personality/Character Stereotypes, and Physical Appearance Stereotypes. The first category, Intelligence/Educational Stereotype, includes comments such as "stupid," "dumb," or "slow." Examples of the second category, Personality/Character Stereotype, include "violent" and "lazy." The final category, Physical Appearance Stereotypes, includes terms like "unclean", "dirty," and "scary." Eventually Solórzano et al. (2000) defined racial microaggressions as "subtle insults (verbal, nonverbal, and/or visual) directed toward people of color, often automatically or unconsciously" (p. 60). Over time, the term developed into Sue et al.'s (2007) definition as brief, everyday racial slights. The acts can be subtle and often leave the person wondering whether their experience was a form of racism and whether or not it was directed intentionally towards them (Sue et al., 2007).

In defining microaggressions, Sue et al. (2007) established a taxonomy of the different types of racial microaggressions that range from overt to subtle forms or racism. Labeling these experiences provides validation and a language to describe these situations (Sue et al., 2008). Sue et al. (2007) developed three broad categories to describe racial microaggressions: microassaults, microinsults, and microinvalidations. These terms describe experiences that African American adolescents may encounter on a daily basis. The more overt forms of subtle racism are microassaults, which are racial derogations through name-calling, avoidant behaviors, or purposeful discriminatory actions (Sue et al., 2007). These acts are similar to explicit racism, but are considered microaggressions because they are privately held thoughts and feelings that are expressed publically only when the person feels support for the thoughts or when there is a sense of anonymity (Sue et al., 2007; Sue, 2010). Microassults are considered more overt than other microaggressions and less common.

Microinsults and microinvalidations may manifest behaviorally, verbally or nonverbally, and environmentally. Microinsults are defined as subtle snubs that convey rudeness and insensitivity, and demean a person's racial heritage or identity (Sue et al., 2007; Sue, 2010). Furthermore, Sue et al. (2007) classified four themes under the category of microinsults: *ascription of intelligence, second-class status, pathologizing cultural values/communication styles, and assumption of criminal status. Ascription of intelligence* referred to ascribing either superior or inferior intelligence, competence, or capabilities to a person because of race (Sue et al., 2007; Sue, 2010). For example, a White teacher assumes an African American student is in remedial classes. Or, a teacher may not recommend a student of color for an Advanced Placement or honors class, thus

hurting the chances the student will have of getting into college. Intelligence is assigned

to the student based solely on his/her race versus individual knowledge of that student.

African Americans experience this theme as intellectual inferiority, being seen as

inarticulate, and lacking common sense (Sue, Bucceri et al., 2009; & Sue, 2010).

     Second-class status was defined as a White person receiving preferential

treatment over a person of color, or when a person of color receives differential

treatment, sending the message that people of color are inferior and deserve inferior

treatment (Sue et al., 2007; Sue, 2010). For instance, a White student is asked to share

their mathematical thinking over an African American student. Another example is a

teacher walks by an African American student who needs assistance and helps a White

student first. Although the teacher may be able to rationalize his or her behavior (e.g., "I

did not see the African American student's hand raised"), there is still a message

transmitted that White students deserve superior treatment.

     Pathologizing cultural values/communication styles suggests the belief that White

cultural norms and communication styles are normal and the cultural values and

communication styles of people of color are abnormal (Sue et al., 2007; Sue, 2010). For

example, a White teacher tells an African American student to speak "right." This

statement implies speaking like a White person is the right way to speak. This type of

comment sends the message that cultural values that are inconsistent with the dominant

culture are not ideal.

     Lastly, the theme *assumption of criminal status* refers to African Americans being

considered dangerous, deviant, or likely to break the law (Sue et al., 2007). For example,

a White teacher acts suspicious of an African American student found alone in the

classroom. This sends the message that the child must be doing something wrong to be alone in the classroom. The perpetrator of a microinsult is typically unaware of the negative implications of these behaviors (Henfield, 2011). They usually occur outside of the conscious awareness of the person and can be rationalized as unintentional (Sue, 2010). However, they send a message devaluing the contributions, importance, and worth of African Americans (Sue et al., 2007).

Microinvalidations are defined as verbal and nonverbal communications that serve to "exclude, negate, or nullify the psychological thoughts, feelings, or experiential reality of a person of color" (Sue et al., 2007, p. 274). There are four themes classified under this category: *alien in one's own land*, *color blindness*, *myth of meritocracy*, and *denial of individual racism. Alien in one's own land* occurs when people of color are assumed to be foreign-born (Sue et al., 2007). This is not a good fit for describing the experiences of African American students since they are not seen as being foreign-born. *Color blindness* refers to statements by a White person who avoids acknowledging race. For example, an African American student is told by a White teacher, "race doesn't matter, we are all people" or "I don't see color." These statements negate a person's experience as a racial being and indicate that race is an undesirable topic to discuss.

Myth of meritocracy is the assertion that race does not influence a person's ability to succeed in life and that everyone has an equal chance for success (Sue et al., 2007). For example, an administrator blames the achievement gap on the underachievement of the African American students and states they just need to work harder. This sends the message that the African American students are at fault for not succeeding, suggesting they are lazy or incompetent (Sue et al., 2007).

Finally, *denial of individual racism* refers to White people denying racial biases (Sue et al., 2007). For instance, a White teacher makes a comment that she is not racist because she has worked in a predominantly African American school. This statement indicates a belief that certain White people are immune to racism and only those who express overt racism are responsible for racism (Sue et al., 2007).

Racial microaggressions communicate hostile, derogatory, and racial insults to African Americans. Someone may encounter a microaggression through the environment as opposed to a personal attack. For example, a teacher may exclude certain racial groups from the classroom decorations, or the curriculum may only include the perspective of White writers (Sue et al., 2007). Many research studies discuss how microaggressions are physically and psychologically harmful to African Americans (Coker et al., 2009; Fisher et al. 2000; Paradies, 2006; Sellers et al., 2006). Racial microaggressions are considered more detrimental than overt racism on the psychological, physiological, and social well-being of people of color, because they are subtle, unconscious, pervasive, and constant (Solorzano et al, 2000; Sue, 2010; Sue et al., 2007). Additionally, experiencing a racial microaggression results in more cognitive efforts as the person works to decipher the experience (Sue, 2010; Sue et al., 2007). The ambiguity of racial microaggressions complicates the ability to decipher the hidden meanings. Racial microaggressions often occur at an unconscious level, which may inhibit the perpetrator from understanding how the behaviors may be interpreted (Sue et al., 2007). The doubt and constant nature of the microaggressions leaves targeted people questioning their experiences and trying to make sense of their interactions. As the intentions of the perpetrator of microaggressions are often unknown, those experiencing the microaggressions are left to resolve for

themselves if a transgression has occurred and the reason for its occurrence (Burrow &

Hill, 2012). These types of interactions are pervasive in daily situations; as such, they are

often dismissed as minor and seen as innocuous (Sue et al., 2009).

   African Americans experience microaggressions on a daily basis and students in

school are no exception. As teachers hold biased perceptions, they may have assumptions

about their students which could influence the academic experiences of the students.

According to Sue (2010), White people are the perpetrators of most microaggressions

against African American students. With the majority of the teachers in schools being

White (Aud et al., 2012), it is important to study possible racial microaggressions

between staff and students. Even though microaggressions may occur unconsciously, the

consequences for students may still be harmful (Meeks, 2010). Overall, racial

microaggressions describe a phenomenon in which African Americans often experience

denigration of their identity based on the perception that their racial identity is inferior to

the dominant racial group (Andrews, 2012). This study used Sue et al.'s (2007) definition

of microaggressions as "brief and commonplace daily, verbal, behavioral, and

environmental indignities, whether intentional or unintentional, that communicate hostile,

derogatory, or negative racial slights and insults to the target person or group" (p. 273).

Racial Microaggressions and Academic Achievement

   The research on racial microaggressions among African Americans has been

growing over the past decade. Some of the studies have had a primary focus on African

Americans whereas others have included African Americans as a part of their sample

with other people of color. Many of these studies have been conducted on college

campuses with adults. This section will examine the studies that explored the relationship between racial microaggressions and academic achievement.

Researchers have studied how racial microaggressions relate to the success of students on college campuses. Solórzano et al. (2000) used critical race theory (CRT) to explore the experiences of African American college students with racial microaggressions and campus racial climate. They conducted 10 focus groups with 34 African American students (18 females, 16 males) to assess the racial climate of their college campuses. The participants all attended predominately White universities. The researchers identified three types of racial microaggressions that occurred among the African American college students. The first theme, racial microaggressions within the classroom setting, was described as feeling one's experiences were omitted, distorted, or stereotyped in the curriculum. The theme also included feelings that their teachers maintained low expectations of African Americans. This assumption of lower intelligence left students with feelings of isolation and frustration. The second theme, racial microaggressions outside the classroom, was defined as feelings of discomfort on campus. This theme included feelings of not being accepted in academic areas because of their race. Lastly, the third theme, racial microaggressions within social spaces on campus, was defined as African American students experiencing a "double standard" on campus. This theme included students being questioned by campus security despite not being engaged in any illegal or inappropriate behaviors. Ultimately, these microaggressions directly influenced the students' experience at their university. This study expanded and applied racial microaggressions analysis to understanding the racial climate on college campuses and understanding racial microaggressions from the

perspective of African American students. It also illustrates the importance of studying the impact of racial microaggressions at each point in the educational system.

Researchers have also been interested in the way racial microaggressions influence the success of students in graduate school. Clark, Mercer, Zeigler-Hill, and Dufrene (2012) explored barriers to the success of minority graduate students. They surveyed 87 ethnic minority and 313 ethnic majority graduate students in a school psychology program. The results indicated that ethnic minority students reported more negative experiences related to race as compared to White students. Experiences with racial microaggressions were associated with higher levels of emotional distress. Ethnic minority participants also felt lower levels of belongingness which were associated with the negative race-related experiences. The data indicated the more students experienced racial microaggressions, the less likely they were to perceive social support within the academic environment. The researchers also found belongingness to be associated negatively with academic engagement for the students. These findings highlight how racial microaggressions negatively relate to students' sense of belonging and their academic engagement. Limitations of this study are also important to consider. The data were collected from students who had only been in the program for approximately one month. Students' perceptions of their program are likely to change over time, so the results may change as data are collected at another time. Additionally, the low ratings of emotional distress may have been a result of the students underreporting their symptoms to appear more emotionally healthy. Overall, Clark et al. (2012) found racial experiences in school relate to the perception of belongingness and academic engagement for students.

Another study that used graduate students as participants focused on their psychological well-being. Torres, Driscoll, and Burrow (2010) examined racial microaggressions and psychological functioning among African American doctoral students and graduates of doctoral programs. Using a mixed-methods approach, the researchers first identified the types of microaggressions reported by African American participants ($N = 97$). They then investigated the mechanism by which these experiences influenced mental health over time with a separate sample of African Americans ($N = 107$).The researchers identified three types of racial microaggressions: assumption of criminality/second-class citizen, underestimation of personal ability, and cultural/racial isolation. Torres et al. found that underestimation of personal ability was associated with greater perceived stress and greater depressive symptoms in the participants. Additionally, the researchers found active coping moderated the racial microaggression-perceived stress link. There were strengths and limitations with this study. The qualitative portions were interviews conducted online which may negatively influence the depth of the responses. However, the mixed-methods approach was helpful in furthering the understanding of the complexity of racial experiences in school. Additionally, the generalizability of the findings may be limited since the sample was composed primarily of females. Nevertheless, the findings highlight the negative psychological consequences of racial discrimination in school.

As the research on racial microaggressions has increased over the years it has become increasingly important to understand how they are perceived on college campuses. Solórzano et al. (2000) used qualitative methods to understand how racial microaggressions negatively influence the racial climate on campus. The findings

demonstrated that the cumulative effects of these subtle forms of racism can be devastating. Clark et al. (2012) further examined racial microaggressions on college campus using quantitative methods. They found African American students reported more racial microaggressions which were associated with higher levels of emotional distress and lower levels of belongingness. They also found belongingness was associated positively with academic engagement. With a mixed-methods approach Torres et al. (2010) also explored racial microaggressions on college campus. The qualitative analysis demonstrated a variety of race-related barriers in school. The quantitative analysis substantiated the qualitative findings and provided evidence of the negative influence of racial microaggressions on the mental health of African Americans. These studies illustrate how the use of both quantitative and qualitative methods has identified negative aspects of racial microaggressions on college campuses. Understanding how college students are impacted makes it even more essential to understand how racial microaggressions occur in all levels of education.

