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Examining the Relationship Between Affective School Engagement and Behavioral School Engagement among Black High School Students: Do Black Racial Identity Attitudes Make a Difference?

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EXAMINING THE RELATIONSHIP BETWEEN AFFECTIVE SCHOOL
ENGAGEMENT AND BEHAVIORAL SCHOOL ENGAGEMENT AMONG BLACK
HIGH SCHOOL STUDENTS: DO BLACK RACIAL IDENTITY ATTITUDES MAKE
A DIFFERENCE?

by

Amy C. Nelson Christensen

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ABSTRACT

EXAMINING THE RELATIONSHIP BETWEEN AFFECTIVE SCHOOL ENGAGEMENT AND BEHAVIORAL SCHOOL ENGAGEMENT AMONG BLACK HIGH SCHOOL STUDENTS: DO BLACK RACIAL IDENTITY ATTITUDES MAKE A DIFFERENCE?

by

Amy C. Nelson Christensen

The University of Wisconsin-Milwaukee, 2014

Under the Supervision of Professor Dr. Markeda Newell

The purpose of this study was twofold: 1) to examine whether affective school engagement predicted behavioral school engagement among Black high school students and 2) to examine whether Black racial identity attitudes moderated the relationship between affective engagement and behavioral engagement. School connectedness and perceived school support were used as indicators of affective school engagement, and school attendance was used as an indicator for behavioral engagement. A total of 272 students in grades 9-12 were recruited for this study, and 105 of these students self-reported as Black, Biracial, or Multiracial. The results of regression analyses showed that school connectedness and perceived school support significantly predicted 10% of the variance in self-reported attendance for all participants and 11% of the variance for Black participants. A moderated multiple regression analysis examining racial identity attitudes as a moderator was not significant; however, self-hating attitudes showed a small and significant correlation with feelings of rejection and peer support, and multiculturalist attitudes showed small and significant correlation with feelings of teacher support. Finally, a MANCOVA was conducted to examine whether racial identity attitudes

differed based on age. The results of the MANCOVA indicated that participants ages 18-21 reported stronger beliefs of self-hating attitudes compared to younger age groups. Further analysis discovered that participants ages 18-21 were mostly enrolled in an alternative high school for students who had previously dropped out of school or were at high risk of not completing. Overall, the results of the study reveal that affective engagement has a significant relationship with behavioral engagement and supports previous studies with similar findings. However, while this study reveals that Black students' racial identity attitudes may differ due to age, more research is needed to study the influence of racial identity attitudes on school engagement.

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I cannot write this without first acknowledging my students and family at Transition High School and Transformation Learning Community, who were the inspiration for this study. In the four years I worked at these schools, I learned how our students of color today are bombarded with mixed messages regarding who they should and should not be, when life is already confusing as an adolescent. I also learned that so many of these students are more resilient than we think. This study is very much a tribute to them in the hope that I will help to bring awareness of how we educate our youth in a time where education is seemingly becoming more about “schooling” than education. I also cannot write this without thanking the principals at the schools where this study was conducted. Your values and desire to learn something different about how we can help your students is admirable and motivating. Your trust in, and support of, my work is also deeply appreciated.

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CHAPTER ONE

Introduction

The purpose of this study was to examine school engagement among Black high school students. Studying school engagement is a complex task because it is a multidimensional construct that can be difficult to define and measure (Fredricks, Blumenfeld, & Paris, 2004). Li and Learner (2013) provided one of the most comprehensive definitions of school engagement, which defines school engagement as the “extent to which students are involved in, attached, and committed to the academic and social activities in school” (p. 20). This definition of school engagement reflects the multidimensional nature of this construct. To explain, Christensen, Sinclair, Lehr, and Godber (2001) have argued that school engagement is an “umbrella construct” that refers to many different aspects of one’s attitude towards school. Therefore, the operationalization of school engagement in research as solely behavioral (i.e., achievement or attendance) is problematic, because it does not accurately capture the complexity of one’s engagement in school (Christenson et al., 2001). Fredricks and colleagues (2004) also support this argument, adding that examining school engagement as a multidimensional construct could lead to more effective intervention for disengaged students. Hence, there is growing consensus that school engagement is comprised of three broad factors: affective engagement, cognitive engagement, and behavioral engagement (Fredricks et al., 2004; Jimerson, Campos, and Greif, 2003).

In general, researchers of school engagement have focused on one type of engagement, defining school engagement generally, rather than examining how different factors of engagement work together (Christensen et al., 2001; Fredricks et al., 2004). Li and Lerner (2013) were the first, to date, to conduct a study examining the

multidimensionality of school engagement amongst high school students. The authors tracked over 1,000 9th grade students through 11th grade to determine if there was a relationship between these three dimensions of school engagement. Affective engagement was measured with a 4-point Likert scale using questions developed by the authors that asked students about their feelings of belongingness in school, otherwise known as school connectedness. Cognitive engagement questions, also developed by the authors, focused on goal-orientation towards school; and behavioral engagement questions focused on attendance and effort to complete schoolwork. Li and Lerner (2013) found that affective engagement in 9th grade predicted behavioral engagement in 10th grade, and then that behavioral engagement predicted affective engagement in 11th grade. The authors argued that there was a bidirectional relationship between these two dimensions of engagement. Cognitive engagement did not predict behavioral engagement.

Even though these findings contribute to the research surrounding the multidimensionality of school engagement, the population studied by Li and Lerner (2013) was mainly White, middle class (74%). The generalizability of these findings to students of color who tend to struggle with school engagement needs to be addressed. In fact, studying school engagement amongst students of color has been lacking for quite some time (Fredricks et al., 2004). As such, this study aimed to examine affective and behavioral engagement further, but specifically for Black high school students who attend schools in an urban context. For the purposes of this study, affective engagement was measured by two indicators: 1) school connectedness, or the feelings of belongingness one has towards school, and 2) perceived school support, or the feelings students have

that their peers and teachers care about them and their learning. Behavioral engagement was defined as the attendance rate for a student, based on a 180-day school calendar.

These variables are further explained later in this chapter and again in chapter two.

Black Students and School Engagement

Increasingly, researchers are studying the relationship between affective engagement and the racial achievement gap. Specifically, researchers have wondered if racial gaps in affective school engagement could explain why students of color are more likely to be behind in school achievement compared to their White counterparts, and more likely to drop out of school. For instance, Lewis, Sullivan, and Bybee (2006) have examined how Black students affectively engage in school by measuring their feelings of whether or not they felt they belonged in school. They studied whether increased communalism for Black middle-school students within the context of an African-centered pedagogy would increase reports of belongingness, motivation to achieve, and participation in activities that promote social change. For their study, students in eighth grade attending a predominantly Black middle-school were randomly assigned to a life skills course (control group) or a Black social justice and leadership course (Lewis et al., 2006). The leadership course was an intervention that focused on fostering positive racial identity (i.e., the feeling one has towards one's race), which they argued would lead to increased feelings of belongingness in school (Lewis et al., 2006).

According to the authors, students in the intervention group reported higher rates of belonging than those students in the control group. Students did not differ in rates of belonging before being assigned to their groups. Furthermore, reports of motivation to achieve and interest in being an agent for social change increased for the intervention

group, but not for the control group. Although this study only measured one indicator of affective engagement (i.e., feelings of belongingness), findings further support that racial identity is a factor that needs to be considered when measuring school engagement for students of color, since there appeared to be a relationship between racial identity and increased reports of affective engagement.

Studies have also examined the correlational relationships between affective engagement and behavioral engagement (e.g., school completion and GPA) (Chavous et al., 2003; Harper & Tuckman, 2006). These studies consistently demonstrated that different racial identity profiles were related to feelings of belonging in school. Specifically, Chavous and others (2003) found that Black students who endorsed positive attitudes about their race also rated more positive feelings about their belongingness in school and had stronger beliefs in their ability to complete high school. This was associated with high school completion and enrolling in college or other higher education programs. In this case, it appeared that the attitudes one had about his or her race had a significant relationship with affective engagement. Understanding attitudes and beliefs of Black students could help educators effectively engage Black students in school via prevention and intervention programs targeted at racial identity and its relationship to students' feelings about school.

On the other hand, Chavous and colleagues (2003) did not find a significant relationship between GPA, their measure of behavioral engagement, and racial identity in their study. This calls into question whether or not GPA would be a good measure of behavioral engagement, considering how other variables may confound the measure of GPA, for instance, student ability, academic instruction received, or variance in teacher

expectations and grading. Chistle, Jolivette, and Nelson (2007) have argued that attendance is a stronger indicator of behavioral engagement, because it has been found to be significantly correlated with feelings of belonging in school, which is, as previously mentioned, an indicator of affective engagement (see also Li and Lerner, 2013).

While more research is needed to further examine the relationship between racial identity and school engagement, there are some limitations in how racial identity has been typically examined in current research. For instance, most studies have utilized rating scales to measure racial identity in adolescents that have been found to be not as psychometrically strong as newly published scales (Simmons, Worrell, & Berry, 2008). More importantly, among the studies that have examined school engagement and racial identity, behavioral engagement constructs that lead to early detection and intervention (i.e., attendance) have not been measured, leaving results with little practical use.

With the current movement in schools to collect and respond to data, school administrators can intervene differently with Black students who have chronically poor attendance if they understand the relationship between affective school engagement and racial identity attitudes. Understanding that affective and behavioral engagement may be tied to maladaptive racial beliefs and negative social experiences, they can choose interventions that more appropriately address the social nature of their behaviors rather than just focusing on skill remediation or credit recovery. Moreover, if educators understand the buffering effect of certain racial identity attitudes, instilling these positive attitudes early and training teachers how to bond with students across race may help to prevent compounding negative school experiences that can lead to disengagement.

Therefore, the purpose of this study is to examine the relationship between affective

school engagement and behavioral school engagement among Black adolescents who live in urban contexts.

Definition of Study Variables and Purpose of the Current Study

Affective engagement. For the purposes of this study, affective school engagement was assessed based on students' feelings of belongingness in school, often labeled school connectedness in the research literature. In addition to measuring school connectedness, perceived school support from both teachers and peers was also measured as an indicator of affective school engagement. Whether or not students feel supported at school (i.e., perceived school support) has also been identified as a correlate of school connectedness (Furlong, O'Brennan, & You, 2011; Hanson & Kim, 2007). For the purposes of this study, school connectedness will focus on attitudes regarding reactions to one's school climate, while perceived school support will focus on one's attitudes regarding teachers and peer support in school. Both constructs then are considered to be indicators of affective engagement.

Behavioral engagement. There are several possible indicators of behavioral engagement (Fredricks et al., 2004); however, Chistle and colleagues (2007) have identified attendance to be a strong behavioral indicator of one's engagement in school. To explain, students who are connected to school and feel supported by teachers and peers will more likely attend on a regular basis (Christenson et al., 2010; Christenson et al., 2001). Students who are not connected to school and lack feelings of support will more than likely attempt to avoid school. For this reason, poor attendance has been

shown to be a strong indicator that a student has disengaged from school (Chistle et al., 2007).

Racial identity. Racial identity was measured based on the theory of nigrescence, first developed by Cross in the 1970's (Cross, 1991). According to Cross (1991), racial identity is one's attitudes and beliefs about his or her racial group. These beliefs are influenced by one's experiences in life, and change over time.

Purpose. The purpose of this study was twofold. The first purpose of this study was to further investigate the multidimensionality of school engagement for Black students, focusing on the relationship between affective and behavioral school engagement. Second, studies to date have established positive racial identity attitudes as an important protective factor to consider when examining school engagement of Black students (Chavous et al., 2003; Harper & Tuckman, 2006; Sellers, Copeland-Linder, Martin, & L'Heurex Lewis, 2006; Sellers, Smith, Shelton, Rowley, & Chavous, 1998). Thus, affective school engagement was examined to determine if it predicted behavioral engagement for Black students; while racial identity attitudes were examined as a possible moderator of this relationship. Questions to be addressed in this study are then as follows:

1. Does affective engagement (as measured by school connectedness and perceived school support) predict behavioral engagement (as measured by self-reported attendance)?

2. Does affective engagement (i.e., school connectedness and perceived school support) predict behavioral engagement (i.e., self-reported attendance) for Black high school students?
3. If affective engagement (i.e., school connectedness and perceived school support) predicts behavioral engagement (i.e., attendance), will the relationship between these variables change when racial identity attitudes are considered?
4. Is there a statistically significant difference in racial identity attitudes of Black students across age groups?

CHAPTER TWO

Literature Review

In the last couple of decades, research in the area of school engagement has increased in popularity. According to Fredricks and colleagues (2004), this is partly due to theoretical assertions that students achieve higher and behave more appropriately when they are engaged. As such, research has shown that various factors of engagement in school are related to achievement and school completion, and that engagement in school could be the main difference between students who complete school and those who do not (Fredricks et al., 2004). Fredricks and colleagues (2004) also argue that the increased interest in researching school engagement could be due to the assertion that engagement in school can be altered, based on an individual's experiences and reactions. This idea that school engagement is "malleable" and related to achievement, makes it an attractive area for intervention, because it is something that educators can change; unlike factors typically out of a school's control, such as socioeconomic status.

In their meta-analysis of research pertaining to student engagement in school, Fredricks and colleagues (2004) found that research in the area of school engagement has evolved recently to encompass three factors: *behavioral engagement*, *affective engagement*, and *cognitive engagement*. The argument that engagement in school is a complex and multifaceted construct is also supported by Jimerson and colleagues (2003), who has argued for a multidimensional approach to measuring school engagement, similar to Fredricks and colleagues (2004).

