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## **Beyond Grades: The Impact of Race And Academic Disidentification on Social Functioning and Academic Outcomes Among At-Risk High School Students**

Brian K. Colar  
*University of South Carolina*

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BEYOND GRADES: THE IMPACT OF RACE AND ACADEMIC DISIDENTIFICATION ON  
SOCIAL FUNCTIONING AND ACADEMIC OUTCOMES AMONG AT-RISK HIGH  
SCHOOL STUDENTS

by

Brian K. Colar

Bachelor of Science  
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Submitted in Partial Fulfillment of the Requirements

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Accepted by:

Mark Weist, Director of Thesis

Melissa George, Reader

Lacy Ford, Senior Vice Provost and Dean of Graduate Studies

## DEDICATION

I would like to dedicate this project to the living memory of my father, Floyd and the ongoing excellence and perseverance of my mother, Joetta. Without their sincere love, selfless pursuits, and commitment to my education and well-being, none of my accomplishments would be possible. Lastly, I dedicate this work to the living memory of Dr. Kendra Ogletree-Cusaac; her mentorship enabled me to dig deeper, reach higher, and become a better human being. She will always remain a beacon of light guiding my path.

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## ABSTRACT

An extant literature has supported the notion that black students perform poorly in comparison to white students on frequently used indicators of academic functioning, known as the academic gap between races. Although previous studies have identified this academic inequity between White and Black high school students, there is a dearth of literature examining the context and processes which may contribute to this gap. The current study further examines this educational disparity by evaluating the role of students' social functioning, the impact of race, and academic outcomes among at-risk high school students. Although analytical evidence reports a positive correlation between social skills and academic outcomes, very few investigators have evaluated this relationship in tandem with race. This study seeks to investigate the validity of that relationship with specific regard to Black and White students with emotional and behavioral concerns. Although individuals functioning at high social levels have been found to have academic success, it is posited that this relationship may be dependent on student race. Furthermore, research purports that Black students who encounter negative perceptions and interactions within academic settings (e.g., teachers) have been found to be more susceptible to *disidentify* and disengage from educational achievement. This hypothesis suggests an inverse relationship exists between academic outcomes and social functioning for Black students. Results indicated that race and social functioning had a significant relationship with academic outcomes. Interestingly, despite receiving more

punitive academic-related associations, Black students were more cognitively engaged.

Implications of disidentification will be discussed.

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## LIST OF ABBREVIATIONS

|           |                                     |
|-----------|-------------------------------------|
| AO.....   | Academic Outcomes                   |
| ATT.....  | Attitude Toward Teachers            |
| CE.....   | Cognitive Engagement                |
| CRSW..... | Control and Relevance of Schoolwork |
| EBD.....  | Emotional-Behavioral Disorder       |
| EM.....   | Extrinsic Motivation                |
| FG.....   | Future Aspirations and Goals        |
| LD.....   | Learning Disability                 |
| PD.....   | Physical Disability                 |
| PRS.....  | Parent Report Scale                 |
| SRP.....  | Self-Report Scale                   |
| SE.....   | Student Engagement                  |
| SF.....   | Social Functioning                  |
| TSR.....  | Teacher-Student Relationship        |

## **CHAPTER 1**

### **INTRODUCTION: THE ACHIEVEMENT GAP**

Using academic achievement as markers of success, many school-aged children are not succeeding in today's schools. For example, a study conducted by McClelland, Morrison, and Holmes (2000) revealed that many adolescents in the US are not obtaining appropriate skills in vocabulary, mathematics, and reading. However, this trend is particularly interesting when examined by race. Although both Black and White students have concerns regarding academic achievement, what is more puzzling is the disparity between the two groups. Despite the history of educational inequality in the US, the academic gap has shown marginal improvement at best.

Although the verdict of *Brown v. Board of Education* in ruling in 1954 was a momentous occasion, eradicating many barriers, some researchers may argue that educational disparities have only worsened. Similarly, performance-related inequities remain persistent and diverse in academic environments in the US (see Ladson-Bilings, 2006; Donovan & Cross, 2002; Wald & Losen, 2007). In 1973, the National Center for Education Statistics began studying this difference with a nationally representative sample of 9, 13, and 17-year old students. This study produced staggering results indicating White students consistently bested Black students at every time point in the 30-year study (Campbell, Hombo, & Mazzeo, 2000).

Pervasive racial disparities still exist in the US education system and are reflected in academic achievement indicators such as test scores, grade retention, drop-out, and graduation rates. Additionally, these discrepancies have been identified in behavioral markers of adjustment including disciplinary actions, suspensions and expulsions from schools (American Psychological Association [APA] Presidential Task Force Report, 2012). Across these indicators, the academic gap found in secondary education suggests that Blacks are academically underperforming. Blacks are less likely to graduate from high school and more than twice as likely to dropout (US Department of Education, 2013). According to several researchers, the graduation rate for Black adolescents increased a meager 2% from 1988 to 2001 (Greene & Winters, 2002; Martin, Martin, Gibson, & Wilkins, 2007). Similarly, the Education Trust reported that 61% of Black students received marks below the basic standards on an eighth grade assessment of math skills compared to 21% of their White peers. By the end of high school, African American students' math and reading scores were comparable to White eighth graders (Hoffman & Llagas, 2003). Within this academic disparity, race appears to be the most influential factor.

One study in particular conducted by Vanneman et al., (2009) assessed 4<sup>th</sup> grade mathematics at the state level; 67% of the states accounted for in this study failed to narrow the Black and White achievement gap compared to 1992. At the 8<sup>th</sup> grade level, the academic gap pertaining to Mathematics existed in all 41 applicable states. Similarly, a comparable trend existed for reading scores at the state level. For 4<sup>th</sup> grade reading, all states surveyed noted gaps in scoring between races. For 8<sup>th</sup> grade reading, 98% of the states surveyed reported achievement gaps.

Academic performances in high schools across the US remain extremely important for subsequent development across the lifespan. High school graduation has strong implications for socioeconomic potential and health outcomes (Heckman & LaFontaine, 2010). Despite the negative trajectory associated with high school dropout, many Black students are not accomplishing this task. For example, Black students rate of graduation is around 50%, compared to 75% for White students (Gordon, 2004). However, the assessment of purely academic outcomes do not account for important contextual influences which can impede or enrich a student's academic performance. In the US, Black youth often are found in large, urban schools that have a disproportionate concentration of low socioeconomic status. In many of these school systems, academic achievement and graduation percentages are far lower than the national average (Baker, 2005). These students have been found to be at greater risk for a host of adverse outcomes such as elevated rates of suspension, expulsion, special education assignment, absenteeism, and academic failure (Ferguson, 2003).

Interestingly, the General Education Development (GED) test was identified as possessing similar cognitive components as a high school diploma (Heckman, 2010). However, attainment of a high school diploma versus a GED depicts very different financial and social outcomes. Individuals with the lesser diploma (GED) on average receive less financial compensation. Furthermore, Black males are being awarded GEDs at almost twice the rate as White males (Heckman, 2010) with a substantial amount being awarded to black males who are incarcerated. Black men account for 22% of all GED credentials awarded to inmates compared to 5% of Whites (Heckman, 2011). Even more

unfortunate, Western and Pettit (2000) found that in the late 1990s, one-third of Black male high school dropouts were in prison.

As graduation rates are currently on the decline (Chaplin, 2002; Miao & Haney, 2004), Blacks high school graduates are less likely to enroll and graduate college (Aud et al., 2010; Kane 1998; Massey et al. 2003; Vars and Bowen 1998). As such, Black college students graduation rate from 4-year colleges is 20% lower than White students (US Department of Education, 2005; Cokley, 2007). Lastly, the impact of the disproportionate academic gap has been linked to health outcomes. The intersectionality of race and educational attainment has been connected to increased rates of mortality and decreased wellbeing for Blacks (Montez, 2011).

Collectively, the impact of educational disparities as they relate to the academic gap, are debilitating. Therefore, the magnitude of this crisis cannot be overemphasized. Despite the significant attention the achievement gap has received from researchers, policy makers, educators, and parents (Skiba et al., 2011), the margins of educational inequity have not been shortened. Moreover, this disparity has been identified as the most urgent education-policy challenge the US is up against (National Governors' Association, 2005; see Individuals with Disabilities Education Improvement Act of 2004; No Child Left Behind, 2008). As more and more adolescents continue to suffer academically, politicians and private organizations have exhorted educators to make the necessary advancements to close the gap and put an end to this educational bane.

## **RELEVANT THEORIES ON THE ACADEMIC GAP**

The Black and White achievement gap is not a straightforward matter. As scholars have worked to create and solidify theories that elucidate the academic performance deficit, some prominent perspectives have emerged. One in particular, asserts that Blacks come from broken homes and are attracted to criminal lifestyles and violence (Cosby and Poussaint 2007; Ogbu 2003; Valencia 1997). This ideology stems from the work of Ogbu (1987) where he theorizes minorities' subconsciously resist assimilation in an attempt to preserve their culture. Interestingly, this body of literature adheres to the belief that Blacks do not inherently value education. As a result, they disengage from academia for fear of *acting white* (1987, 2003, 2004).

