Black boys are confronted with unique educational circumstances. They are often misdiagnosed and misplaced into special education programs (Bush-Daniels, 2008; Patton, 1998; Terman et al., 1996). Additionally, they are less likely to be enrolled in gifted and talented programs, even if their former achievements reflect their aptitude to succeed (Black Alliance for Educational Options, n.d.; Moore & Flowers, 2012). Given these statistics, a considerable emphasis has been placed on the causes and the consequences of low/under achievement for this population. As a result, the experiences of Black males who are achieving have been greatly neglected. Moreover, little is known about the factors that facilitate academic achievement among high-achieving Black boys. In an effort to bring the heterogenic nature of schooling experiences for Black boys to light, the present study examined the influence risk and protective factors had on the academic experiences of high-achieving Black boys.

Grounded in the risk and resilience framework and the Integrative Model for the Study of Minority Youth Development, this study explored whether the high-achieving
Black high school boys in this sample (n = 88) reported experiencing discrimination (i.e. academic-based) and how this academic-based discrimination related to their 1) academic performance (i.e. GPA), 2) perceptions of math ability, and 3) race-based academic self-concept. In addition to exploring how academic-based discrimination was linked to academic achievement, this study examined how cultural resources such as racial socialization messages and racial identity related to academic achievement. Specifically, cultural socialization, preparation for bias, egalitarianism, private regard and public regard were evaluated alongside the three academic outcomes under study. Finally, the study explored whether aspects of racial socialization or racial identity buffered the effects of discrimination on any of the outcomes.

Interestingly, the race/ethnicity of the student mattered for how students perceived their math ability. The risk factor academic-based discrimination was linked to academic performance. Cultural resources cultural socialization, preparation for bias, and private regard were linked to various academic outcomes of interest. There was only one significant moderating effect: a high private regard buffered the relationship between academic-based discrimination and race-based academic self-concept. Limitations and implications of this study are discussed.
BLACK, MALE, AND HIGH-ACHIEVING: 
AN EXAMINATION OF A RISK FACTOR AND 
CULTURAL RESOURCES FOR 
BLACK MALE ACADEMIC ACHIEVEMENT 

By 

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Dedication

I dedicate this work to all of the Black boys out there. It is my hope that this work will make a difference so that you can live full lives- where people see your humanity and recognize your potential.

The Sky’s Reflection
By Nyesha Lashay

I saw shooting stars for the first time
against a sky so black I couldn't
see my own hands.
& I forgot where I was, but
Black African soil has a way
of making you feel like you're home,
like your blackness is not just
sticky tar or rocky pavement,
wore down by people,
like somehow you are the soil
and the sky at the same time,
with roots that go deeper than the Earth,
and fingertips that are the reason
for stars,
like your blackened skin is
what makes the sky, and
that your soul
is what makes the moon glow.
Earth met heaven's tears and
created black man,
not sticky tar, or rocky pavement, or coal,
burned and wore down by people.
black boy, black girl,
made of dreams and dark flesh,
that look better in the sky than
on this land.
The reason for the sky and
this land.
I saw shooting stars for the first time
against a sky so black I couldn't
see my own hands,
but I didn't realize I was looking
at a reflection of myself.
You see I am soil and sky,
with roots and fingertips,
made of Earth and heaven's tears,
the very beginning of this universe.
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Chapter I: Introduction

Almost 150 years ago, it was illegal for Blacks of any age to be taught to read. In more recent years, segregation ensured differential access to education for Black youth. Currently, de facto school segregation, as a consequence of class standing (and thus race) allows many school systems to inadvertently uphold racial inequalities through vastly under-resourced schools with poor curricula and ill-equipped teachers (Dixson & Rousseau 2006; Ladson-Billings & Tate 2006; Lewis, 2003; Noguera, 2003; 2008; Orfield & Lee 2007; Perry, 2003). Many Black students have been challenged by these practices, with 42% attending schools that are under-resourced and performing poorly (Darling- Hammond, 2007; The Schott Foundation for Public Education, 2009).

Black boys are at a particular disadvantage as they encounter many challenges in the educational system. When compared to White male students, they are almost three times less likely to be enrolled in gifted and talented programs, even if their prior achievements reflect the ability to succeed (Black Alliance for Educational Options, n.d.; Moore & Flowers, 2012). They are also more likely to be classified as mentally challenged by their schools; Black boys are often misdiagnosed and misplaced into special education programs (Bush-Daniels, 2008; Patton, 1998; Terman et al., 1996).

Given the deep evidence about the ongoing academic disparities between many Black and White youth, and the disproportionate impact of such disparities on Black boys, there is no debate that these issues need to be discussed and resolved. However, as a

---

1 The terms African American and Black [American] are used in many ways throughout the dissertation, so I want to be clear about how those terms are used. Usually, being African American refers to an individual who is a citizen or resident of the United States and is descended from African slaves (Locke & Bailey, 2013). Sometimes, scholars use the term in an interchangeable way with Black American. However, a Black American refers to an individual who identifies as African American, Sub-Saharan African (e.g., Liberian) or Afro-Caribbean (e.g., Haitian) (Rastogi, Johnson, Hoeffel, & Drewery, 2011). In some cases, this also includes individuals who are Biracial (e.g. Black-White biracial) or Multiracial and ascribe to being a Black individual. In an effort to consider the varied lived experiences of Black people, I will use the term African American or Black if that is how a sample was described in distinct research literatures. If it is known that individuals in a sample are African or Biracial, I will refer to them in that way. In all other cases, whether the sample is unknown or the contrary, the sample is known to be diverse, I will refer to individuals as Black.
result of the emphasis on the causes and the consequences of low- and under-achievement, little is known about Black males who are achieving, or the factors that enable them to excel. Allen (2012) asserts that this current limited lens gives the notion that the schooling experiences of Black youth are uniform and consistent across time. In an effort to bring the heterogenic nature of schooling experiences for Black boys to light, the present study examined a number of factors that might influence the academic experiences of high-achieving Black boys. Specifically, this study will examine the role of academic-based discrimination, a variety of racial socialization messages, and two aspects of racial identity attitudes, assessing them as risk or protective factors for academic achievement. The remainder of this chapter will provide a brief background on the variables of interest, followed by a list of key terms.

Discrimination Experiences and Black Adolescent Development

Black boys are faced with a unique dilemma of having to navigate in a society where common notions that Black males are “dangerous” or “up to no good” are maintained by institutional and systematic entities (i.e., media, criminal justice system, schools) (Bogle, 2003; Chiricos, & Eschholz, 2002; Entman & Gross, 2008; New York Civil Liberties Union, 2014; Welch, 2007). Consequently, Black male children have been perceived as threatening as early as 7 years old (Boyd-Franklin, & Karger, 2012). Boyd-Franklin and colleagues (2000) emphasize that experiences with prejudice and discrimination that Black boys confront are a result of racial stereotypes. Boyd-Franklin and colleagues (2000) state:

Instead of viewing them as individuals, many people respond to stereotypes. They confuse TV images of young men in handcuffs to every Black male with which they
come into contact. These images continue to fuel racism, discrimination, and stereotypes that are born of fear (p. 12).

Research has also found that African American children are attuned to the societal biases they encounter at an early age (Brody et al., 2006; Dulin-Keita, Hannon, Fernandez, & Cockerham, 2011; McLoyd, 1985). Black children, as young as age 10, report experiencing racial discrimination (Coker et al., 2009). These experiences have been noted to persist throughout the life course for African Americans (Bynum, Best, Barnes, & Burton, 2008). Considering the developmental stages that all individuals matriculate through, racism may further complicate the already rocky adolescent period for Black youth (Comer, 1995). Moreover, the effect of discrimination is unmistakably troubling as it is associated with elevated anger, depression, and anxiety for African American adolescents (M age 18 at Time 2) (Gibbons, Gerrard, Cleveland, Wills, & Brody, 2004; Gibbons et al., 2010). Additionally, rates of conduct disorder for African American adolescents who report having experienced more discrimination are much higher than African American adolescents who experience less discrimination (Gibbons et al., 2007).

Experiencing discrimination also appears to foster low self-esteem and depressive symptoms. Simmons and colleagues (2002) found that at both the individual level and the level of the community, experiences with racial discrimination for 10 to 12 year olds were associated with higher levels of depressive symptoms. In a couple of longitudinal studies, perceived discrimination from both peers and adults was associated with lower self-esteem and increased depressive symptoms for 7th and 8th graders (Wong, Eccles, & Sameroff, 2003) and 9th and 10th grade youth (Greene, Way, & Pahl, 2006). Fisher and
colleagues (2000) found that distress, as the result of peer and educational discrimination was associated with lower self-esteem for a sample of ethnic minority adolescents, including African American youth.

While much of the literature regarding discrimination experiences for Black youth is focused on mental health, a growing body of literature sheds light on the impact discrimination can have on academic outcomes (Dotterer, McHale, & Crouter, 2009; Neblett, Philip, Cogburn & Sellers, 2006; Wang & Huguley, 2012; Wong et al., 2003). This literature includes the negative impact that racial discrimination has on academic curiosity, persistence, and motivation, how students feel about their school and their membership at their school. A deeper review of this literature is provided in Chapter 2. The evidence presented thus far should provide some insight into a major risk factor that Black youth are exposed to. African American boys are particularly vulnerable, as they appear to be frequent targets of discrimination (Smith Bynum, Lambert, English, & Ialongo, 2014). It is important to note that even high-achieving African American boys are not immune to the reality of negative stereotypes about Black people or Black men (Smith Bynum et al., 2014). Thus, discrimination is a risk factor that is harmful to the development and psychosocial adjustment of high-achieving Black boys. Moreover, it is critical that research broaden to include the largely ignored subpopulation of high-achieving Black boys and their experiences with discrimination. The present study examined the schooling experiences of this particular population. In effect, this investigation aimed to provide insight into the factors that enable Black boys to excel academically in spite of academic-based discrimination.
Racial Socialization in African American Families

Racial socialization appears to be exceptionally important in ameliorating the negative impact of racial discrimination experiences on African American adolescents' development (Neblett et al., 2006). Such socialization is defined as messages that parents teach their children about their race and culture, how to function as an individual of that race and cope with possible discrimination (Hughes & Chen, 1999; Thornton, Chatters, Taylor, & Allen, 1990). African American parents partake in the racial socialization process in a number of ways (Hughes, Rodriguez, Smith, Johnson, Stevenson, & Spicer, 2006; Neblett, Smalls, Ford, Nguyen, & Sellers, 2009; Thornton et al., 1990). While for some parents the discussion of race is a central component to how they raise their children (proactive), other parents may only discuss race-related issues in response to an event that has occurred or if their children bring it up (reactive) (Bowman & Howard, 1985; Hughes & Chen, 1999). Further, there are some parents who de-emphasize the importance of race as they socialize their children. Thus, the content of the messages that African American parents send to their children about what it means to be Black may vary.

As cultural socialization and preparation for messages have been especially central in theoretical and empirical literature (Bowman & Howard, 1985; Dotterer, McHale, & Crouter, 2009; Hughes, Hagelskamp, Way, & Foust, 2009a; Hughes, Witherspoon, Rivas-Drake, & West-Bey, 2009b; Wang & Huguley, 2012), these aspects of racial socialization were examined in the present study. Cultural socialization involves promoting children’s knowledge about their history and heritage and instilling group
pride (Hughes & Chen, 1999). These interactions are sometimes referred to as racial
pride (Lesane-Brown, Scottham, Nguyen, & Sellers, 2008) and cultural pride
reinforcement (Stevenson, Cameron, Herrero-Taylor, & Davis, 2002). Preparation for
bias consists of warnings to children about racial discrimination and teaching them how
to cope with bias and inequity. It is similar to cultural alertness for discrimination
messages and coping with antagonism messages (Stevenson et al., 2002) and racial
barrier messages (Lesane-Brown et al., 2008).

Egalitarianism was also explored. It is defined as messages that African American
parents share regarding the value of having cross-racial relationships and encourages
learning about other groups beyond one’s own (Hughes et al., 2006). It is similar to
egalitarian messages, which promote interracial coexistence and equality (Lesane-Brown
et al., 2008). Considering the diversity of the county in which the data were collected,
this was likely a salient interaction between youth and their parents.

Growing research demonstrates that specific aspects of racial socialization
messages may act as important buffers against racial discrimination (Fischer & Shaw,
1999; Harris-Britt, Valrie, Kurtz-Costes, & Rowley, 2007; Thomas, Coard, Stevenson,
Bentley, & Zamel, 2009a; Trask-Tate, Cunningham, & François, 2014; Wang & Huguley,
2012). However, less is known about whether specific racial socialization messages have
a buffering effect against discrimination experiences for academic behaviors and
outcomes. Of the four known studies (Dotterer et al., 2009; Neblett et al., 2006; Trask-
Tate et al., 2014; Wang & Huguley, 2012) that looked at this particular relationship, only
two found that a type of racial socialization attenuated the effect of discrimination on an
academic outcome. Specifically, cultural socialization attenuated the effect of both peer
and teacher discrimination on grade point average (GPA) and teacher discrimination on educational aspirations (Wang & Huguley, 2012). Cultural socialization also served as a buffer in Trask-Tate and colleagues (2014) study, buffering peer and teacher-based discrimination effects on future academic expectations.

The nuances of these studies are described further in Chapter 2; however, this evidence demonstrates the limited knowledge about the way racial socialization may protect youth academic outcomes from discrimination. The lack of research merits further examination via studies that consider gender and utilize samples from under-explored social contexts (Wang & Huguley, 2012). The present study sought to answer this call as the sample is focused on Black male adolescents who identify ethnically in different ways and are being raised by highly educated parents. Further, the majority of these youth were considered high-achieving, as they were recruited from a program with an entry GPA requirement of 3.0. The experiences of high-achieving Black students have too often gone ignored, and this study shines light on this particular social context. Along those lines, this investigation helps bring clarity to the processes that enhance Black student academic achievement as Carter Andrews (2012) has called the field to do.

**Racial Identity in Black Adolescents**

This research also examined specific aspects of adolescent racial identity as they related to racial discrimination and academic outcomes. Racial identity is defined as the psychological meaning of being African American to members of this racial group (Sellers et al., 1998). Racial identity has been noted to function as a protective factor for African American adolescents’ psychosocial adjustment (Dotterer et al., 2009; Neblett, Banks, Cooper, & Smalls-Glover, 2013; Rivas-Drake et al., 2014). The present study
posited that specific aspects of racial identity would serve as a psychological buffer that reduces the impact of racial discrimination on youth’s academic performance and academic attitudes.

Little is known about racial identity serving as a buffer against discrimination experiences impact on academic behaviors and outcomes. Further, there is a gap in knowledge in how specific aspects of racial identity (i.e., regard) might protect youth. To my knowledge, there are only a few studies that examined whether racial regard buffered against discrimination related to academic outcomes for Black youth. Dotterer et al. (2009) looked at this relationship among 148 sixth to twelfth grade African American students. Miller and MacIntosh (1999) examined it among African American high school age youth. However, contrary to the present study, Phinney’s Multi-group Ethnic Identity Measure (MEIM) was used to assess racial identity in both of these studies.

The present investigation extends the literature by providing insight into the role aspects of racial identity have in relation to academic-based discrimination experiences for Black male adolescents. Additionally, use of the Multidimensional Inventory of Black Identity measure was effective in that it was created to specifically capture the cultural experiences relevant to being Black in America. Because this sample comes from a wide-range of socio-economic backgrounds, this work broadens the spectrum of what we know about African American/Black families, given much of research is focused on families from working class to low-income backgrounds. Finally, this study offers some evidence as to how racial identity is relevant or not relevant for academic performance and academic attitudes among high-achieving Black students.
Grounded in the risk and resilience framework (Masten, Best, & Garmezy, 1990) and the Integrative Model for the Study of Minority Youth Development (Garcia Coll et al., 1996), this study used hierarchical multiple regression to examine how experiences of academic-based discrimination relate to GPA, math ability, and race-based academic self-concept for high-achieving Black male adolescents. Acknowledging important cultural processes and factors that impact the development of Black youth, this study also considered the ways in which types of racial socialization messages (i.e., cultural socialization preparation for bias, and egalitarianism) and how racial identity attitudes (i.e., private regard, public regard) related to the academic outcomes under study. Dimensions of racial socialization and racial identity were examined as potential moderators of the relationship between academic-based discrimination and academic outcomes under study.

**Key Terms**

Before reviewing previous studies that examine the relationships among the variables of interest, this section provides the definitions of key terms.

**African American.** African American refers to an individual who is a citizen or resident of the United States and is descended from African slaves (Locke & Bailey, 2013). African American individuals may also be referred to as Black.

**Black American.** Black American refers to individuals who identify as African American, Sub-Saharan African (e.g., Liberian) or Afro-Caribbean (e.g., Haitian) (Rastogi, Johnson, Hoeffel, & Drewery, 2011). In some cases, this may include individuals who are Biracial (e.g. Black-White biracial) or Multiracial, but ascribe to
being a Black individual. This last part is key, as not all Biracial/Multiracial individuals with Black heritage identify as Black.

**Racial identity.** Racial identity, defined by the Multidimensional Model of Racial Identity (MMRI, Sellers, Smith, Shelton, Rowley, & Chavous, 1998), is the part of the person's self-concept that is related to her/his membership within a race. It is concerned with both the significance the individual places on race in defining him/herself and the individual's interpretations of what it means to be Black.

**Centrality.** Centrality refers to the extent to which a person normatively defines himself or herself with regard to race across a number of different situations (Sellers et al., 1998). Racial regard. Racial regard is defined as the extent to which a person feels positively about his or her race (Sellers et al., 1998).

**Private regard.** Private regard is defined as the extent to which individuals feel positively towards African Americans as well as the extent to which they feel positively about being African American (Sellers et al., 1998).

**Public regard.** Public regard refers to individuals’ perceptions of how other groups view or value African Americans (Sellers et al., 1998).

**Ethnicity.** Ethnicity refers to “shared culture and traditions that are distinctive, maintained between generations, and lead to a sense of identity and group and as common language or religious tradition” (Dein, 2006, p. 69).

**Ethnic identity.** The development of one’s ethnic identity requires the knowledge of the group’s history and tradition, feelings of belongingness, participation in practices that reflect group membership and the development and influence of positive (or negative) views of one’s group (Phinney, 1990).
Racial socialization. Racial socialization is defined as specific verbal and non-verbal messages transmitted to children for the development of values, attitudes, behaviors, and beliefs regarding the meaning and significance of race and intergroup and intra-group interactions (Lesane-Brown, 2006).

Cultural socialization. Cultural socialization consists of parental practices that teach children about their racial or ethnic heritage and history, promote cultural customs and traditions, and promote children’s cultural, racial, and ethnic pride (Hughes et al., 2006). It may also be referred to as racial pride (Lesane-Brown, Scottham, Nguyen, & Sellers, 2008) or cultural pride reinforcement (Stevenson et al., 2002).

Preparation for bias. Preparation for bias involves parents’ efforts to promote their children’s awareness of discrimination and prepare them to cope with it (Hughes et al., 2006). It may also be referred to as cultural alertness for discrimination messages or coping with antagonism messages (Stevenson et al., 2002) or racial barrier messages (Lesane-Brown et al., 2008).

Egalitarianism. Egalitarianism involves parents explicitly encouraging their children to value individual qualities over racial group membership and value having cross-racial relationships. It also involves encouraging the learning about other groups beyond one’s own (Hughes, et al., 2006). It is similar to egalitarian messages, which promote interracial coexistence and equality (Lesane-Brown et al., 2008).

Racism. Racism refers to a system of dominance and power that assumes there is a superior race and excludes those deemed as less inferior from power, status, and/or equal access to societal resources (Garcia Coll et al., 1996; Harrell, 2000)
**Racial discrimination.** Racial discrimination occurs when a dominant group or member’s action leads to a differential and negative effect on subordinate racial/ethnic groups (Williams, Neighbors & Jackson, 2003). These can be intentional or inadvertent.

**Academic-based discrimination.** Academic-based discrimination refers to any racial discrimination that occurs in the school setting or by school related personnel or classmates. It also involves differential treatment around one’s ability to understand or perform, based on assumptions about their racial group.

**Race-based academic self-concept.** Race-based academic self-concept refers to the conceptualization of one’s academic identity, ability to achieve and succeed in the context of their race.
Chapter II: Theoretical Frameworks and Literature Review

Despite the stereotypes and misconceptions that exist, Black boys want to learn, want their teachers to have higher expectations for them and push them harder (Garibaldi, 1992; Jenkins, 2006). However, much of what we know about the academic experiences of Black boys is deficit focused. Even within literature focused on academically talented African American K-12 youth, much of the attention is directed towards the success of African American girls (Ford, Grantham, & Whiting, 2008; Hubbard, 1999; Roach, 2001; Trent, 1991; Ward & Robinson-Wood, 2006). Thus the knowledge about high-achieving Black boys and the factors that contribute to their success in spite of risk is limited.

The present study applied two theoretical frameworks that are relevant for understanding both the risk and protective factors that impact the development of high-achieving African American boys. These theoretical frameworks are risk and resilience theory and the Integrative Model for the Study of Developmental Competencies in Minority Children. A brief background on what is known about educational outcomes for Black boys at large is provided. Additionally, the lack of attention in the literature on the experiences of high-achieving Black boys will be noted. This is followed by a review of the literature in regards to the variables of interest. Finally, this chapter concludes with the research questions and hypotheses for this work.

Risk and Resilience Theory and the Psychosocial Development of Black Boys

This research relied upon Luthar and colleagues’ (2000) definition of risk and resilience theory. They define resilience as “a dynamic process encompassing positive adaptation within the context of significant adversity” (Luthar, Cicchetti, & Becker, 2000, p. 543). This definition identifies two crucial conditions: 1) the exposure to risk (i.e.,
significant trauma or adversity) and 2) the achievement of positive adaptation despite threats to developmental competencies (Garmezy, 1991; Masten, Best, & Garmezy, 1990; Masten & Coatsworth, 1998; Luthar & Zigler, 1991).

There are several developmental tasks that youth are expected to accomplish during childhood and adolescence. These tasks include abiding by rules without direct supervision; developing and applying decision-making skills, doing well in school, and becoming autonomous (Erikson, 1968; Havighurst, 1972; Klaczynski, 1990; Masten & Braswell, 1991; Masten & Coatsworth, 1998). Key tasks that are crucial during the adolescent years involve the formation of a positive identity, having positive peer relationships, and academic achievement (Masten & Coatsworth, 1998). The accomplishments of these developmental tasks are paramount for the development of productive adults. Thus, it is problematic when youth are exposed to risk factors, circumstances that can increase the likelihood of poor outcomes, as it may impact their ability to accomplish these tasks.

Resilience is an interactive concept, taking into account both the level of exposure to risks as well as the presence of promotive or protective factors (Masten et al., 1991; Walsh, 2003; Zolkoski & Bullock, 2012). Promotive factors alter responses to adverse events so that potential negative outcomes can be avoided, while protective factors serve as buffers so that the impact risks on developmental outcomes are diminished (Garmezy, Masten, & Tellegen, 1984). Further, children can experience positive outcomes, despite an adverse situation that makes them vulnerable, if there are systems operating to protect against or neutralize any threats to development. (Luthar et al., 2000; Masten & Coatsworth, 1998; Rutter 1993).
An important assumption is that resilience is a process (Garmezy, 1991; Luthar et al., 2000; Jenson & Fraser, 2015). Masten (1994) has warned that scientific representation of resilience as a personal attribute may inadvertently facilitate the notion that some individuals simply are incapable of overcoming adversity. Additionally, this conceptualization does not account for instances when a person shows resilience across a range of circumstances, while in other circumstance of risk, they do not. Moreover, resilience should be viewed as a process and not as a fixed attribute of an individual.

Application to Black boys: Risk factors, protective factors, and developmental tasks. Rutter (2006) defines the process where there is reduced vulnerability to environmental risk experiences, or when someone is able to triumph despite risk experiences as resilience. Again, resilience is a process that considers the exposure to risk and the presence of protective factors. This section considers academic-based discrimination as a risk factor that might hinder African American boys from achieving competence in expected developmental tasks for adolescents. Additionally, this section explores two factors that could protect youth from discrimination.

Risk factors. Black children are at risk for negative developmental outcomes because of their membership in a stigmatized racial group in the U.S. (Clark et al., 1999). Their increased risk for exposure to racial discrimination represents a risk factor potentially negatively impacting optimal development. African American children experience racial discrimination as early as elementary school (Brody et al., 2006; Dulin-Keita et al., 2011). Research demonstrates that risk for exposure to racial discrimination persists into adulthood, and often at greater rates for African American boys (Bynum et al., 2008; Smith Bynum et al., 2014).
This research conceptualized discrimination as an environmental risk factor for Black adolescent development. In a review paper examining the impact of racial discrimination on the development and functioning of children of color in the US, Sanders-Phillips (2009) asserts that exposure to racial discrimination contributes to a chronic source of trauma. She further states that based on contemporary definitions of violence and child maltreatment, exposure to racial discrimination should be deemed a form of violence. Symptoms of anger, anxiety and depression, decreased self esteem and self-efficacy that are associated with exposure to racial discrimination have also been reported for youth exposed to domestic, interpersonal, and community violence (Kendall-Tackett 2002; Osofsky 1999). Thus, discrimination can have a demoralizing impact on its targets, likely impacting youth through its impact on developing a cohesive sense of self (i.e., identity) (Havighurst, 1972; Manning, 2002; Masten & Coatsworth, 1998) which in turn, can undermine academic performance (Masten & Coatsworth, 1998).