A multidimensional approach to measuring engagement in school based on these three factors has more benefits when compared to research that has measured school

engagement as a one-dimensional construct. With a multidimensional approach to studying and measuring school engagement, researchers can capture the nuances of engagement and examine specific relationships between the three constructs to find patterns of functioning that could lead to more enriching intervention. Yet, few studies to date have defined school engagement in this way, leaving overlap and multiple labels for similar constructs. For instance, Fredricks and colleagues (2004) point to overlap in school engagement and motivation research in schools, arguing that many of the constructs are similar, but are labeled differently. Self-regulation, identified in the motivation research as self-directed learning, is labeled as cognitive engagement in the school engagement literature. Another problem is inconsistency in the definition of various constructs claiming to measure constructs of engagement. Measurement of school connectedness is one example, as some studies measure school connectedness as feelings of belonging, while others might measure school connectedness as the value one places on school. Although school connectedness is a construct measuring affective engagement, it is rarely labeled as such.

Fredricks and colleagues (2004) argue that current research on school engagement needs to be more consistent. In an attempt to create this consistency, they have developed the following definitions for the constructs of school engagement. *Behavioral engagement* refers to one's participation in the academic environment. This includes, but is not limited to, attendance in school, homework completion, and participation in extra-curricular activities. *Affective engagement* is one's reactions to those in one's school environment, including teachers and peers, which influence how they feel about one's place in school. This is often measured through self-report questionnaires assessing

one's feelings of school connectedness and support from teachers and peers. Finally, *cognitive engagement* refers to one's commitment to doing well in school and encompasses one's use of strategies to learn and regulate one's learning. Cognitive engagement is often measured through observations and self-reports of self-regulated learning.

To further the arguments and assertions made by Fredricks and colleagues (2004), the goal of this study was to use these definitions of affective and behavioral engagement to better understand how Black students feel about school. Considering existing racial differences in academic achievement and completion, it is important to consider factors of school engagement as a possible explanation. Fredricks and colleagues (2004) claim that research on school engagement has been lacking in diversity, which is dominated by White middle-class participant samples. Thus, it makes sense to study how race influences the relationship between affective and behavioral engagement amongst Black students.

As previously mentioned, affective engagement was measured by assessing students' school connectedness and perceived support from teachers and peers. Considering the overlap in the research of these two constructs, both constructs were examined together as two measures of affective engagement. Behavioral engagement was measured with self-reported rates of attendance. The constructs of school connectedness and perceived school support, for the purposes of this study, are further explained in the following sections.

Affective Engagement: School Connectedness

School connectedness refers to one's feelings about whether or not they belong at school and are valued as a student (Christenson et al., 2010; Christenson et al., 2001; Loukas, Ripperger-Suhler, & Horton, 2009). Statements that reflect school connectedness are "I feel close to people at school," "I feel like I am part of my school," and "I feel safe at my school" (Faulkner, Adlaf, Irving, Allison, & Dwyer, 2009). School connectedness often has been referred to with other labels in research, such as school engagement, school bonding, school belonging, school attachment, and commitment to school (Anderman, 2002; Center for School Mental Health Analysis [CSMHAA], 2005; Jimerson, et al., 2003). Regardless of the label used, the research literature about school connectedness has consistently shown that it can indicate one's level of engagement in school (Anderman, 2002; Barry & Reschly, 2012; Christenson & Thurlow, 2004). Thus, improving a student's connection to school can increase the likelihood that the student will stay in school.

Teacher bonding has been argued to be a large component in the development of school connectedness, but factors in school climate have also been found to influence teacher-student and peer relationships. School climate characteristics that have been found to foster school connectedness are small school size, effective classroom management strategies, and moderate, rather than harsh, school discipline policies (CSMHAA, 2005; McNeely, Nonnemaker, & Blum, 2002). Researchers have argued that these factors allow students and teachers to connect in the school setting and prevent distractions from rapport building. School climate, or the values and practices of a school, are thus believed to be critical for developing school connectedness.

In a large national study of over 90,000 adolescents, Anderman (2002) analyzed the results of the National Longitudinal Study of Adolescent Health to explore how schools impact students' reports of school connectedness. Five items from the NLSAH study were said to have measured school connectedness (i.e., *I feel like I am part of this school*). Anderman, (2002) highlighted three areas of the school structure that may contribute to students being able to develop a connection to their school: school size, grade configuration, and urbanicity. School size refers to the ratio of students to teacher. Studies are inconclusive as to whether or not school size actually has an effect (Anderman, 2002). Grade configuration refers to the span of grades in one school. For instance, some schools span kindergarten through 5th grade, while other schools span up to 8th grade. Anderman (2002) found that schools spanning kindergarten through 8th or 12th grade were more effective at promoting school connectedness. However, this relationship was not shown to have a strong statistical significance. Urbanicity, whether or not a school is located in an urban environment, did seem to have a strong relationship in that students attending urban schools were more likely to report lower school connectedness than students who attended suburban schools. While important, it is unclear what factors explained the lower reports of connectedness in urban schools.

One's connection with school is not only a protective factor that can reduce the likelihood of later school dropout, but has been found to be predictive of higher life satisfaction, greater hope for the future, and less alcohol and drug abuse (Bond et al., 2007; Bonny, Britto, Klosterman, Hornung, & Slap, 2000; Suldo, Mihalas, Powell, & French, 2008; Suldo, Shaffer, & Riley, 2008; You, Furlong, Felix, Sharkey, Tanigawa, & Green, 2008). Thus, school connectedness may be an important factor in a student's life,

not only academically, but physically and psychologically as well. The following sections explore the research literature to date regarding the impact of school connectedness on academic success, mental health, and health risk behaviors.

Academic success. School connectedness has been shown to have an impact on the academic success of students. Anderman (2002), as discussed above, reported that higher ratings of school connectedness was associated with higher GPA. In a study developed based on community concerns that the racial climate of a local public school was contributing to racial disparities in the school's achievement and discipline data, Mattison and Aber (2007) argued that students who viewed their school environment as fair were more likely to achieve at a higher level than students who viewed their school environment as unfair. In a survey of almost 2,000 Black and White high school students, they asked participants to rate statements such as, "At my school, students are disciplined fairly regardless of race," and answer questions such as, "How often has another teacher treated you badly because of your race?" They also collected data on each student's GPA and whether or not he or she had received a suspension during the current school year. The results of their study showed that regardless of student body composition, positive perceptions of the racial climate were associated with higher GPA for both Black and White students and a lower suspension rate.

Witherspoon, Schotland, Way, and Hughes (2009) argued that school connectedness was an important factor to consider along with family and neighborhood connection when examining academic and psychological outcomes for adolescents. The authors used a shortened 10-item version of the Psychological Sense of School Membership Scale (PSSM) to measure school connectedness. In their study of 437 urban

adolescents, they found that a strong connection to school, family, and neighborhood was positively correlated with self-reported grades. Mainly, Witherspoon et al. (2009) believed that their results indicated that connection with one of the three environments led to higher grades and self-esteem. They also argued that strong school connectedness buffered the effects of poor connectedness with family and neighborhood. Witherspoon and colleagues (2009) also reported the ethnic make-up of their sample and used ethnicity as a variable in their analyses. They reported that the Black students in their study (23%) indicated attitudes significantly more consistent with the profile they labeled as *average connection*. The average connection profile was defined as those with family and neighborhood connections being slightly higher than the mean, and school connectedness being slightly lower. Witherspoon and others (2009) argued that this may indicate that Black students used a connection with family and neighborhood to buffer the effects of not being able to find a connection in school. Results of this study, along with Mattison and Aber (2007), indicate the value of examining school connectedness attitudes amongst Black students.

Mental Health. More recently, studies have gone beyond the academic setting to examine the relationship between school connectedness and psychosocial outcomes for students. In a study of over 2,000 12-14 year old male and female students, Shochet, Dadds, Ham, and Montague (2006) examined whether ratings of school connectedness predicted self-reported symptoms of depression and anxiety. Over 70% of the participants identified as White Australian. The authors surveyed students at three time periods using the Children's Depression Inventory (CDI), Strengths and Difficulties Questionnaire (SDQ), Psychological Sense of School Membership Scale (PSSM), and the

Spence Children's Anxiety Scale (SCAS). Surveys were administered as a pre-test, post-test, and at a 1-year follow-up after the post-test. Comparing the pre-test and post-test surveys, school connectedness was found to be correlated with self-reported depressive symptoms for male and female students (Shochet et al., 2006). This was also the case for self-reported symptoms of anxiety. Using linear regression, the authors examined self-reported symptoms of depression and anxiety at the 1-year follow-up. Controlling for previously reported symptoms of depression and anxiety, the study found that ratings of school connectedness were also predictive of later self-reports of symptoms of depression and anxiety for male and female students. Also, a direct relationship was found in that for every one unit of increase in ratings of school connectedness, there was a 2-unit decrease in the symptoms of depression reported by male and female students. When examining self-reported symptoms of anxiety, this relationship was true for female students, but not for males. To examine the opposite relationship, the authors used regression analyses to determine if these symptoms predicted reports of school connectedness and whether or not the opposite relationship was a better explanation of the data. The authors report that the models tested were not significant (Shochet et al., 2006). Thus, they claim that school connectedness predicted the future mental health difficulties and not vice versa. Shochet and others did not examine whether racial differences existed in the data from this study, nor did they indicate that the sample's lack of diversity was a limitation of the generalizability of the results.

Loukas and colleagues (2009) surveyed 6th and 7th grade students to see if school connectedness, using the same items from the NLSAH as were used in Anderman (2002), could predict self-reported conduct problems and depressive symptoms. Approximately

4% of the students in their survey identified as Black. Loukas and colleagues (2009) also used the SDQ to measure conduct problems and the CDI to measure depressive symptoms. Students were surveyed in two waves: first when the students were in 6th and 7th grade, and again a year later when the students were in 7th and 8th grade. They used school connectedness reports taken at wave 1 to predict conduct problems and depressive symptoms at wave 2, controlling for similar symptoms reported at wave 1. The authors found that reports of school connectedness significantly predicted reports of conduct problems at wave 2. In other words, ratings of low connectedness to school predicted high self-reports of conduct problems. Loukas and colleagues (2009) did not indicate the racial makeup of participants as being mostly White (77%) as a limitation of their study. Thus, although these results shed important light on the mental health implications of school connectedness, it is difficult to generalize these results to Black students, considering their small representation in the sample.

A study conducted by Wilkinson-Lee, Zhang, Nuno, and Wilhelm (2011) was also limited in a similar way. Wilkinson-Lee and colleagues (2011) believed in the buffering effects of school connectedness, which they measured using ten items from the CDC's Classroom Climate Scale. They found that in their sample of over 4,000 middle and high school students, school connectedness buffered the effects between family obligations (i.e., missing school to take care of a family member or working to contribute to household income) and emotional distress. For students with moderate to high family obligations, high ratings of school connectedness moderated the relationship between high family obligations and emotional distress. Similarly, Dallaire (2007) argued in her review of research that, for students with incarcerated mothers, connectedness with adults

could buffer the traumatic effects of being separated from one's mother. She argued that connectedness with school could have the same effect (Dallaire, 2007). Thus, school connectedness has been shown to be a powerful protective factor for students in stressful home environments. Wilkinson-Lee and others (2011) reported that the majority of their participants were White (60%) and included race as a control variable. Nonetheless, they did not examine whether racial differences were indicated in their study's data, nor did they report the lack of Black students in their study (4%) as a limitation.

Loukas, Roalson, and Herrera (2010) found similar results in their study of school connectedness and its buffering effects on family relations and subsequent conduct problems. The authors also used items from the NLSAH to measure school connectedness, as previously noted by other studies. They surveyed over 400 6th and 7th grade students, 78% were White, who reported negative family relations and conduct problems to see if school connectedness would moderate the relationship between these two variables. The authors assessed students at two time periods separated by 1 year. They also assessed for effortful control, which is a construct similar to self-regulatory control and indicates focus and attention to school. Results of the study supported the hypothesis that feelings of school connectedness serve as a protective factor for conduct problems. The students, who reported strong school connectedness at time 1, did not report high levels of conduct problems at time 2, while controlling for conduct problems reported at time 1. This was significant for both male and female students in the study. Although results of this study further indicate the impact of school connectedness on well-being, these results are not easily generalized to non-white populations considering the large sample of White students in this study.

In a study of 89 3rd and 4th graders conducted recently by Earhart and others (2009), they found that school connectedness was moderately positively correlated with measures of hope for the future and life satisfaction ($r = .63$ and $r = .65$ respectively, $p < .01$). School connectedness was measured using the School Connectedness Scale. Oberle, Schonert-Reichl, and Zumbo (2011) found similar results. In their study of over 1,000 students in 4th through 7th grade, school connectedness, measured using the Sense of School as a Community Scale, was found to be positively correlated with life satisfaction along with relationships with peers and non-related adults in their community. An outcome evaluation study of a suicide prevention program for 453 adolescent aged high school students by Wyman and colleagues (2010) indicated that the program led to stronger connections to school and decreased reports of suicidal ideation. Similarly, none of these studies addressed racial differences.

Schochet and colleagues (2006) contend that school connectedness is an “underemphasized” construct when examining adolescent mental health. As discussed above, school connectedness has been shown to have a profound protective impact on adolescent well-being and could buffer the effects of life stressors. Schools then are powerful spaces that go beyond academics and set students on a positive life path. Yet, we still know little about how school connectedness specifically affects Black students. Nonetheless, beyond academic performance and mental health, school connectedness has also been studied in relation to health risk behaviors.

Health risk behaviors. Strong school connectedness for middle and high school students can reduce the likelihood they will engage in substance use, delinquency, gang activity, and violence (Catalano, Haggerty, Oesterle, Fleming, & Hawkins, 2004). For

instance, Carter, McGee, Taylor, and Williams (2007) examined whether reports on the Youth Risk Behavior Survey (YRBS) correlated to reports of school and family connectedness. They surveyed 643 adolescent students and used the three school climate items on the YRBS (i.e., *Teachers at school care about me*) to measure school connectedness. The majority of the students in their study identified as White New Zealanders. The behaviors the study focused on from the YRBS included health risk (e.g., substance use) and health promotion behaviors (e.g., physical activity). The study found that students who reported high levels of school connectedness also reported fewer health risk behaviors. These students were then less likely to engage in substance use, unsafe and promiscuous sexual intercourse, and suicidal ideation. Furthermore, students who reported high school connectedness were more likely to report exercising, eating fruits and vegetables, and using a condom when having sexual intercourse.