Racial Microaggressions in K-12 Schools

Most research on racial microaggressions have taken place on college campus, but a growing body of literature attempts to explore the experiences of African American students in K-12 schools. It is important to examine the studies related to younger African American students, particularly since this current study examines students in high school. Much of the research explores the relationships of microaggressions with the psychological health of students, but it is also important to see how these experiences relate to the achievement gap. The academic achievement of African American children may be undermined by the negative perceptions and discriminatory behaviors of teachers

(Brown & Bigler, 2002). Studies that explore these racial microaggressions in K-12 schools are reviewed.

There are systemic factors in schools that perpetuate racial microaggressions and some researchers have explored these systems. Allen, Scott, and Lewis (2013) wrote about racial microaggressions in urban schools serving African American and Hispanic students. They used CRT as the theoretical lens to explore the literature about K-12 systems and structures, focusing on racial microaggressions at the district/school level and teacher level. Allen et al. identified racial disparities that exist in schools as they pertain to disciplinary policies, academic tracking, and the curriculum. Allen et al. (2013) explored the research conducted over the past 40 years, which exposed the racial disparities with school discipline for African American students. Zero-tolerance policies in schools result in racial minority students receiving harsher consequences than White students (Allen et al., 2013). The increase in school suspensions and the racial discipline gap perpetuate the racial disparities among African American students. Additionally, so do academic tracking policies, as students with certain grades are given more access to classes and post-secondary opportunities (Allen et al., 2013). Students with higher academic performances are placed on higher tracks that lead to advanced courses and four-year colleges. On the contrary, students on lower tracks are placed in remedial courses and prepared for vocational occupations. The variability in access to education and resources perpetuates educational inequities for African Americans as traditional models of tracking were associated with race. This systemic microaggression is also apparent in the overrepresentation of African American students in special education as well as their under representation in gifted programs.

Allen et al. (2013) further explored the ways in which the curriculum in schools reflects the interests of the dominant social class. This bias oppresses African Americans as cultural values, messages, and historical facts are suppressed or omitted from the curriculum (Allen et al., 2013). Allen et al. (2013) not only explored microaggressions perpetuated by the school system, but also the role of the teacher. They found teachers' perceptions may lead to the manifestation of racial microaggressions towards students. One example is when teachers interpret differences between racial groups as deficits in students and their culture. This paper highlighted how racial microaggressions persistently affect the school experience of African American students. The authors purported that the acknowledgment, awareness, and removal of racial microaggressions from schools would support healthy psychological, social-emotional, and intellectual development for all students.

Another layer to understanding the experiences of African Americans in school is to explore how microaggressions occur in schools when African American students are the minority in the building. Henfield (2011) conducted a qualitative study of Black male adolescents navigating microaggressions in a traditionally White middle school. The participants included five male African American eighth-grade students ranging in age from 13 to 14 years. The assumption of deviance was found to be the most common theme. Students felt they were perceived as exhibiting deviant behavior that served to separate them from school norms. For instance, one boy stated that some teachers would assign detention to students for "stupid things," such as tapping on a desk. Two students' responses were related to the themes of assumed universality of the Black American experience and assumed superiority of White cultural values/communication styles. One

student shared how White students viewed him and his friends as "rappers" and "gangbangers." He also noted how Black student-athletes were expected to excel at sports and coaches would push them harder than White students. A student expressed how he disliked the lack of Black cultural representation in the school. This study had some limitations that should also be considered. Given the age and cognitive development of the students, they may have had difficulty understanding the questions. As middle school students, they may not have developed the cognitive complex skills needed to further describe their experiences or process the subtle nature of microaggressions. Also, only the perceptions of African American males were explored. The experiences of African American females may have also provided insightful information that may have strengthened the findings. Additionally, only five students were interviewed, a low number, and the researchers may not have reached saturation with their themes. Having more participants would have strengthened their findings.

Many schools are not racially balanced and therefore some races are the minority. This can be a factor in how students perceive the people in their school. A yearlong qualitative investigation of high-achieving Black students in a predominantly White high school was conducted by Andrews (2012). The author analyzed interview data, participant observations, and field notes using a grounded theory approach to arrive at an understanding of how students perceived experiences with racial microaggressions in their school. There were nine African American high school students in grades 10-12 interviewed for this study; four participants were male and five were female. These students were considered high achievers. The researcher identified two ways that students experienced racial microaggressions: racial spotlighting and racial ignoring. Racial

spotlighting described the experiences African American students had of being racially hypervisible to Whites when they do not seek to be. Students described being put into positions as the spokesperson for their race. This added attention was seen as spotlighting because the teacher and/or peers would look at the student as having an "expert" opinion on race because of his or her race. A student shared how she became silent during racial discussions in fear of giving the wrong answer. Additionally, she became silent due to her perception that her White peers held negative stereotypes of her intellect. There were instances where students perceived that their race was the primary factor for being accused of deviant behaviors or being associated with other African American students because of their race.

In turn, the term racial ignoring described the experiences of African Americans being racially invisible to Whites when they wanted to be visible. The participants described situations of being racially ignored. Students discussed feeling that their ideas and thoughts were not valued. There were examples of teachers and peers refusing to acknowledge or consider their thoughts and ideas. These experiences caused psychological stress and self-doubt in their own academic abilities. When an African American and White student gave the same comment, peers validated the response from the White student but not the African American student. A student shared how these occurrences caused her to limit her participation in the class. Finally, some students shared experiences of White peers using derogatory racial slurs which dehumanized the African American students. One example was how a student repeatedly used a negative racial slur when reading a literary passage. The student felt ignored and the teacher allowed the behavior to continue, which neglected the emotional and psychological

effects that word may have had on the student. "In being silent, the teacher perpetuated the White students' racial microaggression" (Andrews, 2012, p. 35). Additionally, throughout the school there were racial slurs written about African Americans on bathroom walls and doors. These experiences made navigating the school system difficult and were related to emotional and psychological stress. A few limitations in the study included there only being nine students interviewed, a low number and therefore it is difficult to know if the researcher reached saturation. Additionally, the researcher chose students who were high achieving. It would be interesting to explore the experiences of other African American students in the same school and how their experiences compared.

There are several factors that guide students and ultimately may influence their experience at school. Allen (2012) used critical race theory to examine the experiences of high school male students through their counterstories. Six African American middle-class high school male students and their fathers participated in this study. The sons and fathers in the study all spoke of microaggressions in their school. These experiences included the negative stereotypes of African American males held by the staff, which resulted in racialized assumptions of intelligence, deviance, and differential treatment. Their class status offered the males opportunities and power within the school system that is not easily accessible by the working class, but because they were African American they were still subjected to microaggressions. The fathers reported helping their sons to navigate the school structure and to respond to the racial microaggressions. Furthermore, to resist the microaggressions, the fathers drew upon their cultural wealth to create opportunities for their sons. Cultural wealth was defined as forms of cultural capital people of color draw upon to fight discrimination and create opportunities. For instance,

the fathers in this study drew upon their school-based social networks and previous

knowledge of the school system to teach their sons how to respond to microaggressions

and create opportunities. Additionally, the fathers relied on their relationships with the

teachers to protect their children from differential treatment in the classroom. Even

though their class status provided opportunities and power within the school, they were

still subjected to racial microaggressions because of their race. Some limitations in this

study include there only being six families interviewed; it is unknown whether the

researcher reached saturation. The researcher did effectively describe how the analysis

was triangulated to strengthen the findings. Additionally, the researcher described the

role of being an observer in the classroom and how the observations were checked.

However, the number and length of observations was not provided. Member checking

was also performed for feedback on the final themes and findings, which strengthens the

results indicated.

Sometimes school personnel perpetuate racial microaggressions because of their

lack of understanding cultures to which they do not belong. A qualitative study was

conducted by Kohli and Solórzano (2012) who used CRT to explore racial

microaggressions in regards to students' names in K-12 settings. This study was designed

to explore racial microaggressions and internalized racial microaggressions associated

with names among students of color within K-12 schools. The researchers asserted that

the racial undertones to the mispronunciation of student names in schools are racial

microaggressions. A person's name often holds a cultural and family significance

connecting them to their ancestors, country of origin or ethnic group, and may have

meaning for their families. Therefore, the authors claimed that when a child goes to

school and their name is mispronounced or changed, it can negate the child's identity. Even though this happens for White students as well as students of color, the historical and continued racism is what makes this more harmful for students of color. For example, in the past people were forced to change their names. Even though this practice has ended, names that are non-White continue to be seen as inconvenient for the majority population. When a teacher tells a student that his or her name is hard to say or asks if there is a nickname because the name is too long, these comments are considered racial microaggressions (Kohli & Solórzano, 2012). Students may even begin to believe they do not fit within the school or society and thus develop internalized racism.

There were 41 adult participants in the Kohli and Solórzano (2012) study who reflected on their experiences when they were in a K-12 school. The cumulative impact of these experiences with name changing/mispronunciation was found to be damaging to students. Participants shared feelings of invisibility or being different, which led them to confusion around race or feelings of cultural burden. Although the participants were of different races, classes, and contexts, the people of color in the study all experienced racial microaggressions related to their names in their K-12 schooling. The consequences of this can have a lasting negative impact on students (Kohli & Solórzano, 2012). A limitation in this study was the use of email for data collection. This format did not allow the researchers to probe for deeper explanations. Also, all of the participants were in their 20s and 30s so they had to retrospectively reflect on their experience. Interviewing students currently in K-12 would allow for a different perspective on this topic.

In contrast to the qualitative methods used by the previous studies, Meeks (2010) conducted a quantitative study to explore the racial microaggressions of secondary school

teachers towards students of color. The Student Life Experiences Survey (SLES), created by the researcher, was used to measure 342 twelfth grade students' perceptions of the frequency of racial microaggressions by teachers over the previous four years and how bothered they were by them. Students were also able to write about instances of observed or experienced racial microaggressions in an open-ended question. Analysis of the SLES indicated students did not perceive many racial microaggressions, and they were not bothered by the ones they experienced. In contrast, the written comments indicated they were bothered by racial microaggressions. The most common microaggressions reported on the SLES were being ignored by their teacher and being told they were articulate or spoke well. Among the participants, 54 wrote comments, 31 of which were related to racial microaggressions. One comment was about a teacher being surprised when an African American student was articulate. Others related to feelings of being ignored in class. Students also wrote about being insulted by a teacher, being poorly treated in class, or feeling disturbed by racial jokes. Many of the comments related to teachers favoring some groups over others and having higher expectations for some students based on their race.

Overall, Meeks' (2010) study found students witnessed or experienced racial microaggressions by their teachers and were bothered by them to varying degrees. However, the sample population was a limitation for this study. By only choosing twelfth grade students, this excluded younger students and their experiences. Additionally, this survey was given to capture students' opinions at one point in time. It also may have been difficult for students to be honest since the survey was conducted at the school of the researcher. Also, the measure indicated students were not very bothered by the

microaggressions, but the written comments stated otherwise. This implied the measure did not capture the full experience of the students. Adding a qualitative analysis to this study may have strengthened the findings.

There are many barriers that may influence a student's success in school, particularly in certain subjects. To have an in-depth understanding of racial microaggressions in particular classes, Grossman and Porche (2014) conducted a mixed-methods study using a survey measure and interviews to explore perceived gender and racial/ethnic barriers to STEM (science, technology, engineering, and mathematics) success. They surveyed 1,024 high school students and interviewed 53 of these students. All students in grades 9 and 10 were asked to complete surveys that focused on their STEM-related aspirations and experiences. All students who completed the survey were asked if they were interested in being interviewed. For the surveys, 18.3% of participants identified as Black; for the sample interviewed, 16% identified as Black. When the researchers analyzed the survey they found that Black students reported lower perceived support in science than White students did.

Additionally, three themes emerged from the interviews (Grossman & Porche, 2014). The perceptions of microaggressions were the first theme, and the responses to microaggressions and perceived gender- and race-based support were the other themes. The most commonly expressed subtheme was microassaults manifested as the dynamics of power. For example, students described intersections between resource inequities and minority status. This was illustrated when a student shared how in school someone may discriminate against another because the person does not want to work with that particular student. Another student talked about job discrimination based on race. The

subtheme microinsults, societal beliefs, and assumptions were also described by the participants. There were responses describing stereotypical ideas that Black youth would not succeed in STEM. A White participant also echoed minority students' discussion of low expectations for African Americans. Furthermore, 13% of students described racism as a diminishing daily concern. Students also described responses to microaggressions: ignoring others' biased assumptions, challenging them, or proving them wrong. Finally, 52% of underrepresented minority students identified racial/ethnic-based support. Family members and teachers were identified for their role in encouraging students to pursue STEM goals despite inequities. The interviews confirmed the survey findings. The study is limited by the descriptions of the students' experiences to being what they witnessed or their generalized perceptions. They shared few personal experiences with the barriers, which may have to do with social desirability. Additionally, because of the students' age, the complexity of microaggressions may prevent students from accurately identifying incidents of discrimination.