**Protective factors.** Racial socialization messages and racial identity attitudes are factors that may have a positive influence on the developmental outcomes of Black youth. It is important to note that racial socialization messages and racial identity attitudes are culturally specific protective factors for Black youth. While risk and resilience theory does not explicitly address specific protective factors that apply to ethnic minorities, these processes are believed to operate in the same way as more global protective factors such as a positive parent-child relationship.

Racial socialization is designed to protect against racial discrimination (Bynum, Burton, & Best, 2007; Fischer & Shaw, 1999; Neblett et al., 2008). It can broadly be thought of as a “suit of armor” involving messages and behaviors that iterate that one’s
race has the potential to affect one’s options and opportunities, and that Black youth must
develop skills to thrive in such an environment (Hughes & Chen, 1999; Thornton,
Chatters, Taylor, & Allen, 1990). Given these conditions, Black parents strive to raise
their children to be emotionally healthy in a society in which being Black is considered a
disadvantage by the broader society.

It is important to acknowledge the possible varied protection that different types
of racial socialization messages provide against discrimination. Consistently, cultural
socialization and egalitarianism have been associated with positive outcomes (Caughy,
Nettles, O’ Campo, & Lohrfink, 2006; Cooper & Smalls, 2010; Neblett et al., 2006;
Smalls, 2009; Trask-Tate et al., 2014; Wang & Huguley 2012). There is evidence to
support the benefits of preparation for bias messages as well. However, there is also
literature to support the negative impact preparation for bias messages may have on
psychosocial outcomes for African American children (Caughy et al., 2006; Elmore &
Gaylord-Harden, 2013; Harris –Britt et al., 2007). With this said, it is possible that while
preparation for bias messages prepare youth for discriminatory experiences, they may not
lessen the influence of discrimination on developmental outcomes.

Interestingly, while a positive global identity is considered a developmental
competency, positive aspects of racial identity have also been noted to act as a buffer
against discrimination for African American youth (Dotterer et al., 2009; Miller &
is defined as the part of a person’s self-concept related to his/her membership within a
race (Sellers et al., 1997; 1998). The significance a person places on race when they
define his/herself and how they conceptualize what it means to be Black are important
elements in this process. An individual, who feels good about being Black, may be better able to bounce back from racial prejudice or discrimination. As a result, it has been suggested that Black adolescents develop a positive racial identity to meet the challenges of the social conditions that obstruct their advancement (Parham, 1989).

Considering these risk and protective factors, the risk and resilience theory would suggest that Black boys demonstrate resilience because they are attuned to racial socialization messages from their parents, are able to develop a positive racial identity and do well academically in the presence of high levels of racial discrimination have demonstrated resilience. This theory would further suggest that it is through protective factors that these youth are able to flourish in the midst of adversity. In the conceptual model, various racial socialization messages were proposed to serve as protective factors against discrimination on academic outcomes (i.e., academic performance, math ability and race-based academic self-concept). Additionally, a positive racial identity may minimize the negative impact that discrimination may have on academic performance (i.e., GPA), math ability and race-based academic self-concept. Ultimately, this theory provides an important lens for understanding how discrimination is a risk factor for the development of Black boys and may provide awareness of potential protective factors that may foster resilience in this population.

**Integrative Model for the Study of Minority Youth Development**

The second theoretical framework for this research is the Integrative Model for the Study of Developmental Competencies in Minority Children (Garcia Coll et al., 1996; Figure 1). This framework was one of the first to incorporate and emphasize fundamental factors for understanding the growth and development of minority children. It
acknowledges that there are distinct experiences that children of color encounter and explicitly accounts for the unique ecological contexts within which Black youth and other children of color develop. For example, the expanded role of the family and kin networks is understood to protect children from economic hardship and sources of oppression derived from their relative social position in America (Garcia Coll et al., 1996; Harrison, Wilson, Pine, Chan, & Buriel, 1990). In particular, this framework is useful for placing into context the experiences of Black adolescent boys, thus extending considerations included in a risk and resilience approach.

Luthar (1999), a major theorist in risk and resilience research, asserted in her seminal piece on the topic, that broad developmental theories should be expanded upon to consider features that are prominent within the particular adversity circumstance under study. Garcia-Coll and colleague’s (1996) model expands upon the risk and resilience framework by considering cultural processes relevant to minority youth. This model outlines 8 major constructs that affect the development of minority children: social position (e.g., race, gender); social stratification mechanisms (e.g., discrimination); segregation; promoting or inhibiting environments (e.g., schools and neighborhoods); adaptive culture (e.g., traditions and legacies); child characteristics (e.g., age); family characteristics; and children’s developmental competencies (see Figure 1).

Garcia Coll and colleague’s (1996) model offered this important model during a time when the developmental science field largely ignored socio-cultural factors. Prior to that time, research on ethnic minority children reflected a heavy focus on examining the ways ethnic minority children and families deviated from their white middle-class counterparts (e.g., deficit-model approach). Additionally, this model helps supplement
the resilience framework because it considers both social position and social stratification constructs at the core rather than at the fringes of a theoretical formulation of children's development.

A full accounting of each panel of the Integrative Model is beyond the scope of this dissertation. However, several key constructs and pathways are relevant to understanding the experiences of high-achieving Black boys. Thus, this section highlights constructs from this model that are applicable to the present study: social position variables, social stratification mechanisms, promoting or inhibiting environments, family characteristics, and developmental competencies.

**Social position variables.** A fundamental assumption of Garcia Coll et al.’s (1996) model is that developmental outcomes are greatly affected by the individual's social position. This social position is derived from the social stratification system of any given society. Specifically, factors such as a child’s gender, race, and socioeconomic status have bearing on access to the resources and opportunities that shape developmental outcomes. Garcia Coll et al. (1996) noted that the categories that make up one’s social position overlap, resulting in additive and multiplicative effects, depending on the degree to which an individual occupies specific combinations of these social positions. For example, in some contexts, the notion that males are superior to females is widely accepted. In this situation, males have access to power and privilege. However, when one considers the common experiences of Black males, being perceived as powerful is seen as a threat. As a result, Black males are often treated more harshly for their behavior and conduct. Thus, depending on the various contexts that Black boys find themselves in,
these various characteristics of their social position may elicit access to privilege or result in marginalization.

**Social stratification mechanisms.** Garcia Coll et al. (1996) noted four macro-level mechanisms that intervene between an individual's social position and their development. These are racism, prejudice, discrimination, and oppression. Most relevant to this study is racism and discrimination. Racism refers to a system of dominance and power; and assumes there is a superior race and excludes those deemed as less inferior from power, status, and/or equal access to societal resources (Garcia Coll et al., 1996; Harrell, 2000). In more recent years, minority children have endured much more subtle forms of educational racism such as low teacher expectations and attitudes.

At the interpersonal level, racism manifests through experiences of discrimination. Discrimination against a group involves the systematic exclusion of members of said group. It not only limits the magnitude of resources available to a particular group but it also restricts access to those resources. Moreover these mechanisms, in conjunction with one’s social position, create distinct conditions that are faced by children of color. Further, these conditions affect the nature of the developmental processes for minority youth.

**Promoting or inhibiting environments.** The environmental contexts in which children of color grow up can have a negative or positive impact on their ability to thrive (Garcia Coll et al., 1996). Positive contexts, or promoting environments are those enriched with good quality resources. These include well-resourced schools with talented instructional staff, high quality day care programs, and strong community programs. Unlike promoting environments, inhibiting environments result from a restriction of resources. They might include under-resourced schools, neighborhoods populated by
food deserts, and inadequate public transportation. This type of resource deficit creates conditions that hinder further development, and has the potential to undermine the competencies that have already been achieved (Garcia Coll et al., 1996). For example, impoverished neighborhoods have been linked to poor health and behavioral outcomes such as physical inactivity, obesity, poor academic performance and, youth violence (Singh & Ghandour, 2012).

Garcia Coll et al. (1996) also noted that for some youth of color, environments can be both inhibiting and promoting with respect to child development. For example, an environment that might be considered inhibiting (e.g., such as a segregated neighborhood) may be a promoting environment for a child if that setting readies youth to deal with the societal demands imposed by discrimination. Similarly, an environment that appears to be promotive could expose minority youth to risk. For example, a middle-class environment may be able to provide an Black boy with economic stability, a quality education, and access to adequate health services. However, it may also present opportunities for Black youth to be marginalized and discriminated against.

**Family characteristics.** Characteristics of families such as their socioeconomic status have great influence on the development of children. The financial capital available to a family of color would have bearing on the resources which they are able to provide their children. Families with higher economic status have greater access to the resources that enhance the development of their children's competencies than families of lower economic status. For example, a family with means can decide to live in a community with a library, a community center with activities for youth, quality schools, etc. However, as alluded to previously, wealth and education do not shield Black families
from risk due to the realities of racial discrimination. Therefore, while residing in a well-off community can address the needs for well-resourced schools and low-crime communities, it may increase the opportunity for African American youth to experience discrimination or marginalization within the neighborhood or in the schools as the result of being in the minority.

Additionally, the Integrative Model distinctly acknowledged that Black families actively engage in racial socialization. Again, racial socialization addressed the challenges of being Black in a society that devalues Black people. Parents have the task of ensuring that their children maintain a positive view of their racial group and teach their children how to prepare for and cope with issues of prejudice and discrimination (Hughes & Chen, 1999; Thornton et al., 1990). Garcia Coll and colleagues (1996) stressed that youth of color must also effectively cope with racism as well as maintain a strong sense of self; racial socialization is one strategy that African American parents employ to help their child with these developmental tasks.

**Developmental competencies.** Considering the previously noted processes, the model helps provide a framework to better understand the factors that impact the developmental competencies of minority youth (Garcia Coll et al., 1996). These competencies include emotional, social and cognitive tasks, as well as tasks that are vital for the development of minority youth (i.e. coping with racism). They represent tasks that a child may have at any one point in time but tasks that may shift in development as children navigate through multiple ecologies (school vs. neighborhood).

The academic outcomes of interest in this study directly map onto the cognitive competency domain. One’s academic performance (i.e. GPA), feelings around their
ability to do well in their coursework, and how they feel about being a student of color in
general, may all indicate a student’s strengthening of their cognitive development in the
school environment. According to Garcia Coll and colleagues (1996) it is important to
note that the cognitive development of Black children should not be judged solely in
relation to any specific standard that is applied to all children. From this lens, it may be
key to think about how minority students are faring cognitively in respect to each other,
instead of comparing them to groups that may come from different ecological contexts.
This would include factoring in race/ethnicity/culture as well as other factors such as
socio economic class and access to resources that might aide in cognitive development.

Finally, in thinking about how the academic achievement of Black boys is
fostered, this model recognizes that a reciprocal process exists between the child’s
individual characteristics, family processes, and promoting/inhibiting environments. This
perspective suggests that the temperament of a child, the conversations they have (or do
not have) with their parents about the importance of doing well in school, or the
behaviors in the home that facilitate (or make harder for) engagement in school, and the
type of school a child attends, all have bearing on how this child achieves academically.

Racial socialization and racial identity as cultural resources. The role of racial
identity and racial socialization processes in reducing the impact of discrimination on
African American youth. More recent research has identified the ways in which racial
identity and racial socialization matter for the development of African American
adolescents (Chavous, Hilkene-Bernat, Schmeelk-Cone, Caldwell, Kohn-Wood, &
Zimmerman, 2003; Harris-Britt et al., 2007; Hughes et al., 2006; Neblett, et al., 2008;
Sellers, Copeland-Linder, Martin, & Lewis, 2006). In an effort to be consistent with the
recommendation to consider how culturally-informed strengths can serve as protective functions for members of ethnic minority groups, Neblett and colleagues (2012) explore racial factors associated with resilience among ethnic minority youth. Thus, racial identity and racial socialization are considered to be culturally relevant factors that could protect African American youth from the harmful effects of discrimination.

Racial identity and racial socialization are noted to reciprocally influence one another over time while simultaneously influencing and being shaped by self-concept, cognitive appraisals, and coping strategies (Neblett et al., 2012). Additionally, bidirectional interactions between these two protective factors and these mediators are believed to in turn, influence the impact of racial discrimination on adolescent adjustment. Specifically, positive messages about the significance and meaning of being a part of a racial or ethnic group and having affirmative feelings about one’s group helps adolescents feel competent when striving to accomplish social, academic, and behavioral tasks.

**Application to African American boys.** Cultural factors as resources against discrimination. These culturally specific frameworks would suggest that discrimination occurs at macro levels (i.e., societal laws, policies, practices) as well as through direct interaction such as in schools. Racial discrimination experiences have the potential to impact important developmental tasks for youth such as academic achievement. Whether developmental contexts are promotive or inhibiting, they influence how risk factors impact developmental outcomes for African American youth. Family characteristics (e.g., socioeconomic status) can also alter the impact, the degree, and direct exposure to the discrimination a child experiences, due to its link to the racial composition of the
community. Culturally appropriate parenting strategies such as racial socialization appear to be important in fostering adolescent developmental competencies, including tasks that may be unique to minority individuals such as coping with discrimination.

Taken together, these frameworks can help uncover the ways in which discrimination manifests for an understudied population such as high-achieving African American boys. Considering that one of the most secure avenues for success in the United States is through the classroom, it is imperative to investigate the factors that may aim to impede or enhance academic success for African American boys. Equally, it is crucial to acknowledge the factors that might empower them to persevere in spite of the barriers they may face as Black males in American society. Further, with the use of these frameworks, this research might provide insight into ways to diminish the achievement gap between African American boys and their White peers.

**The Missing Narrative of High-Achieving Black Boys**

The knowledge about high-achieving Black boys is not robust, and what does exist is rather homogeneous. Research examining the academic experiences of African American youth has heavily focused on urban schooling and low-income to working class populations (Allen 2012; Gordon, Iwamoto, Ward, Potts, & Boyd, 2009; Irvin, Farmer, Leung, Thompson, & Hutchins, 2010; Miller & Macintosh, 1999). Additionally this literature has predominately been concerned with the low achievement or under-achievement experiences of African American youth (Ford, 2010; Ford & Moore, 2013; Jackson & Moore, 2006; Vega et al., 2012). This lens disproportionately presents the idea that the schooling experiences of Black youth are uniform. Consequently, little attention has been garnered to note the resilience of Black youth who excel in spite of obstacles.
When academic achievement is discussed in the literature about the experiences of K-12 students, African American females are applauded for their academic performance, while the success of African American boys is largely ignored (Ford et al., 2008; Hubbard, 1999; Roach, 2001; Trent, 1991; Ward & Robinson-Wood, 2006). In fact, the literature is consistent in emphasizing the negative stigmas that African American boys endure. The literature has showcased that Black boys are seen as less competent and have more behavioral problems than other students (Noguera, 2003; Ward & Robinson-Wood, 2006). Black boys experience low rates of school retention, more disciplinary action, over representation in special education programs and low representation in gifted education and Advanced Placement (AP) classes (Blanchett, Klingner, & Harry, 2009; Ford, 2010; Grantham, 2004; Mickelson, 2003; Moore & Flowers, 2012). Addressing these issues is crucial. However, the discourse around low/under achievement has the potential to be harmful by perpetuating the idea that African American male students are incapable or incompetent. In reality, there is variation in the academic experiences of African American boys, with some struggling, while others are excelling. Exploring the experiences of those that are achieving, as well as the factors that promote their achievement, may be paramount to better understanding how to promote academic success across all African American youth.

The literature highlighting high-achieving African American students, let alone Black boys, is slim but growing. Within it, a variety of environments have been featured. Much of this research has been conducted in public, urban school environments (Fordham, 1996; Gayles 2005; Hemmings 1996; O’Connor 1997; Sanders 1997), with some studies focused on high-achieving African American youth in predominately White
public, suburban high schools (Carter, 2005; Wells & Crain, 1999) and predominantly White, private or elite K–12, and postsecondary environments (Foster, 2003, Horvat & Antonio, 1999; Tuitt & Carter, 2008). And, while not focused on the experiences of students in K-12 settings, quantitative and qualitative research on high-achieving Black college students offer some perspective of the experiences of high-achieving Black students (Bonner, 2010; Fries-Britt & Turner, 2002; Griffin, 2006; Harper, 2012).

A common theme within this literature is the acknowledgment of risk factors that African American students have been exposed to and how they manage their success in spite of their challenges (Allen, Scott, & Lewis, 2013; Carter Andrews, 2012; Fries-Britt & Griffin, 2007; Ford, 2010; Trask-Tate et al., 2014). These risk factors include discrimination and/or microaggressions, subtle but offensive actions towards a person of a non-dominant group. Of particular interest to this study, school-based discrimination has been linked to motivation, engagement, and disciplinary problems among African American students (Mattison & Aber, 2007; Thomas et al., 2009a; Wong et al., 2003). Additionally, a qualitative study found that Black high achievers reported experiences with prejudice based on prevalent stereotypes regarding the academic abilities of Black students (Fries-Britt & Griffin, 2007). This study found that the students actively resisted these negative stereotypes in both the classroom and outside of it. This finding acknowledges that gifted Black students are confronted with unique obstacles and provides insight into how students manage these experiences. This study focused on students in higher education, thus it is worth exploring in other school settings (i.e. high school).
In line with the recent shift in research on Black males, from a deficit-model and towards more asset approaches (Graham & Anderson 2008; Wright, 2011), this study examined how both risk factors and protective factors impact developmental outcomes for high-achieving African American male youth. Specifically, this study examined if the risk factor of academic-based discrimination is related to academic outcomes. Additionally, this study examined whether or not three types of racial socialization (i.e., cultural socialization, preparation for bias, and egalitarianism) are linked to academic outcomes. How private regard and public regard relate to the academic outcomes was also explored. Finally, this study examined if varying types of racial socialization messages and racial identity attitudes serve as protective factors, buffering the effects of discrimination on academic achievement of high-achieving Black male students.

**Literature Review**

The following section consists of a review of the literature that examines discrimination, racial socialization messages, and racial identity attitudes as it pertains to Black youth and GPA, math ability, and race-based academic concept. When relevant, review of literature pertaining to discrimination, racial socialization messages, and racial identity attitudes as it pertains to academic variables similar to those under study (e.g., test scores, educational aspirations) is also provided.

First, it is important to acknowledge the diversity within the Black community. As such, youth, who have a non-Black parent or a first generation Black immigrant parent may hear different socialization experiences around race, if they receive any racial socialization messages at all (Joseph & Hunter, 2011) These factors may also influence youths’ recognition and awareness of discrimination due to their parent’s cognizance of
and experience with discrimination (Hall & Carter, 2006). Their parent’s culture of origin may also have bearing on how youth identify racially (Benson, 2006; Butterfield, 2004). Youth, who have a parent of African descent, may identify as African American, or Biracial/Multiracial or as Black-White, Black-Latino, etc. Similarly, second-generation black immigrant youth may identify with their culture of origin (e.g. Nigerian or Nigerian American) or even view themselves as African American. Finally, youth who have a non-Black parent or a first generation Black immigrant parent may hear different messaging about the importance of education (e.g. sacrifices made to live in America) and indications of (or de-emphasis on) barriers that boys of color face in school (Joseph & Carter, 2011; Raleigh & Kao, 2010). These were important considerations to bear in mind considering the diversity of the sample and the possible implications for discrimination, racial socialization, racial identity, and the academic outcomes of interest.

**Academic-based Discrimination as a Predictor of Academic Behaviors and Outcomes**

Discrimination occurring in school settings has been noted as a contributor to disparities in achievement among African American and White students (Thomas et al., 2009a). One study indicated that an estimated one fourth-to-one half of African American high-school adolescents, age 13-19, reported that they either (1) received lower than deserved grades, (2) been discouraged from joining advanced level courses, or (3) were unfairly disciplined by adults in the school setting because of their race (Fisher et al., 2000). African American males are especially vulnerable for such unfair treatment. For instance, this was captured using a sample from the Maryland Adolescents Development Context Study (MADICS). During 11th grade, African American males reported more
discrimination experiences from teachers than their female counterparts (n = 410) (Chavous, Rivas-Drake, Smalls, Griffin, & Cogburn, 2008).

It is believed that the treatment African American boys receive by some teachers has bearing on how they perform in school (Swanson, Cunningham, & Spencer, 2003). Students who do not feel their teacher or other school personnel believe in their ability are likely to disengage from their schoolwork. Thus, how teachers and other school personnel treat African American boys at large, has bearing on how they view school, their motivation to do well, maintain engagement, and perform well (Swanson et al., 2003). The next sections review studies on the linkages between racial discrimination and academic outcomes. This research indicates that discrimination is harmful for youths’ grades, perception of ability to perform and complete a task, motivation and engagement, and educational aspirations.

**Academic performance.** Neblett and colleagues (2006) examined the interrelationships among racial discrimination experiences, racial socialization, and academic achievement outcomes in a sample of 548 African American adolescents. Participants were primarily in grades 7 through 10 and were recruited from 11 middle schools and high schools in a public school district in the Midwestern United States. This study employed the Perceived Discrimination Scale (Harrell, 1997), a discrimination measure that assesses discrimination experiences in a number of settings (e.g., store, restaurant, school). Adolescent experiences with general racial discrimination were negatively associated with student self-reported grades.

Wong and colleagues (2003) with the longitudinal MADICS sample found perceived discrimination at school by teachers and peers was related to academic
performance as measured by GPA. The data were collected at the beginning of the 7th grade and after the completion of the 8th grade. Results indicated that experiences of school-based racial discrimination from one’s teachers and peers were associated with declines in grades.

Wang and Huguley (2012) also examined discrimination experiences of youth in the school setting. Like Chavous and colleagues (2008) and Wong and colleagues (2003), Wang and Huguley’s sample came from MADICS. Wang and Huguley examined two waves of data: Wave 3, when adolescents were transitioning to the 9th grade, and Wave 4, when majority of the participants were in the 11th grade. The teacher discrimination measure in this study contains items that align with the measure used to assess academic-based discrimination in this study. This measure included items examining if students felt that their teachers graded them more harshly, disciplined them more harshly, discouraged them from taking a class, and thought they were less smart because of their race. Wang and Huguley (2012) found teacher discrimination to be a negative predictor of GPA at 11th grade.

**Academic attitudes and behaviors.** To my knowledge, there is only one study examining how discrimination impacts how African American adolescents perceive their ability to do well in school. Wong and colleagues (2003) found racial discrimination at school by teachers and peers to be associated with declines in academic ability self-concepts, and academic task values for middle school African American youth. Additionally, there is evidence that discrimination experiences impact student’s efficacy, motivation, engagement and aspirations for college. Among the 548 African American adolescents in grades 7 through 10, Neblett and colleagues (2006) found that experiences
with general racial discrimination were negatively associated with academic behaviors such as persistence and curiosity.

Wang and Huguley (2012) found teacher discrimination to be a negative predictor of cognitive engagement, and educational aspirations for 630 African American adolescents in the 11th grade. Interestingly, the negative effect of teacher discrimination on cognitive engagement appeared to be more pronounced for African American males than for females. Taken together, these studies support the notion that racial discrimination has negative consequences for student’s belief in their ability to do well, motivation and engagement in school, and aspirations for higher education. Thus, this evidence, in congruence with the theoretical models being used in this dissertation, supports the idea that academic-based discrimination is harmful for students’ perception of ability to do well in math.

**Race-based academic self-concept.** Research demonstrating the impact discrimination experiences can have on one’s race-based academic self-concept is virtually nonexistent. However, literature focused on the notion that doing well in school is “White property” offers a foundation for understanding how Black youth might conceptualize their achievement and success in the context of their race (Davidson, 1996; Fordham, 1988; Fordham & Ogbu, 1986). Carter Andrews (2009) asserts that the idea that African American students, who are able to do well in school simply because they have a strong academic self-concept or because they have a strong racial identity, is a partial truth. She suggests that when African American students do well in school, it is because they conceptualize achievement in the context of their race. This theory arose after conducting a qualitative study with African American students ($n = 9$) at a
predominately White high school. Carter Andrews (2009) found the students rejected the idea that achievement is “White property” but rather can be acquired by anyone. However, they also recognized how race could serve as a barrier to their success. Additionally, students found motivation to succeed as a matter of racial uplift and commitment to one’s race group.

Considering racial discrimination that challenges a student’s competence, ability, or work ethic, it is plausible that students enduring such assaults may begin to question their intelligence or efforts as African American students (Davis, Young, Hart, Francois, & Smith Bynum, 2014; Fries-Britt & Griffin, 2007). Further, such experiences could lead these students to believe that these assaults or insults occur because their peers do not think Black people are smart. It is also possible that youth are able to perform well in spite of discrimination, but due to the consequences that come with the territory, they may acquire a negative race-based academic self-concept, or the belief that African Americans are not smart.

**Racial Socialization as a Predictor of Academic Behaviors and Outcomes**

African American parents have a unique responsibility to help their children recognize, understand and cope with the destructive influence of racial discrimination (Brown & Krishnakumar, 2007; Bowman & Howard, 1985; Hughes et al., 2006). This process is referred to as racial socialization. Hughes and Chen (1999) defined racial socialization as any parental practices that deliver attitudes, values, and information about being a member of a race to children. These ideas or beliefs about race can be communicated verbally and/or nonverbally and can occur bi-directionally. They may be delivered from parents who explicitly make an effort to discuss ideas about race or they
may occur spontaneously during everyday events in families’ lives (Hughes & Chen, 1999; Hughes et al., 2006; Stevenson, 1995). Lastly, racial socialization messages may be proactive, occurring because of parents’ preconceived values, agendas, beliefs or they may occur in reaction to a discrete event in the parent’s or child’s lives (Hughes & Chen, 1999).