In a meta-analysis examining the impact of various dimensions of connectedness on sexual and reproductive health, Markham and colleagues (2010) found 18 studies that reported school connectedness as a protective factor for sexual activity. They reported the results of the studies indicated three outcomes associated with school connectedness. These were whether or not a student ever had sexual intercourse, early sexual debut, and frequency of sexual intercourse. There were no studies that indicated school connectedness as a risk factor for these outcomes. Essentially, students who reported high school connectedness were more likely to report engaging in healthy sexual behaviors (i.e., practicing safe sex). A meta-analysis by Voisin, Hong, and King (2012) regarding the prevalence of sexually transmitted infections and its correlation with connectedness for juvenile delinquents found similar results. Voisin and Neilands (2010)

found in their survey of 563 adolescents that gang involvement had an inverse relationship with school connectedness, measured with GPA and the Student Assessment of Teachers Scale, and sexual activity. They argued their results showed that as school connectedness increased, reports of gang involvement decreased, along with sex risk behaviors. These authors argued that school connectedness is one protective factor within the larger ecological framework of adolescents' lives, and is imperative to their healthy development in collaboration with connections to family and positively influential peers.

Wang, Matthew, Bellamy, and James (2005) used a path analysis to determine school connectedness as a protective factor for substance abuse among 790 students of color, ages 11 to 16. A majority of the participants were Black (60%), but many others were Latino (16%), Asian American (14%), and Native American (3%). They found that school connectedness, as measured by the Center for Substance Abuse Prevention (CSAP) National Youth Survey, was moderately negatively correlated with substance abuse ($r = -.44; p < .001$). Thus, those students who reported high school connectedness were less likely to report using alcohol and drugs. However, the authors also reported their analyses indicated that measures of social support, family supervision, and self-control predicted ratings of school connectedness. The authors believed that school connectedness may be a proxy for other family-related variables that have an indirect impact on substance abuse for students of color.

School connectedness as it relates to students of color, especially Black students, is not a widely researched concept. To date, almost no studies have examined racial differences in reports of school connectedness and the majority of studies about school

connectedness have disproportional rates of White participants. Considering the impact school connectedness has on students, not only academically, but in mental and physical health, studying this concept amongst Black students could inform educators about how to better engage these students in school. School connectedness could also serve as another protective factor that keeps Black students engaged and in school. Relatedly, perceived school support has been shown to have similar effects as school connectedness and could serve as another indicator of engagement in school. As mentioned earlier, much of the research on school connectedness could also be measuring perceived school support, so it is argued that much of the research on these two constructs overlaps. Perceived school support is explored further in the following section.

Affective Engagement: Perceived School Support

Perceived school support refers to how a student feels about whether or not their teachers and peers care about their learning (Furlong et al., 2011). This is often measured in research as teacher-student relationships. Teacher-student relationships are the bond between a teacher and student (Crosnoe, Johnson, & Elder, 2004). These relationships are believed to foster feelings about school, because students feel more valued when they feel their teacher cares about their learning (Anderman, 2003; Baker, Grant, & Morlock, 2008; Mattison & Aber, 2007; Murray & Pianta, 2007).

Klem and Connell (2004) studied the impact of a district-wide intervention program aimed at increasing student feelings of support from teachers. They measured support using the self-report form of the Research Assessment Package for Schools (RAPS-S). After the intervention, the authors surveyed over 4,000 students, parents, and

teachers in elementary and high school throughout the district regarding their feelings of support. Of the student participants, 81% of the elementary sample and 44% of the high school sample reported being Black. Klem and Connell (2004) found for the schools that participated in the teacher support program, attendance rates increased, more students returned each year (fewer dropouts), and graduation rates were higher than for schools that did not participate in the teacher support program. Although the authors reported the racial background of their student sample, they did not conduct any specific analyses with this data regarding race in their study. Nonetheless, the results showed that perceived support did have a relationship with other behavioral indicators of engagement (i.e., attendance) amongst Black students with this considerable sample size.

Recently, Niehaus, Rudasill, and Rakes (2012) also noted the academic benefits of perceived school support. They created their own measure by combining items from the National Educational Longitudinal Study (NELS), the Need Satisfaction Scale, and the Scale of Caring Adult Relationships in School. Niehaus and others (2012) believed that students who felt supported in school tended to have higher grades, higher classroom motivation, and higher academic self-efficacy. For further exploration, the authors conducted a longitudinal study of feelings of school support and its impact on GPA and discipline referrals for 330 sixth grade students. They reported that 58% of the students included in the study identified as Black. Niehaus and others (2012) surveyed students at the beginning, middle, and end of the school year. The authors created their own survey comprised of items to assess student feelings of support from teachers. They used ratings from this survey to predict grades at the end of the school year. The results of the study indicated that when students reported feeling less supported through the school year, their

grades were lower than the grades of students who reported the same or more support. Thus, the authors argued that teacher-student relationships were related to student GPA. Unfortunately, the authors did not examine racial differences in their study, considering such a large percentage identified as Black.

Crosnoe and colleagues (2004) examined whether these important teacher-student relationships, or as they call it “intergenerational bonding,” impacted two important school-based outcomes: achievement and disobedience. They were also interested in exploring whether these relationships were more important for Black and Latino students than for Whites. Essentially, what they were interested in showing was that perceived support could serve as a protective factor for students of color. In this study, approximately 11,000 adolescents enrolled in 126 schools and spanning grades 7-12 were administered measures targeting perceived support, academic achievement, disciplinary problems, demographic variables, and school-level variables. To measure perceived support, students were asked to complete three items that asked for perceptions of their teacher-student relationships. Students were asked to rate on a scale from 1 to 5 the extent to which they got along with teachers, felt that teachers cared for them, and believed that teachers were treating students fairly. To measure academic achievement, students were asked to self-report their grades for math, science, English, and social studies. For measuring disciplinary problems, students were asked to self-report whether or not they were suspended or expelled within the last year. Demographic variables that were measured included grade level, level of parental education, family structure (e.g., single-parent), race, and gender. In order to examine contextual influences on perceived support, the authors also measured the structure of the school students attended (i.e.,

public, private, and class size), the racial composition of students and teachers, and school climate (i.e., mean level of academic achievement, parental education, and student's perceptions of safety).

Regression analyses indicated that perceived support was predictive of higher academic achievement and lower disciplinary problems (Crosnoe et al., 2004). In the case of academic achievement, perceived support explained 40% of the variance and had an equivalent or larger effect size than every demographic variable. Although this seemed to be true for all racial groups, cross-categorical analyses showed an interaction effect for Latino girls indicating the relationship between perceived support and academics is even stronger for students in this group.

When examining disciplinary problems, perceived support explained 14% of the variance, where support also predicted lower discipline issues (Crosnoe et al., 2004). It is also noteworthy that the odds ratio for this outcome indicated discipline problems decreased by 39% with every unit increase in perceived support (race and gender not included in this analysis). The effect size for this relationship exceeded any of the other demographic variables. Crosnoe and colleagues (2004) concluded that amongst all things emphasized in an educational context (e.g., test scores and curriculum), one cannot ignore the importance of interpersonal relationships due to its large impact on student success.

In the same study mentioned above, examining perceived school support, Crosnoe and colleagues (2004) fit a regression model using the aforementioned school-level variables (i.e., structure, composition, and climate) to predict perceived support. The structural variables were not as significant as composition and climate. Students'

feelings of a safer school (climate) were the highest predictor for perceived school support. Students also reported higher levels of support when they attended schools with more students of their own race. Teacher race composition was more significant when examined by racial group. Black boys and girls and Latino girls were more likely to report negative views of their teachers when the majority of the teachers at their school were White.

The authors concluded that perceived school support not only affected student achievement and behavior, but was highly influenced by the school students attended (Crosnoe, et al., 2004). This further supports Fredricks and colleagues' (2004) assertion that school engagement factors are malleable. Crosnoe and others (2004) claimed that, "[S]chools can be viewed as important aspects of the ecology of human development— institutional settings influencing the more proximate contexts that, in turn, direct development" (p. 75). Thus, one might argue that this study measured both perceived school support and school connectedness considering the authors' arguments regarding the influence of school climate, although they did not clearly indicate this.

Finally, the authors argued that the male students of color included in their study seemed to be at the highest risk for school disconnection considering their ratings of school climate. This is further supported by Cokely (2001), who argued that Black males are more likely to disconnect because of negative school experiences. This finding lends further support to examining the influence of racial identity on affective school engagement, as race does appear to have some relationship.

To summarize some related studies, Baker and colleagues (2008) measured 423 elementary aged (kindergarten through 5th grade) students' perceptions of their relationships with their teachers. They argued that one's classroom teacher has the largest impact on school adjustment. Reports of warm and trusting teacher-student relationships, or positive perceived school support, were positively related to measures of school adjustment, such as grades, work habits, and appropriate classroom behavior. Roeser, Midgley, and Urda (1996) found that for their study of 296 8th grade students, positive perceived school support was positively correlated with their grade at the end of the school year. The inverse was true for reports of adverse perceptions of school support. Gregory and Ripski (2008) reported similar results when they surveyed 32 high school students who were referred for in-school suspension. They found that students who trusted their teachers were less likely to misbehave in the classroom. Neither of these studies reported racial differences in perceived school support, and the majority of the students surveyed were White in each study.

Although it has been argued that race may have a relationship with affective engagement and subsequent behavioral engagement, the relationship between affective and behavioral engagement has not been studied amongst students of color. Black students have been included in various studies, many of them representing a large part of the sample, but racial attitudes were not examined for influence on indicators of factors of school engagement. More studies are needed to examine this relationship, considering its potential to help educators increase school engagement for Black students. Of these three factors, the one that has been researched the least is attendance as an indicator of behavioral engagement. Attendance has been described as having a relationship with

indicators of affective engagement, such as school connectedness (Christensen et al., 2010; Chistle et al., 2007), yet most studies examining race and academics focus on other factors such as GPA or state achievement test scores. In the following section, the underutilized variable of attendance is discussed.

Behavioral Engagement: Attendance

In their analysis of studies claiming to measure engagement, Fredricks and colleagues (2004) found three definitions of behavioral engagement common in the literature. Behavioral engagement can often be defined as refraining from breaking school rules. Thus, behavioral engagement may often be measured by referrals to the school office for discipline issues or one's number of suspensions. A second definition of behavioral engagement often refers to a student's involvement in learning, such as attention paid in class or participating in class discussions. However, Fredricks and colleagues (2004) also point out that this definition can sometimes overlap with the definition of cognitive engagement, which is often defined as self-regulated learning. A third definition is participation in extracurricular school-based activities, such as sports or social clubs. Measurement of behavioral engagement is dominated by self-report and teacher rating scales, and very few studies examine more direct behavioral indicators (Fredricks et al., 2004).

One indicator of behavioral engagement that is often the easiest for schools to track, and yet not widely measured, is attendance. Attendance has been described as a behavioral outcome related to feelings of school belonging and support (Chistle et al., 2007). As such, poor school attendance has been believed to be an important indicator of whether or not a student is affectively engaged in school. To date, there are no research

studies that have examined racial disparities in school attendance. In fact, most studies examining race and factors of school engagement have focused on measures of achievement, such as GPA, which one might consider easily confounded. It is important to begin to examine school attendance amongst Black students. Attendance can indicate whether Black students are behaviorally engaged in school and would more likely have a relationship with factors of affective engagement, such as school connectedness and perceived support.

Summary

In review, Bonny and others (2000) found a racial disparity in school connectedness ratings amongst Black and White students in their study, while Crosnoe and colleagues (2004) found racial differences in how perceptions of support from teachers impacted academic outcomes. Crosnoe and colleagues (2004) contend that, in their study, Black males seemed to be at the highest risk for school disengagement. Yet, of the research that has been conducted examining race in this context, many studies have been conceptualized to measure race as a dichotomous variable (i.e., Black or not), which does not explain the relationship between being Black and the outcome. By studying race in this way, the findings are misleading because it is then assumed that the outcome applies to all Black students. As Cross (1991), a leading theorist and researcher on Black identity has argued, Black students can have different beliefs and feelings about their race that lead to different experiences and outcomes. For this reason, it is important to advance research in the area of school engagement by examining Black students' racial identity and its relationship with affective and behavioral engagement.

Black Racial Identity

There are multiple theories of how racial identity develops, including multiple rating scales that measure racial identity. The most psychometrically sound rating scale to date is the Cross Racial Identity Scale (CRIS), based on the nigrescence-expanded (NT-E) theory of racial identity development (Cross, Strauss, & Fhagen-Smith, 1999; Cross & Vandiver, 2001; Simmons et al., 2008). Thus, the proposed study has drawn from NT-E and utilized the most recent form of the CRIS. Nigrescence is the most widely researched and supported theory of racial identity. The word *nigrescence* essentially means the “process of becoming black” (Cross, 1991, pg. 157). After many decades of research, Cross has confirmed that Black attitudes about race and others’ change throughout their lives based on a conversion experience (Cross & Vandiver, 2001). Conversion experiences are encounters or events, wherein individuals learn about their race and develop specific attitudes or beliefs about their race. Some examples could be hearing someone use racial slurs when being bullied at school, or hearing a White person defend a person of color when being discriminated because of the color of his or her skin. These encounters can change one’s perspective of race and others. Furthermore, the theory of nigrescence also incorporates the socialization of children who may have specific positive attitudes about their race due to their family upbringing (Cross & Vandiver, 2001). Black children can be reared with a sense of pride in their race, because of the experiences their parents provide.