Notably, several researchers presented findings to refute the “fear of acting White” perspective. Research investigating Black adolescents' perceptions of their environment in “high-risk” neighborhoods found that participants were aware of the environmental obstacles in their neighborhood, but still expected to perform well academically (Chavous et al., 2003; Chavous et al. 2008; Cunningham, 1999). In addition, Cokley (2003), Ford (1993), Lovaglia et al., (1998), and Whaley (2011) contested that in historical and modern times, education has remained an essential facet of Black life in America. Likewise, education has been perceived as a tool to change one's vocation and eradicate various forms of oppression. Additionally, Blacks who excel in academia have been and continue to be held in high-esteem amongst their community (Nobles, 1988; Perry, Steele, & Hilliard, 2003; Sanders, 1997).

Others investigators theorize social psychological factors (e.g., inequity, anomie, and discrimination) contribute to subpar academic outcomes (Jencks & Phillips, 1998;

Nisbett, 2009). For example, psychological threat related to prejudice or stereotypes were believed to contribute to the academic disparities within education (Steele, 1997, 2010; see also Cohen & Garcia, 2008; Nisbett, 2009; Walton & Cohen, 2007). One notable theory from the social psychological framework is *stereotype threat*. Steele (1997, 1999) suggested marginalized individuals who perceived threat in areas where members of that underrepresented group were thought to be inferior, may perform under increased duress and inadvertently confirm the stereotype. Particularly, for Black students, school settings can be increasingly arduous and debilitating due to stereotypes about the intelligence of their race (Steele, 1995; 2002; Aronson, 2002). Counterintuitively, this framework suggests the most intelligent Black students are the most susceptible to confirming this threat (see Steele: 1997; 2003).

Research has shown that as a culture, African Americans value education. Data gathered from the National Education Longitudinal Study (NELS) suggested that African American students possessed more positive attitudes regarding education compared to Asian American, Hispanic, and White peers (Lundy & Firebaugh, 2005). However, there appears to be some discrepancy between high regard for good grades and actual attainment of those desired academic outcomes. Interesting, based on SAT scores, the statistical ranking was quite different: Asian American, White, Hispanic, followed by Black students (Lundy & Firebaugh, 2005).

Despite having positive attitudes and expectations regarding academic outcomes, Black students are not receiving marks equivalent to their White classmates.

*Disidentification theory* (see Osbourne, 1999; Cokley, 2003) may be able to shed additional light on this quandary. This theory asserts that Black students underperform in

academia – in part to the debilitating effect of stereotypes held by educators’ regarding their ability, but also due to the negative treatment associated with prejudice and cultural misunderstanding. Disidentification theory suggests students remove their identity from their academic outcomes. As such, these students also feel their grades may not be adequate measures of their academic ability due to racialized perceptions, stereotypes, or just unfair treatment. In theory, despite having poor grades, adolescents demonstrate confidence and skill in other less self-injurious areas.

Research suggests the power of perception and racialized treatment for students, especially minorities, can alter a student’s academic mindset. Given this, disidentification is protective against racialized treatment (actions and responses toward someone based on their race) such as perceived stereotypes, negative academic expectations, and beliefs about social ethnic inequalities (Aronson, 2002; Crocker & Major, 1989; Schmader, Major, & Gramzow, 2001; Steele, 1997). One important facet of disidentification is that it may be beneficial in and outside the classroom. For example, racialized treatment within school settings and the larger society adversely affects African American students’ motivation and scholastic goals (Brown & Jones, 2004; Mattison & Aber, 2007). Stereotypes and stigma not only impact students of color who receive poor grades, but also those who excel academically (Osborne & Walker, 2006).

Regardless of academic ability, prejudicial attitudes and subsequent treatment based on those perceptions can be detrimental to future educational success. Studies have shown an association between African American adolescent’s reported incidents of racialized discrimination in school settings and decreased self-esteem (Fisher et al., 2000), increased mental distress (Scott, 2003), increased psychological problems and

decreased academic motivation (Wong et al, 2003). By disidentifying from academic outcomes, Black students are able to navigate other domains of their life without unilaterally applying the detrimental messages received related to their academic performance.

Disidentification theory has been supported for Blacks with regard to academic outcomes (Cokley et al, 2012; Cokley, 2002; Osborne, 1997). One reason is apparent bias; Black students who perceived their academic environment as unfair or racially biased were more likely to endorse beliefs purporting that the education they receive is not beneficial (Brown & Jones, 2004). Disidentification theory provides a theoretical framework for conceptualizing the examination of processes underlying variables that impact academic outcomes, such as those investigated in the current study the role of social skills on academic outcomes.

## **CHAPTER 2**

### **SOCIAL FUNCTIONING AND ACADEMIC OUTCOMES**

As research has illustrated, one's academic ability is not a fixed entity, but rather is quite malleable. It is plausible that a student's academic development may be influenced by factors beyond individual aptitude. Therefore, the academic gap may be the product of a myriad of factors such as socioeconomic status (SES), social functioning, interpersonal and environmental characteristics. Academic competence is not only socially situated, but places heavy emphasis on interpersonal supports and assistance of other people (Newman, 1991). Notably, deficits in social functioning in children can negatively impact social, behavioral, and academic progression (Boivin et al., 2001; Coie, 2004; Crick & Dodge, 1994; Patterson, 1982).

In an attempt to close the academic gap and the social inequities caused by this disparity, the federal government created "No Child Left Behind" legislation and state proficiency testing - allocating monies aimed at improving social and academic skills within this population (Martin, Martin, Gibson, & Wilkins, 2007). Social functioning has been readily believed to be highly desirable with many social and academic benefits. The ability to function in socially productive manners requires certain qualities of an individual's behavior which facilitate the adaptability to excel in many social situations (Steadly, Schwartz, Levin, & Luke, 2008). Still, building upon that definition, social functioning has been considered as a set of skills which a) allows one to create and

sustain strong social relationships, b) positively influence peer relationships and to sufficiently academically adjust, and c) allow an individual to successfully interact within the broader societal constraints (Walker, 1983). Similarly, Gresham and Elliot (1990) defined social skills as learned behaviors which allow an individual the ability to create and maintain positive social interactions and behavioral regulation. In summation, social functioning can be described as the capacity to positively build and influence peer relationships, in a manner which is socially accepted and positively associated with academic achievement.

Social functioning has been linked to the promotion of social networks which positively influence academic outcomes (Bandura, 2000) and have a profound impact on academic success (Bandura, 1996; 2000). However, it is important to make a clear distinction of social functioning as it is not merely the absence of maladaptive behavior. While the two constructs are similar, they are distinctly different (Ladd, Herald, & Kochel, 2006). Notably, if social functioning was simply the absence of antisocial behavior, there may not be unique associations to this ability (Berry & O'Connor, 2010). One example of this relationship is that students with higher social functioning had more positive peer relationships and greater academic outcomes (Birch & Ladd, 1997; Dodge, 1983; National Educational Goals Panel, 1995; Vitaro, Gagnon, & Tremblay, 1990). In addition, social functioning has been linked to numerous important constructs such as: improved academic settings, enhanced competence, and supportive social networks (Bandura et al., 1996b; Pajares, 1997; Schunk, 1989; Zimmerman, 1990).

Research continues to suggest that social functioning is a significant predictor of academic outcomes. Behavioral components of academic adjustment have often been

examined highlighting the importance of student's social skills as a primary predictor of academic achievement (Malecki & Elliot, 2002). Although the research examining the importance of social functioning within academic settings for at-risk youth is limited, some explorations have demonstrated that social functioning in adolescence impacted adjustment to academic settings and scholastic performance (Alexander, Entwisle, Dauber, 1993; Cooper & Farran, 1988, 1991; Ladd, 1990). Furthermore, many studies examining the benefits of social functioning have not readily examined this construct in tandem with academic outcomes among diverse student populations. The connection between social functioning and problem behaviors may change across ethnicity (Malecki et al, 2002). For example, Agostin and Bain (1997) reported White students had more academic ability than their Black counterpart, but fell behind in Math due to inadequate social skills. In addition, children who socially function at lower levels, perform worse academically compared to their high socially functioning peers (McClelland, Morrison, & Holmes, 2000). Therefore, social functioning likely plays a key role in predicting academic outcomes; however little is known about the role of race in these associations for high school aged youth.

#### **SOCIAL FUNCTIONING AMONG YOUTH WITH EMOTIONAL-BEHAVIOR DISORDERS**

According to the *Diagnostic and Statistical Manual 4<sup>th</sup> Edition* (2000), emotional or behavioral disorders (EBD) can be characterized as, (a) externalizing behaviors (constitute an *acting-out* style which can be described as aggressive, impulsive, coercive, and noncompliant); (b) internalizing behaviors (a type of inhibition which is withdrawn, lonely, or anxious). During adolescence, social and behavioral abilities are believed to affect learning capacity, classroom, and social dynamics. In fact, Gresham (2002) posited

the primary reason children are referred and diagnosed with EBD is due to their social functioning insufficiencies. Subpar social skills may lead to social exclusion and various academic difficulties (Duncan et al., 2007), which may inhibit academic engagement (Ladd et al., 1999; Pianta & Stuhlman, 2004).