The studies reviewed above illustrate the negative experiences African American students have at school. However, not every study revealed obvious racial microaggressions by teachers towards students. Moore-Thomas (2009) conducted a phenomenological study with 10 African American high school students in California. The researcher conducted this qualitative study using CRT and the interviews occurred over a period of three months. This study was unique because it provided African American students the opportunity to share the practices and strategies that promoted their academic success. With a few exceptions, most of the students expressed they had not been mistreated by a teacher nor had any bad experiences related to race. The

students who had encountered microaggressions used the experiences to motivate them. The students who were successful in school took responsibility for their education. They wanted their teachers to have high expectations of them, be accessible and available to them, and to be friendly and communicate. The participants described quality teachers to be patient, enthusiastic, supportive, and make learning applicable to the real-world. A limitation in this study may be students' willingness to share negative experiences with their teachers for fear of repercussions. The sensitivity of this topic may make students uncomfortable talking with someone they do not know. This study does offer a unique addition to the current literature on racial microaggressions in schools.

Microaggressions may seem to be inconsequential, but the literature illustrates the many negative effects that may arise from these experiences. Individuals may have psychological, physiological, or emotional problems as a result of daily racial microaggressions in schools. Studies show that adolescents are not immune to these experiences or the effects that may occur. Many of the studies on racial microaggressions examined have been qualitative. Although qualitative approaches have provided an important initial examination and identification of racial microaggressions, the use of quantitative approaches may provide a comprehensive examination of racial microaggressions among a larger group. It is essential to understand how microaggressions occur in school in order to create change and improve the environment for African American students. Our schools are becoming increasingly culturally different and therefore they must change and become more accountable and responsive to the student population.

School Connectedness

Understanding the school environment and how students view the environment is important to gain insight on why the achievement gap is still present. The literature generally illustrates there are certain recognizable features of academically successful schools (Anderman, 2002). Results of various studies have found the perception of belonging or feeling connected to one's school is positively related to academic achievement, psychological well-being, and behavioral outcomes (Anderman, 2002). Research findings suggest the importance of exploring school context in understanding the sense of belonging among African American students (Booker, 2007). A school that supports and welcomes all students, regardless of the ethnic composition of the student body and faculty, is likely to have students demonstrate higher levels of achievement (Booker, 2007). Some of the literature discussed the importance of school connectedness without being specific to African American students, but it still sets the stage for this study by illustrating the relationship between school connectedness and student outcomes.

The school environment has been explored to understand the associations between the connection students feel towards their school and how it may influence their school performance. Anderman (2002) used existing data to examine school-level differences in school belonging. This study used data from the Add Health data set which included 15% African American students. Anderman only focused on the studies that included students in kindergarten to 12th grade. Study 1 explored characteristics of schools that may be predictive of a perceived sense of belonging. Study 2 explored the school-level differences in relation to school belonging and various outcomes. In Study 1, Anderman

(2002) found that perceived school belonging varied across schools and was related to individual factors. For instance, high perceived school belonging was associated positively with high self-concept. African American and Native Americans students identified lower levels of school belonging than did European Americans students. The researcher also found school-level characteristics were related to the perception of school belonging. For example, the perception of belonging was lower in urban schools than suburban schools. Additionally, the practice of busing was related negatively to belonging.

Results from Study 2 indicated perceived belonging was associated negatively with depression, social rejection, and school problems (Anderman, 2002). Higher levels of belonging were also associated positively with greater optimism and higher GPA. It was found that African American students reported higher levels of depression and social rejection and lower GPAs than European American students. In the schools with many students who felt they belonged, those who did not feel they belonged experienced more social rejection and problems in school.

Overall, Anderman's (2002) study illustrated the influence of school-related variables, which is important to note since many of those variables may be altered through reform efforts. The study had some limitations that are important to consider as well. The data collected were a part of larger study; therefore, it was not possible to include measures that may have generated a deeper understanding into the processes that might explain the findings. For instance, school size emerged as a predictor, but it was not possible to examine the intricate processes in various sized schools that may explain the patterns found. Additionally, it is possible that school belonging could be a

consequence of the other psychological variables versus being a protective factor. Since

the study is correlational, this possibility could not be directly explored. Overall, this

study is unique as it used a multilevel statistical technique that separated within and

between-school variance to demonstrate that the perception of school belonging is related

to positive outcomes for students.

        The school environment may also influence whether or not a student completes

high school. Henry, Knight, and Thornberry (2012) used data from the Rochester Youth

Development Study to examine school disengagement as a predictor for dropping out of

high school. The researchers created the disengagement warning index by assessing

school records including standardized test scores, attendance, failing one or more

subjects, grade retention, and suspensions. They used data from 911 participants and 68%

of them were African American. The results showed the school disengagement warning

index was positively associated with dropping out of high school. Therefore, as a student

accumulated more school disengagement, the likelihood of dropping out increased

dramatically. This risk factor was determined by looking at the student's standardized test

scores, attendance, failing one or more subjects, suspensions, and grade retention.

        Henry, Knight, and Thornberry's (2012) study provided a better understanding of

the importance for students to have a sense of belonging at school by controlling for a

number of demographic and family risk factors and baseline measures of delinquency and

substance use. There are limitations in this study that are important to take into

consideration. This study does not test causal effects so it is not possible to use the

disengagement warning index to causally relate it to high school dropout and problem

behaviors. The results do suggest that disengagement is a critical risk factor even though

causal effects cannot be established. Another limitation is the location of the study, which was in an urban school. The extent for generalizability to suburban and rural schools is undetermined.

School connectedness has been linked to academic outcomes and also studied with regard to how it may relate to the psychological well-being of students. Ernestus et al. (2014) also conducted a quantitative study with 260 adolescents (141 African American) between 13 and 19 years of age. The researchers examined the mediating effect of self-system processes on the relationship between school connectedness and depressive symptoms. This study conceptualized self-system processes as a composite of self-esteem, coping efficacy, and perceived competence. The overall purpose was to examine the process of school connectedness as a protector from depression among African American and European American adolescents. They found self-system processes mediated the relations between school connectedness and depressive symptoms for both groups. As school connectedness increased, so did the students' self-system processes. Additionally, the self-system processes were associated with lower levels of depressive symptoms. However, there was a variation found between African American and European American youth. For European American youth, their self-system processes fully mediated the relationship between school connectedness and depressive symptoms. In contrast, this relationship was only partially mediated for African American youth. A possible reason for this difference could be due to other mediators that are relevant to African Americans that were not examined in this study. Since this study was cross-sectional in design, causality cannot be assumed. Furthermore, the study

only explored depressive symptoms as an outcome measure. Therefore, it was unclear how school connectedness may relate to other aspects of student experience.

When studying school connectedness, researchers also have investigated adult interactions with students. Chhuon and Wallace (2014) conducted a qualitative study with 77 high school students ranging in age from 14 to 20 years old. African American students made up 37.6% of the sample. The researchers conducted 13 separate focus groups with five to six adolescent participants in each. The emphasis was to understand the ways adolescents experienced relationships with the adults in the school. Across all of the focus groups, the participants described what high-quality interactions with staff looked and felt like as well as negative and disengaging interactions. The findings in this study supported how important the student-teacher relationship is for students. Specifically in high school, the degree students feel known by teachers had implications for students' development. In order to have a positive relationship the students expressed the need for considerable attention and frequent positive interactions. A limitation in the focus group format is the notion of groupthink and social desirability. The researchers tried to control for this by frequently checking in with the participants to make sure they were sharing their "real" feelings.

Adolescents have many adults in their lives that may influence their academic success. Researchers have been interested in understanding these relationships and how they are associated with completing high school. In a longitudinal study, Englund et al. (2008) explored the experiences of 96 participants (11% African American) who were followed from birth through age 23. This study examined the aspects of the parent-child and teacher-child relationships as possible factors for students dropping out of high

school. The findings indicated that the adult relationship had little to do with why

adolescents who were predicted to drop out, remain in school, and graduated. However,

there were numerous differences between the participants who were predicted to graduate

and who dropped out, compared to those who were predicted to graduate and did. The

analysis indicated the students who were unexpected to dropout had lower levels of

parental involvement than the expected graduates. Additionally, expected graduates had

higher levels of social competence than those expected to drop out.

It was also found that both groups became more positive towards their teachers

over time, implying the importance of the teacher-child relationship (Englund et al.,

2008). The importance of the adult-child relationship for academic success was evident in

this study. Also, the link between parent-child relationships, school success, and high-

school completion may be mediated by the quality of teacher-student relationship and

attitudes toward school. A limitation in the study was the small sample size, particularly

for the predicted to dropout groups. Participants were not selected based on their dropout

status, leaving small subsamples. The sample was originally chosen based on poverty and

risk status. Therefore, the results may be different for those who are not low income. The

findings implied that a student's academic success is embedded in their interactions with

adults. This suggests the importance of building and maintaining positive and supportive

adult-child relationships. This relationship is one component of school-belonging and

adolescents indentified as having positive attitudes towards their teachers and schools

were more likely to academically succeed.

To gain a more in-depth perspective on the teacher-student interactions,

Shaunessy and McHatton (2009) used quantitative and qualitative means to explore urban

students' perceptions of teachers in regards to the views of students in general, special, and honors education classes. There were 533 students in grades nine through 12 served through general education (*n = 232*), special education (*n = 140*), or honors program (*n = 201*). Additionally, seven focus groups of four to six students were convened. A total of 139 African American students were included in the study. The researchers used a mixed-methods design with surveys and interviews. The survey explored the students' perceptions of their interactions with their teachers. On the other hand, the focus groups were asked questions about their learning, teaching, relationships with teachers, life at school, and their success.

Shaunessy and McHatton (2009) found that African American students indicated receiving punitive teacher feedback more frequently than other racial groups. In the focus groups, students in special education classes described their experience more negatively. They perceived their teachers as disconnected, uninterested, and lacking the motivation to teach. Participants expressed feeling discouraged when teachers appeared distant or unavailable. Additionally, students attributed teachers having low expectations of them based on their appearance as a factor that impeded their learning. For example, a student expressed the perception that teachers expect the worst out of them based on their appearance. Students also expressed the appreciation for teachers who were energetic, passionate, and made meaningful personal connections. When teachers were interested in their students and showed kindness, students said it had a positive impact on their learning. Respect was also mentioned as an effective teaching and learning element. This study illustrated how powerful the feeling of school connectedness can be on students' education. However, the study did not further explore the difference between the various

racial groups. This would be a helpful addition to the research to understand how people from different races feel about their interactions with teachers.

The experience of school connectedness may be different for students depending on their race. One study used a sample entirely of African Americans to further understand their experiences in school. Booker (2007) used qualitative methods to investigate a sense of belonging among African American high school students. This study explored 13 African American students that were a part of larger study (Booker, 2007) that examined the relationship between school belonging and academic achievement. The researcher found students felt they belonged when others in the school accepted and appreciated them. Similarities in dress and music assisted in the facilitation of these feelings as well as participation in extracurricular activities. As students described belongingness, they discussed feeling warmth and encouragement from faculty and peers. They also expressed the importance of being engaged in organized school-related activities. This study had its limitations, such as the researcher did not observe the interactions between peers and teachers. This information could have illustrated the interactions between peer groups, classroom settings, and during extracurricular activities.

Reviewing the literature highlighted the importance of examining the school environment as it relates to the academic success of African American students. A huge aspect of the school environment is to understand how connected students feel to the school. Anderman (2002) found as students felt they belonged they also had greater optimism and higher GPAs. Henry et al.'s (2012) study made it apparent that school belonging was associated with staying in school or dropping out. If students did not feel

connected, then they were less engaged and some dropped out. Henry et al. (2012) found a way to help students because as school connectedness increased so did students' self-esteem, coping efficacy, and perceived competence. These self-system processes could help ameliorate the negative effects of racial discrimination in schools. Additionally, relationships with school personnel were found to be a major predictor of school connectedness. Chhuon and Wallace (2014), Englund et al. (2008), and Shaunessy and McHatton (2009) all found the teacher-student relationship to be very important for a student's academic success. The interactions with students by the teachers can either improve or hinder the school experience for African American students. Finally, Booker's (2007) study emphasized the need for students to feel as though they belong at school. This sense of belonging occurred when students felt accepted. Overall, the research by several authors has shown how microaggressions and school connectedness are related to students' academic success. Exploring racial microaggressions in high school can illuminate racial issues that may hinder the academic success of students. Additionally, investigating school connectedness may suggest interventions to improve the school experience for African American students.