Nigrescence was once argued to be a stage-like theory where Black individuals moved from one stage of attitudes to another, maturing in their view of their race (Cross, 1991). There were three main stages of racial identity, pre-encounter, immersion-emersion, and internalization that were broken into six categories (see Table 1; Cross,

1991). In the pre-encounter stage of racial identity, individuals can try to assimilate to the majority White culture, remain miseducated by internalizing negative stereotypes as typical and accepted behavior, or have feelings of self-hate because of the negative stereotypes they have learned about their race. During the second stage, immersion-emersion, individuals may express anti-white sentiments and hatred. It is a strong reaction to experiences of hate targeted against them or someone they know. A person in this stage expresses their dislike for Whites or blames them for his or her struggles. As a result, one may not normally associate or relate well to those outside of one's race. In the final stage of nigrescence, internalization, individuals feel more inclusive and positive about race in general. They may have a more multicultural mindset and have many relationships with others of a different race. They may also feel a strong commitment to being active in their communities to bring peace or change and be active in non-violent efforts.

Recent revisions of nigrescence, NT-E, have demonstrated that the development of a Black identity does not happen in stages; rather, identities move back and forth between different identity statuses (Cross & Vandiver, 2001). Adults who are constantly evaluating their racial attitudes engage in what Cross refers to as nigrescence recycling, or the continued development of one's Black identity (Cross et al., 1999). Thus, individuals can have a conversion experience that propels them into the internalization status and then another experience some time later that propels them into the immersion-emersion status.

Human development of Black adolescents and racial identity. Attitudes may differ as well, due to stage in human development. As mentioned in chapter one, Worrell

(2008) found that participants ages 14-18 in his study endorsed more pre-encounter attitudes than adults. Cross and colleagues (1999) discussed how racial identity for Black individuals develops from birth through adulthood and that adolescents are almost always in the pre-encounter status, depending on family and life socialization, as they interpret their social environment. Black adolescents then, are more likely to express more assimilated, miseducated, and self-hating beliefs than adults. Based on this theory, the results of this study may indicate that students are more likely to show pre-encounter beliefs.

Based on social cognitive theory (SCT), culture plays a strong role in influencing one's beliefs and subsequent feelings and behaviors (Bandura, 2002). Bandura (2002) believed that social influences work within three modes: individual, proxy, and collective. Bandura (2002) argued that individually, we act based on the beliefs we hold. However, we may also act to influence others to act within our favor (proxy). Collectively, we act based on group influence as well, where our beliefs are based on our identified group's beliefs. This concept supports NT-E in the idea of racial group orientation (RGO), which serves as one of the important basics of racial identity theory (Cross, 1991). When one has a RGO for personal identity, then one's personal identity is highly influenced by race. The attitudes then that one would hold about race serve as an important influence for beliefs about one's self and abilities.

When it comes to school engagement for Black students who have a RGO, the attitudes they hold about being Black would influence perceptions and feelings about school and how they interpret school experiences. For instance, Bandura (2001) noted that media has been a large cultural influence for humans in present day society.

Table 1

Attitudes of Nigrescence

Identity Stage	Attitudes
Pre-encounter assimilation (PA)	Internalized negative Black stereotypes lead one to try to reject their own race in order to fit in with the majority white culture.
Pre-encounter miseducation (PM)	Internalized negative Black stereotypes lead one to be highly influenced by media or sensationalized manifestations of Black culture (i.e., gangster rap).
Pre-encounter self-hatred (PSH)	Internalized negative Black stereotypes may lead to feelings of low self-esteem and self-worth.
Immersion-emersion anti-white (IEAW)	Feelings of Black pride are accompanied with feelings of hatred toward whites. They often blame whites for their personal difficulties.
Internalization afrocentricity (IA)	Feelings of Black pride are accompanied with feelings of acceptance of whites.
Internalization multiculturalist inclusive (IMCI)	Feelings of Black pride are accompanied with feelings of acceptance for all cultures.

Note. Adapted from “The Cross Racial Identity Scale: Technical Manual, 2nd edition,” by F. C. Worrell, B. J. Vandiver, and W. E. Cross, 2004.

The media has become increasingly popular and accessible to adolescents, partially due to social media sites and access to technology. As a result, adolescents are regularly bombarded with images of stereotypes across racial groups. For Black students particularly, the images they see and hear in the media that reflect their culture can influence their beliefs. Therefore, media representations of Black culture solely as musicians and athletes may influence Black students to think that school is not something they need to be successful in life. Such schemas may lead students to develop miseducated beliefs about their race when not yet given life opportunities in adulthood to learn otherwise. Coupled with cumulative negative school experiences, this may lead to low school engagement.

Measuring racial identity. There has not been much research on racial identity and school-related issues, and one reason might be the difficulty of measuring racial identity. Racial identity is a multi-faceted and complex construct that requires specific measurement and analysis. It is not as simple as having respondents complete a questionnaire and obtain a general score. Scales must be examined in terms of their validity and reliability, and also their alignment with racial identity theory. Several racial identity scales have been developed over decades of research and as new findings emerge, we learn increasingly more about the complexity of racial attitudes and how they develop.

One major issue in the racial identity literature is that the terms racial identity and ethnic identity have been used interchangeably by some researchers (Cokley, 2005). Cokley (2005) argues that racialism is conceptually separate from ethnic identity, but that one can have an effect on the other. In a study of 201 Black college students at two universities (one traditionally Black and the other traditionally White), Cokley (2005)

administered measures of racial and ethnic identity along with a measure of Afrocentrism. The participants were both men and women ranging from ages 17 to 40. According to statistical analyses, the ethnicity scale did not predict the racialized identity variables from the racial identity scale. Therefore, Cokley (2005) argues that these two constructs are conceptually different and the terms should not be used interchangeably.

Simmons and others (2008) conducted a comparative study of three popular rating scales of Black identity: the Multidimensional Inventory of Black Identity (MIBI), the African Self-Consciousness Scale (ASCS), and the CRIS. The MIBI, which has been used a great deal with adolescents in research (see Chavous et al., 2003; Harper & Tuckman, 2006; Sellers et al., 2006), was found to be psychometrically less robust compared to the CRIS. Factor loadings on the MIBI did not support the theoretical basis of the racial identity scale (Simmons et al., 2008). Factor analysis of the CRIS indicated a six-factor structure, which aligned clearly with nigrescence theory.

Although the CRIS has been identified as the most psychometrically sound Black racial identity scale to date, it has yet to be systematically used in research of Black adolescents. Most studies that have surveyed Black adolescents have utilized other rating scales of identity. The studies discussed below have not been conducted with the CRIS, but the reported results do indicate that racial identity is a valuable construct to continue to explore.

In a study of 314 Black adolescents ranging in age from 11 to 17, Sellers and colleagues (2006) administered the MIBI among other measures of ethnic identity, symptoms of psychological distress, and levels of exposure to racial oppression and stress.

Overall, the researchers found that harassment based on racial discrimination was not infrequent in this sample of adolescents. Furthermore, harassment was related to public regard in that those who reported higher incidents of harassment also reported lower feelings of public regard for their race (i.e., “others hold negative feelings toward my race”). Additionally, high public regard was viewed as a resiliency factor against misperceived racism. In other words, those who believed that society viewed their race in a more positive light reported less incidences of harassment. Racial discrimination was therefore argued as a risk factor because of its positive relationship with psychosocial distress and its negative relationship with psychological well-being. Unfortunately, to date, there are no other studies regarding the impact of racial discrimination on psychological well-being for adolescents.

Racial discrimination is not only believed to impact psychological well-being, but researchers examining this relationship have found that it can also negatively impact Black adolescents academically. Alliman-Brisset and Turner (2010) did not measure racial identity, but they examined how experiences with racial discrimination impacted math efficacy and expected outcomes in math. In their study of 108 8th grade students, they found that perceived racism was just as harmful as racism that was actually experienced in terms of the impact it could have on academics. Results indicated that math efficacy was predicted by experiences with institutional racism. Math outcome expectations were predicted by parent support and racially discriminatory experiences. Poor math performance and personal experiences with racism also predicted whether or not a student was interested in math. Thus, racism has been shown to serve a role in how Black students perceive their academic future.

Chavous and colleagues (2003) surveyed over 600 Black 12th grade-aged participants. The authors wanted to identify the internalized negative and positive racial stereotypes that promoted and prohibited academic success amongst Black adolescents. Using the MIBI to measure racial identity, they found four profiles in their study that directly related to future academic success at a two-year follow-up: *buffering/defensive*, *low connectedness/high affinity*, *idealized*, and *alienated*. Individuals in the *buffering/defensive* profile tended to value their race as part of their identity (race centrality) and have positive beliefs about their race (private regard). Concurrently, they also believed that society in general might not have had the same positive views about their race (public regard). Chavous and others (2003) referred to this as “racism awareness.” Individuals in the *low connectedness/high affinity* profile had the same views of public and private regard as the *buffering/defensive* group; however, they did not view their race as a central part of their identity. Those in the *idealized* group rated all three areas positively, meaning that they viewed their race as central to their identity and felt positive about their race along with the rest of society. Finally, those in the *alienated* group were the complete opposite of those in the *idealized* group in terms of their beliefs. These individuals did not view their race as central to their identity and felt that society viewed their race negatively along with them.

Chavous and colleagues (2003) measured educational beliefs and academic success as their outcomes. The educational beliefs they measured were school attachment (the degree to which one feels that school is a place for them), school relevance (the degree to which what they are learning in school is relevant to their future success), school efficacy (the degree to which they feel that they can be successful at

school-related tasks), and school importance (the degree to which school is important to their future success). Academic success was measured by whether or not the students were enrolled in school, their cumulative 12th grade GPA, and whether or not they were attending college at a 2-year follow-up. Analyses indicated that amongst all participants in the study, those students with low race centrality and low private regard were more likely to report dropping out of school. When examining academic outcomes, school attachment was positively related to public regard. In other words, students who did not report racism awareness tended to be more attached to their school. At a two-year follow up, those students attending college reported higher ratings for centrality and private regard. Thus, students who highly valued being Black and viewed their race positively were more likely to attend college in this study.

When examining racial profile groups, students in the alienated group reported lower school attachment and lower school efficacy than the other groups (Chavous et al., 2003). These were the students who reported low race centrality and also low private and public regard for their race. Students in the idealized group reported higher school relevance. These were the students who reported high race centrality, and high private and public regard for their race. School importance and GPA were not significantly correlated with any group profile. It is also important to note that school relevance and school importance are theoretically similar, and it is possible that results may have been different if they were measured as one construct or differently.

A logistic regression model examining high school completion as the predictive variable found that, for students in the buffering group, higher ratings of school importance was related to a lower likelihood of drop out and students with high efficacy

were more likely to drop out (Chavous et al., 2003). The authors explained the reason why high efficacy may have been related to dropout for idealized students is because they may have overestimated their abilities, and increasing frustration may have led them to leave school. Students in the idealized group were more likely to have completed school if they reported high school relevance.

Harper and Tuckman (2006) replicated the use of Chavous and colleagues (2003) profiles to predict 9th and 12th grade students' GPA. They argued that the sample Chavous and colleagues (2003) obtained was limited in that it only included experienced high school students (i.e., 12th graders) and did not include students living in an urban environment. Harper and Tuckman (2006) believed that the profile analysis should be examined with students just starting high school (i.e., 9th grade) since their school experiences in terms of race may be different due to less time in high school. Further, they believed that the racial experiences of students living in an urban environment were different than students living in the suburbs. To address their concerns, Harper and Tuckman (2006) surveyed almost 300 Black high school students about their racial identity using the MIBI and obtained their GPA from their school's guidance counselor. Results of the study indicated that profiles were not consistent between 9th and 12th grade students. Amongst the 9th grade students, *idealized*, *buffering/defensive*, and *alienated* profiles were found. Amongst the 12th grade students, *idealized*, *low connectivity/high affinity*, and *alienated* profiles were found. In summary, although the same profiles were not found in both grades, four profiles still emerged in the overall sample.

Since the idealized and alienated groups were found in both grades, the authors looked for differences in GPA amongst these two profiles (Harper & Tuckman, 2006).

Results indicated that students in the alienated group had a higher GPA than students in the idealized group. Harper and Tuckman (2006) argued that this was an indication that Black students may distance themselves from their race due to negative public regard, which in turn leads them to use academics as a way to show that they are not like their race. Harper and Tuckman's (2006) study demonstrates that there is an impact of internalized racism on Black students and suggests how they might differentially cope with their experiences. Results of this study are limited, however, in that it did not further support the impact these racial identity attitudes had on the academic attitudes of Black students, as was done in Chavous et al. (2003). Consequently, it is unclear why Harper and Tuckman (2006) chose to use GPA, and only GPA, as an outcome variable when Chavous and others (2003) showed that it was not related to any racial identity profile. The authors did not discuss this in their article.

Nonetheless, it appears that racial identity has utility in understanding how race impacts the academic achievement of Black adolescents. The current study aimed to expand upon existing studies by using a more psychometrically and theoretically sound racial identity measure (i.e., CRIS). Furthermore, the studies mentioned above have identified important profiles, but these differences have not been examined with constructs related to school engagement that indicate risk for school dropout. Chavous and others (2003) allude to school attachment, efficacy, and perceived importance as the beliefs they measured, but this is only one study of its kind and only scratches the surface of how racial identity is related to engagement. Understanding school connectedness, perceived school support, and attendance as indicators of school engagement among Black students is imperative to closing the gap in school dropout rates. Unlike the

aforementioned studies, this study established a foundation in school engagement research by focusing on three important indicators of school engagement (e.g., school connectedness, perceived school support, and attendance). As such, the purpose of this study is to examine how school connectedness, perceived school support, and attendance are influenced by the racial identity attitudes found among Black adolescents.