Academic and social trajectories of students with EBD are quite bleak as they have more frequent failing grades and increased delinquent behavior (Sutherland, 2008). Students with EBD often struggle to create social relationships, acquire social skills, and often face peer rejection (Gresham et al., 2004; Cummings et al., 2008). Possessing limited social functioning, these deficits may lead to short and long term academic difficulty (Kupersmidt, Coie, & Dodge, 1990; Gresham et al., 2004). Research has shown that students with EBD may progress slower through academic curriculums compared to their peers (Anderson et al., 2001; Southerland et al, 2008). Students with EBD display problematic patterns which negatively impact their learning and behavior in school settings (Kauffman, 2005). Studies have reported significant reading deficits among children with EBD. One study purported that 54% to 85% of their sample were reading below their respective grade (Greenbaum et al., 1996) and another reported 83% of their children with EBD performed below the normative range on a standardized reading assessment (Nelson et al., 2004). Unfortunately, most children with EBD continue to underperform their non-EBD peers throughout their school years.

Once in high school, they perform 3.5 grade levels behind their peers (Coutinho, 1986; Ryan et al., 2004). In addition, they have higher rates of unemployment, mental health issues, greater rates of incarceration, and limited social support (Bradley, Henderson, & Monfore, 2004). Studies suggest 58% of students with EBD are arrested

within 5 years of leaving school, and 73% dropout (Wagner, 1995). These concerns continue into adulthood, where they often demonstrate increasingly poor social functioning and struggle with unemployment (Serpell, 2009).

Once in high school, kids with EBD may have an increasingly difficult time – both academically and socially. As a result, graduation rates for this population are low. Evidence suggests that over 50% of these students withdraw from school (US Department of Education, 2004). The pervasiveness of academic achievement and students with EBD has been studied (Mattison, Hooper, & Glassberg, 2002; Mattison et al., 1998). Results indicated deficiencies ranged from 25% to 97% of students with EBD (Reid et al. 2004). Likewise, school-aged youth frequently dealt with a range of varying educational challenges (Nelson, 2004), such as failing grades, grade retention and dropout (Locke & Fuchs, 1995; Ryan et al, 2004).

Children with EBD who drop out of school often maximize their problems. Lacking appropriate social functioning and cognitive skills required to acquire and maintain employment. According to D’Amico et al., (1991), 52% of this population is unemployed 4-years after high school. Exclusive efforts have been applied to increase their academic outcomes (Lane, 2004). However, focusing solely on academic skills may not produce long-term gains in a either academic achievement or behavior (Ryan, 2004).

## **CHAPTER 3**

### **RACE AND ACADEMIC OUTCOMES**

Race may be an important component underlying scholastic achievement and though recognized as an individual factor impacting academic functioning, as often characterized by the “academic gap,” it is often neglected when researchers examine the associations between other risk factors for school dropout, such as social functioning, and school success. Clarifying the multiple influences related to race that impact school functioning and indicators of academic performance and school success is critically important for understanding how race may impact scholastic achievement.

Black adolescent students are often denied access to quality education, lower academic expectations (Harry & Klinger, 2006), and indicated receiving greater frequencies of racialized treatment within an academic setting (Thomas, 2009). The impact of this type of prejudice faced by minority students may extend beyond grades. This discrimination can manifest as one receiving poor evaluations or lower marks from teachers and more severe punishment as a result of their race (Fisher, Wallace, & Fenton, 2000; Greene, Way, & Pahl, 2006; Romero and Roberts, 1998). Consequently, Black students are oversampled in special education classes and expulsion (Pollard, 1993) and referrals (Skiba, 2002). This type of racial biases identified in school disciplinary

practices are evidence of ongoing institutional racism (Hannssen, 1998) or structural inequity in education (Nieto, 2000).

Generally, the purpose of disciplinary sanctions is to maintain order and safety through behavioral disciplinary action and exclusion of students who are perceived to be unruly and in violation of school conduct. In addition, punishments are meant to deter future unwanted behavior (Arcia, 2006). However, this strategy has frequently produced disproportionately negative results for Black students (Skiba & Nogoera, 2010). With over three decades of research, Skiba et al., (2011) reported that Black students have consistently received more suspensions and expulsions compared to their White classmates. Such penalties can include longer suspensions, detentions, and disciplinary referrals. Research has consistently identified disproportionate use of race in school suspensions (Costenbader and Markson, 1994, 1998; Glackman et al., 1978; Gregory, 1997; Kaeser, 1979; Lietz and Gregory, 1978; Massachusetts Advocacy Center, 1986; McCarthy and Hoge, 1987; McFadden, Marsh, Price, and Hwang, 1992; Nichols, Ludwin, and Iadicola, 1999; Skiba et al., 1997, 2002; Streitmatter, 1986; Taylor and Foster, 1986; Thornton and Trent, 1988; Wu et al., 1982), and has steadily increased since the 1970s (US Department of Education for Civil Rights, 2002) with Black students having the highest frequency of overrepresentation (Advancement Project/Civil Rights Project, 2000).

Suspensions can also negatively impact academic outcomes. Frequent suspensions can drastically increase the risk of academic underperformance (Skiba & Noguera, 2010). In addition, suspension is associated with late graduation and withdrawal from school (Mendez, 2003). This is important because time away from school can

diminish motivation related to academic achievement, cognitive engagement (Skiba et al, 2010). Importantly, research has identified a strong positive relationship between time engaged in academic activities and student achievement (Greenwood, Horton, & Utley, 2002.) Research on school suspension has shown students who receive free school lunch, low SES are at an elevated risk for suspension (Skiba, 2002). Similarly, Wu et al., (1982), found that children whose fathers did not work full-time jobs were more likely to be suspended compared to students' whose fathers were employed full-time. Still, low SES can negatively impact other academically-related outcomes.

Most referrals start in the classroom and more frequently, students of color who are socioeconomically disadvantaged receive the bulk of these sanctions. However, this is not a new development in school discipline research. For over 25 years, research has consistently found evidence of racial and economic discrepancies (see Children's Defense Fund, 1975; McCarthy and Hoge, 1987; Skiba, Peterson, and Williams, 1997; Thornton and Trent, 1988; Wu, Pink, Crain, and Moles, 1982). Research has found differential treatment of Black children compared to Whites. For example, Black students receive more referrals that are subjective in interpretation; 40% of these students who received referrals were based on subjective interpretation of disrespect. For example, White students were more likely to receive behavioral referrals for smoking, leaving without permission, and vandalism; Black students received referrals for excessive noise, threat, and disrespect (Skiba et al., 2002). For example, a student who hits another student has committed a physical act of aggression against a classmate. While causation can be argued, the physical act cannot. However, importantly, what one teacher perceives

as disrespect or combative may actually have more to do with teacher interpretation, not student intention.

Frequent racialized experiences can have cumulative effects on students of color. If Black students believe their academic experience is related to prejudice or discrimination, they are more likely to have lower grades and drop out of school (Mattison & Aber, 2007). Given the evidence of the racialized treatment Black students endure, they may require additional or atypical reasoning to remain cognitively engaged in academic environments.

African American college students' fundamental motivation to learn was linked to their self-esteem but not their academic self-concept (Cokley, 2003). This in part, suggests there may not be an association with their self-esteem and academic identity. Similarly, Whaley (2012) suggests that Black students make a distinction between learning and academic achievement. This contends that Blacks may be able to learn in educational settings in spite of racism and prejudice.

## **RACE AND EMOTIONAL-BEHAVIORAL DISORDERS**

In the two decades there has been a substantial scarcity of research on emotional-behavioral disorders (EBD) across cultures. With little improvement in several decades (Bradley, Dolittle, & Bartolotta, 2008; Wagner, Newman, & Cameto, 2004), students with EBD report the worst educational, social, and behavioral outcomes of any group with disabilities (Oshe, Woodruff, & Sims, 2002). Distinctively, Black students are at the bottom of this group comparison. For instance, Sitlington and Carson (1995) reported that students with EBD have more failed courses, grade retention, and lower passing

percentages on competency tests than students with other disabilities. In particular, only 28% of Black students with EBD graduate from high school and more than half withdraw from school (Blackorby & Wagner, 1996).

Still, research has indicated a severe over-identification of students as EBD from diverse backgrounds (Chakraborti-Ghosh et al., 2010). Moreover, they are identified at an increased rate for special education services. Although they account for 17% of the school-aged population, Blacks comprise 33% of students identified with some mental handicap (Donovan & Cross, 2002) and are twice as likely to be identified for special services compared to White students (Skiba & Noguera, 2010). Within school settings, Blacks who stand out from their group are more likely to be identified for EBD even though their behavior is akin to their White peers (Oswald et al, 2002; Chakraborti-Ghosh et al., 2010). Since 1960, Blacks are 2-3 times more likely to be identified with a stigmatized disability that infers diminished capacity for educational and behavioral outcomes (NRC, 2002). Interestingly, Blacks were found to be more likely to receive placement in a restrictive academic environment compared to White students with the same disorder (Skiba, 2006). Research has attributed these inequalities to racial bias, institutional racism, stereotypes, and inequitable discipline policies (Lehr & McComas, 2006).