CHAPTER III: METHODOLOGY

The purpose of this study was to investigate whether the relationship between racial microaggressions and academic performance in African American high school students was moderated by school connectedness as illustrated by the conceptual model (see Figure 1). This chapter will describe the research design, the participant and sampling procedures, measurement, the processes of data collection, and data analysis to address the following research hypotheses:

Based on predictions from the understanding of microaggressions, the data from a sample of high school students will show:

1. African American students' perceptions of racial microaggressions perpetrated by school personnel will relate negatively to their academic performance.

2. School connectedness will moderate the relationship between racial microaggressions and academic performance, such that for African American students who feel a greater sense of connection to their school, the relationship will be weaker.

Design

A quantitative, descriptive, non-experimental survey method was used for this study. Participants from a high school in the Midwest of the United States were used to determine if there was a relationship between the perceptions of racial microaggressions and academic performance. Additionally, school connectedness was examined to see if it moderated this relationship. Individual students responded to survey questions that asked them to report their perceptions about microaggressions and school connectedness. The

survey method was different from the more predominant method of focus groups used by researchers in colleges that study microaggressions.

Participants

The sample for the survey was ninth through twelfth grade students in a large suburban high school in the Midwest United States. The sample was a non- random sample. Students ranged in ages from 14 to 19 years old. Almost all students in the 9th-12th grades were asked to complete the surveys in order to not single out African American students. The only students not asked to participate were those whose parents opted-out of the study. Only the surveys completed by African American students were used for data analysis in the study.

There were 1724 students in the school who come from several parts of the metropolitan area. The school currently participates in two busing programs where students are transferred from different districts to attend this school. Additionally, children of staff are also able to attend the school regardless of the district they reside in. There are 229 (13.28%) students who qualify for free and reduced lunch based on the family's household income. Of the 1724 students, 38 (2.20%) are Asian, 303 (17.58%) are Black, 49 (2.84) are Hispanic, 71 (4.12%) are Multiracial, and 1316 (76.33%) are White. There are 10 students who qualify for English Language Learner (ELL) services and 235 have an Individualized Education Plan (IEP) and require Special Education services. There are 297 (17.23%) students who meet the criteria for the Gifted Education Program. In the high school there are eight administrators and 116 certified staff members. The average years of experience for the teachers is 16 years and 92.1% have a master's degree.

Last year 425 students graduated from the high school. The graduation rate for the four-year cohort was 97.53%. The four-year cohort graduation is the number of students who graduated in four years with a regular high school diploma. The graduation rate for Black students was 93.67% and it was 98.78% for White students. Of the students who graduated, 89.4% enrolled in college for their post-graduate plans. The majority of those students (64%) will attend a four-year college and 25.4% will attend a two-year college. In 2016, the proportional attendance rate for all students was 86.26%. For Black students it was 75.59% and it was 88.91% for White students. Attendance targets use individual student's attendance rate and set the expectation that 90% of the students are in attendance 90% of the time. In 2016, there were 27 students who were suspended 10 or more consecutive days and eight who were expelled for disciplinary reasons.

State assessments are given to students to provide an independent insight into their progress, as well as each school's. In 2015, 66.3% of the Black students who took the English 2 test scored proficient or advanced whereas 94% of White students scored proficient or advanced. For the Algebra 1 test, 42.9% of the Black students scored proficient (no one scored advanced) and 85.7% of White students scored proficient or advanced. For Algebra 2, 38.7% of Black students scored Advanced and 84.4% of White students scored proficient or advanced. On the Biology 1 test, 45.7% of the Black students scored proficient and 94.4% of the White students scored proficient or advanced. On the Government test, 18.9% of Black students scored proficient and 77.7% of the White students scored proficient or advanced. The percentage of graduates who took the ACT in 2016 was 95.70 with an average composite score of 23.40.

A total of 81African American/Black students agreed to the assent/consent form and completed the surveys. Of the students surveyed, 26 (32.0%) identified as male, 53 (65.4%) identified as female, one (1.2%) identified as genderqueer, and one (1.2%) did not feel any of the options accurately described how the person identified. Of the participants, 10 were seniors, 20 were juniors, 27 were sophomores, and 24 were freshman. Eight students were 14 years old, 25 were 15 years old, 24 were 16 years old, 16 were 17 years old, six were 18 years old, one student was 19 years old, and one student did not indicate age. There were 50 students who lived in suburban communities, 25 in urban, and six in rural areas. The teachers at the high school where the study took place were predominately White.

Measures

The research study entailed a combination of various questionnaires completed by students in grades ninth through twelfth as well as an evaluation of their academic performance. Students were asked to complete a demographic form (ex: gender, race, grade, age, location of home) (see Appendix A). The use of demographic categories provided information about the characteristics of participants. The surveys measured experiences related to racial microaggressions and school connectedness. Academic performance was assessed through grade point averages (GPA).

Racial Discrimination. Participants' experiences with racial microaggressions were assessed using the Daily Life Experiences subscale (DLE; Harrell, 1997, see Appendix B). The DLE is one of several different subscales of the Racism and Life Experiences Scale (RaLES; Harrell, 1994; 1997). The RaLES is a collection of measures designed to assess the multiple dimensions of race-related stress among people of color.

Development of the RaLES occurred with a racially diverse group of undergraduate and

graduate students (CDC, 2008). The RaLES was designed to include multiple scales that

can be used individually to assess various types of racial experiences (Harrell, 1997). The

current version of The RaLES consists of five primary racism-related stress scales:

Racism Experiences (EXP), Daily Life Experiences (DLE), Perceived Influence of Race,

Group Impact (GRP), and Life Experiences and Stress (STR). Between 1993 and 1996,

six psychometric studies with racially and ethnically diverse undergraduate and graduate

students were conducted to provide data on the reliability and validity of the RaLES

scales. Internal consistency ranged from .74 to .96, split-half ranged from .82 to .94, and

test-retest reliability coefficients of the full scale ranged from .79 to .86, suggesting

moderate to high reliability (Harrell, 1997). Evidence of criterion-related validity was

demonstrated in that DLE scores were related to perceived stress, psychological

symptoms, and trauma-related symptoms (Harrell, 1997). The measure is appropriate to

use with adolescents of diverse racial backgrounds (CDC, 2008).

This study only used the DLE of the RaLES because it assessed for

microaggressions (Harrell, 1997). The DLE or an adaptation of it has been used with

adolescents in various studies (Meeks, 2010; Seaton, Yip, & Sellers, 2009; Sellers et al.,

2006). Meeks (2010) designed a survey to use with twelfth-grade students by combining

Harrell's DLE scale with another scale to explore students' perceptions of racial

microaggressions in their school. Sellers et al. (2006) surveyed 314 African American

adolescents using the DLE. Seaton et al. (2009) also explored the frequency of

discriminatory experiences using the DLE with 219 African American adolescents, aged

14 to 18.

The DLE is a self-report measure that assesses the frequency of racial

microaggressions in the past year. Students were presented with a list of 20 experiences

and asked to indicate how often they have happened to them in the past year at school

because of their race using a 6-point Likert type scale (0 = *never*, 1= *once, 2 = a few*

times, 3 = *about once a month*, 4 = *a few times a month, 5 = once a week or more*).

Additionally, students indicated on a 6-point Likert type scale about how much the

experience bothered them ranging from (0) *never happened to* me to (5) *bothers me*

extremely. Sample items include: "Having your ideas ignored" and "Being asked to speak

for or represent your entire racial/ethnic group". The scale was scored in a two-step

process. First, frequency scores (sums) and bother scores (sums) were computed. Then

the sum of the frequency and bothersome scores was calculated to represent the total

DLE score. The total scores for the DLE range from 0 to 200, with higher scores

indicating a higher frequency of racial microaggressions experienced and that the

students were more bothered by them (Harrell, 1997).

In the development sample, the author reported a coefficient alpha for the DLE as

$\alpha = .94$ (Harrell, 1994). In order to inform construct validity, the author tested for racial

and ethnic differences in the sample. The group differences found indicated that

participants of color experienced more racism and had a greater awareness of racism as

compared to the White participants. This pattern suggests the scale is measuring what it is

intended to measure. In the validation sample, a coefficient alpha for the DLE was

reported as $\alpha = .84$ (Harrell, 1997). The coefficient alphas for the development and

validation samples indicate the items in the scale have a strong internal consistency. In

multiple samples, correlations with social desirability were either small or statistically

insignificant, indicative of discriminate validity. Finally, the DLE was correlated as

expected with criterion measures of collective self-esteem, cultural mistrust, racial

discrimination, racism reaction, and urban life stress, indicating strong concurrent

validity.

Test-retest reliability was examined with 50 participants from the development

sample of 286 students (Harrell, 1997). Over a period of four weeks, the author reported a

test-retest correlation of .93 for the DLE, indicating high test-retest reliability.

Furthermore, the author examined construct validity of the DLE scores by correlating

them with racism measures, the Racism Reaction Scale (RRS; Thompson, Neville,

Weathers, Poston, & Atkinson, 1990) and two subscales (Institutional Discrimination and

Interpersonal Discrimination) from the Quick Discrimination Inventory (QDI; Ponterotto

et al., 1995). The DLE was positively correlated with the RRS ($r = .56$, $p < .001$)

(Harrell, 1997). It was found to be correlated higher with the RRS for students of color (r

$= .57$, $p < .001$) compared to White students ($r = .20$, $p < .001$) in the development

sample (Harrell, 1997). The correlation patterns suggest that the DLE is measuring the

intended constructs.

For this study there were minor changes made to the DLE for students to only

consider the school environment. The directions were modified so they asked students to

think about experiences in their lives at school. Examples given were those applicable to

the school only. Additionally, delimitations were set to limit the scope and define the

boundaries for students. They were asked to only consider their experiences since school

started in August. Students answered the questions first considering their experiences

with school personnel and then answered the same questions with peers in mind. This

provided separate information about experiences with school personnel and peers. School

personnel were defined as any staff member who works in the school (i.e. teachers,

counselors, custodians, teacher assistance, nurse).

School Connectedness. School connectedness was measured with the

Psychological Sense of School Membership scale (PSSM; Goodenow, 1993). It was

developed for use by school mental health researchers and practitioners to measure

youths' perception of belonging and psychological engagement in school. Item content

was generated from previous research that examined students' perceptions of liking

school, personal acceptance and inclusion, respect, and encouragement at school. An

initial 28-item scale was administered to 454 students from a suburban middle school and

another 403 students from two ethnically diverse urban junior high schools. The final

analysis eliminated items that negatively impacted internal consistency, as well as those

items with low response variance, resulting in the final 18-item Psychological Sense of

School Membership scale (Goodenow, 1993).

The 18 items are assessed with responses indicated on a 5-point response scale,

ranging from 1 (*not at all true*) to 5 (*completely true*) (see Appendix C for instrument).

The PSSM includes items such as "I feel like a real part of this school," "I am included in

lots of activities at this school," and "Other students here like me the way I am." There is

reverse scoring for items 3, 6, 9, 12, and 16. These items are to help ensure the

respondent stops consider each question and hopefully provide a more meaningful

response. The scores are then summed into a total score. In a review of 26 studies, the

reliability of the PSSM was found to range from .78 to .95 across samples of elementary

and secondary school students from diverse backgrounds, including African Americans

(You, Ritchey, Furlong, Shochet, & Boman, 2011). Additionally, moderate to high

correlations with other educational and mental health constructs provided support for the

PSSM's concurrent validity (You et al., 2011). PSSM scores correlated positively with

school success (Goodenow, 1993). In addition, there was support for a link between

higher PSSM scores and better academic competence (Booker, 2007; Gutman &

Midgely, 2000; Ibañez, Kuperminc, Jurkovic, & Perilla, 2004), and grade point average

(Booker, 2007; Gutman & Midgely, 2000).

Procedures

Using the natural environment for this research study was beneficial, but it also

created ethical concerns. In order to protect the respondents from participating in research

without their knowledge, they were provided informed consent as an ethical safeguard.