This study focused on three dimensions of racial socialization: cultural socialization, preparation for bias, and egalitarianism. The research on linkages between racial socialization messages and academic behaviors and outcomes dates back at least 30 years, with a recent boost of empirical work over the past decade (Bowman & Howard, 1985; Caughy et al., 2006; Cooper & Smalls, 2010; Hughes, Hagelskamp, Way, & Foust, 2009a; Hughes, Witherspoon, Rivas-Drake, & West-Bey, 2009b; Neblett et al., 2006; Smith, Atkins, & Connell, 2003; Trask-Tate et al., 2014; Wang & Huguley, 2012). Prior to a review focused on linkages between racial socialization variables and academic outcomes, a review of the literature as it pertains to how the age of youth influences the process of racial socialization is offered.

**Racial socialization and the age of youth.** As noted in the theoretical section, it is important to consider how characteristics of the youth may influence parenting practices such as racial socialization. In particular, the age of the youth may matter for how parents engage in racial socialization (i.e. type, frequency). Research suggests that these conversations are not static, but instead shift according to the cognitive abilities and the experiences of youth (Hughes & Chen, 1997; Hughes & Johnson, 2001; Umana-Taylor & Fine, 2004). Further, parents with young children, who may have some sense of
race, but not yet a comprehensive cognitive understanding of the concept, are less likely than parents of older children to discuss racial or ethnic issues with them.

Cognitive developmental advances during maturation, enables youth to better able understand parental messages about race relations over time. Additionally, the process of identity formation, an important developmental task during adolescence, may foster youth's interest in cultural values, traditions, and achievements. These processes, plus the greater likelihood that they will encounter racial bias, may prompt youth to initiate discussions about race with their parents on their own (Hughes & Johnson, 2001). Correspondingly, parents may preemptively initiate these conversations based on their expectation that their child has an increased awareness of race-based differential treatment and is more exposed to individuals of various ethnic backgrounds as they mature (McHale et al., 2006).

A review of the literature has illuminated a specific pattern: cultural socialization and egalitarian messages are commonly transmitted when children are young. To the contrary, discussion of more complicated social processes, that take place with preparation for bias messages, occur more readily when children reach middle childhood or adolescence (Hughes et al., 2006). Additionally, findings suggest that racial socialization increases in frequency as children age. For a more comprehensive review of the literature as it pertains to racial socialization and the influence of youth age, see Hughes and colleagues’ (2006) review paper.

Narrowing in on how racial socialization relates to relevant academic outcomes of interest, the next section highlighted how cultural socialization messages, as well as other similar constructs (e.g. racial pride), were consistently beneficial for academic
achievement. Additionally, this section documented the mixed evidence regarding the effects of preparation for bias messages. Lastly, although there is limited knowledge, this section reviewed egalitarianism as it appeared to have positive consequences for academic beliefs and attitudes.

**Academic performance.** Cultural socialization and preparation for bias have been linked to academic performance in previous studies. Several studies found cultural socialization as a positive predictor of youths’ GPA (Caughy et al., 2006; Cooper & Smalls, 2010; Smalls, 2009; Wang & Huguley 2012). Brown and colleagues (2009) found that receiving messages about the importance of African American cultural values and heritage were statistically linked to higher grades among African American male adolescents (grades 9–12) attending a public high school in the northeastern United States. Specifically messages about cultural values from a maternal caregiver was linked to higher grades for male adolescents. It was also found, that receiving messages regarding African American heritage from a paternal caregiver was related to higher grades for male adolescents.

The findings regarding preparation for bias are mixed. Classic studies by Bowman and Howard (1985) and Sanders (1997) found preparation for bias to be positively associated to academic grades. However, preparation for bias has also been linked to negative academic outcomes. For instance, Caughy and colleagues (2006) found preparation for bias to be linked to poor test scores. Specifically, in a sample of 241 African American male and female 1st graders (M= 6.59) living in an urban area, preparation for bias was linked to lower Kaufman Brief Intelligence Test scores (Caughy et al., 2006). This finding is consistent with Marshall’s (1995) results that found
preparation for bias to be linked to lower reading scores for 9 to 10 year old children. These results both provide some evidence of the negative link that can exist between preparation for bias messages and academic outcomes for Black youth. It is however, important to note that these studies used parent report of racial socialization messages. Parental involvement may prove to be an important factor in understanding how racial socialization messages are linked to academic outcomes.

Finally, the literature on egalitarian messages and academic performance is scarce. Neblett and colleagues (2006) examined the interrelationships among racial discrimination experiences, racial socialization messages, including egalitarianism and academic achievement outcomes in a sample of 548 African American adolescents in 7th to 10th grade (41% male). While there was a small positive relationship between egalitarianism and GPA, the relationship was not significant. Messages about interracial interactions could be useful for academic outcomes of students in diverse school settings. Thus, it is crucial that this relationship be explored further using a sample of students attending diverse schools.

**Academic attitudes and behaviors.** Although the literature does not specifically highlight how racial socialization is related to African American adolescents’ perception of their ability to do well in school, it does showcase links with other types of academic beliefs and behaviors. Cultural socialization was found to be associated with positive educational aspirations in a longitudinal study with 630 adolescents (M = 14.5) (Wang & Huguley, 2012). Educational aspirations were assessed by a one item question, “If you could do exactly what you wanted, how far would you like to go in school?,” with responses ranging as low as 9th grade to as high as Ph.D. or a medical doctor’s degree.
In another study, with 144 African American students in 6th to 9th grade, cultural socialization was positively linked to classroom engagement (Cooper & Smalls, 2010). Classroom engagement measured student effort and attention in classroom-related activities. This finding is consistent with previous work where cultural socialization was significantly and positively linked with emotional school engagement among 94 11 to 14 year old African American students from a Midwestern city (Smalls, 2009). Emotional school engagement assessed youths’ positive emotions and attitudes toward schoolwork and achievement.

Among a slightly different sample, Hughes and colleagues (2009b) found a positive relationship between cultural socialization and academic efficacy. These data were pulled from a larger longitudinal study and consisted of 805 African American and White elementary and middle school youth from a middle-class suburban community. Academic efficacy assessed students’ beliefs in their ability to master tasks needed for academic success. As previously mentioned, while these studies did not explore perception of ability, they tap into similar academic beliefs and behaviors. Taken together, these studies demonstrate the benefits cultural socialization has for academic beliefs and behaviors, suggesting that there would be a positive link between cultural socialization and perceptions of math ability in the present study.

In a few studies, preparation for bias was positively related to academic competence, and motivation in school (Bowman & Howard, 1985; Sanders, 1997). However, a more recent study found that preparation for bias messages were negatively related to adolescent’s emotional engagement in school among 11 to 14 year old African American male and female students (Smalls, 2009). These mixed findings demonstrate
ambiguity in whether preparation for bias messages are beneficial or harmful for academic outcomes of African American youth.

Additionally, there is evidence that egalitarianism positively predicted academic curiosity in a sample of 548 African American adolescents in 7th to 10th grade (Neblett et al., 2006). Lastly, Trask-Tate and colleagues (2014) found that egalitarianism had a statistically significant positive relationship with future academic expectations for 206 African American youth (ages 13-18) who attended a public high school in a large, urban area in the South.

**Race-based academic self-concept.** Racial socialization also appears to be an important process in fostering a positive race-based academic self-concept in African American youth (Allen, 2015; Graham & Anderson, 2008). In each of these qualitative studies, high school boys (10th through 12th grade) and their parents discuss having conversations about cultural socialization as well as the role race, racism and class played in creating barriers for students of color. One father acknowledged that he frequently shared these messages with his son, “Black kids [need] to get as much education as possible, especially Black men because they are always going to be stereotyped, so [my son] has to prove that he’s capable of doing many things well” (Graham & Anderson, 2008, p. 488).

Considering these messages from their parents, the African American male high school students in both Graham and Anderson’s (2008) and Allen’s (2015) studies shared that they were empowered by the fact their academic achievement could counteract the stereotypes about African American students. This experience is in contrast to previous studies where students dissociated from being African American as a strategy to
counteract the stereotypes (Davidson, 1996; Fordham & Ogbu, 1986; Hemmings, 1996; Majors & Billson, 1992). Instead, the African American male youth in Graham and Anderson’s (2008), as well as Allen’s (2015) research recognized that academic success could be achieved without having to sacrifice their racial identity. Moreover, these youth viewed their Blackness as a source of strength while pursuing academic endeavors (Graham & Anderson, 2008). Thus, it is reasonable to imagine that cultural socialization and egalitarianism messages might foster a positive race-based academic self-concept as they respectively highlight the contributions of African Americans and the access to opportunities if one works hard.

Again, as preparation for bias messages are sometimes linked to negative outcomes, it was unclear whether or not youth in this sample would use these messages as extrinsic motivation to do well in school and consequently feel good about defying stereotypes. It was also not clear if these youth would feel at risk of confirming negative stereotypes about African Americans as the stereotype threat phenomenon suggests (Steele & Aronson, 1995). Thus, some youth may not see any benefits of embracing their racial identity. Lastly, there is the possibility that youth do not buy in to the idea that ‘it’s not okay for Black youth to be smart’ and minimize their effort on school tasks (Fordham & Ogbu, 1986). This study may provide insight into how messages about discrimination impact how African American students, particularly boys, make sense of their racial and academic identities.

Racial Identity as a Predictor of Academic Behaviors and Outcomes

There is growing evidence that a positive racial identity is good for African American development (Caldwell, Zimmerman, Bernat, Sellers, & Notaro, 2002; Sellers,
African American racial identity has been conceptualized in a variety of ways (Cross, 1991; Helms & Parham, 1996; Sanders-Thompson, 2001; Sellers et al., 1998). Within this literature, some researchers conceptualize African American identity as a single construct, while others define racial identity as having multiple dimensions (Allen, Thornton, & Watkins, 1992; Sanders-Thompson, 1995; Sellers et al., 1998). This dissertation operates from the latter approach, exploring two specific aspects of racial identity as they relate to academic achievement.

Using the Multidimensional Model of Racial Identity (MMRI), which measures the psychological meaning that members of the Black race attach to being Black, the study focused only on regard. Regard is defined as the extent to which a person feels positively about his or her race (Sellers et al., 1998). There are two components to regard: private regard and public regard. Private regard refers to African Americans’ personal assessment of their positive or negative feelings about being African American and towards African Americans in general. Public regard refers to the extent to which African Americans believe that others view African Americans in a positive or negative manner.

Though research examining the implications that racial identity has for academic outcomes is growing (Chavous et al., 2003; Chavous et al., 2008; Mendoza-Denton, Pietrzak, & Gowney, 2008; Mickelson, 1990; Sellers, Chavous, & Cooke, 1998; Smalls, White, & Chavous, 2007; Smith et al., 2003), what is known is quite limited. The following sections summarize the research on linkages between private regard and public regard and academic performance, academic beliefs and behaviors and race-based academic self-concept. This research indicates that having high private regard is
advantageous for a number of academic outcomes. Interestingly, low public regard, where one believes others see African Americans in a negative light, has been linked to both positive and negative academic outcomes.

**Academic performance.** A few studies have grouped private and public regard with racial centrality in an effort to examine racial identity’s impact on academic performance. Chavous et al.’s (2003) found that 17-year-old African American youth from a Midwestern city who had positive group feelings (i.e., private regard) along with high race centrality and an awareness of societal biases against African Americans (low public regard) had the highest academic achievement and attainment. They suggested that these youth see education as a means of future mobility. Thus, it is speculated that youth are motivated and empowered to do well in hopes to improve one’s group conditions, and perhaps combat stereotypes about African Americans.

Harper and Tuckman (2006) found that a differing combination of racial identity dimensions resulted in high academic achievement for 289 African American students from an urban district when they attempted to replicate Chavous et al.’s (2003) work. Students with lower than average levels of racial centrality, public regard, and private regard achieved significantly higher grade point averages than those who reported higher than average levels of racial centrality, public regard, and private regard. Harper and Tuckman (2006) acknowledge this finding supports the “racelessness” phenomenon described by Fordham and Ogbu (1986) where students dissociate themselves from their racial/ethnic group in order to improve their chances of school success.

To my knowledge, there are only a couple of studies that explicitly examine private or public regard as predictors of any academic performance outcomes. In a
sample from a medium-sized, urban, southeastern city, fourth grade African American children with higher levels of private regard were found to also be higher achievers than those with lower levels of private regard, as measured by math and reading grades and standardized test scores (Smith et al., 2003). Although this study involves a younger sample, it provides important insight into how private regard is linked to academic outcomes. Further, examining this relationship in more adolescent samples is especially critical, as the formation of one’s identity is a more salient developmental process for this age group. Mickelson (1990) found African American high school seniors in Los Angeles who perceived that they were disregarded and undervalued because of their race (i.e., low public regard) showed lower academic achievement (i.e., GPA) than youth who believed society saw them in a more favorable manner.

**Academic attitudes and behaviors.** While the racial identity literature does not specifically note how racial identity and one’s perception of their ability to do well in school are related, it does provide evidence that aspects of racial identity are linked with similar beliefs such as one’s academic efficacy. Specifically, work by Chavous and colleagues (2003) indicate that high private regard for 17-year old adolescents is associated with academic efficacy, as well as one’s attachment to school. This finding supports other research that found that high private regard is linked to positive academic outcomes.

Public regard has also been linked to academic efficacy. Oyserman and colleagues (2001) examined various aspects of racial identity and how they related to academic efficacy among a sample of 126 Black middle-school students from high poverty areas in inner city Detroit. In cross-sectional analyses, boys who had a higher awareness of racism
(i.e., low public regard) had higher levels of academic efficacy. In contrast, low public regard was negatively associated with academic efficacy for girls. Further, longitudinal analyses revealed that girls who felt connected to a group that they believed was negatively viewed by others had a deflated academic efficacy if they did not view achievement as part of one’s in-group identity. For boys, the positive effects of awareness of racism were no longer evident in the longitudinal analyses.

There are a number of other studies that have noted the potential negative impact that public regard may have on academic adjustment for African American youth. Low rates of school belonging, poor academic engagement, and inhibited task performance are other outcomes that have been linked to African American youth who endorse low public regard (Mendoza-Denton, et al., 2008; Tenenbaum & Ruck, 2007). Further, these findings support the notion that low public regard is harmful to African American academic adjustment.

**Race-based academic self-concept.** Because of the stereotypes linking African Americans with poor school performance and the racial achievement gap between African Americans and Whites, it is possible that some African American youth have complex views of themselves when it comes to their racial identity and their academic self-concepts. Under the assumptions of the Integrative Model, racially segregated schools and neighborhoods are ecological contexts, where the identities that African American students form about their academic potential are shaped by the local realities in their communities. African American students in underfunded, predominately segregated schools may come to believe that working hard in school is akin to acting White (Fordham & Ogbu, 1986). Similarly, African American students who attend
predominately White schools may find few of their peers in honors classes or college preparation curricula, causing academic achievement to become racialized (DeCuir-Gunby, Martin, & Cooper, 2012).

This research provides evidence that one’s private or public regard might be linked to one’s race-based academic self-concept (e.g., being African American and smart). In particular, individuals who have a positive private regard, in which they feel positively about being Black, would also feel good about being Black and smart. The literature suggests that youth who are connected to their African American heritage adopt fervent attitudes toward schooling, believing that through education one can improve race relations while dispelling myths and destroying stereotypes (Graham & Anderson, 2008). Thus, youth who feel good about being Black would likely reject the idea that doing well in school is “acting White” and endorse achievement among their peers. Secondly, individuals who have high public regard, in which they believe others see Black Americans in a positive light, will likely believe that their non-Black peers think that Black people are smart.

**Do Cultural Resources Serve as Protective Factors? The Role of Racial Socialization and Racial Identity Against Academic-based Discrimination**

A risk and resilience framework suggests that individuals with certain strengths or access to resources will either not be harmed by risk or will be affected to a lesser degree than those who do not possess such strengths or resources. Consistent with this framework, racial socialization and racial identity have been noted to serve as protective factors for African American adolescents. A few studies have considered whether racial socialization messages or racial identity moderated the damaging effects of
discrimination on African American youth problem behavior (Bennett, 2007), substance use (Neblett, Terzian, & Harriot, 2010), and self-esteem (Harris-Britt et al., 2007; Tynes, et al., 2012).

Regarding academic outcomes, four studies have been conducted (Dotterer et al., 2009; Neblett et al., 2006; Trask-Tate et al., 2014; Wang & Huguley, 2012). Two of these studies noted cultural socialization to attenuate the effect of discrimination on an academic outcome. Specifically, cultural socialization attenuated the effect of both peer and teacher discrimination on grade point average (GPA) and teacher discrimination on educational aspirations (Wang & Huguley, 2012). Cultural socialization also served as a buffer in Trask-Tate and colleagues (2014) study, buffering peer and teacher-based discrimination effects on future academic expectations.

Neither Neblett et al. (2006) or Dotterer et al. (2009) found a type of racial socialization that moderated the link between discrimination and academic outcomes in their studies; however, they did find that racial socialization was related to academic outcomes in an additive way. Further, it is believed their results support a compensatory model of resilience described by Garmezy and colleagues (1984) in which compensatory factors might counteract or compensate for stressful life events or exposure to risk. Additionally, it is important to note that the two studies where students experienced buffering effects had older samples (high school age) than the two that did not. Given the increases in cognitive capacity and salience of identity that emerge in later teen years, it is reasonable to suggest that the effects of racial socialization may be more pronounced with older youth. Thus, this potential developmental consideration warrants further examination of the ways in which racial socialization messages impact the relationship
between discrimination and academic outcomes among older African American adolescents.

Turning to racial identity, private regard has also been noted to moderate discrimination’s effects on academic outcomes. One study found that private regard served as a protective factor against discrimination for school bonding for girls in a study of 148 sixth through twelfth grade African American adolescents (Dotterer et al., 2009). Specifically, school bonding was lower when girls had weaker ethnic identities and experienced more discrimination. This finding supports previous work by Miller and MacIntosh (1999) who found a positive global racial identity, measured by Phinney’s Multi-group Ethnic Identity Measure, shielded African American adolescents (grades 8 to 12th) against discrimination and daily hassles as they strived to perform well in school. To my knowledge, only one study has found that public regard moderates the discrimination on academic achievement (Thomas, Caldwell, Faison, & Jackson, 2009b). Caribbean Black youth who believed that other groups perceived Blacks negatively (i.e., low public regard) were buffered from the negative impact of perceived teacher discrimination on academic achievement (i.e., GPA). This finding is consistent with previous work that examined public regard’s ability to buffer discrimination on psychological distress (Sellers & Shelton, 2003) and discrimination impact on depression (Rivas-Drake, Hughes, & Way, 2008) for minority youth.

These findings suggest that being aware that people may view Blacks negatively is actually protective in that when individuals encounter discrimination it is less taxing because it was expected. However, considering the literature that has found low public regard is also linked to negative outcomes, further research is warranted to untangle the
ways in which public regard is harmful or beneficial for African American youth adjustment.

Taken together, this literature demonstrates some ways in which dimensions of racial socialization, and aspects of racial identity operate in a protective manner for African American youth. While there is some evidence showcasing how cultural socialization messages and private and public regard work as buffers against discrimination, this literature is slim. Additionally, the role of preparation for bias and egalitarian messages in protecting youth academic outcomes from the negative effects of discrimination is nonexistent. The present study aimed to fill in these gaps by examining these processes among an economically diverse sample of high-achieving Black male youth.

The Present Study

In line with the risk and resilience framework (Masten, Best, & Garmezy, 1990), the Integrative Model for the Study of Minority Youth Development (Garcia Coll et al., 1996) and conceptual model of protective mechanisms against discrimination (Neblett et al., 2012), this investigation seeks to examine how experiences of academic discrimination relate to academic outcomes (i.e., GPA, math ability, and positive race-based academic self-concept) for high-achieving Black male adolescents. This examination acknowledges important family processes that impact the development of African American youth, thus considers the ways in which different types of racial socialization messages (i.e., cultural socialization, preparation for bias, and egalitarianism) relate to the academic outcomes under study. Finally, this investigation examines how racial identity attitudes relate to the academic outcomes under study.
This study investigated four research questions. One major goal of this study was to investigate the influence of academic discrimination on academic outcomes of high-achieving Black male youth. The first research question sought to explore the relationship between academic-based discrimination and GPA, math ability, and race-based academic self-concept. The second research question sought to explore how a cultural resource, such as racial socialization messages (i.e., cultural socialization, preparation for bias and egalitarianism), relates to GPA, math ability, and race-based academic self-concept. The third research question sought to explore how racial identity attitudes (i.e., private regard and public regard) relate to GPA, math ability, and race-based academic self-concept. Finally, this investigation explored the role of cultural socialization, preparation for bias, and egalitarian messages and private and public regard dimensions of racial identity on the relationship between academic-based discrimination and the academic outcomes under study. In order to explore these research questions, four hypotheses were tested.

**Hypotheses**

**Hypothesis 1a**

After controlling for parent education, racial composition of school, ethnicity, and student age, greater academic-based discrimination would be linked to poorer academic outcomes in the form of lower GPAs (Neblett et al., 2006; Wang & Huguley, 2012; Wong et al., 2003).
Hypothesis 1b

After controlling for parent education, racial composition of school, ethnicity, and student age, greater academic-based discrimination would be linked to poorer academic outcomes in the form of lower self-ratings of math ability (Wong et al., 2003).

Hypothesis 1c

It was not clear how academic-based discrimination would relate to race-based academic self-concept, as the literature is nonexistent. However, considering racial discrimination that challenges a student’s competence, ability, or work ethic, it is plausible that students enduring such assaults may begin to question their intelligence or efforts as African American students (Davis et al., 2014; Fries-Britt & Griffin, 2007). Thus it is hypothesized that greater academic-based discrimination would be linked to lower self-ratings of race based academic self-concept.

Hypothesis 2a

After controlling for parent education, racial composition of school, ethnicity, and student age, cultural socialization and egalitarianism would be linked to better academic outcomes in the form of higher GPAs, (Allen, 2013; 2015; Brown et al., 2009; Caughy et al., 2006; Cooper & Smalls, 2010; Graham & Anderson, 2008; Hughes et al., 2009; Neblett et al., 2006; Rivas-Drake et al., 2009a; Trask-Tate et al., 2014; Wang & Huguley, 2012). Preparation for bias messages would be linked to poorer academic outcomes in the form of lower GPAs (Caughy et al., 2006; Rivas-Drake et al., 2009a; Stevenson & Arrington, 2009).
**Hypothesis 2b**

After controlling for parent education, racial composition of school, ethnicity, and student age, cultural socialization and egalitarianism would be linked to better academic outcomes in the form of higher ratings of math ability, (Allen, 2013; 2015; Brown et al., 2009; Caughy et al., 2006; Cooper & Smalls, 2010; Graham & Anderson, 2008; Hughes et al., 2009; Neblett et al., 2006; Rivas-Drake et al., 2009a; Trask-Tate et al., 2014; Wang & Huguley, 2012). Preparation for bias would be linked to poorer academic outcomes in the form of lower ratings of math ability (Caughy et al., 2006; Rivas-Drake et al., 2009a; Stevenson & Arrington, 2009).

**Hypothesis 2c**

After controlling for parent education, racial composition of school, ethnicity, and student age, cultural socialization and egalitarianism would be linked to better academic outcomes in the form of higher self-ratings of race-based academic self-concept (Allen, 2013; 2015; Brown et al., 2009; Caughy et al., 2006; Cooper & Smalls, 2010; Graham & Anderson, 2008; Hughes et al., 2009; Neblett et al., 2006; Rivas-Drake et al., 2009a; Trask-Tate et al., 2014; Wang & Huguley, 2012). It was unknown whether preparation for bias would be linked to lower self-ratings of race-based academic self-concept considering that discussing possible bias may empower youth to break stereotypes about African American students (Graham & Anderson, 2008). Further, there was no specific hypothesis regarding how racial barrier messages would relate to self-ratings of race-based academic self-concept in this sample.
Hypothesis 3a

After controlling for parent education, racial composition of school, ethnicity, and student age, higher levels of private regard messages would be linked to better academic outcomes in the form of higher GPAs (Oyserman et al., 2001; Smith et al., 2003). Considering the evidence that both low and high levels of public regard are linked to positive academic outcomes (Chavous et al., 2003; Graham & Anderson, 2008; Mickelson, 1990; Steele & Aronson, 1995; Mendoza-Denton, et al., 2008; Tenenbaum & Ruck, 2007; Oyersman et al., 2001), it was unclear how public regard would link to GPA. Therefore, there was no specific hypothesis regarding the way in which this outcome would relate to public regard.

Hypothesis 3b

After controlling for parent education, racial composition of school, ethnicity, and student age, higher levels of private regard messages would be linked to better academic outcomes in the form of higher ratings of math ability (Oyserman et al., 2001; Smith et al., 2003). Considering the evidence that both low and high levels of public regard are linked to positive academic outcomes (Chavous et al., 2003; Graham & Anderson, 2008; Mickelson, 1990; Mendoza-Denton, et al., 2008; Oyersman et al., 200; Steele & Aronson, 1995; Tenenbaum & Ruck, 2007), it was unclear how public regard would link to math ability. Therefore, there was no specific hypothesis regarding the way in which this outcome would relate to public regard.