Research Questions and Hypotheses

Research questions 1 and 2: *Does affective engagement (as measured by school connectedness and perceived school support) predict behavioral engagement (as measured by self-reported attendance)? Does affective engagement predict behavioral engagement for Black high school students?* It is hypothesized that school connectedness and perceived school support would predict attendance for all students, and for the Black sample alone. In following the research by Li and Lerner (2013), school engagement is a multidimensional construct, where there is a bidirectional relationship between emotional and behavioral engagement. Attendance could be considered to be an indicator of behavioral school engagement, whereas, school connectedness and perceived school support could be considered indicators of affective engagement. Essentially, it is believed that students who report low school connectedness and negative perceptions of school support will have poor attendance due to the negative feelings toward school, leading to school avoidance.

Research question 3: *If affective engagement (i.e., school connectedness and perceived school support) predicts behavioral engagement (i.e., attendance), will the relationship between these variables change when racial identity attitudes are considered?*

Since previous studies have indicated a link between affective school engagement and

racial identity attitudes (i.e., Chavous et al., 2003), it is anticipated that the relationship between school connectedness, perceived school support, and attendance will be moderated by racial identity attitudes. Specifically, it is hypothesized that pre-encounter and internalization beliefs (i.e., assimilation, miseducation, and self-hatred) will moderate the relationship between these indicators of school engagement.

Research question 4: *Is there a statistically significant difference in racial identity attitudes of Black students across age groups?* This question is in response to the work by Worrell (2008), who found that Black adolescents (age 14-18) who completed the CRIS reported more pre-encounter attitudes than young adults and those older (older than age 18). This indicated support for a developmental model of racial identity. Based on Worrell's (2008) findings, it is hypothesized that participants ages 14-15 will indicate higher pre-encounter attitudes, while participants ages 18-21 will report lower pre-encounter attitudes comparatively. It is also hypothesized that the 18-21 year old participants would indicate higher internalization attitudes compared to 14-15 year old participants.

CHAPTER THREE

Methods

Participants

The target population of this study was Black male and female students enrolled in grades 9 through 12 in public schools throughout an urban city in the Midwest. Participants enrolled in 9th through 12th grades were recruited from two high schools: one a large public school district (school A) and one a university charter school system (school B) in the same city. All students were surveyed, but only students who identified as Black or African American were asked to complete the racial identity scale. This resulted in two samples: one sample of mixed race, and one sample derived from the mixed race sample to include Black participants only.

Overall sample. A total of 272 participants completed the study. Overall, 38% of the entire sample identified as Latino, 6% identified as White, 2% identified as Asian, and 1% identified as First Nation/Native American, leaving 53% of the sample identifying as Black, Biracial, or Multiracial. The means and standard deviations of the demographic variables, not including ethnicity, are presented in Table 2. Approximately 54% reported that they were female. The ages of participants ranged from 14-21 ($M = 15.8$). When asked about parent's highest level of education, 50% responded that at least one parent had attempted some college or higher.

Black only subsample. One-hundred-thirty-five participants who identified as Black attempted to complete the study. After examining for missing data, 105 participants fully completed all surveys, including the racial identity scale. Participants

Table 2

Descriptive Statistics for Demographic Variables in Both Datasets

Variable	Overall Sample	Black Sample
	<i>M (SD)</i>	<i>M (SD)</i>
Age	15.97 (1.50)	16.25 (2.58)
Grade	10.43 (1.10)	10.67 (1.10)
Gender ^a	1.53 (.52)	1.50 (.53)
Parent Education ^b	4.03 (2.12)	4.27 (2.32)

^a 1 = male, 2 = female.

^b Highest level of education completed by parent: 1 = elementary, 2 = some high school, 3 = high school diploma or equivalent, 4 = some college, 5 = trade school, 6 = Associate's degree, 7 = Bachelor's degree, 8 = some graduate school, 9 = Master's or higher degree.

who attempted to complete the racial identity scale self-identified as Black or African American ($n = 110$), Biracial ($n = 11$), or Multiracial ($n = 14$). The ages of participants ranged from 14 to 21 ($M = 16.2$). Approximately 52% of the Black sample was female ($n = 70$). When asked about their parents' highest level of education, 56% of the Black sample reported that at least one parent had attended college or obtained a post-secondary degree.

School demographics. Students in the public school system were recruited from school A, which made up 48% of the sample. School A is a small alternative high school that focuses on utilizing online curriculum to help students who are behind in school to recover credits and catch up to their age-appropriate grade. Students enrolled at school A also received socio-cultural programs that encouraged them to learn better ways to cope with past mistakes and handle life stress. According to the Wisconsin Department of Public Instruction (DPI), school A had 106 students enrolled for the 2011-2012 school year (Wisconsin Department of Public Instruction [DPI], 2013). Of those enrolled, 96% were Black and 80% were considered “economically disadvantaged” by DPI criteria. According to the public school district’s database, school A had an overall attendance rate of 85% for the 2012-2013 school year.

Participants were also recruited from a university system charter school, which will be identified as school B. According to the information provided by the school to the DPI, school B had 199 students enrolled for the 2011-2012 school year (Wisconsin DPI, 2013). Of those enrolled, 36% were Black and 17% were White. The majority of the students enrolled at school B were Latino (42%). According to DPI, approximately 80% of students at this school were considered “economically disadvantaged.” A

separate report from a local educational organization for the 2011-2012 school year reported that school B had an average attendance rate of 95% (Seeds of Health, Inc., 2012).

Recruitment procedures. Approval to conduct research with human participants was requested from the UW-Milwaukee Institutional Review Board (IRB # 13.298) and the public school district's Research and Evaluation Office. Approval was granted to conduct research at schools A and B. Students were recruited at school A through posting an announcement on the school's web-based message board. At school B, the principal was asked if he would be willing to allow the principal investigator (PI) to survey his students about their beliefs and attitudes regarding race and school. All initial communication was handled through the university's charter school research office.

Measures

School connectedness. The Psychological Sense of School Membership (PSSM) scale was used in this study to measure school connectedness (see Appendix A for scale). Originally developed by Goodenow (1993), the PSSM aims to measure one's beliefs of being accepted and respected in school (You, Ritchey, Furlong, Shochet, & Boman, 2011). Although the PSSM is widely used in research, it does not appear to have been revised since its original development in 1993. This is an 18-item scale that has 3 subscales: caring relationships (CARING), acceptance (ACCEPT), and rejection (REJECT). Response options to each item used a 5-point Likert scale ranging from 1 (*not at all true*) to 5 (*completely true*). The CARING subscale was measured by four items (e.g., *Most teachers at this school are interested in me*), the ACCEPT subscale was measured by five items (e.g., *I can really be myself at school*), and the REJECT subscale

included three items (e.g., *Sometimes I don't feel as if I belong in school*). Only 12 of the items from the PSSM were used in scoring, based on the results of confirmatory factor analysis, which found a three factor structure using these items (You et al., 2011). Scores were calculated for each subscale by using the sum of responses on items for each subscale. Scores on the CARING subscale ranged from 4 to 20. Scores on the ACCEPT subscale ranged from 5 to 25. Items on the REJECT subscale were reverse coded and scores ranged from 3 to 15. Higher scores indicated stronger beliefs for each subscale.

Reliability studies of the PSSM demonstrated medium to high reliability, with Cronbach alpha scores ranging from .78 to .95 (Shochet, Smith, Furlong, & Homel, 2011; You et al., 2011). The PSSM has also been argued to be a reliable scale to use with school age students ranging from elementary to high school, and with students from diverse economic and cultural backgrounds (Shochet et al., 2011; You et al., 2011). For the current study, reliability estimates for the scores on the PSSM subscales were .70 (ACCEPT), .61 (REJECT), and .39 (CARING). These estimates are not as high as the estimates found in previous studies (i.e. Shochet et al., 2001; You et al., 2001). Due to the low reliability estimate of the CARING subscale, this subscale is not used in any of the analyses and is not discussed further in this study.

Perceptions of school support. The Class Life Scale (CLS) was used to measure perceptions of school support (see Appendix B for scale). The CLS is a 17-item self-report scale that asks respondents questions regarding whether or not they feel supported by peers and teachers at school using a 5-item Likert scale, 1 (*never*) and 5 (*always*). The CLS has two subscales that measure a respondent's attitudes regarding personal and academic support from both teachers and peers. The peer personal support subscale is

comprised of five items that measure one's feelings that he or she is personally supported by peers (e.g., *Other students in this school care about my feelings*). In the peer academic support subscale, respondents are asked to respond similarly to four items about academic support (e.g., *Other students in this school want me to do my best schoolwork*). The teacher personal support subscale is comprised of four items that measure whether one feels personally supported by his or her teachers (e.g., *My teacher really cares about me*). Finally, the teacher academic support subscale is comprised of four items as well, and measures whether one feels academically supported by teachers (e.g., *My teacher cares about how much I learn*).

All of the items from the peer academic and personal support subscales are summed to create the PEER subscale, where scores ranged from 9 to 45 (VanRyzin, Gravely, & Roseth, 2009). Similarly, all of the items from the teacher academic and personal support subscales are summed to create the TEACHER subscale, with subscale scores that ranged from 8 to 40. Thus, the CLS is considered to have a two-factor structure, teacher and peer, and two subscale scores are calculated rather than an overall score. To date, no studies have been published that investigate the validity of this structure. VanRyzin and others (2009) report the subscale reliability of the CLS ranges from .90 to .92. Therefore, the CLS is considered to be highly reliable. In the current study, reliability estimates for the scores on the CLS subscales were .88 (TEACHER) and .89 (PEER). These estimates are similar to the estimates reported in a previous study by VanRyzin and others (2009).

Racial identity. The Cross Racial Identity Scale (CRIS) is a 40-item scale designed to examine prominent attitudes one holds about their racial group affiliation

(scale cannot be published; must contact developer for copies). There is no overall CRIS index score; rather, a profile for each respondent is created that consists of each subscale score. The CRIS uses a 7-point Likert scale format to target attitudes about different types of Black identity, based on the expanded nigrescence model (NT-E) of racial identity development (Worrell, Vandiver, & Cross, 2004). The scale consists of six subscales that measure the three stages of nigrescence: pre-encounter assimilation (PA), pre-encounter miseducation (PM), pre-encounter self-hatred (PSH), immersion-emersion anti-white (IEAW), internalization afrocentricity (IA), and internalization multiculturalist inclusive (IMCI). Each subscale score consisted of the sum of all ratings for items that represented that subscale scale. As such, each subscale score could range from 7 to 35. Scores on the higher end indicated stronger feelings of the attitude the subscale measured.

The CRIS has been rigorously examined and revised since its initial development (Gardner-Kitt & Worrell, 2007; Vandiver, Cross, Worrell, & Fhagen-Smith, 2002; Worrell & Watson, 2008; Worrell et al., 2004). Studies have found that subscale reliability coefficients (Cronbach's alpha) ranged from .78 to .90 (Worrell et al., 2004). In the current study, reliability estimates for the scores on the CRIS subscales ranged from .67 (PA) to .90 (IEAW), similar to those found in Worrell and others (2004). Exploratory and Confirmatory factor analyses have supported the six-subscale structure, but only with using 30 of the items (Gardner-Kitt & Worrell, 2007; Vandiver et al., 2002). As such, these 30 items are used in scoring as factor analyses indicate these items are the strongest indicators of nigrescence (Vandiver et al., 2002). Convergent validity study using bivariate and canonical correlations with the MIBI indicated positive correlations between subscales on the CRIS and corresponding subscales on the MIBI (Vandiver et al.,

2002). Social desirability analyses using correlations with the Balanced Inventory of Desirable Responding (BIDR) demonstrated that no correlations with CRIS subscales were above $|\ .23 |$ (Vandiver et al., 2002).

Attendance. Students were asked to self-report their attendance by answering the question, *Over the 2012-2013 school year, how many days of school have you MISSED?* Response options included: *1 = 0-18 days, 2 = 19-36 days, or 3 = 37 or more days.* The number of days corresponded to attendance rates of 90% or better, 80% or better, and less than 80% attendance rate, respectively. These rates are based on a 180-day school year.

Data Collection Procedure

Applications to the UW-Milwaukee IRB and the public school's Research and Evaluation Office were submitted in February of 2013. Approval from UW-Milwaukee was received in March 2013 and approval from the public school district was received in May 2013. Once approval was obtained from the UW-Milwaukee IRB, an application to conduct research in the university charter school system was submitted and approved in August 2013.

Survey. The chosen scales were compiled into a battery of questions for students to complete via paper and pencil. Demographic questions were on the first page of the survey packet and included: gender, age, grade, ethnic background, and highest level of parent education. The PSSM was next in the packet followed by the CLS. All students in the classroom were asked to complete these surveys regardless of racial background. Included in the packet, following these two surveys, was a page asking students to continue and complete the next set of questions only if they identified as

being Black or African American. Therefore, the CRIS was placed at the end of the packet.

School A. Once approval was obtained to collect data, recruitment of students via a web-based flyer began as outlined in the above section. Students who responded to the recruitment flyer were given a brief introduction to the study and its purpose. If they agreed, they were given a passive consent letter to take home to their parents. After one week, students who had received passive consent letters were taken to a large room during lunch time to complete the entire survey packet. A short script was read to the students describing the purpose of the study and the expectations. Students were informed through the script that they were being asked questions regarding their attitudes towards school and social opinion. Care was taken not to use the words “racial identity” or other words that would prime the students’ attitudes before completing the survey. They were also told their identity would be kept anonymous and not shared with their parents, teachers, or school administrator so they can be honest with their responses. All students were surveyed regardless of race. Students completed the packet within 15-20 minutes. Those students who did not have to complete the CRIS, completed the survey within 10-15 minutes. When finished, students were asked to raise their hand for the PI to come and collect their survey. When all surveys were collected, students were allowed to ask questions and debrief regarding the purpose of the survey. Data collection at school A occurred from May 2013 to June 2013.

School B. As previously stated, communication with school B was initially coordinated through the charter school research office. Once contact with the high school principal was facilitated, the PI met with the principal to create a plan for data collection.