To consider participation to truly be voluntary, students were informed of the risks and

benefits of the research. Adolescents were not competent to give consent since they may

not fully understand or be capable of evaluating the risks and benefits (Whitley & Kite,

2013). Therefore, there was a two-part process in obtaining consent for adolescents to

participate.

First, a passive consent form (see Appendix D) was given to the parents/guardians

and then the students had a chance to provide assent if they were under the age 18 (see

Appendix F) or consent if they were 18 or older (see Appendix E). Passive consent

notified parents/guardians of the study intention and they had the option to "opt-out."

This option was chosen since active consent in large-scale studies typically have a low

return rate from low-income and undereducated parents, which is the demographic group

that is overrepresented in African-American neighborhoods. Participation rates in

behavioral studies with the use of passive consent are often above 90% (Shaw, Cross,

Thomas, & Zubrick, 2015). A passive consent procedure avoids non-response bias.

Research shows that 87% of non-responders to the passive consent process received and

understood the material, and made the decision to allow their child to participate (Shaw et

al., 2015). For students above age 18, they were asked to give their consent to participate

in the study. The consent form for students over the age 18 and assent form for students

under the age 18 were included in the beginning of the survey. Based on the student's

age, they received either the assent form or consent form to participate in the study. The

consent form assured the parent/guardian and the student that the survey was completely

confidential, surveys were kept secure, and the results of the study would not be used

against them. Protecting participants before, during, and after the research study was

imperative.

Data was collected from students during the school year. The surveys were

administered in the classroom under supervision as a whole group. All students attending

the high school were recruited with the exception of six students whose parents opted-out

of the study. Teachers received brief instructions about identifying the students that did

not have parental consent. These students and those who opted-out of the study

themselves worked independently while those in the study completed the questionnaire.

The latter students were asked to complete two surveys and a demographic form on their

iPads. The teachers let the students know they were being asked to participate in a study

to understand the school environment better. They were told their participation was

voluntary. The questionnaire was created in Qualtrics so students were able to

electronically answer and submit their responses. An email link was sent to the students

and they had the option to click on the link if they were interested in participating.

Students first answered "yes" or "no" if they were 17 or younger. If the student answered

"yes," then he or she was taken to the assent form where the student could "accept" or

"decline" to participate in the study. If the student answered "no" to being under the age

17, then he or she was taken to the consent form where the student may "accept" or

"decline" to participate in the study. If the student declined to participate then the survey

ended. If the student accepted to participate, then the survey began.

      Student GPAs were used for the academic variable since school officials report

student's high school GPA, not a standardized test score, it was the best predictor of their

academic performance. The high school GPA is illustrative of a body of work, while a

standardized test is a one-time snapshot of a student's ability. Therefore, using students

GPA was important for this study as the environment was being examined. It was found

students' grades ultimately matter more for high school and college graduation than their

test performance because grades capture more of the factors relevant for student

achievement than test scores (Chorneau, 2014). This supports how achievement data

were considered so important that they outweighed the potential risk of confidentiality

breaches. Since academic data was connected to the survey responses, it was not possible

to ensure anonymity. However, participants were assured that confidentiality will be

maintained. Careful ethical treatments were done before, during, and after data collection

to continue to protect the participants. The data were received and downloaded from the

school and the student IDs and GPAs into a Statistical Program for the Social Studies

(SPSS) data file. The Qualtrics data were downloaded into an SPSS file, which also had

their student ID. SPSS was used to combine the two data files using the student ID as the

matching variable. This way the GPA data did not have to be manually entered. The new combined data file was used and the student ID column was removed and saved as a new data file so the original was available in case of any mix-ups. This made it possible to have no idea who each line of data belonged to. At no time were there paper copies of the surveys that included the student numbers. All data were kept confidential on a password-protected computer.

The district's and principal's approval was obtained in addition to the university Institutional Review Board (IRB). Parents and students were not required to participate in the research study. The risk of harm and likelihood of benefits needed to be evaluated. There was no anticipation of physical harm, but there was a small possibility of psychological harm due to the evaluation of a sensitive and emotional topic. Asking students to explore the possibility of racial microaggressions in their place of learning may have induced stress. Also, there may have been potential harm in inquiring about perceptions of inequities from a sample that may frequently experience discrimination. Asking students to think about their experiences with microaggressions may also sensitize them to microaggressions. To assist with this possibility, counselors were available to talk with anyone who may have experienced distress during or after this study. Ethical considerations and safeguards assisted with protecting students before, during, and after this research study.

A total of 1,724 letters were sent to the guardians of all ninth through twelfth grade students asking for parents consent for their child to participate in the study. Of these, six (0.3%) students had parents who opted-out of the study. There were a total of 1,718 surveys (99.7%) actually emailed to the students. There were 417 (24.2%) students

who agreed to the assent/consent form and completed the surveys. Of those students, 81

identified as African American or Black and were used for the data analysis.

Data Analysis

A power analysis was conducted utilizing Faul, Erdfelder, Lang, and Buchner's

(2007) GPower program for the social, behavioral and biomedical sciences. This program

assessed the ideal sample size needed to detect a medium effect of $f^2 = .15$ for the

interaction effects, as recommended by Cohen (1988). A sample size of 68 was

calculated to detect a significant effect size with a power of .80, alpha of .05, and a

medium effect size of .15. This size was judged sufficient to adequately test for the

individual moderation effect of school connectedness on the relationship between racial

microaggressions and academic performance.

Data retrieved from the surveys were assessed to examine the relationships

between racial microaggressions and academic performance with school connectedness

as a moderator variable. The data collected from the surveys were entered into SPSS for

analysis. Prior to the main analyses, the preliminary analyses of the data were conducted

in order to clean the data, to determine the description of the sample, and to examine

assumptions. Data cleaning involved identifying participants who did not fit the criteria

for data analysis in this study, who did not provide complete data, or who missed 10% or

more of a measure or scale. Initially, 516 individuals clicked on the link to participate in

the online survey. First, 27 participants were removed because they opted-out of the

survey. Afterwards, 72 participants were removed because they only accessed the consent

form and did not continue on. Next, 336 students were removed from the final sample

because they did not identify as African American/Black; only participants who

identified as African American/Black were included for this data analysis. The final sample for the data analysis for this study included 81 students.

Multiple regression analysis (MRA) was used as an extension of simple and partial correlation. The use of MRA assumes there are no curvilinear relationships between the independent and dependent variables in addition to any interaction among the independent variables (Whitley & Kite, 2013). MRA was chosen over ANOVA because the independent variables were measured on a continuous scale, and the independent variables were correlated. Prior to testing the hypotheses, preliminary analyses were conducted to examine assumptions of normality and to detect univariate and multivariate outliers.

Hierarchical multiple regression was performed to test the moderating effect of school connectedness on the relationship between racial microaggressions and academic performance. Hierarchical MRA has been recognized as a preferred statistical method when moderating effects are being tested (Frazier, Tix, & Barron, 2004). Additionally, according to Leech, Barrett, and Morgan (2014), this level of analysis was most appropriate when the relationship between the predictor and dependent variables are linear, and errors or residuals are normally distributed and uncorrelated with the predictors. For the present study, a regression analysis was conducted to determine the main and interaction effects of the predictor (racial microaggressions) and the hypothesized moderator (school connectedness) on academic performance.

CHAPTER IV: RESULTS

This chapter provides a review of the results, including the preliminary analysis and the main analysis of the two hypotheses. Data were analyzed using SPSS (24).

Preliminary Analyses and Data Cleaning

When examining the data, the assumption that the data were missing completely at random (MCAR) was tested. It was found that the data was missing at random, but that may not be accurate considering a high number of students did not take or complete the DLE. It appeared that many students dropped out of the survey early or decided not to answer the scale about their perceptions of racial microaggressions. This may have been due to feeling uncomfortable answering these types of questions about their school. It was decided that multiple imputation would be the method used to address missing data in order to maintain the sample size (Parent, 2013).

There are three goals of multiple imputation: a) unbiased parameter estimates in the final analysis (regression coefficients, group means, odds ratios, etc.); b) accurate standard errors of those parameter estimates, and therefore, accurate p-values in the analysis; and c) adequate power to find meaningful parameter values significant (Rubin, 1987). This process involved using available data and correlations among the observed variables for all of the cases (Parent, 2013). This method was beneficial for the study because it allowed participants who answered all but one or two of the scales to be included in the analysis. This process created multiple data sets that were analyzed individually but identically to obtain a set of parameter estimates. These estimates were combined to obtain an overall estimate, variance, and confidence intervals (Allison, 2002).

Following the initial cleaning of the data, univariate and multivariate outliers were identified. Tabachnick and Fidell (2001) defined univariate outliers as cases with an extreme value on one variable. In order to identify univariate outliers, standardized or z-scores were created for the main variables and cases with an absolute standardized score higher than 3.29 were identified as outliers (Tabachnick & Fidell, 2001). For this study no participants were identified as a univariate outlier. Tabachnick and Fidell (2001) defined multivariate outliers to be cases that have an unusual combination of scores on two or more variables. To test for multivariate outliers, a Mahalnobis distance test was performed; one case was identified as an outlier and was removed from the analysis (Tabachnick & Fidell, 2001).

Next, the data were screened for normality and linearity. Normality was assessed using the skewness and kurtosis values for the study variables. A skewness absolute z-value of 3.00 or above was indicative of a skewed variable and a kurtosis absolute z-value of 10 or above was indicative of a heavily or lightly tailed relative variable, indicating the sample was non-normal. To determine the statistical significance of the skewness value, the skewness score was divided by the standard error of skewness. If that ratio was larger than 3.00, then the effect was statistically significant at $p < .05$. For the PSSM, the skewness value was -2.06 and the kurtosis value was -2.30. The skewness value for GPA was -.22 and the kurtosis value was -1.41. For the DLE assessing the perception of microaggressions by school personnel, the skewness was -2.17 and the kurtosis was -.65. These results indicated the scores on the PSSM, GPA, and the DLE assessing the perceptions with school personnel were reasonably normally distributed. The skewness value for the DLE assessing the perception of microaggressions with peers

was -4.93 and the kurtosis value was -3.68. There was a slight negative skew such that there were more scores at the high end of the distribution than a typical normal distribution. There was minor skewness, but the decision was made to not transform because the values were within the range of a reasonable approximation to the normal curve. Linearity was assessed with bivariate correlations and all relationships were within normal limits.

Finally, the data were screened for multicollinearity. Tabachnick and Fiddell (2001) identified that multicollinearity occurs when variables are too highly correlated with a Pearson correlation coefficient or $r > .90$. To assess for multicollinearity, a correlation analysis was performed to identify Pearson's r correlations between the main study variables of perceived racial microaggressions and school connectedness. As was expected, no two variables yielded a Pearson's r correlation score above .90, meaning that no two variables were identified to be highly correlated and all variables were retained in the analysis. Additionally, multicollinearity was assessed with the Variance Inflation Factor (VIF), which also indicated the variables were not highly correlated.

Prior to analyzing the hypotheses, correlations were run between the dependent variable and the demographic variables of age, gender, grade, and location of home to determine if any demographic variables should be included as covariates in the main study analyses. Pearson's r was used to examine both continuous and categorical (after dummy coding) variables. Female was the only variable to correlate positively at a statistically significant level with GPA ($r = .24$, $p = .05$), implying female participants obtained higher GPA than other gender categories.

Correlations were also run between the variables used for the data analyses. Table 1 shows the means, standard deviations, and correlations among these variables: PSSM, DLE-Adult, DLE-Peers, GPA, and gender. As noted in the Method section, DLE subscale scores for frequency and bother were computed; these scores were summed for a total DLE score. Correlations between the frequency and bother scores and other measures are also included in Table 1. In general, frequency and bother scores were correlated, suggesting that as the frequency of racial microaggressions increased, so did the feeling of being bothered by the experiences.

It is also noteworthy, but not surprising, that the two total microaggression scores (from peers and from school personnel) were correlated positively ($r = .74$, $p < .00$). If students in this study perceived more racial microaggressions from school personnel they also perceived more racial microaggressions from their peers. Additionally, there was a negative correlation between experiencing microaggressions and school connectedness. As more racial microaggressions were experienced, school connectedness decreased. This was the case for microaggression experiences with school personnel ($r = -.34$, $p < .00$) and their experiences with peers ($r = -.31$, $p < .01$).