Hypothesis 3c

After controlling for parent education, racial composition of school, ethnicity, and student age, higher levels of private regard messages would be linked to better academic
outcomes in the form of higher ratings of race based academic self-concept (Oyserman et al., 2001; Smith et al., 2003). Considering the evidence that both low and high levels of public regard are linked to positive academic outcomes (Chavous et al., 2003; Graham & Anderson, 2008; Mickelson, 1990; Steele & Aronson, 1995; Mendoza-Denton, et al., 2008; Tenenbaum & Ruck, 2007; Oyserman et al., 2001), it was unclear how public regard would link to race based academic self-concept. Therefore, there was no specific hypothesis regarding the way in which this outcome would relate to public regard.

**Hypothesis 4a**

It was expected that cultural socialization messages and private regard would moderate the relationship between academic discrimination and GPA (Trask et al., 2014; Dotterer et al., 2009; Miller & Macintosh, 1999; Wang & Huguley, 2012). Namely, it predicted that perceptions of academic discrimination would be linked to higher GPAs for youth with high reports of cultural socialization messages and that perceptions of academic discrimination would be linked to higher GPAs for youth with high levels of private regard.

**Hypothesis 4b**

It was expected that cultural socialization messages and private regard would moderate the relationship between academic discrimination and math ability (Trask et al., 2014; Dotterer et al., 2009; Miller & Macintosh, 1999; Wang & Huguley, 2012). Namely, it predicted that perceptions of academic discrimination would be linked to higher ratings of math ability for youth with high reports of cultural socialization messages and that perceptions of academic discrimination would be linked to higher ratings of math ability for youth with high levels of private regard.
Hypothesis 4c

It was expected that cultural socialization messages and private regard would moderate the relationship between academic discrimination and race based academic self-concept (Trask et al., 2014; Dotterer et al., 2009; Miller & Macintosh, 1999; Wang & Huguley, 2012). Specifically, that perceptions of academic discrimination would be linked to higher ratings of race-based academic self-concept for youth with high reports of cultural socialization messages and that perceptions of academic discrimination would be linked to higher ratings of race-based academic self-concept for youth with high levels of private regard.

Hypothesis 4d

It was not clear whether preparation for bias or egalitarianism would moderate the relationship between academic discrimination and the academic outcomes under study (Dotterer et al., 2009; Neblett et al., 2006). Additionally, as the findings of how public regard relates to discrimination and academic outcomes were mixed (Mendoza-Denton et al., 2008; Mickelson, 1990; Tenenbaum & Ruck, 2007; Thomas et al., 2009b), it was not clear whether low public regard would lead to positive or negative outcomes in the face of discrimination. Exploratory analyses with the interaction terms academic discrimination X preparation for bias, academic discrimination X egalitarianism, and academic discrimination X public regard were used to determine if and how these variables moderate the relationship between academic discrimination and GPA, math ability, and race-based academic self-concept.
Chapter III: Methodology

This study used a cross-sectional design to explore how racial discrimination, racial socialization messages, and racial identity related to the educational experiences for Black high school male students who are participants in a school-based mentoring program for high-achieving African American boys. The investigation used the youth report of measures assessing academic-based discrimination, three dimensions of racial socialization messages, two dimensions of racial identity, and three academic outcomes. These processes were collected using some elements of community-based participatory research (CBPR) framework (Israel, Eng, Schulz, & Parker, 2005). This included recognition of the program as a respected voice in the community, and the building on strengths and resources within the community, (i.e. the schools where chapters existed and the organization offering the program overall).

Sampling Frame

The data presented in this study are a part of a larger cross-sectional study that focused on the evaluation of a high school-based mentoring program for high-achieving Black boys. The Program is managed by a graduate chapter of a well-known African American fraternal organization, located in the Mid-Atlantic Region.

County context. This county has been known for its affluence, quality of life, and excellent schools. This community has an estimated population of approximately 304,580 individuals, with 25% of the total population under 18 years of age (U.S. Census, 2013). The median income for this county is $109,865 (U.S. Census, 2013). The racial makeup of the county is 62% White, 18% Black, 14% Asian, and 6% Hispanic (U.S. Census 2013).
School district context. This investigation involved data from students at public high schools within the county. The schools range from a low of 5% to a high of 42% of Black students enrolled. Students receiving free/reduced lunch ranges from less than 5% to a high of 38%. Specifically, five schools have less than 10% of their students receiving free or reduced lunch, while five other schools have over 20% of their students receiving free or reduced lunch. See Appendix A for the breakdown for each school.

Participants

The sample consists of 88 Black boys who were participating in a community program that had an affiliation with their high school. The program is referred to as the Academic, Leadership, and Enrichment (A.L.E.) program from this point forward. The majority of the participants identified their racial/ethnic group to be African American (81%). However, further exploration revealed that 11% of these individuals had identified at least one parent as African. Ten percent of the participants identified themselves as Biracial/Multiracial with African American as one of their racial/ethnicities. Nine percent of the participants identified themselves as African. The age range of the participants is from 14 to 18 years, with a median age of 16. At the time they were enrolled in the study, 46% of these participants were taking at least 3 honors classes, 39% were taking at least 2 gifted and talented classes, and 36% were taking at least two Advanced Placement (AP) classes.

The education of the parents ranged from a diploma or certificate from vocational, technical, trade, or business school to a doctoral degree, with the median level being spending some time in graduate school. There was not complete data available on all parents on this variable. Refer to procedure section of Phase 2 and 3 for the reasons why.
Participants attended one of the high schools in the county. Preliminary analyses examined whether there were differences between students across school. Results revealed there were no differences between students being at different schools on any of the demographic variables or the study variables in question.

Compensation. An electronic gift card from Amazon.com ($10.00 value) was available students who completed at least 75% of the survey, regardless of whether they completed it online or on paper. All participants were prompted to sign an incentive verification form (Appendix F) at the end of their survey for the receipt of this incentive.

**Data Collection Procedures**

**Marketing.** A number of marketing strategies were deployed to build awareness about the study among the families affiliated with the A.L.E. Program. These strategies included an informational letter for parents, a flyer for students, and YouTube video.

The Director of Education for the fraternity chapter provided an overview of the study to parents via an electronic cover letter sent via email (see Appendix B). These efforts explained the partnership with the Principal Investigator for the evaluation. Additionally, a flyer was distributed to students involved in the A.L.E. Program by school advisers for each program chapter at all 12 schools. The front of the flyer detailed the evaluation process, indicating the purpose of the evaluation and how to participate. The back of the flyer consisted of an abbreviated frequently asked questions list. A copy can be found in Appendix C.

Finally, a YouTube video was prepared to assist with marketing the study for potential study participants, school staff, and fraternity members assisting with the study. A link to the video was embedded in all electronic correspondence. The video described
the purpose of the survey, and provides a brief review of the study activities, risks, and compensation. Additionally, the video had an embedded link for participants to access Frequently Asked Questions page and contact information for Dr. Smith Bynum.

**Passive consent procedures.** Before the first phase of data collection, passive consent procedures were used to obtain permission for fraternity staff to forward parent’s contact information to Dr. Smith Bynum for the purposes of conducting the evaluation. As can be seen in Appendix B, the email asked parents to notify fraternity staff via email reply if they wished to opt out of the project. Parents who wished to opt of the project were removed from the fraternity chapter’s master list of the A.L.E. Program parent contact information. Additionally, any email addresses that were inoperable were identified and removed. After this step, the A.L.E. Program Director sent the master list to Dr. Smith Bynum. Upon receiving the list, a trained research assistant removed parents whose names or contact information were incomplete. Additionally, parents who had more than one son in the program were noted if they appeared in the master list twice. To ensure that parents only referenced one of their children during the survey process, information linked to the youngest son was removed from the list. This cleaning process resulted in the removal of 40 cases and a final collection pool of 367 families.

**Recruitment.** Three major strategies were used to collect data with this population. The research team collected data from students via an online survey, through data collection sessions sponsored by school advisers at designated schools, and through recruitment via the presidents of school chapters. The flow diagram in Figure 2 showcases the three phases of data collection and numbers of enrollment throughout.
**Phase 1.** Phase 1 involved online data collection targeting both parents and students. Students received e-mailed invitations to enroll after their parents granted permission for the research staff to contact their sons. In some cases, students received a hard copy of the survey, if their parent preferred that method instead. This phase lasted from March to June 2015. This effort resulted in 54 participants.

**Enrollment.** Due to the IRB protocol, parents needed to consent for their son to participate in the study. Thus, the initial deployment of the survey was restricted to only the parents of the A.L.E. Program members, and did include the students. Contact information of the 367 parents was uploaded into Qualtrics, an online survey data collection tool, for the purposes of the initial deployment of the survey. This deployment consisted of an email describing the purpose of the study, study activities, the YouTube video link and a unique survey link.

**Informed consent procedures.** Parents who clicked on the survey link that was emailed to them were able to see the parent consent form. The parent consent form was broken up into multiple sections to ease readability. Parents who gave consent were then able to view and complete the Parent Survey. In the course of the survey, parents were instructed to provide their child’s (or their oldest son’s information if they had more than one child in the program) name and email address. Survey links were sent to students only after Dr. Smith Bynum received consent from the parents. Student were then offered the chance to assent to participating in the study.

**Facilitation of survey completion after enrollment.** After parents provided consent for their son to participate, students had the opportunity to opt into the study. In the event that they did not finish the survey, reminder emails were crafted to re-engage them with
the evaluation. These emails were created carefully using Dillman, Smyth and Christian’s (2014) methodological techniques for conducting research with an online platform. Based on Dillman and colleagues’ (2014) recommendations, four reminder emails were created. The first email highlighted the unique link to access the survey, how long the survey was expected to take, and the incentive for completing the survey. The second email reiterated the value of the student’s participation and information on how to complete the survey. The third email let students know that it was not too late to participate and how they could still participate. The final email thanked participants for their time and reminded them if they were interested that they could complete their surveys. There was also language in the latter emails informing participants of a hard copy alternative of the survey. Consenting parents and guardians also received reminder emails in regards to their son’s completion of the study. These emails were deployed at the same time as the emails that were sent to the assenting student. Refer to Appendix D for further details within each reminder email.

Trained research staff sent reminders to the students and their parents. Given that the highest response rate was expected to occur within the first couple weeks of the study launch, the email reminders were sent weekly within the first month of activity. The reminders for the students were sent through Qualtrics. This strategy allowed for a mass deployment of reminder emails, with unique survey links automatically embedded into the correct participant’s email. However, because of this feature, student reminder emails for parents could not be sent via Qualtrics, as it would grant the parent access to their son’s survey. Thus, the reminder emails to parents about their son’s completion were sent via MailChimp, an email marketing service provider.
All reminder emails were personalized so that each participant was greeted by their first name. As mentioned before, all emails contained the unique links originally sent to the participants, which allowed the participants to resume the survey where they last completed it.

**Phase 2.** Due to the low numbers of student participants during Phase 1, a manual data collection was implemented. This phase involved enlisting the help of advisers at the schools with the largest number of eligible participants (n=4). Parent consent and student assent forms were modified to acknowledge this change, particularly that participation in this study was no longer anonymous. Advisers could earn up to $300 for their efforts. See Appendix E for details. This phase lasted from September to December 2015.

**Enrollment.** In preparation for this phase of recruitment, the records of A.L.E. program members who were eligible to participate in the study needed to be reconciled. First, students who were in the 12th grade during Phase 1 were removed from the list as the second phase occurred in a new school year. Secondly, students who had participated in the survey during Phase 1 were removed. Those that remained were deemed eligible for Phase 2 of recruitment.

Four of the 12 schools yielded at least 20 eligible participants. To maximize response rates, research efforts were directed to these four schools. After gaining IRB approval, these four schools were targeted with the help of A.L.E. Program advisers. Advisers were given a list of eligible students based on our records. They were notified that it did not include any students that might have been inducted during the time period that Phase 1 occurred. They were informed that all new inductees were also eligible to participate in the study. Advisers were asked to 1) distribute parent consent forms
(electronic or hard copy) to all eligible students, 2) collect signed parent consent forms, and (3) proctor at least one 1-hour survey session during an A.L.E. chapter meeting or other appropriate non-academic time within a designated time frame. Advisers were eligible for up to $300 compensation for their efforts. See Appendix E for details.

**Informed consent procedures.** Advisers were given two options to collect parent consent: 1) through an electronic link that could be sent directly to parents of eligible students and be received directly by University of Maryland staff once consent was submitted or 2) through distributed hard copies to eligible students to take home to their parents and return to their advisers. Due to the added responsibility of the adviser in this phase, the parent consent form was revised to reflect the role of the adviser in the survey process (Refer to Appendix G). Student assent forms, which were attached to the hard copy of the survey, were also revised to note that role of the adviser in the survey process. Advisers submitted consent forms to University of Maryland staff. Hard copies of the survey were given to advisers to distribute to students whose parents gave consent.

**Phase 3.** An additional phase was implemented to supplement Phase 2 efforts due to slow response rates. Phase 3 enlisted the help of chapter presidents at each school and promoted the hard copy survey through snowball sampling. This phase lasted from November to January 2016.

**Enrollment.** As there was difficulty obtaining parent consent among the four-targeted schools, chapter presidents at all schools were enlisted to help enroll survey participants. After receiving IRB approval, chapter presidents were notified of the eligible participants in their chapter, based on the new list of participants that was created
prior to the enactment of Phase 2. They were encouraged to remind their peers to get the parent consent form signed and have it submitted to their program adviser.

_Informed consent procedures._ Advisers at the remaining 8 schools were supplied with hard copies of parent consent forms for eligible students to take home to their parents and return to their advisers. Again, due to the added responsibility of the adviser in this phase, the parent consent form was revised to reflect the role of the adviser in the survey process (Refer to Appendix G). Student assent forms, which were attached to the hard copy of the survey, were also revised to note that role of the adviser in the survey process. Advisers submitted consent forms to University of Maryland staff. Hard copies of the survey were given to advisers to distribute to students whose parents gave consent.

_Confidentiality._ An ID number was assigned to link all online students to their parent/guardian. A random ID number was assigned to all non-online students. After the survey collection period was completed, identifiable data were exported from Qualtrics and stored in a locked file cabinet. Data were transferred to a password-protected computer for analysis purposes. Data were de-identified, so that only a family case id number and/or individual case id number remained. Additionally, pseudonyms were assigned for each A.L.E. partner high school to enhance security of the data and minimize disclosing the county location of where data were collected.

**Research Measures** (Appendix I)

_Demographic variables._ A proxy for school demographics, student ethnicity, and parent education were used as controls. Student age was initially considered as control; however, this variable was later dropped in an effort to conserve power, as it was not correlated with any of the outcomes during bivariate analyses.
School demographics. The percentage of black students at each school, the percentage of students of color at each school, and the percentage of reduced lunches at each school were considered using the data from the county the schools resided in (HCPSS school profiles, 2015). The percentage of black students was selected as a variable as it appeared to be linked to public regard at the ANOVA level. Schools were grouped together based on having less than 30% (low) or more than 30% black students (high). This variable served as a proxy for school. This was later dropped as it was only correlated with parent education, of which neither were correlated with any of the predictor or outcome variables of interest.

Ethnicity. Students identified their race/ethnicity from a range of options, with ‘1’ for African American, ‘2’ for West Indian, ‘3’ for African, ‘4’ for Asian American, ‘5’ for Latino American, ‘6’ for White American and ‘7’ = Multiracial. Those who selected West Indian or African were asked to list their family’s country of origin. Those who selected Multiracial were asked to give more information about their racial/ethnic group. Ethnicity was transformed into a dichotomous variable, as there were mean differences between African students and other groups of Black students on the math ability outcome. Specifically, those who did not identify themselves as African were coded as 0, and African students were coded as 1. The implications of this unexpected finding is discussed more in depth later in the discussion.

Parent/Guardian’s level of education. The parent/guardian’s level of education reflected the parents’ levels of educational attainment. This information came from available parent data. As some parents of participants did not participate in the parent version of the larger study, mean scores were imputed for those participants missing
parent education data. Responses ranged from ‘1’ for grade school to ‘12’ for doctoral degree. Parent of participants could have indicated if they were unsure about their level of educational attainment, however this was not a relevant response. This variable was later recoded to ‘1’ for a bachelor’s degree or less to ‘3’ for graduate school or more to achieve a normal distribution for testing.

**Academic-based discrimination.** The Adolescent Discrimination Distress Inventory (ADDI, Fisher, Wallace, & Fenton, 2000) assessed the “experience” of racism. Scoring of experiences consisted of the summing of “yes” responses, with lower scores indicating more perceived experiences of discrimination (Scores: low as 5 to high as 10). Academic-based discrimination was measured using items selected from the Educational Discrimination subscale. These items focused on discrimination happening in the school setting or by school personnel (e.g., You were discouraged from joining an advanced level class).

Fisher et al. (2000) used a sample of 177 high school students ranging from 13–19 years of age (M = 16 years) from an academically competitive and ethnically diverse (e.g. African American, Latin American, South Asian Americans, and East Asian Americans) urban school during the development of ADDI. Items from this measure were based upon existing literature, reports in the news media, personal experiences of the multi-ethnic research team, and a racial discrimination measure designed for African Americans (Terrell & Terrell, 1996). These items were then modified for clarity, terminology, and relevance, after being reviewed by 28 multi-ethnic high school students.

ADDI showed adequate reliability. Internal consistency for the relevant subscale as follows: Discrimination Distress Subscale: $\alpha = .60$. Additionally, adequate to strong
reliability coefficients resulted from a two-week test-retest calculation for a subsample (n = 52) of the total participants. The reliability coefficient for the Educational Discrimination Distress Subscale was r = .53.

African American, Latino/a American, South Asian Americans, and East Asian Americans reported statistically significantly higher levels of distress in institutional and educational settings than White Americans, providing evidence for known-groups validity. Evidence for criterion-related validity was demonstrated through statistically significant inverse relationships between self-esteem (Rosenberg, 1986) and scores on the educational discrimination distress and peer discrimination distress subscales of the ADDI.

Original and adapted versions of the ADDI have been used successfully among exclusively African American adolescent samples. For example, Harris Britt and colleagues (2007) found an excellent internal consistency for a composite score of the three subscales (α = .83). Moderate to excellent internal consistency (α = .61 to α = .81) has been found with multi-ethnic samples with African American participants (Bellmore, Nishina, You & Ma, 2012; Tynes, Giang, Williams, & Thompson, 2008).

This study used a modified version of educational discrimination considering the four items from the Educational Discrimination subscale and an additional item from the Institutional Discrimination subscale within ADDI (i.e., “People acted as if they thought you were not smart”). Both the educational discrimination subscale and the modified educational discrimination subscale were tested using reliability analysis. The educational discrimination subscale as deemed by Fisher and colleagues (2000) yielded a poor internal consistency (α = .47). The reliability improved slightly when the additional item,
“People acted as if they thought you were not smart” was included ($\alpha = .53$). Additionally, the modified version yielded greater numbers of correlations with other study variables than the original version of the scale. Thus, the modified version was used for further analyses.

**Racial socialization.** Racial socialization dimensions of cultural socialization, preparation for bias, and egalitarianism were measured with 12 items from the Racial Socialization Questionnaire-Teen (RSQ-T, Lesane-Brown, Scottham, Nguyen, & Sellers, 2008). Cultural socialization was operationalized using the Racial Pride subscale. This subscale consisted of four items that measured the extent to which primary caregivers emphasize Black unity, teachings about heritage, and instilling positive feelings towards Blacks (e.g., “Told the target child to not be ashamed of their Black features {hair texture, lip shape, skin color, etc.}”). Preparation for bias was operationalized using the Racial Barriers subscale. This subscale consisted of four items that measured the extent to which coping strategies and an awareness of racial injustices are conveyed (e.g., “Told the target child that some people try to keep Black people from being successful”). Egalitarianism was operationalized using the Egalitarian messages subscale. This subscale consisted of four items that measured the extent to which messages that promote interracial coexistence and equality (e.g., “Told the target child that they should have friends from all different races”) were present. Participants were asked to respond to all items using a 3-point scale ranging from ‘0’ for Never to ‘2’ for More than Twice. The internal consistency for the relevant subscales from this measure on this sample was moderate (racial pride subscale: $\alpha = .59$; racial barriers subscale: $\alpha = .72$; egalitarian subscale: $\alpha = .61$.
Lesane-Brown et al. (2008) used a sample of African American high school students to validate the measure. Efforts to obtain more information about the validity and reliability from the original use of the measure from the author were unsuccessful. However, there were a few studies that have successfully used the original measure and demonstrated strong reliability for the measure. Neblett et al., (2008) used the RSQ-Teen version with a sample of African American adolescents (ages 11-17) and yielded moderate to excellent reliability for the subscales relevant to the present study: racial pride subscale ($\alpha = .71$); racial barriers subscale ($\alpha = .76$); egalitarian subscale ($\alpha = .64$).

Neblett, Smalls, Ford, Nguyen, & Sellers (2009) used the RSQ-T version with 358 African American youth and yielded moderate internal consistency: racial pride subscale ($\alpha = .63$); racial barriers subscale ($\alpha = .69$); egalitarian subscale ($\alpha = .64$).

In addition, there are several studies that have used modified versions of the RSQ-Teen measure. Smalls (2009) used three subscales (racial pride, racial barrier, and egalitarian) from the Content Assessment of Race Socialization (CARS) Scale (Lesane-Brown et al., 2008) with 94 African American adolescents (ages 11-14). The CARS is identical to the RSQ in regards to subscales, items, and scoring. The internal consistency for the subscales that were used by Smalls (2009) and were also used in this study is moderate (racial pride subscale: $\alpha = .60$; racial barriers subscale: $\alpha = .63$). Scottham and Smalls (2009) used the RSQ-Parent version in a study with 208 African American female caregivers. The RSQ–P was adapted from the RSQ–T developed by Lesane-Brown et al. (2008). With the exception of changing the language from teen to parent in the items, the scale is identical to the RSQ-T. The internal consistency for the relevant...
subscales from this measure was moderate (racial pride subscale: $\alpha = .62$; racial barriers subscale: $\alpha = .76$; and egalitarian subscale: $\alpha = .66$.

Further evidence showcases the validity of the RSQ. Lesane and colleagues (2008) conducted confirmatory factor analyses using a sample of African American middle school and high school students to inspect the construct validity of the RSQ-Teen. The findings indicated a satisfactory fit to the data, resulting in six discrete factors. The subscales of the RSQ–T were also found to predict subsequent racial identity attitudes and intergroup relations in ways that suggested the predictive validity of the measure with African American middle school and high school youth. Scores were created by averaging across each of the items within the subscale. As such, higher scores indicated a greater frequency of the particular message.

**Racial identity.** Regard consisted of two components: Private regard and Public regard. Private regard was measured with 6 items from an abbreviated, adapted version of the Multidimensional Inventory of Black Identity-Revised (MIBI-R; Sellers, Rowley, Chavous, Shelton, & Smith, 1997; Sellers et al., 1998). Private regard referred to the extent to which one feels positively or negatively towards African Americans and their membership in that group (e.g., “I feel good about Black people”). Public regard was measured with 6 items from an abbreviated, adapted version of the Multidimensional Inventory of Black Identity (MIBI; Sellers et al., 1997; Sellers et al., 1998). Public regard referred to the extent to which individuals feel that others view African Americans positively or negatively (e.g., “Society views Black people as an asset”). Participants were asked to respond to all racial identity items using a 7-point scale ranging from ‘1’ for Strongly Disagree to ‘7’ to for Strongly Agree, with 4 as Neutral. Calculating the
mean response for all items that assessed the private regard dimension resulted in private regard composite scores. The same method was used to calculate the composite score for public regard. The internal consistency for the relevant subscales from this measure on this sample was moderate (private regard subscale: $\alpha= .71$; public regard subscale: $\alpha= .58$.

Sellers and colleagues (1997) developed this measure using a sample of 474 African American college students enrolled in introductory psychology courses at two medium-sized universities in the Mid-Atlantic region of the United States. The investigation of the differences between Public and Private regard supported the distinctness between the two factors. Moderate internal consistency was revealed for private regard ($\alpha= .60$). Due to complications with items, public regard was removed from further analyses, including tests of internal consistency.

Original and adapted versions of the MIBI have been used successfully with other African American adolescent samples and show adequate reliability (Chavous et al., 2003; Caldwell et al., 2002; Stevenson & Arrington, 2009; Thomas et al., 2009b). Researchers have found internal consistency reliabilities ranging from .62 to .81 for private regard, and .65 to .84 for public regard. Scottham, Sellers, and Nguyen (2008 designed a shortened version of the MIBI for specific use among adolescent sample. African American teens in this sample responded to the items in the MIBI-t in a manner that was consistent with what was proposed by the MMRI, providing evidence of the construct validity of the MIBI-t as a measure of the MMRI. Additionally, the results of the correlations among the MIBI-t subscales and subsequent race relevant behavior (i.e., interracial contact and conversations about race) provided evidence of the predictive validity of the MIBI-t. The overall pattern of these results is similar to those reported by
Sellers and colleagues (1997) in their initial validation study of the MIBI with African American college students.

**Academic performance.** Unweighted grade point averages were obtained from the youths’ reports during completion of the survey. Responses ranged from 2.0 to 4.0. Perception of math ability. The ability belief scale was used to measure perception of math ability (Eccles, Adler, & Meece, 1984). Items include “How good at math are you?” and “If you were to rank all the students in your math class from the worst to the best in math, where would you put yourself?” Items were rated on a scale from ‘1’ to ‘7’ with the higher end indicating greater confidence in one’s math ability (the scale ratings varied depending on the item. See Appendix I to observe these nuances). Scoring consisted of taking the average rating between the items. Higher scores indicated greater perceived ability. The internal consistency for math ability subscale on this sample was excellent (α= .90.)