#### **RATIONALE FOR THE CURRENT STUDY**

Emotional disturbances are frequently linked to academic difficulty, problematic behavior (Kehle et al., 2004), and academic failure (Cullinan, Osborne, & Epstein, 2004). Still, social functioning has been found to be predictive of improved educational

outcomes (Malecki, 2002), with a tendency for lower social functioning students to be from poorer socioeconomic environments and receive lower scores on measures of academic achievement (McClelland, 2003).

Several studies have shown a relationship between prosocial and in-class behavior and school achievement (DiPerna & Elliott, 1999; Feshbach & Feshbach, 1987). Investigations on the relationship between engagement and academic achievement have been relatively reliable. In grade school, attentiveness and responsiveness are positively associated with scholastic outcomes (Attwell, Orpet, & Meyers, 1967; Cobb, 1972; Malecki, 2002) and this correlation continues throughout middle and high school (Walton & Cohen, 2011). Similarly, appropriate levels of social functioning and cognitive engagement are a predictor for positive academic achievement (Malecki, 2002). Conversely, research in school settings has demonstrated that minority students do not cognitively engage at comparable levels as their White counterparts in learning-related activities (Finn, Fblger, & Cox, 1991; Finn, Pannozzo, & Voelkl, 1995; Lamborn, Brown, Mounts, & Steinberg, 1992). Moreover students who were less cognitively engaged in the classroom, had increased difficulty adhering to rules or with the teacher, and scored lower on standardized cognitive achievement exams (Bronson et al., 1995). Not surprisingly, these students had more risk factors [(i.e, family problems, lower parental education, and EBD) McClelland, 2000].

With varying levels of utility, research pertaining to the academic gap has provided some important theoretical frameworks. However, the academic gap persists. Although the current study examines this educational disparity with a very specific demographic, it is possible the results may elucidate a broader picture. The academic gap

suggests Blacks underperform compared to their White counterparts on markers of achievement. Students' perceptions and beliefs surrounding their academic achievement may play a key role in examining how social functioning is related to academic outcomes. As such, students with high levels of social functioning were found to have high levels of academic success through its connection with academic behaviors (Wentzel, 1993). According to this finding, social functioning may have the ability to offset a host of risk factors and predict academic success. Importantly, social functioning has important benefits, not only to one's self-esteem, but academically as well. In contrast, academic disidentification suggests that Black students disengage academically and may exhibit high social skills in response to academic markers which they believe are unfairly biased and not true representations of their academic aptitude (see Cokley, 2003; 2012). Employing the disidentification framework, we seek to investigate the relationship between social functioning, race, and academic outcomes.

Although the ability to effectively navigate one's social environment is a significant indicator of academic achievement and psychosocial development (Ladd, 1999), social functioning in isolation does not effectively address the academic gap. The current study hypothesizes that social functioning may impact academic success for some groups and not others dependent on race. The relationship between social functioning and academic outcomes may depend on various contextual classroom cues.

Data for the study was collected from the Center for Adolescent Research in Schools (CARS) study, a multi-site randomized controlled trial across fifty high schools in five states, exploring the impact of student- and classroom-level factors on student

emotional/behavioral and academic outcomes among at-risk high school students.<sup>1</sup> This study examines the effects of Social Functioning (SF) and Race on five levels of Academic Outcomes (AO): (1) Cognitive Student Engagement (CE), (2) Suspensions, (3) Behavioral Referrals (4), Absences, and (5) Failing Grades.

For the purposes of this study, only data were used from the first wave of assessments, collected in the fall of 2011, prior to the implementation of interventions. It is possible that social skills may be important throughout one's educational progression. However, the research examining social functioning among diverse students is marginally small.

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<sup>1</sup> Data of the larger CARS study included a battery of psychosocial assessments of student functioning in school, social, and family contexts, completed by students, parents and teachers across five data points over two years. Parent interviews were also conducted, which examined current and previous experience with services. The procedures and measures described here is limited to the measures used in the current study.

## CHAPTER 4

### METHOD

#### Participants

Using archival data from 2011, data for the current study includes a sample ( $n = 639$ ) of high school students (63.6% male) whom were identified by school personnel as at high risk for school dropout due to challenging emotional, behavioral, and academic problems (70% living in poverty; 41% receiving special education services). In our sample, 38% were Black, 52% were White, and 9.4% indicated either another race or did not report. According to parent report, 68.9% of students received free or reduced lunch at school and 35.1% reported a total household income as less than \$20,000 per year. Black and White students reported similar incidents of Felony Convictions ( $n = 8$ , 38.1% and  $n = 9$ , 42.9%), respectively. Almost one-third (33.9%) of mothers or female guardians identified their highest level of education as falling between one and three years of college, 33.6% reported high school graduation, and 15.9% reported some high school education. The fathers (or male guardians) in the study reported 41.1% of fathers (or male guardians), reported high school graduation as their highest level of education, followed by one to three years of college training (23.7%), and 18.5% had some high school. Lastly, 23% ( $n = 156$ ) of the sample indicated they were Married; 14% ( $n = 95$ ) Divorced; 6% ( $n = 37$ ) Separated; 3% ( $n = 17$ ) widow/er, and 49% ( $n = 331$ ) had Never Been Married.

Data used in the current study are from the initial assessment point used for

determining eligibility for the larger randomized controlled trial that sought to evaluate interventions for students with emotional and behavioral issues which may hinder their chance for academic and social success in school. The interventions are school-based and can be implemented by professionals typically employed in academic settings. Adolescents and their parents will receive interventions to enhance their academic and social skills, and several classroom interventions (increased access to tutors, positive teacher-student interaction, de-escalation skills, and curriculum based interventions).

## **PROCEDURE**

Using a randomized-controlled trial (RCT) design, the Center for Adolescent Research in Schools (CARS), administered and evaluated a consultation model for supporting school personnel through the process of implementing empirically-based interventions to provide support for these students (e.g., identification of students, initial assessment, and problem diagnosis, selection of intervention, implementation of intervention, progress monitoring, and evaluation of intervention outcomes).

School personnel in 50 high schools and five states were asked to identify approximately 20 students who were exhibiting the most severe emotional, behavioral and academic problems as indicated by the frequency of a range of school difficulties (e.g., absences, office referrals and disciplinary infractions, suspensions, failing courses). Upon receipt of consent to refer students, school personnel referred students and families to the project. Student were deemed eligible to participate in the study after consent was received, and parents and students completed an initial assessment battery which indicated: 1) the adolescent was experiencing clinically-significant levels of social,

emotional, or behavioral problems, based on multiple broadband or problem-specific rating scales, 2) that the adolescent did not meet criteria for a pervasive developmental disability or an intellectual disability measured by an IQ of below 75.

Parents and students were compensated for their time in completing the assessment battery and interviews about child and family functioning and history of services were completed. Further, school staff provided student's indicators of school functioning (e.g., number of behavior referrals, number of courses in which a student was receiving a failing grade, and number of absences) for recent and current semesters. All study procedures were approved and guided by the Institutional Review Boards of participating universities and school districts.

Data used in the current study are from CARS students who were recruited and determined eligible for participation based on the initial assessment, prior to this intervention phase of the project. Thus, this sample reflects 647 at-risk students who had not yet received interventions through the CARS project. Informed consent was obtained from the parent/guardian and assent was obtained from the student. After consent/assent was granted, many families chose to complete the initial surveys during the same meeting, which took about two hours to complete. Surveys included a battery of psychosocial assessments of student functioning in school, social, and family contexts, as well as interviews about previous experience with services. Parents and students each received a \$50 incentive for completion of the surveys. Surveys that were not completed during the initial meeting were administered to students and their parents/guardians either before or during the fall semester of 2011 in their home, school, or another agreed upon location.

## MEASURES

**DEMOGRAPHICS AND DESCRIPTIVE VARIABLES.** General demographic information was collected from parents/guardians (e.g., gender, age, grade, ethnicity, free/reduced lunch status, clinical diagnoses, household income, and physical disabilities). Parents and students reported this information at the initial assessment. The Race variable denotes the ethnic choice selected by participants in this study. Although our sample comprised many different ethnicities, our study focuses on the differences in those who selected Black or African American and White or Caucasian. Participants who identified as Black or African American were coded as zero, and White or Caucasian were coded as one. *Table 4.1* illustrates the demographic and descriptive variables applicable to the current study.

**Social Functioning (SF).** The Behavior Assessment System for Children – Second Edition’s (BASC-2; Reynolds & Kamphaus, 2004), psychometric properties of the BASC-2 are well established with high internal consistency, test-retest reliability, interrater reliability, and concurrent validity (Reynolds & Kamphaus, 2004). The BASC-2 Teacher Rating Scales (TRS), Parent Rating Scales (PRS), and Self-Report of Personality (SRP) rating scales are designed for a wide variety of uses within school and clinical settings. The BASC-2, includes differential diagnosis of clinically relevant emotional and behavioral disorders, educational classification related to the presence of serious emotional disturbance for special education and related placement decisions (e.g., 504 programming), and program evaluation. The PRS was used to assess adolescent’s emotional and behavioral attributes of their child. For the purposes of the current study,

only *Social Skills*, which is a *PRS measure* on the adaptive subscale of the BASC-2, was used. The Social Skills subscale is a well-established measure used to evaluate the adaptive skills and problem behavior of youth. Specifically, this subscale highlights the necessary ability necessary for successful interaction with adults and peers in home, school, and community environments.