There was a positive correlation between being female and experiences of racial microaggressions by peers ($r = .28$, $p < .01$) and experiences of racial microaggressions by school personnel ($r = .27$, $p < .02$). This was also the case when looking at the frequency and bother subscales individually (see Table 1). Female students indicated more experiences with racial microaggressions than male students and they were more bothered by the experiences as compared to male students.

Hypothesis 1

The primary purpose of this study was to examine whether the relationship between racial microaggressions and student achievement was moderated by school connectedness in a sample of African American high school students. Hypothesis 1 predicted African American students' perceptions of racial microaggressions would show a negative relationship with GPA. In order to determine if this relationship existed, correlational analyses were conducted while controlling for the covariate variable, gender.

Two Pearson product-moment correlation coefficients were computed to assess the relationship between the perception of racial microaggressions and GPA, one assessing the perceptions of racial microaggressions by school personnel and the other exploring the perceptions of racial microaggressions by peers. Perceptions of racial microaggressions by school personnel and GPA were not significantly correlated, $r = .12$, $p = .31$. For perceptions of racial microaggressions by peers and GPA, a significant relationship was not observed, $r = .11$, $p = .39$. Also, school connectedness and GPA were not significantly correlated, $r = -.03$, $p = .80$. As there was not a significant relationship between racial microaggressions and GPA or a significant relationship between school connectedness and GPA, mediation analyses were not conducted. Therefore hypothesis 1 was not supported.

Hypothesis 2

Hypothesis 2 predicted school connectedness would moderate the relationship between racial microaggressions and academic performance, such that, for African American students who felt a greater sense of connection to their school, the relationship

between racial microaggressions and GPA would be weaker. A hierarchical regression model was tested to investigate whether the association between the perception of racial microaggressions and GPA depended on school connectedness.

The experiences of racial microaggressions by school personnel were first explored. In the first step, the gender variable was entered. This variable accounted for a significant amount of variance in GPA, $R^2 = .06$, $F(1, 78) = 4.68$, $p = .04$. In the second step, two variables were included: perception of microaggressions by school personnel and school connectedness. These variables did not account for a significant amount of variance in GPA, $\Delta R^2 = .005$, $\Delta F(2, 76) = 0.22$, $p = .81$. To avoid potentially problematic high multicollinearity with the interaction term, the variables were centered and an interaction term between perception of microaggressions by school personnel and school connectedness was created (Aiken & West, 1991). In the third step, this interaction term was added to the regression model; it did not account for a significant proportion of the variance in GPA, $\Delta R^2 = .003$, $\Delta F(1, 75) = .22$, $p = .67$. In this case, the percentage of variability accounted for was not much of an increase. The interaction between racial microaggressions by school personnel and school connectedness fell short of statistical significance.

In the second hierarchical regression, the experiences of racial microaggressions by peers were explored. In the first step, the gender variable was entered. This variable accounted for a significant amount of variance in GPA, $R^2 = .06$, $F(1, 78) = 4.68$, $p = .04$. In the second step, two variables were included: perception of microaggressions by school personnel and school connectedness. These variables did not account for a significant amount of variance in GPA, $\Delta R^2 = .004$, $\Delta F(2, 76) = 0.17$, $p = .85$. Once again

to avoid potentially problematic high multicollinearity with the interaction term, the variables were centered and an interaction term between perception of microaggressions by school personnel and school connectedness was created (Aiken & West, 1991). Next, this interaction term was added to the regression model, which did not account for a significant proportion of the variance in GPA, $\Delta R^2 = .005$, $\Delta F(1, 75) = .38$, $p = .56$. The interaction between racial microaggressions by peers and school connectedness fell short of statistical significance.

In both regression analyses the first predictor (gender) was significant, but neither the second step (gender, microaggressions, and school connectedness) nor the third step (gender, microaggressions, school connectedness, and the interaction term) predicted scores on the dependent variable (GPA). This indicated racial microaggressions and school connectedness did not have an effect above and beyond the effects of gender. In this case, only gender was a significant predictor of GPA. Thus, school connectedness did not moderate the relationship between the perception of racial microaggressions and GPA and hypothesis 2 was not supported.

Secondary Analyses

An independent-samples t-test was conducted to compare school connectedness between male and female students. There was a significant difference in school connectedness between male ($M = 67.19$, $SD = 13.08$, $N = 26$) and female ($M = 59.92$, $SD = 13.33$, $N = 53$), $t(50.67) = 2.31$, $p = .03$) students. These results indicated the male students reported a greater sense of connection to their school than female students. This is not surprising, given female students indicated more experiences with racial microaggressions than male students.

A one-way between subjects ANOVA was conducted to examine potential differences in school connectedness across freshmen, sophomores, juniors, and seniors. There was a statistically significant difference between groups as determined by one-way ANOVA ($F(3,482) = 10.66$, $p = .00$). A Tukey post hoc test revealed that school connectedness was statistically significantly lower for sophomores ($M = 56.96$, $SD = 12.87$, $p = .00$) compared to freshmen ($M = 64.75$, $SD = 13.19$, $p = .00$), juniors ($M = 63.35$, $SD = 14.78$, $p = .00$), and seniors ($M = 64.50$, $SD = 12.61$, $p = .00$). There was no statistically significant difference between freshman and juniors ($p = .83$), freshmen and seniors ($p = 1.00$), or juniors and seniors ($p = .95$). Taken together, these results suggest that the sophomores felt less connected to their school than freshmen, juniors, or seniors.

CHAPTER V: DISCUSSION

Racial microaggressions are subtle verbal, nonverbal, and/or visual insults directed toward people of color that communicate hostile, derogatory, or negative racial slights (Sue et al., 2007). Whether these microaggressions are intentional or not, they may leave the person experiencing them feeling frustration, anger, alienation, or other emotions from being belittled (Meeks, 2010). These experiences can influence the way students are treated in the classroom (Brown & Bigler, 2002). Therefore, it is essential for school personnel to understand how to identify, eliminate, and handle microaggressions when they occur.

In this study, racial microaggressions were examined to determine if they were meaningfully associated with academic achievement, as indicated by several studies (Burchinal et al., 2011; Neblett et al., 2006; Tyson et al., 2007). Results suggested racial microaggressions were not related to GPA in this sample of African American adolescent students. Racial microaggressions had trivial correlations with GPA and they did not predict a significant amount of the variance in GPA after controlling for gender. Thus, racial microaggression variables may play less of a role in the achievement of adolescent African American students than hypothesized. This finding is surprising, given that several studies have found that these experiences relate to academic achievement in diverse samples (Meeks, 2010; Sue et al., 2009). Racial microaggressions are relevant in understanding the school experiences of African American students even though they did not predict GPA.

It is important to consider what may have contributed to these nonsignificant findings in this study. There are many possible reasons for the lack of relationship

between racial microaggressions and GPA. Many of these students have been in school together since kindergarten and they may not notice or be as bothered by racial microaggressions. In other words, they may have become desensitized to such events. It is also possible students have learned to cope with the racial microaggressions in the school environment so that the effects are not as great (Meeks, 2010). Furthermore, it is possible this finding may have been the case because there are too many factors that relate to GPA. These findings suggest a more holistic model that addresses unique factors relating to GPA for African American students needs to be considered in future studies.

It is also possible that using GPA as a measure of academic performance was not the best indicator of achievement when examining racial microaggressions. Various measures of academic achievement cannot always be used interchangeably and therefore it may be important to consider different achievement measures to understand the correlates of academic achievement (Dickinson & Adelson, 2016). For instance, Roorda, Koomen, Spilt, and Oort (2011) found the relationship between positive student-teacher relationships and achievement was stronger when measured by certain achievement indicators compared to others. Grading practices may vary by teachers; in addition, there is the potential for subjectivity in grading, another potential source of variance (Dickinson & Adelson, 2016). Ultimately GPA may not be one-dimensional, but rather may reflect a number of factors. It is possible using GPA to measure the correlates of racial microaggressions was not the best indicator and future research may want to explore other achievement measures to investigate this relationship.

To explore and explain the relationship between racial microaggressions and academic performance, a moderation model was hypothesized that specifically

investigated the role of school connectedness on the relationship. It was predicted that

school connectedness would ameliorate some of the negative associations between racial

microaggressions and GPA. Ultimately, school connectedness would act as a protection

against racial microaggressions in the school. This hypothesis was not supported in this

study. There was no significant relationship on the dependent variable from the

interaction between the moderator and independent variable, therefore moderation was

not supported. Since a relationship between the main variables was not found, it was not

surprising that moderation was also not found. Even though this hypothesis was not

substantiated, school connectedness was found to be important variable as it related to

racial microaggressions.

Another reason the hypotheses were not supported may be a result of not having

enough power for this study. Every participant used in the data analyses completed the

school connectedness survey, but several participants did not answer the questions from

the microaggressions surveys. This may be due to the sensitivity of the topic or possible

concerns of negative consequences due to answering the survey (Meeks, 2010). Students

may not have felt comfortable reporting on the actions of teachers or their peers. Another

concern in regards to the lack of support for the hypotheses is the issue that individuals

who volunteer for survey research are different in significant ways from those who do not

volunteer (Shaw et al., 2015). This study was limited to participants who volunteered

their participation and these participants may not experience a lot of microaggressions as

compared to their peers who did not volunteer.

In addition to the main analyses, the results revealed some significant

relationships among other variables. This study found a positive correlation between

being female and experiences of racial microaggressions by school personnel and peers.

This indicated female students experienced more microaggressions than male students.

As females, these students are also targets of gender microaggressions, which may be

why they indicated more microaggressions. At times it is hard to distinguish between the

different types of microaggressions (Nadal et al., 2015). Therefore, African American

female students may experience microaggressions that are based on both their racial and

gender identities (Nadal et al., 2015).

Most of the research on microaggressions focuses on the individual's singular

identity instead of understanding how the intersection of a person's multiple identities

may affect their experiences with microaggressions (Nadal et al., 2015). Many qualitative

studies do not consider multiple identities in their data analyses, which is one reason the

research on this topic is scarce. Similar to this study, Nadal, Mazzula, Rivera, and Fuji-

Doe (2014) conducted a quantitative study and found Latina women experienced more

microaggressions than Latino men at work and school. Nadal et al. (2015) conducted a

qualitative study to understand if people with multiple identities could identify

intersectional microaggressions in their lives. They found participants were able to

identify microaggressions influenced by the intersections of their identities even when

asked to answer questions based on singular identities. The results illustrated how women

of color experience microaggressions based on their race and gender. Other studies give

examples of how identities intersect even when the intersection itself is not explored. For

instance, in Sue et al.'s (2008) study African American women shared racial

microaggressions that had to do with their gender without being prompted. This

demonstrates how African American women may be aware of intersectional

microaggressions and many of their experiences may not be based on solely race or gender (Nadal et al., 2015).

Additionally, being female was positively correlated with GPA. African American females had higher GPAs than African American males in this study. The results support previous research that female students outperform male students academically in high school (Heyder & Kessels, 2017). Female students exhibit behaviors in school that may lead to higher academic performance than their male counterparts, which is one possible reason for this finding (Heyder & Kessels, 2017). Gender seems to be a meaningful predictor of racial microaggressions and academic achievement.

The study also found a positive correlation between the experiences of microaggressions by peers and by adults. As students experienced more microaggressions by school personnel, they also experienced more microaggressions by their peers. This illustrates how school personnel may be modeling discriminatory behavior, which the students are mirroring (Brown & Bigler, 2002). It is also possible that the school personnel are creating an environment where it is acceptable for students to engage in discriminatory behaviors (Brown & Bigler, 2002). This adds to the research that shows as students observe microaggressions, they often begin to replicate them, perpetuating the cycle of discrimination (Meeks, 2010). It could also be true that some students are more aware of microaggressions and thus are more likely to report both types.

The results also highlighted a significant negative relationship between racial microaggressions and school connectedness. As students reported more experiences with racial microaggressions, they reported feeling less connected to the school. This finding

demonstrated potential negative outcomes of experiencing microaggressions in the school environment. This is important because the school environment is one of the most important developmental contexts for youth since they spend so much of their awake time in the school setting (Ernestus et al., 2014). School connectedness is important because it has been found to be related to several positive outcomes for students (Anderman, 2002; Chhuon & Wallace, 2014; Englund et al., 2008) and racial microaggressions can compromise that feeling.

The results suggest that students will feel less connected to their school if they experience more racial microaggressions. Feeling connected to the school is important because it can build resiliency, motivation, and decrease at-risk behaviors, thus leading to greater student success (Blum & Libbey, 2004; Ernestus et al., 2014; Windspread, 2003). This finding may lead to future interventions to increase school connectedness in order to reduce the negative outcomes from racial microaggressions. Although racial microaggressions were associated with school connectedness in the current study, they were not associated with GPA.