Eccles, O’Neill, and Wigfield (2005) developed and confirmed the measure for ability self-perceptions (α= .92) using two samples (year 1- 742; year 2: 575) of adolescents in grades 5 to 12. Class subjects, sports, instrumental music, or other achievement-related domains can be substituted for the domain in question in each of the items. Internal consistency for the subscale demonstrated excellent reliability. A recent study using the measure generated strong internal consistency (α= .78 for math at 6th grade and α= .85 at 10th grade) when examining the relationship between math choices and beliefs from middle childhood through adolescence (Simpkins, Davis-Kean, & Eccles, 2006).
Additionally, the validity of these items and this scale is well established (Eccles, Roser, Wigfield, & Freedman, 1999; Fredricks & Eccles, 2002; Frome & Eccles, 1998; Jacobs et al., 2002). One specific example is the replication of the factor structure using a sample of 5-6th graders that included European American and African American students (Eccles et al., 1989).

**Race based academic self-concept.** Three items were evaluated to determine if they would function as a single construct: “Being Black and smart is a good thing,” “I am glad to know other Black boys who get good grades,” and “Other students at my school think that Black people are smart.” Participants were asked to respond to all items using a 7-point scale ranging from ‘1’ for Strongly Disagree to ‘7’ for Strongly Agree, with 4 as Neutral.

After running bivariate and reliability analyses, the item “Other students at my school think Black people are smart” was dropped from the construct, as it was not correlated with the other two items. The remaining two items assessed the race-based academic self-concept of the participants in the study. The internal consistency for this subscale was excellent at .77; the Pearson correlation was strong at .65.

This self-concept construct was based on empirical work that asserts that high-achieving Black youth conceptualize their achievement and success in the context of their race (Carter Andrews, 2009; Davidson, 1996; Fordham, 1988; Fordham & Ogbu, 1986). Youth in these studies appeared to be motivated to succeed because their success could inspire others in their peer group to do well and because it was important to them that they represent their group in a positive light.
Chapter IV: Results

The results are organized into four sections. First, preliminary analyses are described to discuss how the data met the assumptions of hierarchical multiple regression. Second, the results of univariate analyses among all of the key variables are described. Third, bivariate analyses among all key variables are shared. Lastly, using hierarchical multiple regression procedures, adolescents’ reports of academic-based discrimination, racial socialization messages, and dimensions of racial identity in relationship to academic outcomes are examined. Additionally, the extent to which racial socialization messages or racial identity dimensions impacted the strength of the relationship between academic-based discrimination and each of the academic outcomes is described.

Preliminary Analyses

A one-way analysis of variance (ANOVA) was performed to test whether or not there were any differences at the group level (school) on the outcome variables (Woltman et al., 2012). No significant school differences were found for any of the variables. Particularly because there were no statistically significant mean differences by school, in addition to the small sample size, HLM was deemed inappropriate. As such, hierarchical multiple regression was selected to analyze the data.

Prior to conducting formal analyses to test the hypotheses on discrimination’s impact on academic outcomes for high school age Black boys, preliminary analyses were completed to ensure the appropriateness of regression analysis for the data (Neter, Kutner, Nachtsheim, & Wasserman, 1996). All key variables were subjected to diagnostic checks of normal distribution, homoscedasticity, independence, linearity, and
multicollinearity. The diagnostics revealed issues with normality for several key variables. Parent education (from the parent data), school demographics (i.e. percentage of Black students), private regard, egalitarian messages, and racial pride messages were negatively skewed. Additionally, all three outcome variables GPA, math ability, and race-based academic self-concept were negatively skewed. All of these variables, with the exception of school demographics were transformed into three groups: high, medium, low. School demographics variable was transformed into a low and high group. These effects helped correct issues with skewness and variables demonstrated a greater normal distribution.

Finally, before the data were submitted to regression analyses, a power analysis was conducted to determine whether or not the sample size was sufficient for the proposed tests of hypotheses. Power is derived from the alpha level, sample size, and the number of independent variables. For this study, a small effect (0.3) is desired at an alpha level of .05 with a selected level of power at .95. The G*Power program (Faul & Erdfelder, 1992) was used to discern the number of participants that were needed to achieve effects. It was determined that the minimum number of participants that is needed, considering a model with the maximum number of predictor variables (9), is 88. Thus, regression was deemed an appropriate test for these data.

**Univariate Analyses**

Descriptive statistics and frequencies were computed for variables relevant to the present study. Table 1 presents means, standard deviations, and minimum and maximum values for the control variables (i.e., age; school, student ethnicity, parent education), independent variables (i.e. academic-based discrimination, racial pride, racial barriers,
egalitarian, private regard, public regard), and dependent variables (i.e. GPA, math
ability, and race-based academic self-concept).

The following sections showcase the descriptive statistics and frequencies of the
control, independent, and dependent variables in an explicit manner.

**Control variables.** Descriptive statistics are presented for age, parent education,
the percent of Black students at schools, and race/ethnicity prior to transformation (See
Table 1) the mean age of the participants was 16 (M= 4.26, SD= 1.01). The mean for
parent education was 8.71 (some graduate school; SD= 1.21). Examination of the mode
revealed that the value that appeared most often was 10 (Master’s degree). These values
infer the high education levels of many of the parents of the students. Considering the
type of variables, the mode is noted for school and race/ethnicity variables. The mode
for school was 6; School F had the most participants. The mode for race/ethnicity was
African American, with the majority of students identifying in this way.

**Independent variables.** Descriptive statistics are presented for academic-based
discrimination, racial socialization, and racial identity variables prior to transformation.
As can be seen in Table 1, the mean of the experience of specific incidents of academic-
based discrimination the participants reported was 7.89 (SD = 1.37), indicating moderate
experiences with academic-based discrimination.

**Frequency of incidents of academic-based discrimination.** A review of the
incidents that the participants experienced indicated that a majority of participants
experienced various types of academic-based discrimination. Sixty-two percent reported
feeling that people expected more of them than they expected of others their age because
of their race. Fifty-four percent reported feeling that people did not think they were not
smart because of their race. However, 38% reported they were given a lower grade than they deserved because of their race. Twenty-eight percent reported being discouraged from joining an advanced level class was due to their race. Lastly, 26% reported they were wrongly disciplined or given after school detention because of their race.

It is also important to acknowledge the variance of these discrimination experiences by ethnicity. For students who identified as African American, but had an African parent, the mean was the highest at 8.3 (SD = 1.34). Their reports of discrimination were similar to African American students who had a mean of 7.99 (SD = 1.39) and Biracial/Multiracial students who had a mean of 7.84 (SD = 1.21). African students reports of discrimination were the lowest, with a mean of 6.75 (SD = 1.04).

Descriptive statistics of racial socialization and racial identity. In terms of racial socialization messages, the mean was 2.53 (SD = .42) for racial pride messages, 2.29 (SD = .50) for racial barrier messages and 2.46 (SD = .44) for egalitarian messages. This indicates the sample agreed that their parent(s) or caregiver(s) had told them messages that promoted cultural pride, had raised their awareness about biases, and had promoted interracial coexistence at least a few times.

For racial identity dimensions, the mean for private regard was 6.37 (SD = .69), indicating that participants strongly endorsed positive feelings about being Black. Interestingly, the mean for public regard was 3.94 (SD = .80). This finding suggests that on average, participants were neutral about the beliefs, opinions, and attitudes that others have about Black people as a group.

Dependent variables. The dependent variables of interest were academic performance as measured by GPA, perceptions of math ability, and self-ratings of race-
based academic self-concept. Descriptive statistics for outcome variables were also computed (see Table 1). Sixty-eight percent of the participants fell into the 3.26-3.50 unweighted GPA range or higher. In fact, the mean range for GPA was 4.84 ($SD = 1.32$), indicating the average GPA falls into option 5, the 3.26-3.50 range.

Reports of one’s math ability varied across the full sample, however 83% of the students deemed their math ability as higher than average (on a scale of worse to best/poor to very well). The mean for math ability was 5.34 ($SD = 1.13$). The majority of the youth reported in this manner (i.e. African American youth, 5.54; Biracial/Multiracial youth, 5.17; African American, but had at least one African parent, 5.36). However, the mean for youth who identified as African was lower than all other groups at 3.95 ($SD = 1.15$).

In terms of race based academic self-concept, the mean was 6.77 ($SD = .57$), suggesting positive endorsement of one’s racial academic self-concept. Specifically, 89% of the participants strongly agreed that being Black and smart is a good thing and 82% strongly agreed that they were happy to know other Black boys who get good grades.

**One-way ANOVAs.** One-way ANOVAs were completed among the transformed variables. First, a one-way ANOVA was completed to test for school differences among the outcomes of interest. No significant results were found for any of the independent variables. Additionally, results indicated that there were no significant differences for any of the outcomes with school as a factor. Specifically, GPA, $F (11, 85) = .590, p = .83$; math ability, $F (11, 86) = 1.70, p < .10$, based on school; and race based academic self concept, $F (11, 87) = 1.63, p \leq .10$ were not significant.

Next, a set of one way ANOVAs were completed to test for racial/ethnic
differences among outcomes of interest. Specific results indicated that there were not significant mean differences for report of GPA, $F(3, 85) = 2.04, p > .10$, nor for race based academic self-concept, $F(3, 87) = 1.22, p > .10$. However, there were significant differences for math ability, $F(3, 86) = 4.22, p < .01$, based on ethnicity. Post hoc analyses revealed there was a statistically significant mean difference ($M = -.99$) between students who identified as African (n= 9) and students who identified as African American (p < .01). Interestingly, post hoc analyses also revealed that the mean difference ($M= -.98$) between students who identified as African (n= 9) and students who identified as African American but identified at least one African parent was significant (p < .05).

Results also yielded mean differences for report of racial pride, $F(3, 82) = 5.08$, p < .01. Post hoc analyses revealed there was a statistically significant mean difference ($M= -.93, SD = .28$) between students who identified as African American, but noted at least one African parent, and students who identified as African American (p ≤ .01). Additionally, there was a significant mean difference ($M = -1.04; SD= .38$) between students who identified as African American, but noted at least one African parent, and students who identified as Biracial/Multiracial (p < .05).

**Bivariate Analyses**

In order to examine the bivariate pattern of relationships among study variables, Pearson’s correlations were conducted on all continuous variables of interest. Correlation coefficients were computed for the full sample. Results are also reported in Table 2. Unless indicated, all correlations reported were significant at the .05 level.

**Controls and key variables.** All of the controls were correlated with a key
predictor or outcome with the exception of the control variable age. Additionally, there were several trend level correlations.

African dummy code was correlated with several variables. It was negatively correlated with math ability ($r = -.35$). African students reported lower confidence in math ability than other racial/ethnic groups. African students also reported less academic-based discrimination than other groups, as race/ethnicity was negatively correlated with academic-based discrimination ($r = -.27$). Race/ethnicity was found to be negatively correlated with racial pride, but only at the trend level ($r = -.19, p = .07$) and negatively correlated with public regard at the trend level ($r = -.19, p = .08$).

Race/ethnicity under the African parent dummy code was negatively correlated with racial pride ($r = -.32$).

The percent of Black students at the schools was found to be negatively correlated with racial barriers at trend level ($r = .17, p = .11$), suggesting adolescents at schools with more Black students, are less likely to report receiving messages about racial barriers than those at schools with fewer Black Students. To the contrary, the percentage of Black students at schools was found to be positively correlated with public regard at the trend level ($r = .17, p = .08$). Adolescents at schools with more Black students were more likely to report that others view Black people in a positive manner, than those at schools with fewer Black students.

Parent education was found to be positively correlated with student’s GPA at the trend level ($r = .19, p = .07$). This finding implies that students whose parents have a higher education, are more likely to report higher GPAs. Parent education was negatively correlated with the percentage of Black students at schools ($r = -.28$).
Inferring that students with parents who have higher education, are less likely to attend schools with a high percentage of Black students.

**Intercorrelations among independent variables.** Several of the predictors were correlated with one another to a small to moderate degree. In summary, academic-based discrimination was correlated with a racial socialization message and not correlated with any aspects of racial identity. Racial socialization messages were correlated with one another and with different aspects of racial identity.

Academic-based discrimination was found to be negatively correlated with racial barrier messages (r= -.25, p < .05). This finding suggests that students who report more academic-based discrimination also report hearing less racial barrier messages.

Racial pride messages were positively correlated with both racial barrier messages (r = .54) and egalitarian messages (r = .34). It was also positively correlated with private regard (r = .28). Suggesting that students who reported hearing more racial pride messages also reported hearing other racial socialization messages, and the more the adolescent reported feeling good about being African American. Racial barrier messages were positively correlated with private regard (r = .34). This result suggests that students who report hearing more racial barrier messages also reported feeling good about being African American. Lastly, egalitarian messages were positively correlated with public regard (r = .33). Students who report hearing egalitarian messages, are also more likely to report others as viewing Black people positively.

There were several correlations at the trend level among the independent variables. Academic-based discrimination was negatively correlated with racial pride (r= -.20, p=.07). Students who reported more academic-based discrimination also report
hearing less racial pride messages. Additionally, students who reported more academic-based discrimination, also reported hearing less egalitarian messages (r = -.19, p = .08). Racial barrier messages were negatively correlated with public regard messages at the trend level (r = .18, p = .10). This finding suggests that students who reported hearing more racial barrier messages from their parents were more likely to endorse the belief that other people view African American people in a negative manner.

**Intercorrelations among independent variables and dependent variables.**

There were only two independent variables that were significantly correlated to a dependent outcome (i.e., GPA). Academic-based discrimination was positively correlated with student GPA (r = .27). Students who reported more discrimination, also reported higher ranges of GPA. To the contrary, private regard was negatively correlated with student GPA (r = -.32). Students who endorsed high private regard also reported a lower GPA.

There were several correlations at trend level between the independent and dependent variables. Academic-based discrimination was negatively associated with race based academic self-concept at trend level (r = -.19, p = .08). This implied that students who reported more academic-based discrimination were less likely to endorse a positive race based academic self-concept. Racial pride messages were negatively correlated with both GPA at trend level (r = -19, p = .08). Students who reported hearing more racial pride messages, may also report having a lower GPA range. Racial barrier messages were negatively correlated at trend level for GPA (r = -19, p = .09). Students who reported more messages about racial barriers, may have lower GPAs. Public regard was positively correlated with math ability (r = .19, p = .09). Students who endorsed a
positive public regard also report high confidence in their math ability.

**Multivariate Analyses**

**Plan of analysis.** None of the control variables (i.e., student age, parent education, and the percentage of black students at the schools) were statistically correlated with any of the predictor or outcome variables in the bivariate analysis. In an effort to conserve power, they were omitted from the multivariate analyses focused on testing the hypotheses. All remaining predictor variables were centered at zero to reduce mathematically caused multicollinearity during hierarchical multiple regressions. Centering variables converts the original values to deviation scores so that the independent variables have means of zero (Aiken & West, 1991). Race/Ethnicity, a dichotomous variable, was weight-effect coded to adjust for the number of cases for the dependent variables. The weight-effect codes for race/ethnicity for models that included math ability as an outcome were -.09 for Non-African students and .91 for African students. The weight-effect codes for race/ethnicity for models that included racial pride as a predictor were .89 for students who did not identify as African but indicated at least one African parent and -.11 for all other students.

Variance Inflation Factors (VIF) were examined to check for multicollinearity in each predictor, and each were within an acceptable range. Outliers were checked by examining Cook’s D and Mahalanobis distance values. No outliers were detected.

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2 Weight effect codes were calculated by taking the opposite group’s N divided by the total N. For instance, the weight effect code for African students in the the race/ethnicity variable (for models that included math ability as an outcome), the N of Non African students (80) was divided by the total N (88) resulting in .09. In the the case of Non African students, this formula resulted in .91. One of these codes is assigned a negative sign, in this case this was the weight effect code for Non- African students. This same formula was applied to calculate the weight effect codes for race/ethnicity variable for models that included racial pride as predictor.
Procedures outlined by Aiken and West (1991) were used to interpret statistically significant interactions. In each interaction, scores were computed by inserting specific values (1 SD above and 1 SD below the mean) for each variable to facilitate interpretation.

**Tests of Hypotheses**

**Research Question 1**

The first research question involved an examination of academic-based discrimination on academic outcomes of high-achieving Black male youth. Hypothesis 1a stated that greater academic-based discrimination would be linked to poorer academic outcomes in the form of lower GPAs, lower self-ratings of math ability, and lower self-ratings of race-based academic self-concept. Hypothesis 1b stated that greater academic-based discrimination would be linked to poorer academic outcomes in the form of lower self-ratings of math ability. Hypothesis 1c stated that greater academic-based discrimination would be linked to poorer academic outcomes in the form of lower self-ratings of race-based academic self-concept.

Three hierarchical multiple regressions were completed with GPA (Model 1), math ability (Model 2) and race-based academic self-concept (Model 3) as the outcome variables, with academic-based discrimination. For Models 1 and 3 academic-based discrimination was entered at step 1. Given that the variable race/ethnicity mattered for math ability, the dummy code African was entered in step 1 for Model 2. Academic-based discrimination was entered at step 2 for Model 2.

In Model 1, academic-based discrimination was a significant predictor of GPA (Beta = .26, p = .01). The full model explained 7% of the variance in GPA, $F (1, 85) =$
6.38, \( p \leq .01 \). This finding partially supports Hypothesis 1a, as it had been predicted that the relationship between academic-based discrimination and GPA would be negative.

In Model 2, only the dummy variable African was a significant predictor of math ability (Beta = -.38, \( p \leq .001 \)). Against predictions, academic-based discrimination was not a significant predictor of math ability (Beta = -.05, \( p > .10 \)). The full model explained 13% of the variance in GPA, \( F (2, 85) = 6.37, p \leq .01 \). There was no support for Hypothesis 1b.

In Model 3, academic-based discrimination was a significant predictor of race-based academic self-concept at trend level in this sample (Beta = -.19, \( p = .08 \)). There was no support for Hypothesis 1c.

In summary, an inspection of all 3 models indicated weak to no support for hypotheses 1a-1c. The results that were most consistent with any hypothesis (hypothesis 1c) were only significant at the trend level. Moreover, the only statistically significant finding was a positive link between academic-based discrimination and GPA. This finding was contrary to hypothesis 1a. The results of Models 1 and 3 can be seen in Table 3. Model 2 can be seen in Table 4.

**Research Question 2**

The second research question sought to explore how a cultural resource, such as racial socialization messages (i.e., racial pride, racial barrier, and egalitarianism), related to GPA, math ability, and race-based academic self-concept. Hypothesis 2a stated that racial pride and egalitarian messages would be linked to higher GPAs, and racial barrier messages would be linked to lower GPAs. Hypothesis 2b stated that racial pride and egalitarian messages would be linked to higher self-ratings of math ability and racial
barrier messages would be linked to lower self-ratings of math ability. Hypothesis 2c stated that racial pride and egalitarian messages would be linked to higher self-ratings of race-based academic self-concept. There was no specific hypothesis for how racial barrier messages would relate to race-based academic self-concept.

Three hierarchical multiple regressions were completed with GPA (Model 4), math ability (Model 5) and race-based academic self-concept (Model 6) as the outcome variables, with racial socialization variables included in the models. Given that the variable race/ethnicity mattered for racial pride, the dummy code African parent was entered as a control variable at step 1 for Models 4-6. Race/ethnicity also mattered for math ability, thus the dummy code African vs. Not African was entered as well at step 1 for Model 5.

In Model 4, the dummy variable African Parent was not a significant predictor of GPA (Beta = -.10, \( p > .10 \)). None of the racial socialization messages were found to be statistically significant predictors of GPA. These results did not support hypothesis 2a as messages focused on racial pride, racial barriers and egalitarianism were not associated with GPA.

In Model 5, the dummy variable African was a significant predictor of math ability (Beta = -.43, \( p \leq .001 \)). Adolescents who identified as African were more likely to report lower math ability scores when compared with adolescents who did not identify as African. However, the dummy variable African Parent was not a significant predictor of math ability (Beta = .05, \( p > .10 \)).

Racial pride was a significant predictor of math ability (Beta = -.28, \( p < .05 \)). None of the other racial socialization messages were found to be statistically significant
predictors of math ability. The full model explained 17% of the variance in math ability, 
\( F(5, 83) = 3.26, p \leq .05 \). Thus, there was partial support for hypothesis 2b as messages 
focused on racial pride were associated with math ability.

In Model 6, African parent dummy code was not a significant predictor, (Beta = 
-0.15, \( p > .10 \)). Racial barrier was a significant predictor of race-based academic self-
concept (Beta = -0.30, \( p < .05 \)). None of the other racial socialization messages were 
found to be statistically significant predictors of race-based academic self-concept. The 
full model explained 9% of the variance in race-based academic self-concept, 
\( F(4, 83) = 2.06, p \leq .10 \). In summary, there is partial support for hypothesis 2c as racial pride and 
egalitarian messages were not associated with race-based academic self-concept, 
however racial barrier messages were. The results of Models 4 and 6 can be seen in 
Table 5. Model 5 can be seen in Table 6.

Research Question 3

The third question involved an examination of how racial identity attitudes (i.e., 
private regard and public regard) related to GPA, math ability, and race-based academic self-concept. Hypothesis 3a stated that private regard messages would be linked to better academic outcomes in the form of higher GPAs. Hypothesis 3b stated that private regard messages would be linked to better academic outcomes in the form of higher reports of math ability. Hypothesis 3c stated that private regard messages would be linked to higher self-ratings of race-based academic self-concept. There was no hypothesis for public regard for any of the outcomes due to the mixed evidence with how it relates to academic outcomes.

Three hierarchical multiple regressions were completed with GPA (Model 7),
math ability (Model 8), and race-based academic self-concept (Model 9) as the outcome variables, with racial identity variables included in the models. As race/ethnicity mattered for math ability, the dummy code African vs. Not African was entered at step 1 for Model 8.

In Model 7, neither aspect of racial identity was found to be statistically significant predictors of GPA. These results did not support hypothesis 3a as private regard nor public regard were associated with GPA.

In Model 8, the dummy variable African was a significant predictor of math ability (Beta = -.34, p < .01). Again, adolescents who identified as African were more likely to report lower math ability scores when compared with adolescents who did not identify as African. Neither aspect of racial identity was found to be statistically significant predictors of GPA. The full model explained 15% of the variance in math ability, $F(3, 83) = 4.80, p < .01$. In summary, there was no support for hypothesis 3b as private regard in particular was not related to math ability.

In Model 9, private regard was a predictor of race-based academic self-concept (Beta = .27, p < .01). Public regard was not statistically related to race-based academic self-concept. The full model explained 10% of the variance in race-based academic self-concept, $F(2, 83) = 4.23, p < .05$. In summary, there is partial support for hypothesis 3c as private regard was associated with race-based academic self-concept. The results of Models 7 and 9 can be seen in Table 7. Model 8 can be seen in Table 8.

**Research Question 4**

Finally, this investigation explored the role of racial pride, racial barriers, and egalitarian messages and private and public regard dimensions of racial identity on the
relationship between academic-based discrimination and the academic outcomes under study. Hypothesis 4a stated cultural socialization messages and private regard would moderate the relationship between academic discrimination and GPA. Namely, it predicted that greater perception of academic discrimination would be linked to higher GPA for youth with a higher report of cultural socialization messages and a greater perception of academic discrimination with high levels of private regard.

Hypothesis 4b stated cultural socialization messages and private regard would moderate the relationship between academic discrimination and math ability. Namely, it predicted that greater perception of academic discrimination would be linked to higher ratings of math ability for youth with higher reports of cultural socialization messages and a greater perception of academic discrimination with high levels of private regard. Hypothesis 4c stated cultural socialization messages and private regard would moderate the relationship between academic discrimination and race-based academic self-concept. Namely, it predicted that greater perception of academic discrimination would be linked to higher ratings of race-based academic self-concept for youth with a high report of cultural socialization messages and a greater perception of academic discrimination with high levels of private regard.

Hypothesis 4d was exploratory in regards to how racial barrier messages, egalitarian messages, and public regard might influence the relationship between academic-based discrimination and GPA, math ability, and race-based academic self-concept.

**Academic-based discrimination and racial socialization.** Three hierarchical multiple regressions were completed with GPA (Model 10), math ability (Model 11) and
race-based academic self-concept (Model 12) as the outcome variables, with racial socialization variables included in the models. Again, as race/ethnicity mattered for racial pride, the dummy code African parent was entered as a control variable at step 1 for Models 10-12. Race/ethnicity also mattered for math ability, thus the dummy code African was also entered at step 1 for Model 11. At step 2 of these models, academic-based discrimination was entered. Racial socialization variables were included at step 3. The inclusion of interaction terms between academic-based discrimination and the racial socialization variables occurred at step 4.

Against predictions, none of the interaction terms were statistically significant in Models 10-12. Thus, they were omitted from the final results. An examination of Model 10 (prior to the inclusion of interaction terms) revealed that only academic-based discrimination was a significant predictor of GPA (Beta = .23, \( p < .05 \)). It was found that adolescents who recalled more discrimination also reported higher GPAs. Further, no dimension of racial socialization was found to be statistically significant predictors of GPA in Model 10. These results did not support hypothesis 4a and hypothesis 4d. The full model explained 12% of the variance in GPA, \( F (5, 83) = 1.92, p < .10 \). The results of Model 10 can be seen in Table 9.