**ACADEMIC OUTCOMES (AO).** This study contains five measures of AO (Cognitive Engagement, Suspensions, Behavioral Referrals, Absences, and Failing Grades). The Student Engagement Instrument (SEI; Appleton et al., 2006) was used to measure students' perceptions of school engagement. The SEI is a 35-item, self-report measure, designed for use with middle and high school students, examines self-reported engagement from the perspective of the student. Theoretically based on Appleton colleagues' (e.g., Appleton et al., 2006; Christenson et al., 2008), four-part typology of engagement (including academic, behavioral, psychological, and cognitive engagement), the SEI is designed to evaluate the more covert areas of engagement: psychological and cognitive. The SEI measures six subtypes of SE: Teacher-Student Relationships (TSR; nine items), Peer Support for Learning (PSL; six items), Family Support for Learning (FSL; four items), Control and Relevance of School Work (CRSW; nine items), Future Aspirations and Goals (FG; five items), and Extrinsic Motivation (EM; two items). Items are rated on a 4-point Likert rating scale (1 = *strongly agree*, 2 = *agree*, 3 = *disagree*, and 4 = *strongly disagree*), with higher scores indicating higher levels of engagement. Items for the SEI were created or adapted from the results of an extensive literature review and items were refined via focus groups with diverse sample of students (as outlined by Appleton et al., 2006). Multiple studies have examined the psychometric properties of the

SEI (e.g., Appleton et al., 2006; Betts, Appleton, Reschly, Christenson, & Huebner, 2010; Carter, Lovelace, Appleton, & Thompson, 2012; Lovelace, Reschly, Appleton, & Lutz, 2012; Spanjers, 2007) and use of the SEI is widespread in districts across the United States (Reschly, Betts, & Appleton, 2012), which suggests there is growing evidence to support the utility of this instrument.

Specifically, the current study only uses the Cognitive Engagement (CE) subscales (CRSW and FG). While the psychological subscales pertain to outside relationships (e.g., peer or teacher), this study is focused on personal processes. The CE subscale represents the more internal indicators (value of education, self-regulation, personal goals and autonomy, and future endeavors). Previous research on the CE has yielded good internal consistency estimates for the two CE subtypes (CRSW=.80, and FG=.78) and there is support for the validity of scores with a wide range of intended outcomes related to SE (Appleton et al., 2006; Spanjers, Burns, & Wagner, 2008). The CE variable represents the SRP degree of cognitive engagement.

The Suspensions variable indicates the number of in/out suspensions received during the current school year. The Behavior Referrals variable reflects the sum of number of referrals (office referrals) a student received over the previous academic year. The Absences variable indicates the total number of absences within the last academic school year. The total number of absences was partitioned into four groups (0-3); within this sample, higher scores reflect more absences. The Failing Grades variable reflects the total number of final course grades a student received in core academic classes (e.g., Science, Math, English, Social Studies) that were failing (e.g., total average was below 70 percent) during the two most recent grading periods.

**COVARIATES.** In the academic gap literature, several factors have been found to be correlated with academic outcomes. For example, SES has been identified as a predictor of academic achievement (Finn, 1997). Typically, income has been positively associated with academic outcomes. In addition, attitude is important. Research indicated that positive student-teacher attitudes have been found to decrease maladaptive behaviors and increase academic success (Meehan, Hughes, & Cavell, 2003). Students who come from high-income families reported receiving more mild and moderate punishment (e.g., teacher reprimand, seat reassignment), and low-income students reported receiving more severe punishment, and not always administered in a professional manner. This consisted of things like: made to stand in the hall all day, screamed at, and search of personal possessions (Skiba, 2002). Additionally, some studies have shown a negative relationship between student demographics and frequency of school-related discipline (Skiba & Noguera, 2010).

In addition, grade retention has been found to predict aggressive and anti-social behaviors in adolescents (Jimerson, 2007). Also, Palmero et al., (2013) reported a relationship between student-teacher attitudes and social skills. Lastly, self-esteem has been found to be strongly associated with academic outcomes and disidentification (Osbourne, 1995). As such, it is important to mitigate these associations to appropriately assess the relationship between Race, SF, and AO. The current analyses will control for Self-Esteem, Household Income, Grade Retention, Attitudes toward Teachers (ATT), Physical Disability (PD), and Learning Disability (LD).

## **DATA ANALYTIC STRATEGY**

This investigation was based upon several research questions: (1) does SF significantly predict AO (CE, Behavioral Referrals, Suspensions, Absences, and Failing Grades); (2) does Race significantly predict AO; (3) do the moderating effects of Race on the predictor variable (SF) significantly predict AO?

An appropriate analysis to test multiple independent variables is multiple regression. Multiple regression permits researchers to answer questions that assess the role(s) that multiple independent variables play in accounting for variance in a single dependent variable. This method was used to answer the following research questions and examine the following hypotheses:

- 1) Higher SF scores will have a positive linear relationship with AO (CE, Behavioral Referrals, Suspensions, Absences, and Failing Grades).
- 2) Race will be significantly associated with AO (CE, Behavioral Referrals, Suspensions, Absences and Failing Grades). The expected regression weight is negative.
- 3) The relationship between SF and AO (CE, Behavioral Referrals, Suspensions, Absences, and Failing Grades) is moderated by Race (Black and White). We believe the strength of the association between SF and AO is dependent upon race.

In order to gain a better understanding of the sample and to examine the assumptions of regression, descriptive analyses (e.g., means, standard deviations, histograms, skewness, kurtosis) were computed for each of the predictor variable (SF),

the moderator variable (Race), and the outcome variable (AO). The six assumptions of regression were examined for each variable:

- (1) Independence of errors (residuals) was assessed by examining the Durbin-Watson statistic.
- (2) Linear relationship between the predictor variables and dependent variables was assessed by plotting the standardized residuals against the (unstandardized) predicted values. Partial regression plots between each independent variable and dependent variable were also created to examine this assumption.
- (3) Homoscedasticity of residuals (equal error variances) was assessed by examining the scatter plot of standardized residuals and (unstandardized) predicted values.
- (4) Absence of multicollinearity was examined by inspecting bivariate correlation coefficients, as well as the Tolerance/VIF values.
- (5) Absence of significant outliers, leverage, and influential points was examined by inspecting each case's standardized residual as well as the standardized deleted residual. Cases that were greater than 3+/- standard deviations were considered "outliers" and were deleted from the dataset. Absence of leverage points was examined by assessing the leverage values in each of the models. Cases that exhibited high leverage (e.g., values of 0.5 and above) were removed from the dataset. Influential points were examined by assessing Cook's Distance Values in each of the models. Any values above one were investigated.

(6) Normal distribution of errors (residuals) was examined by inspection of histograms with a superimposed normal curve, P-P Plots, Normal Q-Q Plots of the residuals. Skewness and kurtosis values were also computed and examined.

As recommended by Baron and Kenny (1986), a three-step procedure for measuring and testing moderational hypotheses was used to examine if the relation between SK and AO changes as a function of race. The procedure is described below:

- (1) The first step examined the relationship between the first predictor (e.g., SF) and the five AO variables (e.g., [1] CE, [2] Behavioral Referrals, [3] Suspensions, [4] Absences, [5] Failing Grades).
- (2) The second step examined the relationship between the second predictor, Race (e.g., Black and White) and the five academic performance (outcome) variables.
- (3) In the third step of the analysis, the moderating effects of race will be examined to investigate the unique impact race has on the relationship between SF and AO.
  - a. Variables were centered to reduce the collinearity between the main effects and the interaction term, as well as to aid in interpretation of the coefficients of the predictor variables (DeCoster & Claypool, 2004). To center the variables, the mean of each independent variable will be subtracted from each participant's score on that variable.

- b. The interaction or moderator term was constructed from the centered variables by multiplying them together (e.g., SF\*Race).

Multiple regression analyses are one of the more common statistical methods used. In the current study, these models were run separately for each dependent variable (e.g., five models) and all predictor variables were included in the same model in order to gain an understanding of the unique influence of each predictor variable on each outcome variable. Additional advantages of this type of analyses are improved prediction from multiple predictors, increased analytical flexibility, and the ability to determine the proportion of the variance of the criterion variable which is accounted for by each model

## CHAPTER 5

### RESULTS

Descriptive statistics for study variables are presented (*Table 5.1*); this table highlights the demographic and descriptive variables for our sample. *Table 5.2* shows the correlations between all variables used in this study. *Tables 5.3 – 5.8* describe the relationship Race and SF has on AO.