This included having the PI make a short classroom presentation about the study to each classroom across grade levels and hand out passive consent letters to be sent home. Two weeks later, the PI returned with two research assistants to administer surveys. Before the survey packets were distributed, a script was read to students similarly as was done with school A students. When students were finished with their survey, they were directed to raise their hand so that the PI or research assistant could collect the survey. Most students completed the survey within 20-25 minutes, with those who did not have to complete the CRIS completing the survey within 10-15 minutes. Students were directed to sit quietly and do coursework until all students had finished. When all surveys were handed in, students were allowed to ask questions and debrief regarding the purpose of the survey. Data collection was completed at school B during the month of September 2013.

Design and Data Analyses

A correlational design was used for this study. Survey data was analyzed to explore the statistical relationship between affective and behavioral engagement for the Black students who participated in this study. All data analysis was conducted using SPSS (version 22). Two datasets were created as a result of data collection procedures. First, all completed surveys were entered and organized by participant, keeping data for each respondent together. Once all data was organized, all data from Black participants were sectioned off to create another dataset with CRIS responses so that planned analyses could be run.

Descriptive statistics. Means and standard deviations were generated for scores on the major variables used in the study (i.e., school connectedness, perceived school

support, and attendance). In addition, a correlation matrix of the relationships among school connectedness, perceived school support, and racial identity attitudes was created. Reliability estimates for the PSSM, CLS, and CRIS were also calculated.

Research question 1: Does affective engagement (as measured by school connectedness and perceived school support) predict behavioral engagement (as measured by self-reported attendance)? To answer the first research question regarding whether or not subscales on the PSSM (school connectedness) and CLS (perceived school support) predicted attendance, a hierarchical linear regression was used to examine this relationship for the entire sample. The independent variables were school connectedness (ratings of 1 to 5 of feelings of school belongingness, where higher ratings indicated more feelings of belonging) and perceived school support (ratings of 1 to 5 of feelings of support from teachers and peers, where higher ratings indicated more feelings of support) and the dependent variable for this analysis was attendance (ratings of 1 to 3 of days missed from school, where higher ratings indicated more days of school missed). Before conducting the regression, preliminary t-tests were run to determine whether there were significant differences in attendance based on gender (which was coded dichotomously) and parent education (ranging from 1-some high school to 8- doctoral graduate degree). An ANOVA was also run to determine whether there was a significant difference in attendance based on age (coded as a continuous variable ranging from 14 to 21). Differences across schools were not examined, considering the large difference in sample sizes (66 for school A versus 206 for school B).

Research question 2: Does affective engagement predict behavioral engagement for Black students? To answer the second research question regarding

whether or not subscales on the PSSM and CLS predicted attendance for the subsample of Black students, a hierarchical linear regression was used to examine this relationship for a subsection of the sample consisting of only Black participants. Just as was the case for question 1, the independent variables were school connectedness and perceived school support, and the dependent variable was attendance. Before conducting the regression, preliminary t-tests were run to determine whether there were significant differences on demographic variables across schools (coded dichotomously for schools A and B).

Research question 3: If affective engagement (i.e., school connectedness and perceived school support) predicts behavioral engagement (i.e., attendance), will the relationship between these variables change when racial identity attitudes are considered? A moderated multiple regression analysis was used to examine if racial identity moderated the relationship between school connectedness and attendance, as well as perceived school support and attendance. The independent variables were school connectedness and perceived school support, while racial identity attitudes were moderators (where each subscale score ranged from 5 to 35, with 5 being low agreement and 35 being high agreement with the racial attitude the subscale measured). The dependent variable for this analysis was attendance. Tests for multicollinearity were run to see if the variables needed to be standardized before creating interaction variables. Interaction variables were created using the product of subscale scores from the CRIS with the subscale scores of the PSSM and the CLS and entered into a multiple regression analysis to predict attendance, yielding 24 moderator variables. For instance, an

interaction variable of ACCEPT and PSH was simply the multiplication of the two subscale scores.

Research question 4: Is there a statistically significant difference in racial identity attitudes of Black students across age groups? A MANCOVA was used to examine whether there were age differences across racial attitudes. The goal of this analysis was to determine whether racial identity attitudes differed based on age for adolescents and young adults. The independent variable was age and the dependent variables were the six racial identity attitudes. Before conducting this analysis, preliminary t-tests were conducted to determine whether attendance difference for this sample based on gender, parents' level of education, and school attended. Assumptions for the MANCOVA were also tested to consider independent observations of data and homogeneity of variance using Levene's Test. Participants were recoded into three age groups to run this analysis, where participants ages 14 and 15 were placed into Group 1 ($n = 28$); participants ages 16 and 17 were placed into Group 2 ($n = 45$); and participants ages 18 through 21 were placed into Group 3 ($n = 33$). Tukey HSD post hoc procedures were used to follow-up on any significant results.

CHAPTER FOUR

Results

Preliminary Analyses

Missing data. The initial sample size included 272 completed surveys. Participants who did not fully complete both school attitudes scales were removed from the dataset. After examining for missing data in the general sample, 267 participants had completed all of the demographic questions and both school attitudes scales. For the sample of Black students, 135 attempted to complete the entire survey packet, but some did not answer all items on the CRIS. After examining for missing data, 29 participants had not responded to items on the CRIS, leaving 106 Black participants with complete data. Complete data included answering all items on the CRIS, PSSM, CLS, and demographic questions. Approximately 75% of the participants who did not complete the CRIS were identified as female students aged 14 who attended school B.

Outliers. Before beginning analyses, the data were analyzed for multivariate outliers using the Mahalanobis distances test. Two outliers were detected in the larger dataset, but were not removed because they composed an underrepresented group of Black students (i.e., poor attendance). A second Mahalanobis distances test was run for the dataset only including the Black participants, which would be used for the main analyses. No outliers were found in this section of the dataset.

Descriptive statistics. Descriptive statistics, including scale means, standard deviations, and reliability estimates of scores for the PSSM, CLS, and the CRIS for both datasets are reported in Tables 2 and 3. Subscale bivariate correlations are displayed in Table 4 for both datasets.

Overall sample. The mean score on the PSSM ACCEPT subscale for the entire sample was 17.98 and 11.43 for the PSSM REJECT subscale, with higher scores indicating high school connectedness (items in the REJECT subscale were reverse coded). The two subscales were approaching moderate correlation and were significant ($r = .45, p < .001$). Mean scores on the CLS subscales were 30.12 (PEER) and 32.93 (TEACHER), with higher scores indicating high perceived support from peers or teachers. Both subscales were approaching a moderate statistically significant correlation ($r = .41, p < .001$).

Black only subsample. For the Black participant only dataset, the mean ACCEPT subscale score on the PSSM was 18.06 and the mean REJECT subscale score was 11.54. Similar to the overall dataset, the two subscales were approaching moderate correlation and were significant ($r = .45, p < .001$). The mean score for the PEER subscale of the CLS was 28.91 and 32.29 for the TEACHER subscale. There was a small, statistically significant correlation between the subscales on the CLS ($r = .31, p < .001$). CRIS subscale means ranged from 9.61 for the immersion-emersion anti-white (IEAW) subscale, indicating that, on average, participants reported weak agreement with attitudes of anti-white sentiments, to 24.98 for the internalization multiculturalist inclusive (IMCI) subscale, indicating that participants on average endorsed neutral attitudes of multiculturalism. Intercorrelations between the CRIS subscales ranged from $|.02|$ to $|.37|$ ($Mdn = |.21|$). The highest correlations were between pre-encounter self-hatred (PSH) and pre-encounter miseducation (PM) ($r = .37$), and PSH and IEAW ($r = .35$). As shown in Table 4, most of the subscales on the CRIS were intercorrelated.

Across scales for Black participants, the PSH subscale of the CRIS had a small

Table 3

Means, Standard Deviations, and Reliability Estimates for Scores on the Subscales of the PSSM, CLS, CRIS

Subscales	<u>Black Sample</u>		<u>Overall Sample</u>	
	<i>M (SD)</i>	Alpha	<i>M (SD)</i>	Alpha
PA	19.86 (6.30)	.67		
PM	19.08 (7.15)	.83		
PSH	11.32 (6.57)	.83		
IEAW	9.52 (6.17)	.90		
IA	16.90 (6.11)	.79		
IMCI	24.98 (6.93)	.82		
ACCEPT	18.12 (3.24)	.70	11.97 (3.29)	.70
REJECT	11.59 (2.60)	.61	11.42 (2.71)	.67
PEER	28.88 (7.33)	.89	30.10 (6.84)	.89
TEACHER	32.73 (5.08)	.88	32.94 (5.36)	.88

Note. CRIS subscales include Pre-Encounter Assimilation (PA), Pre-Encounter Miseducation (PM), Pre-Encounter Self-Hatred (PSH), Immersion-Emersion Anti-White (IEAW), Internalization Afrocentric (IA), Internalization Multiculturalist Inclusive (IMCI). PSSM subscales include ACCEPT and REJECT and CLS subscales include PEER and TEACHER. Higher values for all scales indicate higher attitudes of the construct measured.

Table 4

Correlations for Scores on the Subscales of the PSSM, CLS, and CRIS

Subscales	1	2	3	4	5	6	7	8	9	10
1. PA	--									
2. PM	.21*	--								
3. PSH	.05	.37**	--							
4. IEAW	.02	.09	.35**	--						
5. IA	.19*	.32**	.21*	.30**	--					
6. IMCI	.26**	.25**	.02	-.25**	.21*	--				
7. ACCEPT	.04	.01	-.14	-.02	-.07	.01	--	.45**	.56**	.51**
8. REJECT	-.03	-.00	-.26**	-.14	-.13	-.08	.45**	--	.27**	.28**
9. PEER	-.14	-.17	-.29**	-.04	.02	.02	.58**	.18*	--	.41**
10. TEACHER	.11	.16	-.04	-.13	.10	.24*	.48**	.27**	.31**	--

Note. Intercorrelations for Black participants ($n = 106$) are presented below the diagonal and intercorrelations for the entire sample of participants ($N = 268$) are presented above the diagonal.

* $p < .05$. ** $p < .001$.

negative correlation with REJECT from the PSSM ($r = -.26, p < .001$) and PEER from the CLS ($r = -.29, p < .001$). It appears that as participants' feelings of self-hatred increased, their feelings of rejection from school as well as their feelings of support from peers also increased. Another significant across-scale correlation was between IMCI on the CRIS and the TEACHER subscale of CLS ($r = .24, p < .05$). This correlation indicates that as participants' multiculturalist views increased, then their feelings of support from their teachers at school also increased.

Analyses of Group Differences

Overall Sample—Age. A One-Way ANOVA was used to examine age group differences in ratings of school connectedness, perceived school support, and attendance. The PEER subscale of the CLS was significant at the .05 level, $F(2, 265) = 4.109, p = .017$, as well as the REJECT subscale of the PSSM at the .05 level, $F(2, 265) = 4.139, p = .017$. Attendance was also significant at the .001 level, $F(2, 266) = 11.86, p < .001$.

Overall Sample—Parent education. A One-Way ANOVA was used to examine differences in parent education as was done above with age group, but instead, parent education was the independent variable. Attendance was significant at the .05 level, $F(8, 252) = 2.33, p = .02$. None of the differences on the other scales were significant.

Overall Sample—Ethnicity. Finally, the same analysis was used to examine group differences in ethnicity (ranging from 1—Black to 8—multiracial). PEER was significant at the .05 level, $F(7, 260) = 2.48, p = .018$ as well as attendance, $F(7, 262) = 2.41, p = .021$. None of the differences on the other scales were significant.

Given that significant differences between age groups, parent's level of education and ethnicity were found for school connectedness, perceived school support, and attendance; age, parent education, and ethnicity variables were entered first in the hierarchical regression analysis to control for these difference.

Black sample. In the Black sample, independent samples t-tests were run to determine whether age, gender, or parent education was significantly different between the two schools represented in the sample. Schools were the independent variable and age, parent education, and gender were the dependent variables. Age was significant at the .001 level, $t(133) = 3.90, p < .001$, and parent education was significant at the .05 level, $t(133) = -2.60, p = .010$. As such, when running the regression analysis for the second question, both age and parent education were entered first as control variables. For the MANCOVA, parent education was used as a covariate.

Questions 1 and 2: The Relationship between School Connectedness, Perceived School Support, and Attendance

A hierarchical linear regression was used to examine the relationship between the measures of school connectedness, perceived school support, and attendance. A hierarchical regression was run for the overall sample first, and then again with the Black sample of participants to determine if the same model would be significant in both cases. First, age, parent education, and ethnicity, and then the subscale scores for ACCEPT, REJECT, PEER, and TEACHER were entered into a model to predict self-reported school attendance in three blocks. The PSSM subscales of ACCEPT and REJECT were

entered in the second block after the control variables were entered in the first block, and the CLS subscales of PEER and TEACHER were entered in a third block.

In both regression analyses, the model was significant. In the overall sample, controlling for age, ethnicity, and parent education, the model was significant in explaining 10% of the variance in attendance, $R^2 = .101$, $F(7, 245) = 3.920$, $p < .001$. For the sample of Black participants, after controlling for age and parent education, the model was significant, explaining 11% of the variance in attendance, $R^2 = .105$, $F(6, 125) = 2.44$, $p = .029$. Thus, it appears that the model explained a small, but significant amount of the variance in attendance for both samples. Table 5 displays a summary of both regression models.

Question 3: Influence of Racial Identity Attitudes

A moderated multiple regression was used to analyze whether racial identity could be a moderator of the relationship between school connectedness and attendance, as well as perceived school support and attendance. First, collinearity statistics were calculated to determine if multicollinearity needed to be accounted for before creating interaction variables of the racial identity attitudes and the school attitude subscales. None of the collinearity indicators were significant, and, as such, the interaction variables were created without standardizing variables. The interaction variables were created by simply multiplying two subscales together. For instance, the PSH*ACCEPT interaction variable was created by multiplying the subscale scores for the PSH subscale by the ACCEPT subscale. Once interaction variables were created, all of the interaction variables were entered as a block into a multiple regression as independent variables to

Table 5

Summary of Regression Model for Both Samples Predicting Attendance

Variable	Overall Sample			Black Sample		
	<i>B</i>	<i>SE</i>	β	<i>B</i>	<i>SE</i>	β
ACCEPT	.005	.012	.034	.015	.020	.096
REJECT	-.005	.011	-.032	.012	.021	.056
PEER	-.008	.005	-.131	-.014	.008	-.189
TEACHER	-.006	.006	-.071	-.028	.010	-.278*
R^2		.101			.105	
F		3.920*			2.440*	

* $p < .05$

see if the model would predict attendance. The model was not found to be significant, $R^2 = .20$, $F(24, 105) = .839$, $p = ns$. See Table 6 for a summary of this regression model.