In model 11, race/ethnicity and racial pride continued to be notable predictors for math ability. None of the dimensions of racial socialization were found to be statistically significant predictors of math ability. These results did not support hypothesis 4b and hypothesis 4d. The full model explained 17% of the variance in math ability, \( F (6, 83) = 2.75, p < .05 \). The results of Model 11 can be seen in Table 9.

Finally, in model 12, racial barriers were found to be statistically significant
predictors of race-based academic self-concept (Beta = .31, \( p < .05 \)). It was found that adolescents who recalled more messages about barriers and discrimination also reported higher ratings of race-based academic self-concept. These results provide no support for hypothesis 4c and partial support for hypothesis 4d. The full model explained 12% of the variance in race-based academic self-concept, \( F(5, 83) = 2.08, p < .10 \). The results of Model 12 can be seen in Table 9.

**Academic-based discrimination and racial identity.** Three hierarchical multiple regressions were completed with GPA (Model 13), math ability (Model 14) and race-based academic self-concept (Model 15) as the outcome variables, and with racial identity variables included in the models. For Models 12 and 15, academic-based discrimination was entered at step 1. Racial identity variables were included at step 2 of these models. The inclusion of interaction terms between academic-based discrimination and the racial identity variables occurred at step 3 for Model 13 and Model 15. However, given that the variable racial/ethnicity matters for math ability, the dummy code African was entered as a control at step 1 of Model 14. At step 2 of this model, academic-based discrimination was entered. Racial identity variables were included at step 3 of Model 14. The inclusion of interaction terms between academic-based discrimination and the racial identity variables occurred at step 4 for Model 14.

In Model 13, academic-based discrimination was the only statistically significant predictor of GPA (Beta = .22, \( p < .05 \)). It was found that adolescents who recalled more discrimination also reported higher GPAs. None of the racial identity variables were found to be statistically significant predictors of GPA. The interaction term academic-
based discrimination X public regard was statistically significant at the trend level 
($R^2$ change = .05; Beta = -.19, $p = .09$).

To determine how public regard affected the relationship between academic-based 
discrimination and GPA, the simple main effects were calculated for both 
predictors. Results indicated that under conditions of low levels of academic-based 
discrimination, students who reported high public regard reported a higher GPA than 
students with low public regard. However, under conditions of high academic-based 
discrimination, students with low public regard reported a higher GPA than students 
with high public regard. The interaction in Model 13 can be seen in Figure 3. The full 
model explained 12% of the variance in GPA, $F(5, 83) = 2.10$ $p < .10$. The results of 
Model 13 can be seen in Table 10.

Against predictions, none of the interaction terms were statistically significant in 
Models 14. Thus, they were omitted from the final results. An examination of Model 14 
(prior to the inclusion of interaction terms) revealed that only the dummy variable 
African was a significant predictor of math ability (Beta = -.36, $p < .01$). Again, 
adolescents who identified as African were more likely to report lower math ability 
scores when compared with adolescents who did not identify as African. Based on these 
results, there was no support for hypothesis 4b or hypothesis 4d as neither private regard 
nor public regard appeared to be associated with math ability. The results of Model 14 
can be seen in Table 10.

In Model 15, academic-based discrimination was a significant predictor of race-based 
academic self-concept at the trend level only (Beta = -.17, $p = .10$). Private regard 
was a significant predictor of race-based academic self-concept (Beta = .27, $p \leq .01$). It
was found that adolescents who reported high private regard also reported a high race-based academic self-concept. The interaction term academic-based discrimination X private regard was statistically significant ($R^2$ change = .07, Beta = .27, $p \leq .01$).

To determine how private regard affected the relationship between academic-based discrimination and race-based academic self-concept, the simple main effects were calculated for both predictors. Results indicated that under conditions of low levels of academic-based discrimination, students reported the same level of race-based academic self-concept, no matter their level of private regard. However, under conditions of high levels of academic-based discrimination, students who reported high private regard also reported higher levels of race-based academic self-concept and students with low private regard reported lower levels of race-based academic self-concept. The full model explained 20% of the variance in race-based academic self-concept, $F (5, 83) = 3.78, p \leq .01$. The results of Model 15 can be seen in Table 10. The interaction in Model 15 can be seen in Figure 4.
Chapter V: Discussion

The present study sought to explore the relationship between the risk factor academic-based discrimination and academic outcomes, and cultural resources racial socialization messages and aspects of racial identity and academic outcomes for Black adolescent boys. The study also examined whether the cultural resources served as moderators between academic-based discrimination and the academic outcomes.

Overall, many of the statistically significant findings were relationships that had not been hypothesized a priori. The race/ethnicity control variable African students mattered for math ability, with African students reporting lower ratings of math ability than other students. Other statistically significant results included academic-based discrimination being positively linked to academic performance, cultural socialization being negatively linked to math ability, preparation for bias being positively linked to race-based academic self-concept and private regard being positively linked to race-based academic self-concept. Lastly, the results indicated that private regard altered the relationship between academic-based discrimination and students’ race-based academic self-concept. Those findings that were in line with the predicted relationships were yielded at the trend level; it is possible that with a higher statistical power, these relationships would have emerged in a stronger manner.

Academic-Based Discrimination as a Risk Factor

The first hypothesis of this study focused on how academic-based discrimination was linked to academic performance (i.e. GPA), math ability perceptions, and ratings of race-based academic self-concept. It was proposed that academic-based discrimination would negatively impact all academic outcomes. The results did not lend
support to this hypothesis in full. While academic-based discrimination was linked to GPA, the relationship was positive. This is to say that as students’ reports of academic-based discrimination increased, so did their reports of their GPA. This finding is contrary to previous work that examined similar types of discrimination and found it to be linked to a decline in GPA (Neblett et al., 2006; Wong et al., 2003; Wang & Huguley, 2012).

While it appears to be an anomaly, it is possible that for the youth in this sample, that this relationship exists because of key attributes that underlie being aware of discrimination and underlie performing in a high manner in school. Students who report discrimination must first be able to distinguish what that looks like. This differentiation requires being conscious and aware in order to even recognize biases that may be happening. Perhaps this same trait of being in tune with what is happening in one’s environment also allows these students to perform well academically. Additionally, as students who make good grades are likely to be highly invested in what is happening in their school environment, it would not be a stretch for them to be cognizant of discrimination that is geared to prohibit them academically (e.g. prevents them from taking advanced level classes).

Lastly, Powell and Arriola (2003) found that students who talk to others about being treated unfairly instead of keeping it to themselves are more likely to have higher GPAs. These students were involved in an organization that provided a space to discuss things that impact them. Perhaps discrimination is something the organization provided them space to talk about, and thus they are able to persevere academically. Nonetheless, further research is warranted to learn more about how academic-based
discrimination impacts students’ academic performance, as there are very few studies that have looked explicitly at this relationship, particularly among high school Black boys. Future research should explore the types of settings that might create spaces that allow students to process their experiences, as they might enable students to excel academically in spite of the risk.

Academic-based discrimination was not statistically linked to math ability as had been predicted. It is notable to say the direction of the relationship was in line with hypothesis 1b. While a slightly different outcome, Wong and colleagues (2003) did find racial discrimination at school by teachers and peers to be associated with a decline in academic ability self-concepts, and a decline in academic task values for middle school African American youth. Wong’s work is the only other known study examining how discrimination impacts how African American adolescents perceive their ability to do well in school, this additional research looking at perceptions of ability in a variety of academic domains is merited.

Academic-based discrimination was significantly negatively linked to race-based academic self-concept at the trend level. While this finding is at the trend level, it may widen the door to considering how academic-based discrimination can have a deleterious impact on how Black students view themselves in the context of their racial academic identity. There is a substantial amount of literature noting how Black youth might conceptualize their achievement and success in the context of their race (Carter Andrews, 2009; Davidson, 1996; Fordham, 1988; Fordham & Ogbu, 1986). However, little remains known about how racial discrimination might erode this race-based academic self-concept. Davis, Young, Hart and Smith Bynum (2014) found that
academic-based microaggressions were salient in such a way that Black students had to make conscious efforts to not allow them to deter their work ethic. It is possible that enough of these discriminatory exchanges can take a toll on students, causing them to buy into the idea that Black people are not naturally smart and/or that they do not belong in advanced level classes. This racial discrimination warrants deeper examination.

**Racial Socialization Messages as a Cultural Resource**

The second research question sought to explore how a cultural resource, such as racial socialization messages (i.e., cultural socialization, preparation for bias and egalitarianism), related to GPA, math ability, and race-based academic self-concept. Hypothesis 2a stated that racial pride and egalitarian messages would be linked to higher GPAs, and racial barrier messages would be linked to lower GPAs. Hypothesis 2b stated that racial pride and egalitarian messages would be linked to higher self-ratings of math ability and racial barrier messages would be linked to lower self-ratings of math ability. Hypothesis 2c stated that racial pride and egalitarian messages would be linked to higher self-ratings of race-based academic self-concept. There was no specific hypothesis for how racial barrier messages would relate to race-based academic self-concept.

Results revealed that varying racial socialization messages were associated with math ability and race-based academic self-concept. Specifically, cultural socialization was negatively linked to math ability and preparation for bias was positively linked with race-based academic self concept. These are unexpected findings, especially considering the socioeconomic profiles of the families, where highly educated parents are more likely to engage in conversations around race, and in a proactive manner, than those with less educational background (Thornton et al., 1990). Nonetheless, this dissertation may
offer some interesting insight about racial socialization, and academic achievement for high achieving Black boys.

**Cultural socialization.** First, cultural socialization was related to math ability, however in a negative manner. This is to say that more messages about racial pride were linked to lower ratings of math ability. While the literature does not specifically highlight how racial socialization is related to African American adolescent’s perception of math ability, it did underscore the links with other types of academic beliefs and behaviors in a positive manner (Cooper & Smalls, 2010; Hughes et al., 2009b, Smalls, 2009; Wang & Huguley). Thus, the finding that cultural socialization is negatively related to students’ perceptions of math ability does not fit within the current literature.

But it is crucial to note how race/ethnicity mattered for both reports of cultural socialization and for math ability. Recall that there were significant differences between those who identified as African American, but identified at least one African parent, and other Black students for reports of racial pride. Additionally, there were significant differences between students who identified as African and those who did not identify as African for reports of math ability. Thus, it is plausible that the diverse racial/ethnic makeup of the students was an influential factor on the direction of the relationship between cultural socialization messages and perceptions of math ability. Further, to my knowledge, all the noted studies that demonstrated the benefits cultural socialization has for academic beliefs and behaviors used exclusively African American samples.

This finding opens the door for future studies to untangle the experiences within Black student populations, as there are some nuances in these experiences. Previous literature has begun to address some of these experiences, particularly concerning racial
socialization (Joseph & Hunter, 2011; Awokoya, 2012) and racial identity (Benson, 2006; Feliciano, 2009). However, there is limited knowledge about these nuances as it pertains to academic outcomes, particularly among K-12 youth.

**Preparation for bias.** Secondly, preparation for bias messages were linked to race-based academic self-concept in a positive manner. It was unclear how this relationship might emerge, as preparation for bias has been linked to both positive and negative outcomes in previous literature (Bowman & Howard, 1985; Caughy et al., 2006; Sanders, 1997; Smalls, 2006). It seems that for this sample, hearing messages about encountering discrimination is beneficial for how Black boys feel about being smart and knowing other smart Black boys. Perhaps hearing messages about encountering discrimination served as extrinsic motivation for the Black boys in this sample to not only do well in school, but to feel good about their effort. This finding is consistent with a number of qualitative studies that found youth were active in addressing stereotypes about their abilities and viewed their Blackness as a source of strength while pursuing academic endeavors (Allen, 2015, Fries-Britt & Griffin, 2007; Graham & Anderson, 2008).

This is a refreshing finding from a sample of Black boys, considering the robust “stereotype threat” literature (originating with Steele & Aronson, 1995), where Black youth conform to negative stereotypes about Black students. Further, there is a hearty amount of literature discussing academic achievement as “White property” and how Black students make sense of their academic identity (Davidson, 1996; Fordham, 1988; Fordham & Ogbu, 1986). In these cases, youth may buy into the idea that ‘it’s not okay for Black youth to be smart.’ However, as these findings come from a cross-sectional
study, no causal inferences can be made. Nonetheless, it would be interesting to examine how this process unfolds for Black high school boys with longitudinal data in hand.

**Egalitarianism.** It is not clear why a relationship between these messages and other outcomes did not emerge in a significant manner, beyond the restraints of a small sample size. Especially considering the diverse make-up of the county the students reside in, egalitarian messages were expected to be salient and thus reasonably influential.

It is possible that these racial socialization messages may be important for academic outcomes that were not under study such as academic engagement, academic motivation, and college aspirations. Additionally, it is possible that for these youth there are a number of cultural resources at play that may have had more meaningful influence on the academic outcomes of interest. Replication is needed to further understand these relationships.

**Racial Identity as a Cultural Resource**

The third question also explored how a known cultural resource for Black youth, namely racial identity, would relate to the academic outcomes under study. Hypothesis 3a stated that private regard messages would be linked to better academic outcomes in the form of higher GPAs. Hypothesis 3b stated that private regard messages would be linked to better academic outcomes in the form of higher ratings of math ability. There was no hypothesis for public regard for either GPA or math ability.

Against expectations, neither private regard nor public regard were associated with GPA or math ability in significant manner. This is a surprising set of findings as previous literature showcased a link between racial identity and academic outcomes.
There are a handful of studies that have explicitly examined private or public regard as predictors of any academic outcomes (Chavous et al., 2003; Mendoza-Denton, et al., 2008; Mickelson, 1990; Smith et al., 2003; Tenenbaum & Ruck, 2007). As a positive racial identity has been consistently noted as beneficial for African American development, it will be important to continue to explore how having a positive private regard or public regard might impact academic achievement for students, as it seemingly is a vital resource for Black youth in a number of other domains.

One link that emerged in this study was the relationship between private regard and a race-based academic self-concept. It was found that adolescents who reported high private regard also reported a high race-based academic self-concept. This relationship seems intuitive, as individuals who feel positively about being Black, would likely also feel good about being Black and smart. However, Black students could choose to ascribe to the “racelessness” phenomenon described by Fordham and Ogbo (1986). In this situation, students could compartmentalize their feelings about being a Black individual as separate from their understanding of their academic identity. It may appear worthwhile to them to dissociate their racial/ethnic group from their academic identity in order to improve their chances of success in school. However, it seems the youth in this sample are similar to those in Carter Andrews (2009) study, where African American students do well in school, because they conceptualized their academic achievement in the context of their race. Thus, it appears that high private regard served as a buffer
against academic based discrimination.

It is important to note that the students in this sample are engaged in a program that promotes academic excellence among Black boys. Thus, it would be interesting to examine how private regard impacts one’s race-based academic self-concept across a more general sample, as it is possible there are effects of the program (that were not measured) that make this a salient process for the boys in this sample.

**The Cultural Resource Private Regard Buffered Academic-based Discrimination**

Turning to the notion that racial socialization messages and aspects of racial identity serve as cultural resources that buffer against the effects of discrimination—the results largely did not tap into this process as had been expected. Only private regard was found to alter the relationship between academic-based discrimination and an academic outcome under study. Specifically, under conditions of low levels of academic-based discrimination, students reported the same level of race-based academic self-concept, no matter their level of private regard. However, when there were high levels of academic-based discrimination, students who reported high private regard reported higher levels of race-based academic self-concept than they had under low conditions. Additionally, students with low private regard reported lower levels of race-based academic self-concept than they had under low levels of academic-based discrimination.

This is an exciting finding, as the literature about private regard buffering any type of racial discrimination’s influence on academic outcomes continues to bloom. Further, this finding provides some insight into how high-achieving Black boys manage experiences of discrimination in the context of their racial identity. It makes sense that
students who have a lower private regard might not feel great about being Black and smart when they experience greater discrimination. This result is similar to the finding in Dotterer and colleagues (2009) study where female students reported lower levels of school bonding when they had weaker ethnic identities and experienced more discrimination.

The more interesting piece of this finding is that students, who have a higher private regard, would have an increased conviction in their race--based academic self-concept in the face of greater discrimination. This finding provides evidence that challenges the idea that one can not have academic success and be of African American heritage (Ogbu, 2004). For these students, there is positivity in being a smart Black boy. Perhaps these students are compelled to defy stereotypes about their academic ability or role in the school setting and that starts with how they view themselves.

Against predictions, private regard was the only noted cultural resource to have an influence on the relationship between academic-based discrimination and the academic outcomes under study. Given the fact that many of the hypotheses examining moderation were exploratory, it is not too surprising that the current study did not yield definitive relationships.

However, among the variables at play, cultural socialization was among the group of viable variables to likely have influence. Wang and Huguley (2012), found that cultural socialization, a construct like racial pride, attenuated the effect of both peer and teacher discrimination on grade point average (GPA) and teacher discrimination on educational aspirations (Wang & Huguley, 2012). Trask-Tate and colleagues (2014) found similar findings with cultural socialization buffering peer and teacher-based
discrimination effects on future academic expectations. Perhaps this relationship would have held up for this sample if an academic outcome similar to educational aspirations or academic expectations had been examined. As there appear to be only four studies examining these processes (Dotterer et al., 2009; Neblett et al., 2006, Trask-Tate et al., 2014; Wang & Huguley, 2012), more research is needed to understand the academic tasks that are protected by racial socialization in the face of discrimination. Qualitative research, specifically focus groups could further elucidate these findings.

**Race/Ethnicity Mattered For Math Ability**

One unexpected significant result of this study involved the race/ethnicity of students in the study, as it pertained to the math ability outcome. Results revealed that African students were more likely to report lower ratings on math ability when compared with all other students. The math ability construct, included questions such as “How good at math are you?” and “If you were to rank all the students in your math class from the worst to the best in math, where would you put yourself”. This finding could be interpreted in at least two ways: 1) The African students were more grounded in reality and thus reported in an accurate manner, while the other kids might have exaggerated, or 2) The African students are influenced by another factor that is causing them to not be as confident in their abilities as the other students are.

The literature to help make sense of this finding is scarce. There is little known about how different ethnicities that identify as Black experience academic outcomes. Further, literature examining these groups in relation to perceptions of academic ability, in any domain (e.g. math, science, etc.), is practically nonexistent. Rascoe and Atwater’s (2004) qualitative study on gifted Black male students’ self-perceptions of academic
ability and gifted potential in science offers some understanding of how high-achieving Black male high school students perceive their academic ability in the context of science classes. Largely, the students held high confidence in their academic ability and exerted effort to match their perceived ability.

This brings into the question whether there is a normative response for academic ability for gifted and/or high-achieving students that vary from a response from students who are not. If this is the case, then perhaps when considering youth who are gifted or high-achieving, that high endorsement of one’s ability to do well in a subject is expected. Thus, it might be perceived as unusual that high-achieving African students are more neutral about their ability while their counterparts are quite confident.

The family domain in the Integrative Model for the Study of Minority Youth Development would suggest the family values, beliefs, and goals, informed by culture, would have bearing on how African students engage in the academic process. Perhaps, growing up in a home with African parents conveying certain beliefs about education influenced how they conceived their academic ability. However, students who did not identify as African themselves, but identified at least one African parent reported great confidence in their math ability, on par with the African American and Biracial/Multiracial youth in the sample. So there is another factor at play that is underlying the difference for African students.

One aspect of the Integrative Model for the Study of Minority Youth Development that was part of the original framing of the study is Adaptive Culture (See Figure 1 and Figure 5). This domain includes considering how migration and acculturation impact developmental competencies for youth. This would suggest
that perhaps one possibility that might distinguish the African students from the students who did not identify as African, but indicated having at least one African parent, is generational status as a result of migration to the United States. Unfortunately, the present study did not inquire whether the students were born in the United States, and if not, where they were born. However, it is plausible that students who did not identify themselves as African are at least second-generation immigrants who were born in the U.S. This conclusion is based on their selection to identify as African American. Further, the students who did identify as African might have been born elsewhere, thus the option African American may not have been viewed as a salient choice. There is literature to suggest that foreign-born students have varying school experiences from native-born students, even those who are second-generation immigrant (Aud, Fox, & Kewal-Ramani, 2010; Coutinho & Koinis-Mitchell, 2014; Rong & Brown, 2001). However, this is merely speculation. Nonetheless, better self-perceptions of ability are correlated with better test scores for African American youth (Pershey, 2010). Thus, it is important that future research delve into understanding these processes for Black students across varying ethnicities.

**Important Considerations for Data Interpretation**

There are a number of important factors that should be considered in making sense of the data. These include 1) the societal context the data were collected in, 2) how racial socialization varies over time, and 3) the influence of parents versus other adults during the life stage of adolescence.

**“Black Lives Matter” Era.** These data were collected during 2015 and 2016. This time period was marked by a high degree of racial unrest including several national
news events covering violent shootings of African-American boys and young adults.
The advertising of this study occurred in parallel as tensions mounted in Ferguson, Missouri, after the killing of 18-year-old Michael Brown (British Broadcasting Corporation, 2014), and in Cleveland Ohio, after the killing of 22-year-old John Crawford and 12-year-old Tamir Rice (Sneed, 2014). It was not long before an incident in Baltimore, Maryland, resulted in the death of 25-year-old Freddie Gray (Ortiz, 2015). This incident and the riots that followed coincided with phase 1 of data collection for the study (2015). During phase 2 of data collection, racial tensions had escalated at well-known universities such as University of Missouri and Yale University (Jaschik, 2015). Elements of bigotry even found its way on one of the most respected national platforms: the presidential campaign, as Donald Trump spewed hateful rhetoric about Black people, Mexicans, and Muslims.

These current events served as an uncomfortable and often alarming backdrop for the issues understudy with this sample of Black adolescent boys. So, if by chance the Black boys in this sample had avoided experiences of discrimination, this period in time forced them to witness the implications of being a Black male in the United States of America. It is not far fetched to understand how these socio-political issues might have influenced how the Black boys in this sample thought about themselves and made sense of their interactions with their parents, and their experiences within the school system.

**Time is a factor.** One thing to consider in future work is the fact that varying processes have influence on student’s development at varying timepoints throughout their lives. For instance, youth’s awareness of discrimination grows as they mature. Thus, young children may not be as cognizant of racial matters or even understand the
concept of race. As youth develop cognitively, they are better able to understand parents' messages about race relations. Additionally, parents shift in the type of messages about race and the frequency in delivery of messages based on youth’s age. It is important to acknowledge that processes such as racial socialization are not static, thus it would be beneficial to add this construct to Garcia Coll and colleagues (1996) model. For the purposes of this study, Figure 5 highlighted the constructs that were relevant to this dissertation with the addition of a time continuum, highlighting how experiences in each domain may fluctuate across different stages of the life span.

**Who has greater influence?** Another thought about how time influences youth development, pertains to who has great influence at varying points in the life of a student. It is possible that during the high school years, as youth seek autonomy from their parents, that teachers/ coaches/mentors may have greater influence on student outcomes than parents. This seems very likely if these adults are associated with a class, group, or organization that the youth enjoys being a part of. Although it was not examined in this study, it is possible that advisers of the organization that the youth were a part of made a positive impact on how the youth coped with the various demands of school. Things that the advisers said or did could have affected how youth managed discrimination experiences in the school setting, as well as how they engaged in school overall. Exploring those relationships and dynamics is worthwhile, considering how at this age youth tend to differentiate from their parents, while still in need of positive role models.

**Data Collection Challenges and Limitations**

As demonstrated by the data collection procedures, there were a number of challenges that in many ways resulted in limitations of this work. This includes issues
Beginning with the statistical power issue, the sample size barely met the minimum number to achieve appropriate power to test the aims of the study. Specifically, the overall sample consisted of 88 students, the minimum sample size as generated by a power analysis to test the research questions. However, there was incomplete data for four of the participants. Their missing data were not at random, as they began the survey but did not complete in full. As such, mean imputation was not utilized for these individuals. To remedy this discrepancy with the sample size and achieving power, different variables were dropped from the models with the most predictors (i.e. models with racial socialization variables). Dropping predictors did not make a difference for any of the outcomes, thus the models were left as hypothesized.

In addition to a small sample size (n=84), there was reduced variability within the data due to the selection of participants from a program that targeted high-achieving students and the focus on academic outcomes. Further, the participants largely responded to the survey in a positive manner, resulting in a great deal of negatively skewed data that needed to be transformed. Transforming data has its benefits in normalizing the data, however, this process can alter the fundamental nature of the data, such as creating curvilinear relationships (Osborne, 2002). All of these are important factors that should be considered in interpreting the findings of this work.

As demonstrated by the data collection procedures, great lengths were taken to secure an appropriate sample size. However, obtaining access to the students was challenging. During the first wave of data collection, student participation relied on their parents opting into the survey via an email sent out by the research team. While
extensive efforts had been made to educate parents of the study, it is possible that the lack of face time with parents and the researchers contributed to a low opt in rate. Additionally, researchers learned there was confusion around whether students had taken the survey or not, as the program organization conducted a separate survey about an organizational event around the same time as the launch of the study.

During the second wave of data collection, issues arose in regards to establishing concrete times that advisers would be able to meet with eligible students, inform them about the survey and provide consent forms. Further, there were challenges with encouraging students to return parent consent forms so that they could complete the survey. Incentivizing the advisers helped garner the response rate that culminated in the available data in the present study. Having a larger budget overall, that would have increased the compensation of the students and provided compensation for advisers to complete extensive data collection training likely would have resulted in a greater response rate.