#### DESCRIPTIVE STATISTICS FOR STUDY VARIABLES

In our sample, 56.6% of White students ( $n = 159$ ,  $SD = 1$ ) and 35% of Black students ( $n = 98$ ,  $SD = .97$ ) received Special Education services. Black ( $n = 181$ , 42.1%,  $SD = .92$ ) and White ( $n = 210$ , 48.8%,  $SD = 1.01$ ) students reported Behavioral Referrals and learning disabilities ( $n = 77$ , 39.1%,  $SD = .99$ ;  $n = 108$ , 54.8%,  $SD = .93$ ). White students ( $n = 122$ , 51.7%,  $SD = 1.01$ ) were more likely to experience academic difficulty in the form of Grade Retention compared to their Black counterpart ( $n = 91$ , 38.6%,  $SD = 1.01$ ).

In our sample ( $n = 639$ ), the number and range of AO outcomes reported varied per category. For example, CE was reported for Blacks ( $n = 235$ ,  $m = .26$ ,  $SD = 1.0$ ) and Whites ( $n = 322$ ,  $m = .18$ ,  $SD = .96$ ). Behavioral Referrals ( $n = 630$ ), ranged from 0 – 59 ( $m = 6.25$ ,  $SD = 7.20$ ); Suspensions ( $n = 629$ ) ranged from 0 – 65 ( $m = 5.44$ ,  $SD = 7.75$ ); Absences ( $n = 217$ ) ranged from 0 – 69 ( $m = 7.25$ ,  $SD = 10.05$ ); ranged from 0 to 66 ( $m = 7.04$ ,  $SD = 11.23$ ); Failing Grades ( $n = 636$ ), ranged from 0 – 9 ( $m = 1.91$ ,  $SD = 1.77$ ).

Furthermore, students (78.8%) reported levels of SF ( $m = 10.75$ ,  $SD = 4.89$ ). For example, collective reports for participants were reported ( $m = 10.75$ ,  $SD = 4.88$ ,  $n = 620$  and by Race [(Blacks:  $m = 11.56$ ,  $SD 4.93$ ) Whites:  $m = 10.10$   $SD = 4.61$ ].

## **RESULTS FROM MULTIPLE REGRESSION MODELS**

The first model of the analyses examined the main effect of SF on all five AO variables (CE, Behavioral Referrals, Suspensions, Absences, Failing Grades). The full results of these analyses are reported in *Table 6.3*, *Tale 6.4*, *Table 6.5*, *Table 6.6*, and *Table 6.7*. The results indicate that while controlling for Self-Esteem, Household Income, Grade Retention, Attitude Toward Teachers (ATT), Physical Disabilities (PD), and Learning Disabilities (LD), SF was significantly related to CE  $\beta = .04$ ,  $F(9,511)=18.83$ ,  $p < .05$ ,  $R^2=.25$ ), which is consistent with our hypothesis. This model purports for every one-unit increase in SF, CE will increase .04 units. SF did not significantly predict Behavioral Referrals; this is not consistent with our hypothesis. SF significantly predicted Suspensions  $\beta = -.03$ ,  $F(9,529)=5.04$ ,  $p < .05$ ,  $R^2=.08$ ), which is consistent with our hypothesis. This means for every one-unit increase in SF, the number of Suspensions is expected to decrease by .03 units. SF did not significantly predict Absences. However, SF significantly predicted Failing Grades  $\beta = -.04$ ,  $F(9,532)=7.19$ ,  $p < .05$ ,  $R^2=.11$ ), which is consistent with our hypothesis. This means for every one-unit increase in SF, the number of Failing Grades is expected to decrease by .04 units.

The second step of the analyses examined the impact of Race on all five AO variables. The results indicate that while controlling for Self-Esteem, Household Income,

Grade Retention, ATT, PD, and LD, Race is significantly associated with CE  $\beta = -.32$ ,  $F(9,511)=18.83$ ,  $p <.05$ ,  $R^2=.25$ ). This means that on average, Black students were .32 marks higher CE compared to their White counterparts. Although the relationship is consistent with our hypothesis, the direction is not. Race significantly predicted Behavioral Referrals  $\beta = -.27$ ,  $F(9,529)=2.66$ ,  $p <.05$ ,  $R^2=.04$ ). This purports that Race is significantly associated with the number of behavior-related referrals received in school. Black students received .27 more referrals than their Whites. This is consistent with our hypothesis. Race significantly predicted Suspensions  $\beta = -.29$ ,  $F(9,529)=5.04$ ,  $p <.05$ ,  $R^2=.08$ ). This means Black students are expected to receive .29 more Suspensions compared to their White counterparts; these results are consistent with our hypotheses. Race significantly predicted Absences  $\beta = -.11$ ,  $F(9,176)=4.01$ ,  $p <.05$ ,  $R^2=.17$ ). This means, on average, Black students received .11 more Absences compared to White students. This is consistent with our hypothesis. Lastly, Race significantly predicted Failing Grades  $\beta = -.16$ ,  $F(9,532)=7.19$ ,  $p <.05$ ,  $R^2=.11$ ). This means, that on average, Black students were .16 more likely to receive Failing Grades. This is consistent with our hypothesis.

The third step of the analyses examined the implications of the moderating variable (SF\*Race) on the AO variables. In the last model, the analyses examined the moderating implications Race and SF on the AO variables. The results indicate that while controlling for Self-Esteem, Household Income, Grade Retention, ATT, PD, and LD our Moderator did not significantly predict CE, Behavioral Referrals, and Suspensions. This is inconsistent with our hypotheses. Although there was not a significant moderating effect for these AO outcomes, there were significant main effects of both social

functioning and race on CE, Behavioral Referrals, and Suspensions (see tables 5.3, 5.4, and 5.5 for details). The Moderator did significantly predict Absences  $\beta = .09$ ,  $F(9,176)=7.19$ ,  $p < .05$ ,  $R^2 = .17$ ) and Failing Grades  $\beta = .04$ ,  $F(9,532)=7.19$ ,  $p < .05$ ,  $R^2 = .11$ ). For Absences, this statistic reported that with every one-unit increase, Black students with higher SF indicated .09 less Absences compared to their White counterpart. The statistic for Failing Grades indicated that with every one-unit increase, Black students with SF received 0.04 less Failing Grades compared to White students. Graphical representations of these associations can be found in Figure 6.1 and Figure 6.2.

## **CHAPTER 6**

### **DISCUSSION**

The current study investigated the moderating effects of Race on the relationship between SF and AO. By design, this investigation was conducted to add to the literature on the academic gap by highlighting the importance of race within the context of social functioning and academic achievement. As such, we believe Race and SF are important constructs which should be considered when evaluating academic outcomes.

#### **SF AND ACADEMIC OUTCOMES**

The research on at-risk students with emotional and behavioral deficits and SF is limited. Still, studies have shown the association of SF and AO to be significant (see Alexander et al., 1993; Cooper & Farran, 1988, 1991; Ladd, 1990). Social functioning is associated with peer approval and scholastic activities. As such, intellectual development among children is significantly impacted by social relationships. For example, social exclusion or low social functioning in schools has been linked to increased aggressive behavior and academic failure (Pettit, Clawson, Dodge, & Bates, 1996; Dishion, 1990).

In addition, research has shown suspensions have been significant predictors of academic difficulty (see Dishion, 1990; Skiba et al., 2003, 2013). As such, results of the first step of the analysis supported our hypotheses where SF significantly impacted CE and Suspensions. These relationships suggest social skills can act as a protective factor within academic settings. Interestingly, SF did not significantly predict Failing Grades,

Absences, or Referrals. One potential reason may be that within this highly specific population, reported levels of SF were comparably similar and on the lower end of the assessment tool. Therefore, a wider range of SF scores may be needed to fully understand the effects of SF on the remaining AO variables (Absences, Failing Grades, and Referrals).

## **RACE AND ACADEMIC OUTCOMES**

Research has demonstrated that race significantly impacts academic achievement. Milner (2013) found major issues regarding faculty (teachers and principals) penal practices along the intersectionality of race and low SES backgrounds. These individuals were often found to receive more frequent and harsher punishment. Correspondingly, the results from the second step of the analysis found race was linked to a higher frequency of absenteeism, receiving more referrals, suspensions, and failing grades. Interestingly, despite receiving more absences, suspensions, referrals, and failing grades than White students, Blacks had higher CE scores. Our hypothesis suggested that because of such an anticipated difference in negative grades and behavior-related punishment, Blacks would be more likely to disidentify. However, counterintuitively, these adolescents invested significantly more cognitive energy in academic activities compared to their White counterpart who received less behavior-related punishment and failing grades. Furthermore, in comparison to White students, Blacks believed they had more control and that their coursework was more relevant to future endeavors. Despite receiving more negative academic grades and behavior-related punishment, Blacks still perceived their schoolwork to be more relevant and had higher future aspirations than White students.

Academic disidentification purports students' disidentify in school settings when they perceive their treatment to be negatively impacted by race. As such, in order to maintain self-esteem and optimism for future success, resources are positioned in areas perceived to be more beneficial. Likewise, self-esteem benefits adolescent mental health by acting as a psychological buffer from deleterious environmental stressors (Compas et al., 1995; Mandara et al., 2009). This is believed to occur because high self-esteem makes adolescents more emotionally stable and improves self-efficacy, which is often required to overcome barriers (Mann et al., 2004). Therefore, our results indicating Black students' scores being significantly higher in areas of FG in the face of adversity is consistent with the framework of our research.