Question 4: Age Differences in Racial Identity Attitudes

A MANCOVA was used to examine whether there were age group differences across racial identity attitudes for the Black students in this sample. Levene's test for independent observations and homogeneity indicated no significant results. Thus, it is assumed that this dataset meets the assumption of homogeneity of variance.

As previously noted, participants were placed into three age groups based on adolescent development and the theory of nigrescence. The age groups were entered as the independent variable and the subscales of the CRIS were entered as the dependent variable. Parent education was entered as the covariate. Results of this analysis indicated one significant finding. When controlling for parent education, PSH was found to be significantly different, $F(2,105) = 2.967$, $p = .05$. Tukey HSD comparisons found that Group 2 (ages 16-17) was significantly different from Group 3 (ages 18-21) on ratings of PSH with a mean difference of 3.52. Upon further examination, participants in Group 3 appeared to have significantly higher ratings of self-hatred ($M = 13.45$) than those in Group 2 ($M = 9.93$). See Figure 1 for a graph that presents this relationship.

Table 6

Summary of Moderated Multiple Regression Model Examining Racial Identity Attitudes as a Moderator

Variable	<i>B</i>	<i>SE</i>	β
PA*ACCEPT	.00	.00	.07
PA*REJECT	-.01	.01	-.81
PA*TEACHER	.00	.00	.45
PA*PEER	.00	.00	.05
PM*ACCEPT	.00	.00	.65
PM*REJECT	.00	.00	.18
PM*PEER	.00	.00	-.22
PM*TEACHER	.00	.00	-.62
PSH*ACCEPT	-.01	.01	-1.54
PSH*REJECT	.01	.01	1.06
PSH*PEER	.00	.00	.01
PSH*TEACHER	.00	.00	.63
IEAW*ACCEPT	.00	.01	.77
IEAW*REJECT	.00	.01	-.38
IEAW*PEER	.00	.00	.84

IEAW*TEACHER	.00	.00	-1.09
IA*ACCEPT	.00	.01	-.52
IA*REJECT	.00	.00	.40
IA*PEER	.00	.00	-.23
IA*TEACHER	.00	.00	.22
IMCI*ACCEPT	.00	.00	.60
IMCI*REJECT	.00	.00	-.12
IMCI*PEER	.00	.00	-.21
IMCI*TEACHER	.00	.00	-.23
R^2		.20	
F		.84	

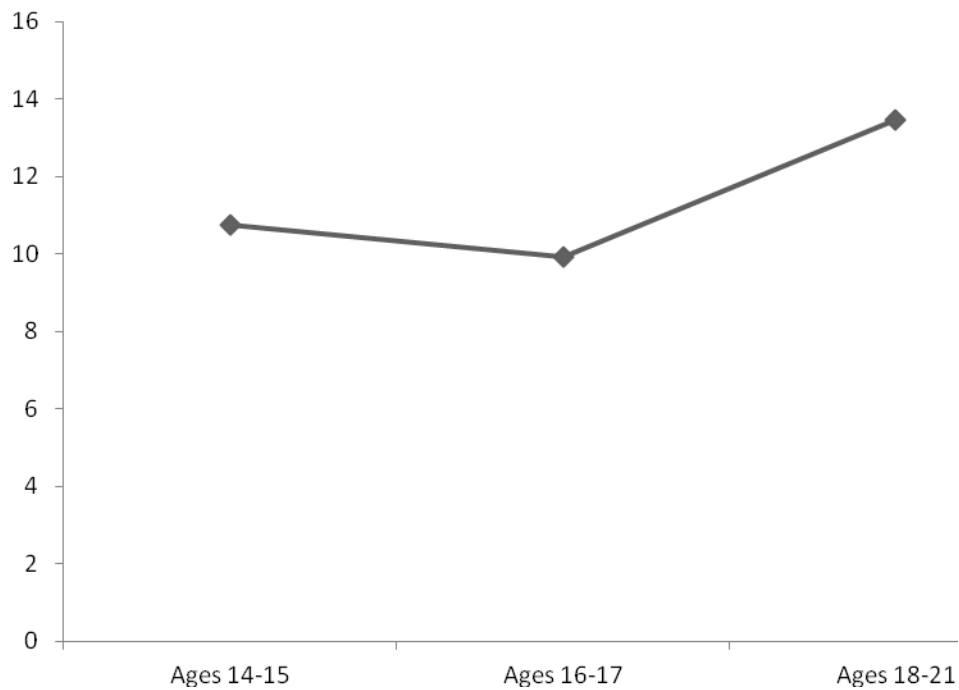


Figure 1. The line in the graph above represents the mean Pre-encounter Self-Hatred (PSH) score for each group. The mean PSH for ages 14-15 (Group 1) was 10.75, 9.93 for ages 16-17 (Group 2), and 13.46 for ages 18-21 (Group 3).

CHAPTER FIVE

Discussion

The purpose of this study was to examine the relationship between affective and behavioral school engagement for Black students and evaluate racial identity attitudes as a possible moderating variable of this relationship. This study also attempted to follow-up findings from Worrell (2008) in exploring age differences in racial identity attitudes.

School Engagement

To review, affective engagement was measured through students' ratings of school connectedness and perceived school support. It was important to measure these constructs together as research on both often overlap. Behavioral engagement was measured by self-reports of attendance. Research on the area of school connectedness often points to attendance as a behavioral outcome; thus, using this construct to measure behavioral engagement, where school connectedness was an indicator of affective engagement, makes sense. As discussed by Li and Lerner (2013), behavioral engagement in school is related to affective engagement, and these findings further support that argument, as school connectedness and perceived school support significantly predict attendance. This finding also supports arguments made by other researchers in the field of school engagement who argue that low attendance in school could be related to negative school attitudes (Chistle et al., 2007; Christenson et al., 2010; Christenson & Thurlow, 2004). What makes this finding especially interesting is that when the model was analyzed with Black students only, the model was also significant.

Furthermore, all of the subscales for the measures of school connectedness and perceived school support had a small to moderate correlation with each other (see Table 2). Higher ratings of school connectedness were associated with higher ratings of perceived school support, as lower ratings of school connectedness were associated with lower ratings of perceived school support. Since these two constructs were correlated, it makes sense to identify them as affective indicators of school engagement. This might also explain why much of the research in this area appears to overlap, as they are statistically related.

Racial Identity Attitudes and School Engagement

Although previous studies have found a connection between racial identity attitudes and affective school engagement (Chavous et al., 2003; Mattison & Aber, 2007; Sellers et al., 2006), this study found that racial identity attitudes were not a statistically significant moderator of the relationship affective and behavioral school engagement. This could mainly be due to the small sample size for this study ($n = 106$), as moderator effects are typically small and a large sample size is needed to detect this kind of effect (Baron & Kenny, 1986; Preacher, Rucker, & Hayes, 2007).

Nonetheless, small, statistically significant correlations were found between Pre-encounter self-hatred (PSH) and subscales from the measures of school connectedness and perceived school support. PSH was found to be negatively correlated with the REJECT subscale of the PSSM (school connectedness; $r = -.26, p < .001$), indicating that stronger PSH attitudes were associated with stronger feelings of being rejected in school (the REJECT subscale is reverse coded). PSH was also found to be negatively correlated

with the PEER subscale of the CLS (perceived school support; $r = -.29, p < .001$), indicating that stronger PSH attitudes were associated with feelings of lack of support from their peers in school. Although this relationship is not causal, their relationship is significant and warrants further investigation into how race plays a role in Black students' attitudes toward school.

Another statistically significant correlation was between the Internalization Multiculturalist Inclusive (IMCI) subscale of the CRIS and the subscale of the perceived school measure of TEACHER. These two subscales had a small, positive statistically significant correlation ($r = .24, p < .05$), indicating that stronger ratings of multiculturalist attitudes were associated with reported feelings of stronger support by teachers. An important thing to consider with this finding is that in both schools studied, Black students interacted with mostly White teachers. This finding further supports previous findings that attitudes about the racial climate of a school may inform one's feelings about teachers and their relationship with their teachers (Mattison & Aber, 2007; Crosnoe et al., 2004). Essentially, race does appear to have a relationship with school engagement for Black students and quite possibly so when they are expected to learn from teachers who are of a different race.

Age differences in racial identity attitudes. Although an age difference was found in this study for the PSH subscale of the CRIS, it was not a difference that was hypothesized. This sample of Black participants indicated higher ratings of PSH attitudes in the 18-21 year old group compared to the 16-17 year old group. The opposite relationship was expected, in that the 14-15 year old group was expected to show higher ratings of PSH and other pre-encounter attitudes. Upon further examination, the 18-21

year old group had an overwhelming majority of students (33 out of 38) who attended school A, a small alternative high school. This group of students represents a group that is typically identified as at-risk for dropping out of high school and, in this case, are returning to school to catch up to their peers. It appears that students still attending high school at this age (i.e., 18-21), when they should have already graduated from high school, may be struggling with some of their attitudes about their race.

Summary

This study demonstrated that ratings of self-hating based on one's race were inversely related to beliefs of school connectedness (i.e., rejection) and perceived school support (i.e., peer support). Also, multicultural beliefs were related to ratings of perceived school support, specifically teacher support. These findings from this study support the argument that race attitudes do have a relationship with attitudes about school. As found in questions 1 and 2, where the relationship between affective and behavioral school engagement was examined, students who reported higher school connectedness and perceived school support also reported higher attendance across samples. Furthermore, higher ratings of racial self-hatred attitudes were related to lower ratings of feelings of support by peers and higher beliefs of rejection in school. Inversely, multiculturalist attitudes for the Black students represented in this study were related to feelings of teacher support, where students who reported stronger multiculturalist attitudes were also more likely to report feeling stronger support from teachers. Considering the correlational nature of this study, it is unclear whether or not the results of this study indicate how race attitudes influence school engagement. Nonetheless, the results do indicate that there is a relationship that needs to be further investigated.

Limitations

Sample size. A major limitation to this study was the sample size. This limited the kinds of analyses that could be used and the possible effects that could be found. It is anticipated that with a larger sample size, more analyses would have been found to be statistically significant. Also, the average attendance rate across both datasets was 1.19 to 1.30, indicating that the majority of participants had approximately 90% attendance in school. Students with 80% or less attendance, thus, were underrepresented in this sample.

Self-report measures. As with any study that utilizes a self-report scale, social desirability can bias responses even when anonymity is given. Some research has found an association between social desirability and self-esteem in children and adolescents, in that they tend to respond in more socially desirable ways when they indicate low self-esteem (Gros, 1995). However, more recent studies have found this not to be the case in that there is no relationship (Erdle & Rushton, 2011; Huang, 2013). Nonetheless, it is important to note that some participants may have rated themselves more favorably on the racial identity items considering that the PI and other graduate assistants who assisted with survey administration were White. Black students completing the CRIS may have been less honest, because of the race of the researcher, and answered questions in a way so that they did not appear racist against Whites.

The measurement of the variable of attendance is also a potential limitation of the study in that students had to self-report the number of days of school they missed. Guessing on this question may have introduced error and does not account for students who attend school but may also skip classes and are found roaming the halls during the

school day. In addition, the survey was administered at schools A and B at two different points of the school year. Students at school A were surveyed at the end of the school year (May 2013), while students at school B were surveyed at the beginning of the school year (September 2013). As a result, there was not much variability in responses to the question regarding attendance for school B because students in general usually have high attendance rates at the beginning of a school year.

Reliability of the PSSM. The PSSM scale was also not as strong a measure as the CLS in consideration of its reliability. In searching for a measure of school connectedness, the PSSM was somewhat better than other available scales that were considered. This poses a problem in the field of school connectedness research as the field appears to be lacking in a reliable measure of school connectedness.

Practical Implications for Educators

The findings of this study should raise awareness of educators and serve as a reminder of the impact race has on education. This is especially noticed when one reviews racial disparities in school completion rates. The National Center for Education Statistics (NCES) reported the dropout rate for Black students in 2010 was 8%, while the dropout rate for White students was 5.1% (2012). This disparity in dropout rates is problematic since dropping out of school has significant implications for future employment and income. According to the U. S. Census Bureau (2010), 25% of those who did not have a high school diploma lived in poverty compared to only 4% of college graduates, regardless of race in 2010. Therefore, the disproportionately high dropout rate among Black students leads to difficulties in finding employment and living in poverty,

which has significant implications for the opportunities these students will have later in life. As Ladson-Billings and Tate (1995) have argued for many years, we cannot deny that racial gaps in education have some kind of relationship with the racial gaps in our communities and how children of color and their families are marginalized. Equity in access to education has a great deal to do with race.

School dropout is an ultimate indication of one's lack of engagement in school and to prevent dropout, one must look at factors of school engagement (Christenson, et al., 2010; Fredricks et al., 2004). Other researchers who have examined the reasons why students do not complete high school have consistently found that students who drop out of school report low connectedness to school, low perceived support by school staff, and have poor attendance (Hunt et al., 2002; Miltich, Hunt, & Meyers, 2004). Christenson and colleagues (2001; 2010) have stated that the one way to prevent students from dropping out of school is to understand why students who drop out disengage from school. The findings of this study lend further support by identifying school connectedness and perceived school support as possible indicators of affective school engagement and attendance as an indicator of behavioral school engagement.