<div align="center">**Research Implications and Future Research**</div>

This study provided meaningful insight into the way racial microaggressions negatively related to the school experience of African American high school students. The focus was on the experiences of high school aged children, so future research expanding into the middle and elementary school environments should be conducted. Furthermore, this was a snapshot of student opinions about the school environment at one point in time. Since student attitudes may change over time it can make generalizability

more difficult. Longitudinal studies would address this and create a better picture of how students experience racial microaggressions over time.

Since this is the first study known to the researcher that explores school connectedness as a moderator for the relationship between racial microaggressions and GPA, future research is needed to continue to explore this phenomenon. It would be particularly powerful to understand how the adolescent experience of racial microaggressions differs from those of adults. As school personnel perpetrate racial microaggressions there is also another layer of power that could be explored (Kohli & Solórzano, 2012). Oftentimes the person engaging in microaggressive behaviors is also the person who gives the student grades. This level of authority adds a layer to the dynamics between the perpetrator and the target that should be examined in future research. One way to explore this further would be through interviews with students. A mixed-methods approach would highlight the frequency of experiences and the stories would shed light on specific experiences.

Another important area for research is the intersectionality of gender and race, as this study found female students experienced more microaggressions than male students. Understanding these constructs in the school environment may provide a deeper understanding of how gender plays into the experiences of racial microaggressions. It is possible that males and females experience racial microaggressions differently, particularly if the racial microaggression also includes a gender microaggression (Nadal et al., 2015). African American woman experience microaggressions based on the stereotypes that exist for both their race and their gender (Lewis, Mendenhall, Harwood, & Browne Huntt, 2016). Most of the current research explores either race or gender, but

does not focus on how they intersect (Nadal et al., 2015). Exploring this in the context of K-12 education would identify the barriers students face when they are in school and how these experiences may inhibit their academic performance.

In addition to exploring the effects of racial microaggressions on the well-being of African American students, studies investigating the best school counseling interventions are needed. Little is known about how school counselors need to specifically intervene when students are experiencing high levels of racial microaggressions in school. Future research should explore ways to ameliorate potential consequences that occur from these experiences. This would highlight effective interventions that may reduce any long-term effects of these experiences. It is essential for school personnel to learn how to recognize these racial microaggressions when they occur (Meeks, 2010) in order to immediately intervene. Future research could explore potential moderating or mediating variables of the association between racial microaggressions and outcomes in African American students. Moderator analyses are important to directly inform practices to improve the high school experiences of African American students (Gardner, Hutchings, Bywater, & Whitaker, 2010). To advance understanding of how and why interventions work, researchers have stressed the importance of also examining mediators of intervention (Gardner et al., 2010). Scientifically, mediation studies are important for testing causal hypotheses about how school personnel influence high school students' experiences (Gardner et al., 2010).

Future research understanding the role of school connectedness as it relates to racial microaggressions is also important to study. Researchers should examine how the experiences of racial microaggressions may work in conjunction with school

connectedness to relate to academic performance. Research has not clearly established how school factors, such as school connectedness, may help protect students from negative outcomes when exposed to racial microaggressions. Since this study found a decrease in school connectedness as racial microaggressions increased, further research may find possible interventions to ameliorate the negative associations with racial microaggressions. By understanding the ways school connectedness is associated with outcomes for African American adolescents, schools can develop appropriate interventions to support students.

School Counseling Implications

The implications of this study imply school counselors do not have to worry about racial microaggressions as they relate to GPA; however these results should be interpreted with caution, given the small sample and resulting lack of power. Even though this study did not find racial microaggressions to predict GPA, these experiences are very important to understand. This research provides insight for school counselors to improve school experiences for African American students. Understanding racial microaggressions and school connectedness can influence the work school counselors do with students through classroom counseling lessons and individual/small group counseling. If an African American student experiences racial microaggressions, the school counselor can provide individual counseling. Additionally, small group counseling could provide a space for African American students to gain support from peers who may have similar experiences. In addition to reactive measures, school counselors can provide preventative measures through classroom lessons and small group counseling sessions that teach students about diversity, empathy, tolerance, and the impact of racial

microaggressions. Furthermore, school counselors are leaders in the school and therefore can advocate for students by collaborating with staff to help them build their multicultural understanding.

There are many adults who work with students in the school environment who should learn about racial microaggressions. It is important for school personnel to recognize racial microaggressions, know how to manage them in the classroom, and to not perpetrate racial microaggressions themselves. Teachers have so much influence in the classroom and with individual students. When microaggressions occur there may be negative consequences for the individual student and also for the entire classroom. Students may share their experiences to add a face to the topic versus discussing it as an abstract concept. When school personnel understand microaggressions, and how to eliminate and handle them when they occur, all students will benefit (Meeks, 2010).

While intervening at the individual level will be useful for students experiencing racial microaggressions, it will be insufficient in preventing and dismantling the stressors that result from continued discrimination. Interventions targeted at the school and district level are needed to eliminate the proposition that African American students are less important, thus decreasing the frequency that one would experience subtle discrimination. Unfortunately, often racial microaggressions may not be detectable to others. As a result, while the target might perceive the school personnel as unresponsive, the act may go unnoticed. It is possible that the racial microaggressions have become a part of the school culture and people miss them. This illustrates the importance of teaching school personnel to identify racial microaggressions and decrease them while facilitating student belonging to provide a more inclusive environment. It is essential to begin to intervene at

the district level by equipping and training school administrators to effectively lead and

develop affirmative attitudes and inclusive environments for African American youth.

The school environment is important to consider as students are often not

represented in the school curriculum and may feel less valued in class discussions. The

school district can assess their curriculum practices to make instruction more inclusive to

increase feelings of connectedness. For instance, African American culture should be

represented outside of lessons solely focused on slavery and the Civil Rights Movement.

There have been many contributions made by African Americans that should be

highlighted and taught. Students should have books with authors and characters from

various backgrounds. They need to be able to see themselves in the curriculum as

opposed to thinking it is only for the racial majority.

School counselors can help the school personnel confront the fact that they are not

immune from inheriting biases, prejudices, and fears associated with race (Sue, Rivera,

Capodilupo, Lin, & Torino, 2010). This acknowledgment can help create systemic

changes within the school. With this understanding and awareness, schools will be able to

look at the existence of microaggressions to reduce them in hopes to improve student

academic performance and increase school connectedness.

Limitations

Although this study adds to the research literature in important ways, as with

every study, there are some limitations. The main issue is the small sample size of

students participating, which resulted in a lack of power. Many students did not complete

the microaggression survey even though they completed the school connectedness

survey. This limited power may be the reason the hypotheses were unsupported in this

study. Students may have also underreported their experiences of racial microaggressions

for many reasons. For instance, participants were asked to think back on their time in

high school to estimate the frequency and bothersomeness of racial microaggressions,

which created room for respondent error. Thinking back on experiences with racial

microaggressions has an internal validity issue because estimates may not be accurate.

Participants may not accurately report because they do not want to talk negatively about

their school personnel or peers. They may have decided not to complete the DLE due to

concerns with repercussions if they indicated microaggressions occurred. Additionally,

students may have focused on current teachers and their actions towards students, and not

consider previous teachers.

Additional limitations may also influence potential areas for future research. For

instance, the use of adolescents may impact the results because their experiences are

moderated by their social-cognitive development (Brown, 2006). The age and cognitive

ability of some children may impact the internal validity of the research due to variations

in students' ability to identify discriminatory behaviors on the survey. Some students may

not be able to understand the thoughts and opinions of their teachers so it may be more

difficult to identify acts of microaggressions. Also, the perception of microaggressions

may be impacted by their parental socialization, acculturation, immigration history, and

social status (Brown, 2006). Additionally, the survey design limited the types of

microaggressions that were presented to students and limited the students' responses to

the items on the survey. For futures studies, the use of focus groups would add to the

research field by allowing for open-ended responses to questions which can generate

additional descriptions of microaggressions for high school students.

Furthermore, due to the correlational nature of this study, a causal relationship could not be inferred or determined. Therefore, it is not possible to determine whether perceptions of racial microaggressions caused a reduction in school connectedness. This is a limitation of the study in that only a negative relationship could be determined but a predictive relationship could not be deduced. This study also focused only on high school experiences of racial microaggressions. Therefore, assertions regarding the long-term effect of these experiences cannot be made from these findings. A longitudinal design could be beneficial in order to determine a more causal relationship and understanding of long-term effects.

Another limitation of this study was with regard to its sample. It is unclear how the findings of this study would generalize to different samples such as schools whose students are predominately African American or schools in rural communities. Similarly, the sample was drawn from a school in the Midwest. As a result of variation of racial attitudes among geographic regions in the United States, the findings may or may not be applicable to other regions. Future studies need to be conducted in various schools in order for the results to generalize to more school environments. Finally, this study was not able to expand the understanding how other racial minority students (i.e. Asian, Latino/a) experience racial microaggressions in school. Future research is needed to explore the experiences of other students of color to learn more about the relationship racial microaggressions may have with the experiences of students in school.

Conclusion

The hypotheses in the study were not supported, but a negative relationship between perceptions of racial microaggressions and school connectedness was

discovered. It was also discovered that more females experienced racial microaggressions than male students. These findings contributed to the literature on how racial microaggressions relate to academic performance among a sample of African American students. These findings can be used in future research to increase the understanding of these experiences and develop ways to decrease the occurrences. Continuing this research will be helpful for creating social and political policies and interventions to prevent and remedy the effects of racial microaggressions in the educational setting.

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FIGURES AND TABLES

Figure 1: Hypothesized moderation model

```
                        ┌─────────────────────┐
                        │ School              │
                        │ Connectedness (Z)   │
                        └─────────────────────┘
                                  │
                                  ▼
┌─────────────────────┐                          ┌─────────────────────┐
│ Racial              │                          │ Academic            │
│ Microaggressions (X)│ ───────────────────────▶ │ Performance (Y)     │
└─────────────────────┘          (-)             └─────────────────────┘
```
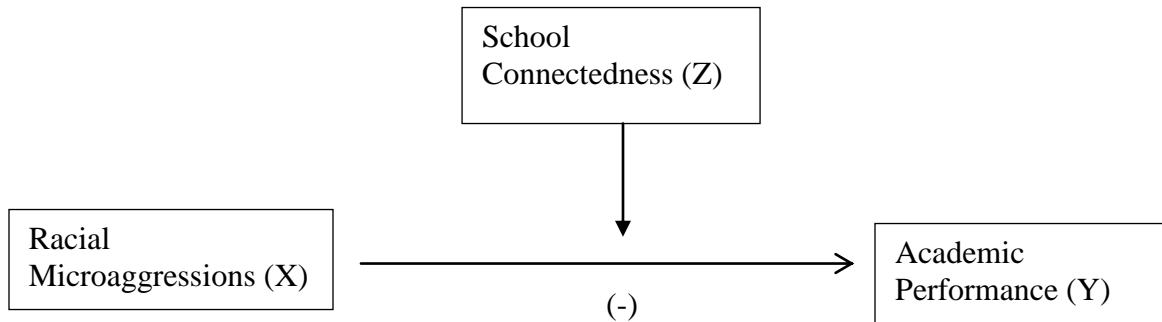
Low in school connectedness, there will be a strong relationship between racial
microaggressions and academic performance
High in school connectedness, there will be a weak relationship between racial
microaggressions and academic performance

Table 1- Means, Standard Deviations, and Zero-Order Correlations among Main

Study Variables

Variable	M	SD	1	2	3	4	5	6	7	8	9
1. Female	.65	.48	1.00	-	-	-	-	-	-	-	-
2. DLE_S-Total	85.48	39.04	.28*	1.00	-	-	-	-	-	-	-
3. DLE_S-Freq	40.25	20.26	.30**	.97**	1.00	-	-	-	-	-	-
4. DLE_S-Bother	43.53	20.51	.27**	.97**	.89**	1.00	-	-	-	-	-
5. DLE_A-Total	76.98	38.88	.27*	.74**	.72**	.75**	1.00	-	-	-	-
6. DLE_A-Freq	34.63	19.12	.24**	.73**	.71**	.70**	.97**	1.00	-	-	-
7. DLE_A-Bother	40.62	21.70	.31**	.75**	.70**	.76**	.98**	.89**	1.00	-	-
8. GPA	2.71	.73	.24*	.11	.11*	.11*	.12	.06	.18**	1.00	-
9. PSSM-Total	61.85	13.97	-.18	-.31**	-.35**	-.28**	-.34**	-.36**	-.33**	-.03	1.00

Note. The categories have been collapsed into the category DLE_S-Total = the total score of racial microaggressions by peers, DLE_S-Freq = the frequency of racial microaggressions by peers, DLE_S-Bother = the bothersome of racial microaggressions by peers, DLE_A-Total = the total score of racial microaggressions by school personnel, DLE_A-Freq = the frequency of racial microaggressions by school personnel, DLE_A-Bother = the bothersome of racial microaggressions by school personnel, PSSM-Total = total school for school connectedness. $* p < .05$, $** p < .01$ level.