Academic disidentification does not inherently account for the CRSW portion of CE. Finn (1997) identified student engagement as an important component of academic resilience. Similarly, perseverance may be an elected strategy for our specific sample population. As many participants within this study come from a low SES background, certain environmental deficits can provide unique opportunities. Blacks have been found to perceive school as a method to improve one's social setting (Whaley, 2011). Also, AO is not always objective and often can be subjective (Skiba et. al., 2013) and can result in lower performance expectations for Black students (Klinger et al., 2005). Individuals within high-risk communities may be more aware of low expectations regarding their race and work hard to earn good grades (see: Chavous et al., 2008; Cokley, 2003; Pollard, 1993). If so, it may be possible that scholastic expectations for White students may be different to those for Black students that in some academic settings. Therefore, Blacks

may be more likely to perceive their schoolwork as relevant, while White students find their work less relevant.

Specifically, with CE, Blacks perceived more control over and relevance regarding their school work and scored higher on future aspiration and goals. Therefore, on average, Black students were more likely to be perceived to have higher social skills and were also more cognitively engaged in their schoolwork.

Another possible explanation is that the Black students in our sample did not associate their academic outcomes to their race. As such, their positive engagement may be an approach to improve outcomes related to academic achievement.

#### **MODERATOR AND ACADEMIC OUTCOMES**

Research on race, social skills, and academic outcomes among high school students reporting clinical symptoms are scarce. As we hypothesized, our moderator variable did significantly impact Absences and Failing Grades.

As Black students received higher SF marks, their number of Failing Grades decreased. However, SF had no relation to the number of Failing Grades White students received. The results suggest that SF may be more important when predicting AO for Black students compared to Whites. Some studies found social functioning to positively predict AO, and others reported a positive relationship with teacher affection (Wentzel, 1993). Interestingly, with the exception of teacher-student relationships (TSR) Black students on average outscored White students on all scales of SE (FG, CRSW, and EM). Studies have shown that adolescents who feel closer to their teachers have fewer behavioral issues and perform better academically compared to students who experience less of a bond with their instructors (Birch & Ladd 1997; Hamre & Pianta, 2001; Hughes,

Cavell, & Jackson, 1999; Pianta, Steinberg, & Rollins, 1995). Furthermore, this relationship proved true when assessing the more at-risk youth for school dropout (Croninger & Lee, 2001); at-risk students who felt connected to their teachers remained engaged in school compared to their classmates who felt disconnected. Despite lower TSR scores, Black students with higher SF had fewer absences. Interestingly, for White students, SF had a positive relationship with their number of absences. Therefore, when White students SF increased, their number of Absences also increased. This is particularly interesting because it suggests social skills function very differently between Black and White students and should be accounted for in future studies examining these constructs.

On the dimension of Failing Grades, as SF increased Black students received fewer “Fs”, while there was no relation between the number of failing grades White students received and their SF. These results indicate SF and academic achievement is moderated by Race. Also, SF may have an increased function among Black students compared to White students. One rationalization for this finding, is that members of socially stigmatized groups, such as Blacks, tend to be unsure about their belonging in settings such as school and work (Walton, 2007; Walton & Cohen, 2012). Therefore, among Blacks, SF may represent a desirable level of inclusion. However, that does not explain the lack of relationship between White students, SF, and AO. A potential explanation for this finding is that Black students with high social skills are perceived to be smarter than Black students with lower social skills and equally as smart as White students with lower social skills.

One reason our moderator failed to predict CE, Suspensions, and Referrals may be that SF scores in general were low. Within this population, social skills may have different functions for Black and White students. SF may represent culturally-relevant perspectives to Black and White parents. This could also correspond with potential different criteria and expectations used to rate academic outcomes for Black and White students. In fact, Former President George W. Bush suggested that people who did not believe the school settings were using “the soft bigotry of low expectations” which enables the gap to remain fettered (Noguera, 2014). Lastly, SF was a main effect for some AO variables, while Race was more consistently a predictor for AO variables.

### **Limitations**

Although our results advance our understanding of the role of race on social skills and academic outcomes, there are some limitations to the study that warrant consideration. The data for the current study examined a distinct population and thus cannot be generalized to the general population. It may be that these findings are specific to youth with EBD. The present study does not adequately measure positive academic outcomes. Instead, this research focuses on personal and social strategies and characteristics which may diminish or facilitate maladaptive behavior. As evidenced, research has highlighted the effects of poor academic performance. However, the academic gap as it relates to Black and White students extends beyond the deficit model which highlights adverse academic performances.

The current study does not examine gender differences, which may further explain some of the previously mentioned findings. Research has shown differential

treatment in school settings among Black males and females to their White counterparts. (see Twenge & Crocker, 2002; Chavous et al., 2008).

### **Implications for Research**

Research should focus on understanding similar processes which influence special placement as well as subpar academic-related outcomes. For example, Blacks are underrepresented by almost 60% in advanced placement programs in schools. Despite comprising almost one-fifth of the student population, they are underrepresented in advanced placement by as much as 55% (US Dept of Education, 2002).

Furthermore, race is importantly a social construct. For example, Black is not a homogenous identity and has very distinct cultural and ethnic experiences which manifest differently in diverse social situations with similar individuals. As behavior related to race can vary, so might the expectations and treatment associated with Blackness. Similarly, race, class, and culture combine to add significant within group differences. For example, subsequent implicit and explicit attitudes and beliefs and the manifestation of these identities are critical to understanding race relations. Moving forward, future studies should seek to understand the implications of the perception of race by assessing attitudes of participants, as well as their environment.

Lastly, positive student-teacher perceptions serve as a protective factor for academic achievement among Black students (Cokley, 2003; Spencer et al., 1997). Still, Black students who perceive an unjust relationship with their instructors may view school as unfair and are more likely to believe education may not be beneficial to their future (Brown & Jones, 2004). New empirical research indicated that teachers have an imperative part in the development of school-aged children's social ability (Berry & O'Connor, 2010). Therefore, student-teacher relationships may have an important

function regarding academic outcomes. While classroom climate involves many aspects of the classroom, essential factors of emotional support, tend to be enmeshed within teacher-student relationships. Furthermore, evidence suggests a positive association between classroom climate and teacher-student relationships (Hamre & Pianta, 2005; Berry & O'Connor, 2010). Given the importance and role of students' perceptions in classroom settings, teacher-student relationships should be examined in juxtaposition to identify more novel underpinnings associated with the academic gap.

*Table 6.1 Demographic and descriptive variables for participants (n=647)*

|                                   | <i>n</i> | %    |
|-----------------------------------|----------|------|
| <i>Gender</i>                     | --       | --   |
| Male                              | 430      | 63.6 |
| Female                            | 217      | 32.1 |
| <i>Ethnicity</i>                  | --       | --   |
| Black/African American            | 245      | 42.3 |
| White/Caucasian                   | 334      | 57.7 |
| Special Education Classification  | 281      | 43.4 |
| Receipt of Free or Reduced Lunch  | 446      | 68.9 |
| Annual Household Income           | --       | --   |
| \$0 to \$20,000                   | 226      | 36.9 |
| \$20,001 to \$40,000              | 198      | 32.4 |
| \$40,001 to \$60,000              | 94       | 15.4 |
| \$60,001 +                        | 94       | 15.3 |
| <i>Drug Use</i>                   | --       | --   |
| Adolescent Users                  | 70       | 10.8 |
| Black/African American            | 21       | 30.0 |
| White/Caucasian                   | 45       | 64.3 |
| <i>Felony Conviction</i>          | --       | --   |
| Adolescent Convicted              | 21       | 3.4  |
| Black/African American            | 8        | 38.1 |
| White/Caucasian                   | 9        | 42.9 |
| <i>Mental Health Diagnoses</i>    |          |      |
| ADHD/ADD                          | 300      | 48.5 |
| Bipolar Disorder                  | 63       | 10.2 |
| Depression                        | 179      | 28.9 |
| Anxiety                           | 161      | 26.1 |
| Other Mental Health Diagnoses     | 48       | 7.8  |
| <i>School Discipline</i>          | --       | --   |
| Behavioral Referrals              | 430      | 66.5 |
| Black/African American            | 181      | 42.1 |
| White/Caucasian                   | 210      | 48.8 |
| <i>Academic Difficulty</i>        | --       | --   |
| Grade Retention                   | 236      | 38.1 |
| Black/African American            | 91       | 38.6 |
| White/Caucasian                   | 122      | 51.7 |
| Failing Grades*                   | 479      | 74.0 |
| Black/African American            | 179      | 37.4 |
| White/Caucasian                   | 250      | 52.2 |
| Received Special Education        | 281      | 43.4 |
| Black/African American            | 98       | 34.9 |
| White/Caucasian                   | 159      | 56.6 |
| Received Speech/Language Services | 126      | 19.5 |
| Black/African American            | 41       | 32.5 |
| White/Caucasian                   | 77       | 61.1 |

|                        |     |      |
|------------------------|-----|------|
| Received Counseling    | 364 | 56.3 |
| Black/African American | 114 | 31.3 |
| White/Caucasian        | 214 | 58.8 |
| Learning Disability    | 197 | 32.0 |
| Black/African American | 77  | 39.1 |
| White/Caucasian        | 108 | 54.8 |
| <i>Family Status</i>   | --  | --   |
| Married                | 156 | 23.1 |
| Divorced               | 95  | 14.1 |
| Separated              | 37  | 5.5  |
| Widow/er               | 17  | 2.5  |
| Never Been Married     | 331 | 49.0 |