It is also worthwhile to consider how not having direct contact with the sample participants and their parents created difficulties. While several efforts were put in place to address questions and concerns preemptively (letters, YouTube videos, Facebook page), having the mandated barrier set by one of the partners between the researchers and participants heavily influenced data collection. We could have more readily addressed face-to-face many of the concerns/issues of parents, students and advisers in a more efficient manner, thus better maximizing the time we had in the field.

Another limitation that must be considered is the study design. The initial survey was set to an online platform via Qualtrics. In the second data collection, the survey was
a paper assessment. An unexpected drawback was that those students who identified as Biracial/Multiracial were not exposed to questions about racial socialization or racial identity (except public regard). The decision to create a skip pattern if individuals identified in this way was made largely in an effort to minimize any offense. While many individuals who have a Black parent identify with black experiences, we did not want to impose this assumption onto the participant.

It was later found during the paper assessment wave, that all individuals who identified as Biracial/Multiracial responded to the racial socialization or racial identity questions, even though we asked participants to complete only if they were African American, African or West Indian. It is possible that if we had included additional questions to assess the relevancy of Black experiences for the Biracial/Multiracial individuals (N-10) who participated in the online wave, that they would have responded in a similar manner as those who took the paper assessment. Moreover, we would have been able to include them in the analysis, which would have boosted the sample size. Additionally, while the organization the students are a part of is inclusive of all races/ethnicities, the Biracial/Multiracial youth also are part of an organization that targets African American males. Thus, identifying as Black while identifying as Biracial/Multiracial at the same time is likely a more salient process for students in this program, as compared to Biracial/Multiracial individuals that are not involved in the program.

It is also important to acknowledge that the construct race-based academic concept is not a fully comprehensive construct based on the items that hung together in this study. The two-item construct is a start in understanding how Black youth
conceptualized their academic self-concept in the context of their race, however the construct should be further developed. Empirical work on similar constructs such as academic race stereotypes (Okeke, Howard, & Kurtz-Costes, 2009) should be considered in order to help expand the construct, from both a theoretical and a measurement standpoint. Doing so will help researchers be better assess these racialized academic experience that happen at an internal level for students and has implications for their academic performance.

Along the lines of data collection procedures, an additional notable limitation concerns how the participants were recruited. All of the participants were members of an organization that fosters positive learning environments in order to facilitate African American males’ pursuit of academic excellence. The findings that did emerge may not be applicable to high-achieving Black male students across the board. Moreover, there are likely program effects that are at play that were not revealed under the aims of this dissertation.

A final limitation that must be considered is the cross-sectional nature of this study. As participants were assessed at only one time in point, causal inferences cannot be made. With greater incentives and buy-in from all partners, it would be interesting to establish a longitudinal study tracking the students from their first year in the program (generally 9th or 10th grade) and over time through graduation. There could certainly be changes in students’ awareness of discrimination, attunement to their parent’s messages around race, and how their racial identity forms, and their commitment in school (demonstrated by their performance, perceptions of ability, and academic self-concept).
Recommendations for Collecting Data from Youth in Community and/or School Settings

In an effort to help other researchers interested in studying this particular population, I offer recommendations to help avoid or better manage some of the major challenges experienced during this project. Again, a major challenge involved the ability to access the participants. Considering the focus of this project involved adolescents, the process of obtaining parental consent was to be expected. However, the added regulation of not having direct contact or interaction with potential student participants made this process much more difficult. As such, we relied heavily on electronic mediums and partner liaisons to reach the population of interest.

Being an outside entity, we were subjected to work within the constraints set by a partner that held more yielding power. Thus, researchers seeking to collect data in schools or communities should consider how they may not be able to easily advocate for things that would make the data collection process easier at the beginning of a new partnership. In hindsight, it would have been worthwhile to consider partaking in processes such as background checks. While this is a seemingly cumbersome process, that possibly could have prolonged the start of the project, it likely would have yielded greater benefits for the research team, while easing any concern about access to students that the partners might have had.

Along the lines of being an outside entity, researchers must be cognizant of how this outside status may influence their potential participants willingness to partake in the study. Ideally, we would have had several opportunities to meet with the parents and students involved with A.L.E so that they could learn about us and our objectives. This
was not feasible, so we sought out other mechanisms to build rapport. This included making ourselves visible through social media platforms such as Facebook and Youtube. We also carefully considered how we would contact our sampling pool and opted to have the organization play a major role in marketing the study. Specifically, while we created the materials, they were responsible for sending flyers home and sending out the links to social media platforms for families to learn about the project and about how was conducting it.

Even while the research team matched the population in which the data were collected from on race/ethnicity identification (this is important as it sometimes has implications for trust/mistrust between the community and researchers), we were very much aware that we would need a “boundary spanner”, an individual who lived and worked in the community and could provide us with valuable insight into how to handle issues unique to that demographic (Kelly, Mock, & Tandon 2002). We worked closely with someone who was not only involved with our partner organization, but was also a teacher at one of the schools, and lived in the community.

While the organization was able to introduce us to the community, and in some ways helped the community see that we were good people with good intentions, we learned that some skepticism still existed. This information was gathered after phase 1 of data collection, at a community forum where some parents of the members of A.L.E. attended with their children. One parent informed us that she read the FAQs and watched the YouTube video, but she was still unsure about our team. She later said she was happy to have met us in person and be able to talk through our goals and be able to ask her questions directly. So while we sought a number of strategies, it seems that
creating moments for direct engagement and interaction is the best route to take. If faced
with a constraint like ours, where access to youth is limited, researchers should consider
working with partners to solidify 1-2 meetings with parents early on in the project. This
will require flexibility and patience, as available dates may be heavily influence by the
needs of the partner organization and the community.

A final comment on challenges with collecting data in the community/school
setting involves the training and expertise of all affiliated parties. Considering a CBPR
approach, it is understood that all partners possess unique strengths that they are able to
bring to the table (Israel et al., 2005). Researchers come with certain skills about the
research process that may not be as readily developed for the partners. For instance, we
had to make clear with our partners that we needed to obtain parent consent prior to
providing the survey to the students. For lay people, the order in which those things take
place may not mean much, however it would be unethical to survey youth without
permission from their parents first. Thus, it was crucial that we provided some education
around the rules set by the institutional review board that were necessary to adhere to.

While likely not a simple task, it is critical to allocate time to have these conversations.
It is recommended that researchers provide extensive training for partners that will be
involved in data collection in some way. Not only will this ensure the partner
organization feels involved but it will help the researchers gain responsible assistance
with the project, and likely increase adherence to study protocol and thorough
completion of the survey from the study participants (D’Alonzo, 2010).

Likely, those community partners that are engaged in the data collection process
in such a hands on way will have other obligations that are competing for their attention,
time, and other resources. Researchers should also consider the time and monetary compensation of potential community partners between trainings and actual implementation, early on in the planning process. Ultimately, these efforts will ease the difficulties that readily present themselves for researchers in the field and are important considerations when thinking about how to reach youth in school or community based settings.

**Key Findings and Future Implications for Research, Policy, and Practice**

While there were not many substantial findings, two important things were illuminated in this study. First, is that even Black boys who live in seemingly safe environments, reaping the benefits of being the children of highly educated parents are not immune to risk (i.e. discrimination). Almost 40% of the sample believed they were given a lower grade than they deserved because of their race, while a little over a quarter reported being discouraged from joining an advanced level class. One-fourth of the sample believed they were wrongly disciplined or given after school detention because of their race.

The greatest indicator of academic-based discrimination was that people expected more of them than they expected of others their age. Sixty-two percent of the sample reported experiencing this feeling. This may seem like the least threatening type within the group, however there are serious consequences that can come with these misplaced expectations. Goff and colleagues (2014) found that Black boys as young as 10 may not be viewed in the same light of childhood innocence as their white peers. It was noted that instead, Black boys were more likely to be mistaken as older (the average overestimation of age was 4.5 years), be perceived as guilty and face police violence if
accused of a crime.

The second important finding in this study is that in spite of discrimination experiences, these Black boys are doing well in school, with 69% reporting a 3.25 GPA or higher (4.0 scale). Further, they are Black boys that have no qualms about being smart. Eighty-nine percent strongly agreed that being Black and smart is a good thing and 82% strongly agreed that they were happy to know other Black boys who get good grades.

Bearing these things in mind, it is important to consider how those who have influence on the environments of high-achieving Black boys can minimize the risks that these students face, as well as foster environments that allow them to thrive unequivocally. Moreover, these considerations will likely improve the academic conditions of Black boys across the board.

**Research.** Overall, there were only a few relationships between cultural resources and the academic outcomes. Further, there was only one relationship where a cultural resource, private regard served as a buffer against discrimination. However, it may be premature to suggest that racial socialization and racial identity do not serve as cultural resources for Black boys in terms of their experiences of academic-based discrimination and academic achievement. Given the restraints of the sample size, it is likely there was not enough statistical power to illuminate the expected processes. Further, the uncovering of the protective factors that enable these youth to flourish in the midst of adversity remains a crucial process and should be given explicit attention. Qualitative efforts including focus groups or future studies that provide a space for participants to help co-create and inform the process may be worthwhile in untangling the nuances in these processes.
Literature focused on the experiences of Black boys is small but growing. How they experience the world may be due how they are perceived based on their gender; some experiences may be due to being a Black individual in America. An additional perspective is that they experience the world through the lens of being both Black and male. Future research should explicitly examine this intersectionality for Black boys, across a number of sociodemographic characteristics (i.e. age; socio-economic status). Further, it will be important to examine what this intersection of race and gender mean for family processes such as racial socialization. It believed that parents think about their children in both the context of their race and their gender, and as such customize socialization messages based on the experiences they believe their child may encounter due to the intersection of these identities.

Again, if researchers are interested in accessing Black boys through the school or the community, CBPR is a worthwhile avenue to take as it can help capture the authenticity in the lived experiences of the youth and help address challenges such as poor community trust in research and limited external validity, which are common concerns for researchers working with human subjects (Allen, Culhane-Pera, Pergament, & Call, 2011).

**Schools.** As noted previously, Black boys are highly visible in special education programs and practically non-existent in gift and talented programs (Black Alliance for Educational Options, n.d.; Bush-Daniels, 2008; Moore & Flowers, 2012; Patton, 1998; Terman et al., 1996). It is crucial that schools gauge the ways in which educational needs of Black boys are diagnosed, addressing any bias that might contribute to the current practices of placement for Black boys. This bias may appear through those who
are conducting the testing or the assessments themselves (Dynarski, 2016). Ideally, high-achieving Black males who otherwise would have flown under the radar, would receive the proper instruction that challenges them.

It is important that schools also consider the other barriers that prevent access to and participation in rigorous course work for Black students. Students at schools predominately attended by low-income and minority families seem to have fewer opportunities to learn advanced content and participate in Advanced Placement courses, thus contributing to disparities in educational outcomes both in high school and beyond (The Schott Foundation for Public Education, 2015). It is recommended that schools assess how to increase the availability of such course work as engagement in high-level course work as it is a critical component of improving the educational outcomes of Black students during secondary and postsecondary years (The Schott Foundation for Public Education, 2015).

Another consideration for schools is to assess the types of clubs and organizations they provide or support. Williams and colleagues (2014) found that Black and Latino male teens who scored higher in positive youth development (e.g. achievement values; educational aspirations; attitudes towards school) were more likely than peers with lower scores to be engaged in prosocial activities (i.e. clubs). It was believed that adding culturally relevant factors contributed to high engagement in the clubs for these youth. Thus, schools should provide and support clubs/organizations that have culturally relevant factors. Collaborating with organizations like the one the students were involved in in this study, not only provides an additional space where students of color are affirmed, but it also helps foster a peer culture where academic
competence is valued. Both of these things would help promote positive feelings about being a smart Black student and positive feelings about being with other high-achieving Black students.

Schools may also contemplate on how the recruitment and retention of Black male teachers may serve to be a great benefit for all students, but especially for Black male students. The scarcity of male teachers of color in elementary and high schools, and negative images of men of color in the media appear to be more detrimental to boys and young men of color than to their female counterparts (Banks & Oliveira 2011). Schools can help resolve this discrepancy by assessing their recruitment process and making targeted efforts to hire Black male teachers. Additionally, schools can develop programs that help support the needs of these teachers, an effort that likely would help retain Black male teachers. These efforts would increase the opportunities that Black males have to learn from role models whom they can identify with. These teachers would likely help validate their experiences as Black males not only in the classroom but also beyond.

**Programs.** It may be worthwhile that programs at schools or within community organizations that target Black male students consider joining networks like The Campaign for Black Male Achievement and The Executives’ Alliance. These networks provide a range of support to help organizations strengthen their capacity to improve their performance, increase their impact, and maintain their work. These supports include increasing opportunities for funding so that programs can better reach and affect their population of interest.

Programs that work with Black boys may also consider adopting Positive Youth
Development (PYD) elements in their work. Traditionally, PYD programs do not focus on adversity or risk; instead they majorly emphasize assets and strengths (Lerner, Almerigi, Theokas, & Lerner, 2005). Yet, Black boys face unique circumstances, as they are often confronted with discrimination and bias across a number of domains. So, it may be a disservice for programs that serve this specific population to not acknowledge the obstacles that threaten the healthy development of Black boys. However, programs can deliberately address those experiences while still operating under the framework of positive youth development by focusing on enhancing the protective factors in the lives of Black boys. Some key protective factors include positive temperament and self-esteem, connectedness to family and school, and positive peer influences (Silloway, Connors-Tadros, & Marchand, 2009). It should be noted that studies have found that PYD programs targeting African American youth are more effective when they also foster cultural pride and bolster a sense of cultural identity (Travis & Leech, 2014). As suggested by this study, these are processes that are good for the academic achievement of Black boys, a major developmental task for adolescents.

Many programs that work with Black boys may not realize their efforts are already aligned with the objectives of PYD. By assessing how to reinforce aspects of PYD into program activities and by defining programs explicitly in this way, organizations could potentially broaden their funding streams. Entities like Arkansas Department of Education and The Sudbury Foundation have created grant programs to specifically allocate financial dollars to support organizations that operate from the positive youth development perspective (The Arkansas Positive Youth Development Grant Program Act of 2011; The Sudbury Foundation, n.d.).
Along those lines, it is important for programs serving Black boys to assess their effectiveness in achieving their outcomes by undergoing program evaluation. This action may involve working with research firms or research groups at universities to help pinpoint identifiable and observable program outcomes that can be measured and tracked. By doing so, programs would be better able assess what is or is not working for the youth who they serve. Ideally, evaluation efforts would help programs to improve their services, thus better helping Black boys meet their developmental competencies such as academic achievement.

Families. While this study only honed in on academic-based discrimination, there is a high possibility that the boys in this study are experiencing discrimination in other domains as well. Given these obstacles, parenting Black boys is no easy feat. However, racial socialization is one method that Black parents can employ. Cultural socialization and preparation for bias messages mattered in different ways for math ability and race-based academic self-concept. Ultimately, the participants endorsed hearing a great number of cultural socialization, preparation for bias and egalitarianism messages. As racial socialization messages are associated with a number of positive developmental outcomes (Caughey, et al., 2002; Neblett et al., 2006; Thompson, Anderson, & Bakeman, 2000), this effective strategy is likely influential for many other developmental outcomes for the boys in the present study.

There is evidence that Black males and females seem to live in differing gendered racial spaces (Boyd-Franklin et al., 2001; Chavous et al., 2004; Hill, 2001; Stevenson et al., 2002), thus parents may offer specific types of messages in response to the experiences of their children. A high frequency of messages that inform African
American youth, and particularly boys, about racial bias may be more harmful rather than protective (Harris-Britt et al., 2007). It is recommended that parents remain cognizant of this and strive to supply a well-rounded dosage of messages to temper the necessary preparation for bias messages due to the racial discrimination their sons are exposed to as Black males in mainstream society.

**Policy and Practice.** Understanding the obstacles that present risk for Black male students, policy makers at various levels can craft policy to better ensure that these students are given optimal opportunities to achieve. One consideration at the school level may be assessing the content within cultural competency trainings for teachers and administrators. It would be worthwhile to inspect whether educators are being trained to interact with students of color from a color or cultural blind approach. This approach is harmful in that it denies children an important aspect of their identity, and communicates to students culture is of little consequence to their learning experience and that cultural experiences are not legitimate in academic settings (Patton & Day-Vines, 2009). Instead schools could have trainings that teach educators to see students holistically in a way that recognizes the rich cultural backgrounds that students possess. Schools could consider training that helps educators improve classroom climate so that it is warm and inclusive. Trainings could help educators learn how to implement culturally continual processes where patterns of interaction that are familiar to students and that draw on their cultural cues and social experiences are implemented into the curriculum. All of these efforts would greatly minimize exposing Black boys to discrimination/bias in the school setting.

It is also recommended that schools reassess their discipline processes. In this
sample, 26% of the students believed they were wrongly disciplined or given after school detention because of their race. Additionally, studies have shown that Black students are disciplined at a higher rate than their White peers, even when there is no evidence of school misbehavior at a higher rate by Black students (The Schott Foundation for Public Education, 2015). Further, when misbehavior does occur, Black students are often punished more severely for less serious infractions (The Schott Foundation for Public Education, 2015). It is possible that expecting more of Black boys than other’s their age may have something to do with this discrepancy. So, in addition to addressing the bias that may be informing the disciplines strategies, it is recommended that schools consider adopting and implementing Positive Behavior Intervention and Supports (PBIS). PBIS methods teach, model, and reinforce appropriate behaviors for students and define consequences so that they are age appropriate, fair, and matched to the behaviors that should be changed (Rosch & Iselin, 2010).

This method is an evidence-based practice that when effectively implemented had reduced office referral rates (and, consequently, suspension and expulsion rates) by up to 50% per year, increased instructional time as a result of the reduced office referral rates, and improved attendance and school engagement (Southern Poverty Law Center, 2008). It is important that these methods give specific attention to issues of race and culture; otherwise reducing racial/ethnic disparities may not be successful (Vincent, & Tobin, 2011).

Restorative Justice processes are another alternative that school boards can consider implementing. It is considered a type of PBIS with a deeper emphasis on collaboration between community, faculty/staff, and students than traditional types of
School-wide PBIS. The framework includes following a set of specific practices, such as restorative chats where the victim and perpetrator talk directly about how the perpetrator's actions may have caused harm and gives the perpetrator a task to repair the damage (Dignity in Schools Campaign, 2013). The Dignity in Schools Campaign and the National Opportunity to Learn Campaign are resources that can provide tools to help districts and schools phase-in positive alternatives. These include model school discipline policies and guidelines for school boards and other policymakers.

Adopting practices such as these would be advantageous, as it would likely improve how educators treat Black boys in school. Ultimately, interacting with youth in fair and age appropriate manners will foster a positive environment for students to engage in. Additionally, these types of strategies might demonstrate that schools (administrators, teachers etc.) are invested in cultivating environments where students feel respected and supported. Environments such as this would be valuable for all students, but this change could prove to be particularly beneficial for Black boys whose assets are often ignored.

**Conclusion**

The state of current affairs would suggest that in a nation that has touted being a post-racial society, that the reality is prejudice and racial bias are pulsating throughout a variety of institutions in the country. As a result, Black boys are often stripped of their humanity on sight- deemed as heinous and problematic, something to be dealt with. There is much more to Black boys beyond the stereotypes that are displayed in abundance in the media and literature. Black boys are complex. They have insights, they have emotions, and they have experiences. Too often their experiences are defined for
them because American culture has already defined these males negatively and far too narrowly.

This study aimed to provide more evidence that counters that usual narrative. While this study did not yield many fruitful findings, it did illuminate some of the experiences that high-achieving Black boys have. Additionally, it continues the conversation about the factors that negatively and positively impact their developmental process. The risk and resilience framework and the Integrative Model for the Study of Minority Youth Development provided a comprehensive foundation to better understand these factors. Under this lens, it is clear that even high-achieving Black boys are exposed to risk and that there are some important cultural resources (e.g. private regard) that Black boys can pull from to foster resiliency. Schools, programs, communities, families, practitioners and researchers all have a responsibility in recognizing the strengths of Black boys. It is vital that settings that are nurturing and intentionally tap into the capacities that are already possessed by these young men are established and sustained. With the investments from various entities, Black boys would be able to understand intimately the saying, “The sky is the limit”, as these efforts would allow them to experience a world in which they are acknowledged, affirmed and seen as assets full of possibilities.
Table 1

*Descriptive Statistics Among Demographic, Academic-Based Discrimination, Racial Socialization & Racial Identity Variables (N = 84-88)*

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>M</th>
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<th>Min</th>
<th>Max</th>
</tr>
</thead>
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<td>6</td>
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<td>1.21</td>
<td>5.00</td>
<td>12.00</td>
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<td>.49</td>
<td>.00</td>
<td>1.00</td>
</tr>
<tr>
<td>4. Race/Ethnicity</td>
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<td>1.05</td>
<td>1.00</td>
<td>4.00</td>
</tr>
<tr>
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<td>10.00</td>
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</tr>
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<td>7. Preparation for Bias</td>
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<td>3.00</td>
</tr>
<tr>
<td>8. Egalitarianism</td>
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<td>3.00</td>
</tr>
<tr>
<td>9. Private Regard</td>
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</tr>
<tr>
<td>10. Public Regard</td>
<td>3.94</td>
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</tbody>
</table>

*Note.* Parent Education: 1 = grade school to 12 = Doctoral Degree (Ph.D., Ed.D., Sc.D.). Ethnicity: 1 = African American, 2 =, etc. All racial socialization messages subscale items ranged from 1 for Never to 3 for Lots of Times. Scores for racial centrality and private regard range from 1 for Strongly Disagree to 7 for Strongly Agree. ABD = Academic-based discrimination.
Table 2

**Correlations Among Demographic, Academic-Based Discrimination, Racial Socialization and Racial Identity Variables (N = 84)**

<table>
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<tr>
<th>Variable</th>
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<th>6</th>
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<td>2. Parent Ed</td>
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</tr>
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</tr>
<tr>
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<tr>
<td>7. CS</td>
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<td>-.16</td>
<td>-.19+</td>
<td>-.32**</td>
<td>-.20+</td>
<td>1.0</td>
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<td></td>
<td></td>
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<tr>
<td>8. PB</td>
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<td>-.25*</td>
<td>.54**</td>
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<td>9. Egal</td>
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<td>-.05</td>
<td>-.17</td>
<td>.08</td>
<td>-.19+</td>
<td>.34**</td>
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<td>1.0</td>
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<td></td>
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</tr>
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<td>10. PrR</td>
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<td>-.04</td>
<td>.03</td>
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<td>-.17</td>
<td>.28+</td>
<td>.34*</td>
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<td>11. PuR</td>
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<td>.17</td>
<td>-.19+</td>
<td>.03</td>
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<td>.00</td>
<td>-.18+</td>
<td>.33**</td>
<td>-.00</td>
<td>1.0</td>
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</tr>
<tr>
<td>12. AP</td>
<td>-.10</td>
<td>.19+</td>
<td>-.00</td>
<td>-.14</td>
<td>-.16</td>
<td>.27*</td>
<td>-.05+</td>
<td>-.19</td>
<td>.02</td>
<td>-.32*</td>
<td>.03</td>
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<tr>
<td>13. MA</td>
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<td>-.35**</td>
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<td>-.05</td>
<td>-.05</td>
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<td>.186+</td>
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<td>.11</td>
<td>-.14</td>
<td>-.19+</td>
<td>-.05</td>
<td>.18</td>
<td>.09</td>
<td>.16</td>
<td>.17</td>
<td>-.10</td>
<td>.16</td>
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</table>

Table 3
Results of Hierarchical Regressions of GPA and Race Based Academic Self-concept on Academic-based Discrimination

<table>
<thead>
<tr>
<th></th>
<th>Model 1 Academic Performance</th>
<th>Model 3 Race based academic self concept</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABD</td>
<td>.23**</td>
<td>.09</td>
</tr>
<tr>
<td>Full Model R²</td>
<td>.07</td>
<td>.04</td>
</tr>
</tbody>
</table>

Note. ABD= Academic-based discrimination. B-weights and β-weights for full models are shown. Model 1 $F(1, 85) = 6.38$ $p \leq .01$ Model 3 $F(1, 85) = 3.11$ $p \leq .10$. $+ p \leq .10$. $* p < .05$. $** p < .01$. $*** p < .001$. 
Table 4  
Results of Hierarchical Regression of Math Ability on Academic-based Discrimination

<table>
<thead>
<tr>
<th></th>
<th>Model 2 Math Ability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$</td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
</tr>
<tr>
<td>African</td>
<td>-1.0***</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
</tr>
<tr>
<td>ABD</td>
<td>-.044</td>
</tr>
<tr>
<td>Full Model $R^2$</td>
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</tr>
</tbody>
</table>

Note. ABD= Academic-based discrimination. B-weights and $\beta$-weights for full models are shown. Model 2 $F$ (2, 85) = 6.37, $p \leq .01 + p \leq .10$. * $p < .05$. ** $p < .01$. *** $p \leq .001$. 
Table 5
Results of Hierarchical Regressions of GPA and Race Based Academic Self-concept on Racial Socialization