Although, racial identity was not found to be a moderator in the relationship between affective and behavioral engagement, correlations between PSH and IMCI and affective engagement indicate possible influences of racial identity in future more robust studies. This is important given the documentation of a racial disparity in school completion rates in the United States. Thus, understanding the influence of racial identity on school engagement could be influential in closing this gap.

Future Research

Although the CRIS has been deemed the most superior Black racial identity scale to date (Simmons et al., 2008), and a reliable and valid scale to use with middle and high school age students (Gardner-Kitt & Worrell, 2007; Worrell, 2008), no study has conducted a cluster analysis with the CRIS to see if the same profiles found with adults are also present for adolescents. Studies that have examined racial identity profiles amongst adolescents have used outdated rating scales (e.g. Chavous et al., 2003 and Harper & Tuckman, 2006) that leave interpretation of results questionable. Future research in this area should utilize a cluster analysis approach to determine if complex profiles of racial identity attitudes can significantly predict school engagement. A cluster analysis would allow researchers to examine if the racial identity attitudes found to be significant in this study, such as self-hating and multiculturalist attitudes, indirectly influence school engagement and serve as protective or risk factors. For instance, most of the students who participated in this study who rated higher attitudes of self-hatred at ages 18-21 were also enrolled in an alternative high school and typically struggle with attendance. Also, students who reported feeling supported by their teachers, who were mainly White, were also more likely to report multiculturalist attitudes. Further investigation is needed to examine how school engagement and racial identity attitudes are related since the correlational nature of this study was not able to draw any inferences. This study also did not measure the influence of environmental factors, such as school climate and home experiences, which may have a large influence on the racial attitudes of Black students. Dotterer, McHale, and Crouter (2009) have found that home racial-socialization can have an impact on the attitudes Black adolescents hold about their race

and how they cope with racial discrimination. Furthermore, researchers who study appropriate research methodology for diverse groups advocate for a mixed-methods approach (Kamenou, 2007). Fredricks and colleagues (2004) also argue that school engagement researchers need to adopt a mixed-methods approach in order to truly capture the complexity of school engagement. Mixed-methods approaches to research include both qualitative and quantitative approaches to data collection to account for more bias, especially in terms of culture and perspective, and allow researchers to get a more holistic picture of the issue being studied. Thus, examining the influence of home environment as a possible underlying factor to the development of racial identity is another important direction for future research in this area that would be valuable.

Conclusion

This study was conducted with the hope that its results would raise awareness amongst educators that we need to think differently about how we support our Black students in school. Simply focusing on raising test scores and teaching to the test ignores the growing problem: that our Black students have a different school experience than their White counterparts, which is related to how they see their race. With the slashing of school budgets that force schools to cut arts and athletic programs, where Black students typically excel, the incentives for staying in school, despite negative school experiences, becomes increasingly difficult. If anything, the finding from this study showing there might be a relationship between self-hating attitudes and affective school engagement should encourage educators and school staff as a whole to reflect on the cultural relevancy of the practices they are using and how they may be helping, or hindering, our Black students from realizing their academic potential.

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Appendix A

Psychological Sense of School Membership (PSSM) Scale

Instructions: Read each item and indicate to what degree it reflects your own thoughts and feelings, using the 5-point scale below. There are no right or wrong answers. Base your responses on your opinion at the present time. **To ensure that your answers can be used, please respond to the statements as written,** and circle your numerical response below each question using the key below.

1	2	3	4	5
<i>not at all true</i>	<i>not true</i>	<i>neither true or not true</i>	<i>true</i>	<i>completely true</i>

1. I feel like a real part of school.

1	2	3	4	5
---	---	---	---	---

2. People here notice when I am good at something.

1	2	3	4	5
---	---	---	---	---

3. It is hard for people like me to be accepted here.

1	2	3	4	5
---	---	---	---	---

4. Other students in this school take my opinions seriously.

1	2	3	4	5
---	---	---	---	---

5. Most teachers at this school are interested in me.

1	2	3	4	5
---	---	---	---	---

6. Sometimes I feel as if I don't belong here.

1	2	3	4	5
---	---	---	---	---

7. There's at least one teacher or other adult in this school I can talk to if I have a problem.

1	2	3	4	5
---	---	---	---	---

8. People at this school are friendly to me.

1	2	3	4	5
---	---	---	---	---

9. Teachers here are not interested in people like me.

1	2	3	4	5
---	---	---	---	---

10. I am included in lots of activities at this school.

1	2	3	4	5
---	---	---	---	---

11. I am treated with as much respect as other students.

1	2	3	4	5
---	---	---	---	---

12. I feel very different from most other students here.

1	2	3	4	5
---	---	---	---	---

13. I can really be myself at this school.

1	2	3	4	5
---	---	---	---	---

14. The teachers here respect me.

1	2	3	4	5
---	---	---	---	---

15. People here know I can do good work.

1	2	3	4	5
---	---	---	---	---

16. I wish I were in a different school.

1	2	3	4	5
---	---	---	---	---

17. I feel proud of belonging to this school.

1	2	3	4	5
---	---	---	---	---

18. Other students here like me the way I am.

1	2	3	4	5
---	---	---	---	---

Appendix B

Class Life Scale (CLS)

Instructions: Read each item and indicate to what degree it reflects your own thoughts and feelings, using the 5-point scale below. There are no right or wrong answers. Base your responses on your opinion at the present time. **To ensure that your answers can be used, please respond to the statements as written,** and circle your numerical response below each question using the key below.

1	2	3	4	5
<i>never</i>	<i>once in a while</i>	<i>sometimes</i>	<i>often</i>	<i>always</i>

1. Other students in this school think it is important to be my friend.

1	2	3	4	5
---	---	---	---	---

2. In this school, other students like me the way I am.

1	2	3	4	5
---	---	---	---	---

3. Other students in this school care about my feelings.

1	2	3	4	5
---	---	---	---	---

4. Other students in this school like me as much as they like others.

1	2	3	4	5
---	---	---	---	---

5. In this school, other students really care about me.

1	2	3	4	5
---	---	---	---	---

6. Other students in this school want me to do my best schoolwork.

1	2	3	4	5
---	---	---	---	---

7. In this school, other students like to help me learn.

1	2	3	4	5
---	---	---	---	---

8. In this school, other students care about how much I learn.

1	2	3	4	5
---	---	---	---	---

9. Other students in this school want me to come to school every day.

1	2	3	4	5
---	---	---	---	---

10. My teachers really care(s) about me.

1	2	3	4	5
---	---	---	---	---

11. My teachers think(s) it is important to be my friend.

1	2	3	4	5
---	---	---	---	---

12. My teachers like me as much as they like other students.

1	2	3	4	5
---	---	---	---	---

13. My teachers care about my feelings.

1	2	3	4	5
---	---	---	---	---

14. My teachers care about how much I learn.

1	2	3	4	5
---	---	---	---	---

15. My teachers like to see my work.

1	2	3	4	5
---	---	---	---	---

16. My teachers like to help me learn.

1	2	3	4	5
---	---	---	---	---

17. My teachers want me to do my best in schoolwork.

1	2	3	4	5
---	---	---	---	---

Appendix C

Cross Racial Identity Scale (CRIS)

Not Published Due to Copyright

CURRICULUM VITAE

EDUCATION

- Ph.D. University of Wisconsin-Milwaukee, Urban Education with Specialization in School Psychology and Minor in Psychology, anticipated graduation May 2014
- M.S. University of Wisconsin-Milwaukee, Educational Psychology, May 2007
- B.S. University of Pittsburgh, Pittsburgh, PA, Honors Psychology and certificate in American Sign Language, December 2003

AWARDS AND HONORS

- 2003 Summa Cum Laude
- 2002 Undergraduate Research Fellowship Award for senior thesis research

PROFESSIONAL EXPERIENCESTeaching Experiences

- 2013- *Part-time Instructor, Alverno College, Dept. of Psychology: Courses Behavioral Science Research Methods (BSC 255) and Probability and Statistics for Nurses (BSC 257). Instructed students in how to write using APA format, conduct literature reviews of existing research, design experimental research studies, and analyze and understand statistics.*
- 2006-2007 *TA, UW-Milwaukee, Dept. of Educational Psychology: Courses EDPSY 755, EDPSY 760, and EDPSY 852, cognitive, alternative, and personality assessment. Graded protocols and met with students.*

Practitioner Experiences

- 2013- *School Psychologist: Violence Prevention Program (VPP) for Milwaukee Public Schools. VPP is a district-wide team that consults with schools for support in implementation of research-based programs. The VPP team also provides professional development to teachers and support staff regarding trauma informed care, restorative practices, and social-emotional learning. Duties include school-wide presentations on topics related to trauma sensitive schools and data collection to assess the effectiveness of consultation with school staff.*
- 2009-2013 *School Psychologist: Alternative high school for African American and incarcerated students in Milwaukee Public Schools focusing on culturally*

responsive and innovative education. Duties included individual and small group intervention, consultation with staff regarding academic intervention, meeting with staff to discuss and solve student behavioral issues, providing professional development to school staff regarding cultural sensitivity, student motivation, behavioral support, academic intervention, and trauma sensitive instruction.

- 2007-2008 *Field Practicum:* Elementary school in Milwaukee Public Schools. Duties included collaborating with educators and education professionals to implement evidence-based intervention strategies, monitor progress of intervention goals, complete comprehensive assessments for a variety of referral concerns, and conduct regular individual and group therapy sessions for referred students.
- 2006-2007 *Psychometrician:* Child Neuropsychology Clinic at the Medical College of Wisconsin. Duties included working under the direction of clinical psychologists to complete assessment batteries for a variety of referral concerns including: epilepsy, learning disabilities, brain trauma, and Attention Deficit Hyperactivity Disorder (ADHD).

Research Projects

- 2009-2013 *Dissertation:* Title- *Examining the relationship between affective school engagement and behavioral school engagement among Black high school students: Do Black racial identity attitudes make a difference?* Conducted a survey study to examine how racial identity attitudes influence factors of school engagement for African American high school students.
- 2008-2009 *Research Team Participant:* conducted a meta-analysis with a team of school psychology graduate students to examine manuscripts published in school psychology journals that address multicultural issues.
- 2005-2008 *Project Assistant for implementation of the Self-Regulation Empowerment Program (SREP):* self-regulation intervention implemented at an urban high school. Responsibilities included facilitating intervention groups with 9th grade students, collaborating with classroom teachers, and attending weekly planning meetings with the research team.
- 2005-2006 *Research Assistant for the Center for Math and Science Education Research at the University of Wisconsin-Milwaukee:* multi-million dollar grant received from the National Science Foundation to conduct research in the area of equity in teaching instruction for the subjects of math and science in urban public schools. Responsibilities included documenting

meetings and events, and assisting the principal investigator with administrative duties.

2004-2005 *Research Associate for the Behavioral Medicine Research Group at the University of Pittsburgh: large cardiovascular research study examining the benefits of using anti-depressants to treat stress to improve cardiovascular health. Responsibilities included conducting structured clinical interviews with research participants to diagnose possible Axis I disorders from the DSM-IV-TR under the supervision of a clinical psychologist.*

Leadership

2007-2008 *School Psychology Student Association, UW-Milwaukee, President*

2007-2008 *Multicultural Connections for School Psychologists, UW-Milwaukee, Advisory Board Member*

2006-2007 *School Psychology Student Association, UW-Milwaukee, Vice-President*

2001-2002 *Resident Student Association, University of Pittsburgh, President*

2000-2001 *Resident Student Association, University of Pittsburgh, Board Member*

Membership in Professional Organizations

2006- *National Association for School Psychologists, member*

2008- *Wisconsin School Psychology Association, member*

2006-2008 *American Psychological Association (Division 16), student affiliate member*

2007-2008 *Social Justice Special Interest Group, National Association for School Psychologists, committee member*

PUBLICATIONS

Book Chapters

Ellison, P. A. & Nelson, A. C. (2009). Brain development: Evidence of gender differences. In E. Fletcher-Janzen (Ed.), *Women in Neuropsychology* (pp. 11-30). New York, NY: Springer Science + Business Media.

Nelson, A. C. & Ellison, P. A. (2009). The neuropsychology of dyslexia: Differences by gender. In E. Fletcher-Janzen (Ed.), *The Neuropsychology of Women* (pp. 131-143). New York, NY: Springer Science + Business Media.

Manuscripts Published in Peer-Reviewed Journals

Cleary, T. J., Platten, P. M., & Nelson, A. C. (2008). Effectiveness of the Self-Regulation Empowerment Program (SREP) with urban high school students. *Journal of Advanced Academics*, 20(1), 70-107.

Professional Newsletters

Sarr, B. J., Nelson, A. C., & Von Der Embse, N. (2007). School psychologists join to advocate for social change in schools. *Communique*, 36(4).

Nelson, A. C. (2008). The Impact of Zero Tolerance School Discipline Policies: Issues of Exclusionary Discipline. *Communique*, 37(4).

Gubi, A., Platten, P., & Nelson, A. (2008). Motivating students: School Psychologists as motivational change agents. *Communique*, 37(4).

NATIONAL PRESENTATIONS

Platten, P. M., Nelson, A. C., & Cleary, T. J. (2008). *Effects of the Self-Regulation Empowerment Program (SREP) on Academic Performance*. Poster presentation at the annual convention for the National Association of School Psychologists, New Orleans, LA.

Cleary, T. J., Platten, P. M., & Nelson, A. C. (2007). *Implementation of the Self-Regulation Empowerment Program (SREP) in Urban Schools*. Poster presentation at the annual convention for the National Association of School Psychologists, New York, NY.

LOCAL PRESENTATIONS

Nelson Christensen, A. C. (2011). School Psychology and Social Justice. Presentation to UW-Milwaukee school psychology graduate students. Milwaukee, WI.

Nelson, A. C. & Madrid, M. (2007). Assessment of Racial Identity. Presentation at the annual UW-Milwaukee School of Education Research Forum. Milwaukee, WI.