*Table 6.2 Descriptive statistics for the main study variables.*

|                      | <i>N</i> | <b>Low</b> | <b>High</b> | <i>M(SD)</i> | <i>Skewness</i> | <i>Kurtosis</i> |
|----------------------|----------|------------|-------------|--------------|-----------------|-----------------|
| CE                   | 614      | -2.85      | 2.51        | .00 (1)      | .18             | -.23            |
| Behavioral Referrals | 630      | -.87       | 7.31        | -.01(1)      | 2.51            | 10.19           |
| Suspensions          | 629      | -.67       | 7.14        | -.01 (.93)   | 2.73            | 11.18           |
| Absences             | 217      | .00        | 3.00        | 2.15 (1.2)   | -.93            | -.85            |
| Failing Grades       | 636      | -.91       | 3.29        | -.02 (.82)   | .82             | .33             |
| SF                   | 620      | -10.75     | 13.25       | .00 (4.89)   | .35             | -.20            |
| Race                 | 579      | .00        | 1.00        | .58 (.49)    | -.31            | -1.91           |
| Moderator            | 569      | -25.75     | 28.25       | -.66 (7.39)  | .32             | 2.26            |

*Note:* CE= Cognitive Engagement; SF=Social Functioning

*Table 6.3 Means, standard deviations, and correlations for study variables.*

|                  | 1 | 2     | 3     | 4     | 5       | 6      | 7      | 8     |
|------------------|---|-------|-------|-------|---------|--------|--------|-------|
| 1 Absences       | 1 | -.14* | .04   | .13   | -.04    | -.09   | .11    | .18*  |
| 2 Referrals      |   | 1     | .33** | .19** | .02     | -.14** | -.03   | .01   |
| 3 Suspensions    |   |       | 1     | .18** | .01     | -.17** | -.07   | -.04  |
| 4 Failing Grades |   |       |       | 1     | -.153** | -.10*  | -.10*  | -.02  |
| 5 CE             |   |       |       |       | 1       | -.22** | .16**  | .10*  |
| 6 Race           |   |       |       |       |         | 1      | -.15** | -.09* |
| 7 SF             |   |       |       |       |         |        | 1      | .74** |
| 8 Moderator      |   |       |       |       |         |        |        | 1     |

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 6.4 Multiple Regression Analysis for CE

|                       | $\beta$ | SE  | t-value | p-value |
|-----------------------|---------|-----|---------|---------|
| Intercept             | .34     | .08 | 4.2     | .00     |
| <b><u>Level 1</u></b> |         |     |         |         |
| Self-Esteem           | .08     | .04 | 2.1     | .04     |
| Household Income      | -.06    | .03 | -2.3    | .03     |
| Grade Retention       | .04     | .04 | 1.1     | .29     |
| ATT                   | -.40    | .04 | -9.7    | .00     |
| PD                    | .04     | .04 | 1.1     | .28     |
| LD                    | .00     | .04 | -.01    | .99     |
| <b><u>Level 2</u></b> |         |     |         |         |
| SF                    | .04     | .01 | 3.2     | .00*    |
| <b><u>Level 3</u></b> |         |     |         |         |
| Race                  | -.32    | .08 | -4.0    | .00*    |
| <b><u>Level 4</u></b> |         |     |         |         |
| Moderator             | -.03    | .02 | -1.7    | .10     |

Note: ATT=Attitude toward teacher; PD= Physical disability; LD=Learning disability; CE= Cognitive Engagement; SF=Social Functioning

\*,  $p = < 0.05$  level (2-tailed).

*Table 6.5 Multiple Regression Analysis of Variance for Suspensions*

|                       | $\beta$ | <i>SE</i> | <i>t-value</i> | <i>p-value</i> |
|-----------------------|---------|-----------|----------------|----------------|
| Intercept             | .17     | .06       | 2.69           | .01            |
| <b><u>Level 1</u></b> |         |           |                |                |
| Self-Esteem           | .14     | .04       | 3.41           | .00            |
| Household Income      | -.10    | .04       | -2.49          | .01            |
| Grade Retention       | .03     | .04       | .71            | .48            |
| ATT                   | .09     | .04       | 2.04           | .04            |
| PD                    | -.02    | .04       | -.38           | .70            |
| LD                    | -.06    | .04       | -1.52          | .13            |
| <b><u>Level 2</u></b> |         |           |                |                |
| SF                    | -.03    | .01       | -2.17          | .03*           |
| <b><u>Level 3</u></b> |         |           |                |                |
| Race                  | -.29    | .08       | -3.51          | .00*           |
| <b><u>Level 4</u></b> |         |           |                |                |
| Moderator             | .01     | .02       | .86            | .39            |

*Note:* ATT = Attitude toward teacher; PD= Physical disability; LD=Learning disability SF=Social Functioning

\*.  $p < 0.05$  level (2-tailed).

*Table 6.6 Multiple Regression Analysis of Variance for Referrals*

|                       | $\beta$ | <i>SE</i> | <i>t-value</i> | <i>p-value</i> |
|-----------------------|---------|-----------|----------------|----------------|
| Intercept             | .13     | .06       | 2.04           | .04            |
| <b><u>Level 1</u></b> |         |           |                |                |
| Self-Esteem           | .11     | .04       | 2.44           | .02            |
| Household Income      | .02     | .04       | .44            | .66            |
| Grade Retention       | .06     | .04       | 1.33           | .18            |
| ATT                   | .13     | .04       | 2.91           | .00            |
| PD                    | -.00    | .04       | -.10           | .93            |
| LD                    | -.01    | .04       | -1.52          | .90            |
| <b><u>Level 2</u></b> |         |           |                |                |
| SF                    | -.01    | .01       | -.13           | .49            |
| <b><u>Level 3</u></b> |         |           |                |                |
| Race                  | -.27    | .08       | -.65           | .00*           |
| <b><u>Level 4</u></b> |         |           |                |                |
| Moderator             | .01     | .02       | .29            | .77            |

*Note:* ATT=Attitude toward teacher; PD= Physical disability; LD=Learning disability; CE= Cognitive Engagement; SF=Social Functioning

\*.  $p = < 0.05$  level (2-tailed).

*Table 6.7 Multiple Regression Analysis of Variance for Absences*

|                       | $\beta$ | <i>SE</i> | <i>t-value</i> | <i>p-value</i> |
|-----------------------|---------|-----------|----------------|----------------|
| Intercept             | .18     | .13       | 1.37           | .17            |
| <b><u>Level 1</u></b> |         |           |                |                |
| Self-Esteem           | -.01    | .07       | -.15           | .88            |
| Household Income      | -.29    | .07       | -4.38          | .00            |
| Grade Retention       | .03     | .07       | .42            | .68            |
| ATT                   | .06     | .07       | .77            | .44            |
| PD                    | .02     | .06       | .29            | .78            |
| LD                    | -.13    | .07       | -1.9           | .06            |
| <b><u>Level 2</u></b> |         |           |                |                |
| SF                    | -.04    | .03       | -1.69          | .09            |
| <b><u>Level 3</u></b> |         |           |                |                |
| Race                  | -.11    | .16       | -.68           | .50            |
| <b><u>Level 4</u></b> |         |           |                |                |
| Moderator             | .09     | .03       | 2.9            | .00*           |

*Note:* ATT=Attitude toward teacher; PD= Physical disability; LD=Learning disability; CE= Cognitive Engagement; SF=Social Functioning

\*.  $p = < 0.05$  level (2-tailed).

*Table 6.8 Multiple Regression Analysis of Variance for Failing Grades*

|                       | $\beta$ | <i>SE</i> | <i>t-value</i> | <i>p-value</i> |
|-----------------------|---------|-----------|----------------|----------------|
| Intercept             | .05     | .05       | -1.57          | .12            |
| <b><u>Level 1</u></b> |         |           |                |                |
| Self-Esteem           | .07     | .03       | 2.12           | .04            |
| Household Income      | -.01    | .03       | -.17           | .87            |
| Grade Retention       | .09     | .03       | 2.63           | .01            |
| ATT                   | .17     | .04       | 4.92           | .00            |
| PD                    | -.03    | .03       | -.73           | .47            |
| LD                    | .07     | .03       | 2.12           | .04            |
| <b><u>Level 2</u></b> |         |           |                |                |
| SF                    | -.04    | .01       | -4.16          | .00*           |
| <b><u>Level 3</u></b> |         |           |                |                |
| Race                  | -.16    | .07       | -2.27          | .02*           |
| <b><u>Level 4</u></b> |         |           |                |                |
| Moderator             | .04     | .01       | 2.58           | .01*           |

*Note:* ATT=Attitude toward teacher; PD= Physical disability; LD=Learning disability; CE= Cognitive Engagement; SF=Social Functioning

\*.  $p = < 0.05$  level (2-tailed).

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