APPENDIXES

Appendix A- Demographic Form

1. Age: _____

2. Gender

    _____ Female
    _____ Male
    _____ Transgender
    _____ Genderqueer
    _____If the options above do not accurately describe how you identify yourself, please share with us how you self-identify:

    _____

3. Please tell us about your race /ethnicity. You may check multiple boxes.

    _____ African American / Black
    _____ Caucasian / White
    _____ Native-American / American Indian
    _____ Asian-American
    _____ Hispanic-American / Latino(a) / Chicano(a)
    _____ Multiracial
    _____ If the options above do not accurately describe how you identify yourself, please share with us how you self-identify:

    _____

4. What is your school level?

    _____ Freshman
    _____ Sophomore
    _____ Junior
    _____ Senior

5. What best describes the area that you live in?

    _____ Urban
    _____ Suburban
    _____ Rural

Appendix B- Daily Life Experience Subscale

DAILY LIFE EXPERIENCE. These questions ask you to think about experiences that some people have as they go about their daily lives <u>in school</u>. Please **first** determine how often you have each experience <u>in school</u> because of your race. Only consider experiences since school started in August. Use the scale in the first column and write the appropriate number on the first blank line. **Next**, use the scale in the second column to indicate how much it bothers you when the experience happens <u>in school</u>. Write the appropriate number on the second blank line.

_____

_____

<u>How often because of race?</u>   <u>How much does it bother you?</u>
0=never   **0=has never happened to me**
1=less than once a year   **1=doesn't bother me at all**
2=a few times a year   **2=bothers me a little**
3=about once a month   **3=bothers me somewhat**
4=a few times a month   **4=bothers me a lot**
5=once a week or more   **5=bothers me extremely**

_____

_____

1) Being ignored, overlooked, or not given service (classroom, cafeteria, bookstore, etc.)   _____ _____

2) Being treated rudely or disrespectfully   _____ _____

3) Being accused of something or treated suspiciously   _____ _____

4) Others reacting to you as if they were afraid or intimidated   _____ _____

5) Being observed or followed while in public places   _____ _____

6) Being treated as if you were "stupid", being "talked down to"   _____ _____

7) Your ideas or opinions being minimized, ignored, or devalued   _____ _____

8) Overhearing or being told an offensive joke or comment   _____ _____

9) Being insulted, called a name, or harassed   _____ _____

10) Others expecting your work to be inferior _____ _____

11) Not being taken seriously _____ _____

12) Being left out of conversations or activities _____ _____

13) Being treated in an "overly" friendly or superficial way _____ _____

14) Being avoided, others moving away from you physically _____ _____

15) Being mistaken for someone who serves others (i.e., custodian, office worker, etc.) _____ _____

16) Being stared at by strangers _____ _____

17) Being laughed at, made fun of, or taunted _____ _____

18) Being mistaken for someone else of your same race (who may not look like you at all) _____ _____

19) Being asked to speak for or represent your entire racial/ethnic group (e.g., "What do _____ people think"?) _____ _____

20) Being considered fascinating or exotic by others _____ _____

Appendix C- Psychological Sense of School Membership Scale

Circle the answer for each statement that is most true for you.

1) I feel like a part of my school.	Not at all true 1	2	3	4	Completely true 5
2) People at my school notice when I am good at something.	Not at all true 1	2	3	4	Completely true 5
3) It is hard for people like me to be accepted at my school.	Not at all true 1	2	3	4	Completely true 5
4) Other students in my school take my opinions seriously.	Not at all true 1	2	3	4	Completely true 5
5) Most teachers at my school are interested in me.	Not at all true 1	2	3	4	Completely true 5
6) Sometimes I feel as if I don't belong in my school.	Not at all true 1	2	3	4	Completely true 5
7) There is at least one teacher or adult I can talk to in my school if I have a problem.	Not at all true 1	2	3	4	Completely true 5
8) People at my school are friendly to me.	Not at all true 1	2	3	4	Completely true 5
9) Teachers here are not interested in people like me.	Not at all true 1	2	3	4	Completely true 5
10) I am included in lots of activities at my school.	Not at all true 1	2	3	4	Completely true 5
11) I am treated with as much respect as other students in my school.	Not at all true 1	2	3	4	Completely true 5
12) I feel very different from most other students at my school.	Not at all true 1	2	3	4	Completely true 5
13) I can really be myself at my school.	Not at all true 1	2	3	4	Completely true 5
14) Teachers at my school respect me.	Not at all true	2	3	4	Completely true

	1				5
15) People at my school know that I can do good work.	Not at all true 1	2	3	4	Completely true 5
16) I wish I were in a different school.	Not at all true 1	2	3	4	Completely true 5
17) I feel proud to belong to my school.	Not at all true 1	2	3	4	Completely true 5
18) Other students at my school like me the way that I am.	Not at all true 1	2	3	4	Completely true 5

Appendix D – Parental Informed Consent

UMSL | Education
University of Missouri–St. Louis

Department of Education Sciences and Professional Programs

University of Missouri- St. Louis
401 Marillac Hall
St. Louis, Missouri 63121-4400
Telephone: 314-516-5782
E-mail: cjwb7a@umsl.edu

Informed Consent for Child Participation in Research Activities

Understanding the School Environment

Participant _____   HSC Approval Number __999855-2____

Principal Investigator __Courtney Wilson__   PI's Phone Number   _(314)397-6706_

_____

1. Your child is invited to participate in a research study conducted by Courtney Wilson, a school counselor in the Kirkwood School District, under the supervision of Dr. Susan Kashubeck-West as a part of UM- St. Louis. The purpose of this research is to understand students' interactions with peers and school staff in high school and how these interactions may relate to their academic performance. If, for any reason, you <u>do not</u> wish your son or daughter to participate in the survey, please sign this form and return it by Thursday, March 21. If you agree to let them participate, you do not need to return this form.

2. Your child's participation will involve completing a questionnaire that should take about 10-15 minutes to do. This questionnaire will be given to your child in class during the regular school day. Also, I will look at your child's GPA in the school database. Student numbers will be used to link the surveys and GPAs together. Once they are linked, the student numbers will be removed.

3. Although not likely, it is possible that your child might experience some discomfort in answering questions about their interactions with peers and teachers. If they do feel any discomfort, I will refer them to one of the school counselors available."

4. There are no direct benefits for your child's participation in this study. However, your child's participation will contribute to the knowledge about students' experiences in school and may help society.

5. Your child's participation is voluntary and you may choose not to let your child participate in this research study or to withdraw your consent for your child's

participation at any time. Your child may choose not to answer any questions that he or she does not want to answer. You and your child will NOT be penalized in any way should you choose not to let your child participate or to withdraw your child. If you do NOT want your child to participate, please sign this form and return it. Otherwise, they will be invited to participate.

6. We will do everything we can to protect your child's privacy. By agreeing to let your child participate, you understand and agree that your child's data may be shared with other researchers and educators in the form of presentations and/or publications. In all cases, your child's identity will not be revealed. In rare instances, a researcher's study must undergo an audit or program evaluation by an oversight agency (such as the Office for Human Research Protection). That agency would be required to maintain the confidentiality of your child's data.

6. If you have any questions or concerns regarding this study, or if any problems arise, you may call the Investigator, Courtney Wilson at (314) 397-6706 or the Faculty Advisor, Dr. Susan Kashubeck-West at 314-516-6091. You may also ask questions or state concerns regarding your child's rights as a research participant to the Office of Research Administration, at 516-5897.

If, for any reason, you <u>do not</u> wish your son or daughter to participate in the survey, please sign this form and return it by Thursday, March 21. If you agree to let them participate, you do not need to return this form.

_____

Parent's/Guardian's Signature   Date   Parent's/Guardian's Printed Name

_____

Child's Printed Name

_____

Signature of Investigator or Designee   Date   Investigator/Designee Printed Name

Appendix E – Student Informed Consent

UMSL|Education
University of Missouri– St. Louis

Department of Education Sciences and
Professional Programs

University of Missouri- St. Louis
401 Marillac Hall
St. Louis, Missouri 63121-4400
Telephone: 314-516-5782
E-mail: cjwb7a@umsl.edu

Informed Consent for Participation in Research Activities (18 years or older)

Understanding the School Environment

Participant _____   HSC Approval Number __999855-2_

Principal Investigator __Courtney Wilson__   PI's Phone Number _(314)397-6706__

_____

3. You are invited to participate in a research study conducted by conducted by
    Courtney Wilson, a school counselor in the Kirkwood School district, under the
    supervision of Dr. Susan Kashubeck-West as a part of UM- St. Louis. The purpose of
    this research is to understand students' interactions with peers and school staff in high
    school and how these interactions may relate to their academic performance.

4. Your participation will involve completing a questionnaire. The amount of time
    involved in your participation will be about 10-15 minutes to do. This questionnaire
    will be given to you in class during the regular school day. Also, I will look at your
    GPA in the school database. Approximately 1800 may be involved in this research.
    Student numbers will be used to link the surveys and GPAs together. Once they are
    linked, the student numbers will be removed.

5. Although unlikely, it is possible that you might feel uncomfortable when answering
    some of the questions. If you do, please come and talk to me or one of your school
    counselors.

4. You will not get any benefits from being in this study but you might enjoy helping
    others understand how to create a better learning environment for students.

5. Your participation is voluntary and you may choose not to participate in this research
    study or to withdraw your consent at any time. You may choose not to answer any
    questions that you do not want to answer. You will NOT be penalized in any way
    should you choose not to participate or to withdraw.

6. By agreeing to participate, you understand and agree that your data may be shared with other researchers and educators in the form of presentations and/or publications. In all cases, your identity will not be revealed. In rare instances, a researcher's study must undergo an audit or program evaluation by an oversight agency (such as the Office for Human Research Protection). That agency would be required to maintain the confidentiality of your data. In addition, all data will be stored on a password-protected computer and/or in a locked office.

7. If you have any questions or concerns regarding this study, or if any problems arise, you may call the Investigator, Courtney Wilson at (314) 397-6706 or the Faculty Advisor, Dr. Susan Kashubeck-West at 314-516-6091. You may also ask questions or state concerns regarding your rights as a research participant to the Office of Research Administration, at 516-5897.

8. By clicking ACCEPT below I consent to my participation in the research described in this form.

Appendix F – Student Assent

Department of Education Sciences and
Professional Programs

University of Missouri- St. Louis
401 Marillac Hall
St. Louis, Missouri 63121-4400
Telephone: 314-516-5782
E-mail: cjwb7a@umsl.edu

Assent to Participate in Research Activities (Minors)

Understanding the School Environment

1. My name is Courtney Wilson and I'm a school counselor in the Kirkwood School District and a graduate student in Counseling at the University of Missouri- St. Louis.

2. I am asking you to take part in a research study because we are trying to understand students' interactions with peers and school staff in high school and how these interactions may relate to their academic performance.

3. If you agree to be in this study you will be asked to complete a questionnaire that should take about 10-15 minutes to do. Also, I will look at your GPAs in the school database. Your student number will be used to link the survey and GPA together. Once they are linked, your student numbers will be removed.

4. Although unlikely, it is possible that you might feel uncomfortable when answering some of the questions. If you do, please come and talk to me or one of your school counselors.

5. You will not get any benefits from being in this study but you might enjoy helping others understand how to create a better learning environment for students.

6. If you don't want to be in this study, you don't have to participate. Remember, being in this study is up to you, and no one will be upset if you don't want to participate or if you change your mind later and want to stop. If you change your mind, please tell me. Also, you may choose not to answer any questions that you do not want to answer. Please know that all of your answers are confidential.

7. You can ask any questions that you have about the study. If you have a question later that you didn't think of now, you can call me at (314) 213-6100 x6040.

8. By clicking ACCEPT below I consent to my participation in the research described in this form.