<table>
<thead>
<tr>
<th></th>
<th>Model 4 Academic Performance</th>
<th>Model 6 Race based academic self concept</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African Parent</td>
<td>-.23</td>
<td>.27</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
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<tr>
<td>Cultural Socialization</td>
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<td>.12</td>
</tr>
<tr>
<td>Preparation for Bias</td>
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<td>.20</td>
</tr>
<tr>
<td>Egalitarian</td>
<td>.09</td>
<td>.11</td>
</tr>
<tr>
<td>Full Model R²</td>
<td>.06</td>
<td></td>
</tr>
</tbody>
</table>

Note. B-weights and β-weights for full models are shown. Model 4 $F(4, 83) = 1.30 \ p \geq .10$; Model 6 $F(4, 83) = 2.06 \ p < .10 + p \leq .10. \ * p < .05. \ ** p < .01. \ *** p \leq .001.$
Table 6
Results of Hierarchical Regression of Math Ability on Racial Socialization

<table>
<thead>
<tr>
<th>Model 5 Math Ability</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>African</td>
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<td>.30</td>
<td>-.43</td>
</tr>
<tr>
<td>African Parent</td>
<td>.134</td>
<td>.270</td>
<td>.05</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural Socialization</td>
<td>-.25*</td>
<td>.13</td>
<td>-.28</td>
</tr>
<tr>
<td>Preparation for Bias</td>
<td>.29</td>
<td>.20</td>
<td>.18</td>
</tr>
<tr>
<td>Egalitarianism</td>
<td>.08</td>
<td>.11</td>
<td>.08</td>
</tr>
<tr>
<td>Full Model R²</td>
<td>.17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. B-weights and β-weights for the full model is shown. Model 5 $F (5, 83) = 3.26 p < .05 + p ≤ .10. * p < .05. ** p < .01. *** p ≤ .001.
Table 7
Results of Hierarchical Regression of GPA and Race Based Academic Self-concept on Racial Identity

<table>
<thead>
<tr>
<th></th>
<th>Model 7 Academic Performance</th>
<th>Model 9 Race based academic self-concept</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
</tr>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Regard</td>
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<td>.10</td>
</tr>
<tr>
<td>Public Regard</td>
<td>.04</td>
<td>.11</td>
</tr>
<tr>
<td>Full Model R²</td>
<td>.01</td>
<td></td>
</tr>
</tbody>
</table>

*Note. B-weights and β-weights for full models are shown. Model 7 \( F(2, 83) = .378 \) \( p \geq .10 \) Model 9 \( F(2, 83) = 4.23 \) \( p \leq .05 \). + \( p \leq .10 \). * \( p < .05 \). ** \( p < .01 \). *** \( p < .001 \).
Table 8  
*Results of Hierarchical Regression of Math Ability on Racial Identity*

<table>
<thead>
<tr>
<th>Model 8 Math Ability</th>
<th>( B )</th>
<th>( SE ) ( B )</th>
<th>( \beta )</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African</td>
<td>-.92**</td>
<td>.28</td>
<td>-.34</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Regard</td>
<td>.09</td>
<td>.09</td>
<td>.10</td>
</tr>
<tr>
<td>Public Regard</td>
<td>.10</td>
<td>.11</td>
<td>.10</td>
</tr>
<tr>
<td><strong>Full Model ( R^2 )</strong></td>
<td>.15</td>
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<td></td>
</tr>
</tbody>
</table>

*Note.* \( B \)-weights and \( \beta \)-weights for the full model is shown. Model 8 \( F (3, 83) = 4.80 \) \( p \leq .01 \) + \( p \leq .10. * p < .05. ** p < .01. *** p < .001.**
Table 9
Results of Hierarchical Regressions of GPA, Math Ability, and Race Based Academic Self-concept on Academic-based Discrimination, and Racial Socialization Messages

<table>
<thead>
<tr>
<th></th>
<th>Model 10 Academic Performance</th>
<th>Model 11 Math Ability</th>
<th>Model 12 Race based Academic Self Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$</td>
<td>$SE$</td>
<td>$\beta$</td>
</tr>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African Parent</td>
<td>.21</td>
<td>.27</td>
<td>.09</td>
</tr>
<tr>
<td>African</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABD</td>
<td>.20*</td>
<td>.10</td>
<td>.23</td>
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<tr>
<td><strong>Step 3</strong></td>
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<tr>
<td>Cultural Socialization</td>
<td>-.11</td>
<td>.13</td>
<td>-.13</td>
</tr>
<tr>
<td>Preparation for Bias</td>
<td>-.09</td>
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<td>-.06</td>
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<tr>
<td>Egalitarianism</td>
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<td>.11</td>
<td>.11</td>
</tr>
<tr>
<td>Full Model R²</td>
<td>.11</td>
<td>.17</td>
<td></td>
</tr>
</tbody>
</table>

Note. ABD= Academic-based discrimination. CS= Cultural Socialization. PB= Preparation for Bias. Egal- Egalitarianism. B-weights and $\beta$-weights for full models are shown. Model 10 $F (5, 83)$ = 1.92 $p \leq .10$. Model 11 $F (6, 83)$ = 2.75 $p \leq .05$. Model 12 $F (5, 83)$ = 2.08 $p \leq .10. + p \leq .10. * p < .05. ** p < .01. *** p \leq .001.$
Table 10
Results of Hierarchical Regressions of GPA and Race Based Academic Self-concept on Academic-based Discrimination, and Racial Identity

<table>
<thead>
<tr>
<th></th>
<th>Model 13 Academic Performance</th>
<th>Model 15 Race based academic self concept</th>
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</thead>
<tbody>
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<td>SE B</td>
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<tr>
<td>Step 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABD</td>
<td>.22*</td>
<td>.10</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Regard</td>
<td>-.05</td>
<td>.10</td>
</tr>
<tr>
<td>Public Regard</td>
<td>.04</td>
<td>.11</td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABD X Private Regard</td>
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<td>.11</td>
</tr>
<tr>
<td>ABD X Public Regard</td>
<td>-.21+</td>
<td>.12</td>
</tr>
<tr>
<td>Full Model R²</td>
<td>.12</td>
<td></td>
</tr>
</tbody>
</table>

Note. ABD= Academic-based discrimination. Model 13 $F(5, 83) = 2.10 \ p \leq .10$ Model 15 $F(5, 83) = 3.78 \ p \leq .01$. $+ \ p \leq .10. * \ p < .05. ** \ p < .01.$
### Table 11
Results of Hierarchical Regression of Math Ability on Academic-based Discrimination, and Racial Identity

<table>
<thead>
<tr>
<th>Model 14 Math Ability</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
</tr>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African</td>
<td>-.96**</td>
<td>.30</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
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<td></td>
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<tr>
<td>ABD</td>
<td>-.03</td>
<td>.10</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Regard</td>
<td>.09</td>
<td>.09</td>
</tr>
<tr>
<td>Public Regard</td>
<td>.10</td>
<td>.11</td>
</tr>
<tr>
<td><strong>Full Model R²</strong></td>
<td></td>
<td>.15</td>
</tr>
</tbody>
</table>

*Note. ABD = Academic-based discrimination. B-weights and β-weights for the full model is shown. Model 14 $F(4, 83) = 3.58 \ p \leq .01$. + $p \leq .10$. * $p < .05$. ** $p < .01$.*
Figure 1 Integrative Model for the Study of Minority Youth Development (Garcia Coll et al., 1996)
Figure 2 Study Participant Flow Diagram of Enrollment

367 eligible families

Parent Engagement
n= 152

A.L.E. Program Members

Target Schools
n= 135

School J
n= 40 eligible

School K
n= 40 eligible

School M
n= 31 eligible

School G
n= 24 eligible

Presidents + peers
Estimated n = 60

Student Online Survey
n=54

Student Paper Survey
n=1

Parent Consent for Student
n= 106

Phase 1
n= 55

13 Excluded
- Biracial/Multiracial & not exposed to all questions of interest

Met Dissertation criteria
n= 42

Phase 2 & 3
n= 50

4 Excluded
- Biracial/Multiracial & not exposed to all questions of interest

Sample Size-
n= 88

Met Dissertation criteria
n= 46
Figure 3 Trend-level Interaction Effect Between Academic-based Discrimination and Public Regard on GPA.
Figure 4 Interaction Effect Between Academic-based Discrimination and Private Regard on Race-based Academic Self-Concept
Figure 5  Adapted Integrative Model of the Study of Minority Youth Development – Framework for High-Achieving Black Boys

Social Stratification Mechanisms
- Racism
- Oppression
- Discrimination

Social Position Variables
- Race
- Ethnicity
- Gender

Promoting/Inhibiting Environments
- Schools

Adaptive Culture
- Migration & Acculturation
- Traditions & Cultural Legacies

Developmental Competencies
- Cognitive-Academic Achievement
- Coping with Racism

Family
- Structure & Roles
- Family Values, Beliefs & Goals
- Socioeconomic Status

Time
### Appendix A: School Profiles 2014-2015 school year

Racial Composition, Percentage of Free and Reduced Lunch and Total of Students per A.L.E. Collaborating School

<table>
<thead>
<tr>
<th>SCHOOL</th>
<th>% BLACK</th>
<th>% WHITE</th>
<th>%HISPANIC/ LATINO</th>
<th>%ASIAN</th>
<th>% FREE/REDUCED LUNCH</th>
<th>TOTAL STUDENTS</th>
<th>% in Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>19.5</td>
<td>51</td>
<td>5.7</td>
<td>18</td>
<td>7.8</td>
<td>1460</td>
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</tr>
<tr>
<td>B</td>
<td>8</td>
<td>48.3</td>
<td>3.7</td>
<td>35</td>
<td>8.9</td>
<td>1402</td>
<td>5.7</td>
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<tr>
<td>C</td>
<td>4.9</td>
<td>79.9</td>
<td>3.2</td>
<td>7.9</td>
<td>&lt; OR EQUAL TO 5</td>
<td>1261</td>
<td>2.3</td>
</tr>
<tr>
<td>D</td>
<td>38.4</td>
<td>30.4</td>
<td>12.2</td>
<td>9.4</td>
<td>31</td>
<td>1226</td>
<td>4.5</td>
</tr>
<tr>
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<td>19.7</td>
<td>55.3</td>
<td>6.1</td>
<td>11.5</td>
<td>10.7</td>
<td>1758</td>
<td>8.0</td>
</tr>
<tr>
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<td>34</td>
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<td>14.1</td>
<td>14.4</td>
<td>29.6</td>
<td>1434</td>
<td>19.3</td>
</tr>
<tr>
<td>G</td>
<td>6.9</td>
<td>59.5</td>
<td>3.3</td>
<td>26.3</td>
<td>&lt; OR EQUAL TO 5</td>
<td>1161</td>
<td>4.5</td>
</tr>
<tr>
<td>H</td>
<td>12.1</td>
<td>49.8</td>
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<td>6.9</td>
<td>38</td>
<td>1085</td>
<td>14.8</td>
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<tr>
<td>J</td>
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<td>36.1</td>
<td>13.3</td>
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<td>24.4</td>
<td>1482</td>
<td>10.2</td>
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<tr>
<td>K</td>
<td>5.9</td>
<td>56.1</td>
<td>7.4</td>
<td>25.9</td>
<td>6.3</td>
<td>1310</td>
<td>3.4</td>
</tr>
<tr>
<td>L</td>
<td>42.7</td>
<td>29.1</td>
<td>12.6</td>
<td>7.6</td>
<td>32.8</td>
<td>1234</td>
<td>12.5</td>
</tr>
</tbody>
</table>
Appendix B: Email for Parental Permission

Email to Obtain Parental Permission to Send Email Addresses to Principal Investigator for the Evaluation of the A.L.E. Program

Subject Line: Evaluation of the A.L.E. Program-Part 1

Dear Parents of A.L.E. students,

The County Chapter of Fraternity, Inc., will begin conducting an evaluation of the A.L.E. Program within the next few weeks. The purpose of the evaluation is to learn about your experiences in the program and to identify areas for improvement. We have invited an Associate Professor at the University to conduct the evaluation.

You will have an opportunity to review all of the details about the study and ask questions in a subsequent email from the investigator. We are writing to notify you of our plans to send your email address to ___PI____. The PI will send you a detailed email explaining the study. You will have the opportunity to decline participation at that time after learning more information about it. You can view a brief video about the planned research by clicking on the link below.

If you DO NOT wish to have your email sent to the PI, please reply to this email by Wednesday, March 12, 2015.

Thanks so much,

Community Partner.

Click here to view video about the Evaluation
Appendix C: Survey Flyer

It’s coming...

Parent and Student Survey

Help The County Chapter of Fraternity, Inc.
Evaluate The Effectiveness of This Program!

Step 1 - Stay tuned to your email for your invitation

Step 2 - Complete your surveys…it takes about 30 minutes. Step 3 - Receive a $10 e-gift card from Amazon.com**

It’s that simple!
Participation is voluntary

**2 e-gift cards will be given per family for the first 250 families that complete the survey
Appendix D: Reminder Emails to Consenting Online Survey Participants

There are 3 categories of email reminders: (1) Parent reminder emails to complete the survey; (2) Student reminder emails to complete the survey; and (3) Reminder emails for Parents of Assenting Students.

Parent Reminder Emails to Complete the Survey:

Email Reminder 1:

Subject Line: REMINDER: A.L.E. Parent Survey

Dear A.L.E. Parent [insert name],

Hope you are well. I am contacting all parents who agreed to be in the survey portion of the A.L.E. Parent Survey. Thanks so much for enrolling! Your answers will help the County chapter of fraternity enhance the A.L.E. Program.

I am a parent, and I know surveys can be a hassle for busy parents. This survey takes about 20-30 minutes from beginning to end to complete. You can start where you left off by clicking the link below.

An e-gift card to Amazon.com will be sent to the first 250 parents who complete the survey.

To complete the survey, simply click this link:

${l://SurveyLink?d=Take the Survey}

Let me close by saying I am passionate about the A.L.E. Program, and I’m honored to help document its success. There are too few research studies that document the factors that shape the experiences of high-achieving African American boys. This survey provides us with the opportunity to document experiences of A.L.E., program successes, and areas for improvement.

Your response is voluntary, and we appreciate you for your consideration!

Sincerely,

Project Director

Follow the link to opt out of future emails:

${l://OptOutLink?d=Click here to unsubscribe}

Email Reminder 2:

Subject Line: It’s Not Too Late— A.L.E. Parent Survey

Dear A.L.E. Parent [insert name],

Last week, I sent an email to you asking for your participation in the survey portion of the Evaluation of the A.L.E. Program. Thanks for agreeing to participate. As a parent myself, I know that your schedule can get quite hectic. There is still time to complete your survey. I can assure you that your response is very important to me and to the County chapter of the fraternity.

The survey takes about 20-30 minutes from beginning to end to complete. You can pick up where you left off by simply clicking the link below:

${l://SurveyLink?d=Take the Survey}
An e-gift card to Amazon.com will be sent to the first 250 parents who complete the survey. Your response is voluntary, and we appreciate you for your consideration! If you have questions or comments, please contact me at email address. Thank you for your time!

Sincerely,
Project Director

Follow the link to opt out of future emails:
$\{l://OptOutLink?d=Click here to unsubscribe\}$
Email Reminder 3:
Subject Line: Your Views Matter!: A.L.E. Parent Survey
Dear A.L.E. Parent [insert name],

In/[on] [insert date/month], I contacted you to ask for your participation in the survey portion of the Evaluation of the A.L.E. Program. Your point of view remains important to me. If you are still interested in sharing your views, complete your survey by [insert date] in order to have all of your responses counted. An e-gift card to Amazon.com will be sent to the first 250 parents who complete the survey. The survey takes about 20-30 minutes from beginning to end to complete. To pick up where you left off, simply click this link:

${l://SurveyLink?d=Take the Survey}

I can also provide a physical paper copy of the survey if you would prefer. I would be happy to mail one with a self-addressed, stamped envelope to you. If you would prefer to provide your input in this way please, provide your mailing address in a reply to this email.

Your response is voluntary. Therefore, I sincerely appreciate your taking time out of your busy schedule to consider my request.

If you have any other questions or concerns please contact me at email address

Sincerely,

Project Director

Follow the link to opt out of future emails:

${l://OptOutLink?d=Click here to unsubscribe}
Fourth and Final Reminder Email
Subject Line: Don’t Miss Out! A.L.E. Parent Survey
Dear A.L.E. Parent [insert name],

The Parent Survey is almost a wrap! Thanks for thinking about participating in this inaugural evaluation of the A.L.E. Program. You have important experiences to share as a parent of a successful son. If you are still interested in sharing your views, complete the survey by [insert date].

There is no need to start from the beginning. Pick up where you left off by clicking below:

${l://SurveyLink?d=Take the Survey}

We can also provide a physical paper copy of the survey if you would prefer. We would be happy to mail this to you. If you would prefer to provide your input in this way please, provide your mailing address in a reply to this email.

If you have any other questions or concerns please contact me at email address.

I sincerely thank you so much for your time and efforts!

Best Wishes,
Project Director

Follow this link to the Survey:

Follow the link to opt out of future emails:
${l://OptOutLink?d=Click here to unsubscribe}
Student Reminder Emails:

Email Reminder 1:
Subject Line: REMINDER: A.L.E. - Student Survey

Dear A.L.E. member[insert name],

Thanks for agreeing to be in our survey! This is a reminder to fill out the survey. We know teenagers have school work and other fun things to do—thanks for considering helping out!

Your link to the survey is unique and cannot be shared with your friends. Just click the link below and pick up where you left off. It takes about 20-30 minutes from beginning to end to complete. The first 250 students to complete the survey will receive a $10.00 Amazon e-gift card.

To complete the survey, simply click this link:

$\{l://SurveyLink?d=Take the Survey}\}

I’m honored to learn about your experiences in A.L.E. and to document its success. Your response really makes a difference.

Your response is also voluntary, and we appreciate your consideration!

Sincerely,

Project Director

Follow the link to opt out of future emails:

$\{l://OptOutLink?d=Click here to unsubscribe}\}
Email Reminder 2:
Subject Line: Don’t Forget to Complete the Student Survey
Dear A.L.E. member [insert name],

Last week, we sent an email to you asking for your participation in the Student Survey about the A.L.E. Program. Your response is very important to us. This email is a reminder to complete your survey by in order to have all of your responses counted. The survey takes about 20-30 minutes from beginning to end to complete.

To pick up where you left off, simply click this link:

${l://SurveyLink?d=Take the Survey}

Thanks for taking time to consider helping make the A.L.E. Program the best it can be. Your response is voluntary, and we appreciate your consideration!

Sincerely,

Project Director

Follow the link to opt out of future emails:

${l://OptOutLink?d=Click here to unsubscribe}
Email Reminder 3:
Subject Line: Almost There: A.L.E. Student Survey
Dear A.L.E. member [insert name],
Hello again! The Student Survey is almost over! I am checking in to remind all interested A.L.E. members to complete their surveys. Remember, every student is unique. It may not seem like it but, your views really matter the success of the Survey.
If you’d still like to have your voice count, you can pick up where you left off but clicking the link below:
   ${l://SurveyLink?d=Take the Survey}
We know teenagers are busy and have other fun things to do. Your participation is voluntary and we appreciate your consideration. If you’ve already finished the survey, thanks a million!
Sincerely,
Project Director

Follow the link to opt out of future emails:
${l://OptOutLink?d=Click here to unsubscribe}
Dear A.L.E. member [insert name],

We are entering the home stretch of the Student Survey! I am checking in to remind all interested A.L.E. members to complete their surveys. Remember, every student is unique. Your response really matters the success of the Survey.

If you’d still like to have your voice count, you can pick up where you left off but clicking the link below:

${l://SurveyLink?d=Take the Survey}

We know teenagers are busy and have other fun things to do. Your participation is voluntary and we appreciate your consideration. If you’ve already finished the survey, we thank you and the County members of the fraternity also thank you!

Sincerely,

Project Director

Follow the link to opt out of future emails:

${l://OptOutLink?d=Click here to unsubscribe}
Reminder Emails sent to Parents of Assenting Students who have already begun but not completed the survey.

Email Reminder 1: REMINDER: A.L.E. - Student Survey
Dear A.L.E. Parent [insert name],

Hope you are doing well! We are contacting all parents of students who agreed to complete the Student Survey about the A.L.E. Program. As a parent, I know that sometimes, teenagers need reminders to do things. If you are still interested in having your son participate, check with him about completing the survey. It would be a great help to the County Chapter of Fraternity, Inc., in its efforts to offer your son a top-notch program.

Your response is voluntary and we appreciate your consideration!
Sincerely,

Project Director

Follow the link to opt out of future emails:
$\{!://OptOutLink?d=Click\ here\ to\ unsubscribe\}$
Email Reminder 2:
Subject Line: Don’t Forget to Complete the Student Survey
Dear A.L.E. Parent [insert name],

Last week, I sent an email to asking you to check with [your son] about completing the Student Survey about the A.L.E. Program.
This is the first time that the County Chapter of Fraternity, Inc., is evaluating the Program. Every son’s response really does make a difference in figuring out what’s working and what needs improvement.
Families are quite busy today, and we know your family is no exception. Thanks so much for your help!
If you have questions or comments please contact me at email address.
Thank you for your time!

Sincerely,
Project Director

Follow the link to opt out of future emails:
$://OptOutLink?d=Click here to unsubscribe
Email Reminder 3:
Subject Line: Almost There!: A.L.E. Student Survey
Dear A.L.E. Parent [insert name],

In [insert month/week], we contacted you about your son’s participation in the survey portion of the Evaluation of the A.L.E. Program.
We’re almost there! We’d love to have your son’s views about being an A.L.E.. Every response counts! We’ll use the information to take the A.L.E. Program to the next level!

The survey will close on [insert date]. It will about 20-30 minutes from beginning to end to complete, but he can pick up where he left off. We can re-send the survey link to your son if needed.
We can also provide a physical paper copy of the survey and a stamped addressed envelope if you would prefer. We would be happy to mail one to you. If you would prefer to provide your input in this way please, provide your mailing address in a reply to this email.

If you have any other questions or concerns please contact me at XXX-XXX-XXXX

Families are super busy today—we know this survey effort takes your family’s time and energy. We sincerely appreciate your consideration!

Sincerely,

Project Director

Follow the link to opt out of future emails:
${l://OptOutLink?d=Click here to unsubscribe}
Fourth and Final Reminder Email
Subject Line: The Home Stretch - A.L.E. Student Survey
Dear A.L.E. Parent [insert name],

We’re entering the last phase of the Student Survey. Help us end on a strong note!!

The survey will close on [insert date]—if your son is still interested in participating, ensure your son’s views count!

We can also provide a physical paper copy of the student survey if you would prefer. We would be happy to mail this to you. If you would prefer to provide your input in this way please, provide your mailing address in a reply to this email.

Help us tell the story of the A.L.E. and take the Program to the next level. Thank you for your patience and support!

If you have any other questions or concerns please contact me at email address.

Thank you again for your time and efforts!

Regards,
Project Director

Follow this link to the Survey:

Follow the link to opt out of future emails:
${l://OptOutLink?d=Click here to unsubscribe}$
Appendix E: Adviser Contract – Phase 2/3
Incentives Agreement: Program Advisers

Agreement to Assist with Recruitment and Enrollment

____ I agree to distribute parent consent forms to parents of the students in the _______ chapter of the Program and hold at least (1) one-hour data collection session at my school during noninstructional time. This session will provide an opportunity for students who have returned consent forms to complete the survey.

____ I understand that I will receive a list of eligible students in my school’s chapter.

____ I understand that I have the choice to collect paper or electronic versions of the Parent Consent Forms.

____ I understand that there are ___ number of eligible students who may participate in the Survey at my school. This number does not include any new members inducted into the Program during the 2015-2016 school year. If I recruit 50% of this number and hold 1 data collection session, I will receive a cash incentive of $150.00. If I recruit 80% or more of the number of eligible students and hold 1 data collection session, I will receive $300.00 cash incentive.

____ I understand that I will have to provide my social security number to Dr. Mia Smith Bynum to process my payment. I understand that this policy is state law for cash incentive payments equal to or exceeding $100.00.

____ I understand that student participation in the survey is voluntary and not a requirement to be in the Program. My responsibility consists of presenting parents and students with the opportunity to participate.

____ I agree to communicate with the Project Director, her staff, and our liaison to (1) manage any relevant logistics related to collecting consent forms and holding the data collection sessions.

________________________________________   _________________________________
(Print your name here)                (Sign your name here)                  (Date)

________________________________________
(School name)
Appendix F: Payment Verification Form
Payment Verification Form
Parent & Student Survey

Thank you for your participation in the A.L.E. Evaluation! In order for the organization to send out your e-gift card from Amazon.com, we must ask you to certify your participation.

1. Please provide the following information:

Name: ______________________________________________________

City, State: ________________________________________________

2. I certify that I completed the A.L.E. Parent Survey and am eligible for a $10 Amazon e-Gift Card.

Sign here: _________________________________________________

Date
___________________________________________________________

4. Email address to send gift card:

___________________________________________________________

Thank you!! Have a Great Day! If you have any questions, please contact the Project Director at email address.

[Website]
References


Carter Andrews, D. J. (2012). Black achievers’ experiences with racial spotlighting and ignoring in a predominantly White high school. Teachers College Record, 114(10), 1-46.


Gibbons, F. X., Yeh, H. C., Gerrard, M., Cleveland, M. J., Cutrona, C., Simons, R. L., & Brody, G. H. (2007). Early experience with racial discrimination and conduct disorder as


on academic achievement among African American and Caribbean Black adolescents.

*Journal of Educational Psychology, 101*(2), 420–431. doi:10.1037/a0014578


