Examining the Moderating Effects of Racial Socialization on Teacher Discrimination for the Psychological Outcomes of Black Middle School Girls

Kayla Nichols

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EXAMINING THE MODERATING EFFECTS OF RACIAL SOCIALIZATION ON TEACHER DISCRIMINATION FOR THE PSYCHOLOGICAL OUTCOMES OF BLACK MIDDLE SCHOOL GIRLS

A Dissertation
Submitted to the School of Education

Duquesne University

In partial fulfillment of the requirements for the degree of Doctor of Philosophy

By
Kayla D. Nichols

August 2017
EXAMINING THE MODERATING EFFECTS OF RACIAL SOCIALIZATION ON TEACHER DISCRIMINATION FOR THE PSYCHOLOGICAL OUTCOMES OF BLACK MIDDLE SCHOOL GIRLS

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ABSTRACT

EXAMINING THE MODERATING EFFECTS OF RACIAL SOCIALIZATION ON TEACHER DISCRIMINATION FOR THE PSYCHOLOGICAL OUTCOMES OF BLACK MIDDLE SCHOOL GIRLS

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Kayla D. Nichols

August 2017

Dissertation supervised by Dr. Scott L. Graves Jr.

A hierarchical multiple regression was used to understand the 1) the predictive ability of teacher discrimination on racial identity, 2) the predictive ability of teacher discrimination and racial identity on the educational beliefs and psychological outcomes of early adolescent Black girls, and 3) if egalitarian messages of racial socialization moderate the risk of teacher discrimination on the psychological outcomes for early adolescent Black girls. Participants were 8th grade Black girls from Wave 3 of the MADICS dataset (Eccles, 2010). Results showed that teacher discrimination had a negative relationship and predicted 5% of the variance in connection to heritage, educational beliefs, and resiliency and problem solving for this sample. Surprisingly, teacher discrimination showed a positive relationship with early adolescent Black girls’ efficacy to combat discrimination, contributing 12% of the variance in the third model. Lastly, egalitarian messages of racial socialization were not shown to moderate the
effects of resiliency and problem solving for early adolescent Black girls’ or their efficacy to combat discrimination.
ACKNOWLEDGEMENT

First, I want to give praise to God for allowing me to endure this journey. It has been a long road to get here, but perseverance and hard work have paid off. I faced obstacles that I never thought I would face and as a result, I have grown immensely. I’d like to thank my advisor Dr. Graves, for all his support. Words cannot express how much I appreciate all your support and guidance along the way. Through the good, the bad, and the ugly, you have always been my advocate and I am truly thankful. To my family and friends, I am forever grateful for your love and support. Thank you to each and every one for your encouragement and reality checks along the way. I am so, so, so thankful and feel incredibly blessed for the people that have been placed in my life. If I did not have you all in my support system, I would not be where I now.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
</tr>
<tr>
<td>Acknowledgement</td>
</tr>
<tr>
<td>List of Tables</td>
</tr>
</tbody>
</table>

## Chapter 1

1. Identity Development .......................................................... 1
2. Racial Identity ................................................................. 2
3. Gender development ............................................................ 3
4. Stereotypes and Blacks Girls ............................................... 4
5. Academic Efficacy ............................................................... 5
6. Significance of the Problem ................................................... 6
7. Problem Statement ............................................................... 8
8. Research Questions and Hypotheses ......................................... 8
9. Research Question #1 ........................................................... 8
10. Hypothesis Question #1 ........................................................ 8
11. Research Questions # 2 ....................................................... 9
12. Hypothesis # 2 ................................................................. 9
13. Research Question #3 ........................................................ 9
14. Hypothesis #3 ................................................................. 9
15. Research Question #4 ........................................................ 10
16. Hypothesis #4 ................................................................. 10

## Chapter 2

1. Introduction ................................................................. 12
2. Identity ................................................................. 12
3. Racial Identity ............................................................... 12
4. Gender identity and adolescence ........................................... 14
5. Black Girls and Education .................................................. 16
6. Stereotypes ................................................................. 18
7. Positive Stereotypes .......................................................... 19
8. Negative Stereotypes .......................................................... 20
9. Discrimination ............................................................... 22
10. Systemic Discrimination .................................................... 23
11. Academic Discrimination .................................................... 24
12. Protective Factors ............................................................ 27
13. Racial Socialization .......................................................... 27
14. Theoretical Framework ...................................................... 31
15. PVEST ................................................................. 31
16. MMRI ................................................................. 33
17. Limitations of Existing Research .......................................... 33

## Chapter 3

1. Limitations of Existing Research .......................................... 36
Methods........................................................................................................36
Participants.....................................................................................................36
Data Collection.................................................................................................38
Measures...........................................................................................................39
Development and testing of measures...............................................................39
Teacher discrimination .....................................................................................39
Socioeconomic status.........................................................................................40
Racial identity ..................................................................................................40
Educational outcomes.........................................................................................41
Psychological well-being..................................................................................41
Racial socialization ............................................................................................42
Research Design................................................................................................42
Operational Definitions of Variables................................................................42
Independent variables ......................................................................................42
Control variables .............................................................................................42
Dependent variables .........................................................................................42
Moderator Variable ..........................................................................................42
Procedures .........................................................................................................43
Power analysis ..................................................................................................43
Preliminary Data Analysis ................................................................................43
Scale Creation....................................................................................................43
Data Analysis.....................................................................................................45
Chapter 4...........................................................................................................46
Results...............................................................................................................46
Descriptive Statistics........................................................................................46
Research Question 1 Results.........................................................................47
Research Question 2 Results.........................................................................47
Research Question 3a Results.......................................................................48
Research Question 3b Results.......................................................................48
Research Question 4 Results.........................................................................49
Chapter 5...........................................................................................................50
Discussion.........................................................................................................50
Research Question 1 Discussion....................................................................50
Research Question 2 Discussion....................................................................51
Research Question 3a Discussion..................................................................53
Research Question 3b Discussion..................................................................54
Research Question 4 Discussion....................................................................55
Implications for Educational Outcomes..........................................................56
Implications for Teachers and Administrators...............................................57
Implications for Mental Health.......................................................................58
Limitations........................................................................................................59
Future Research...............................................................................................60
References.........................................................................................................62
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>81</td>
</tr>
<tr>
<td>Table 2</td>
<td>82</td>
</tr>
<tr>
<td>Table 3</td>
<td>83</td>
</tr>
<tr>
<td>Table 4</td>
<td>84</td>
</tr>
<tr>
<td>Table 5</td>
<td>85</td>
</tr>
<tr>
<td>Table 6</td>
<td>86</td>
</tr>
<tr>
<td>Table 7</td>
<td>87</td>
</tr>
</tbody>
</table>
Chapter 1

This study first sought to understand the predictive ability of teacher discrimination and racial identity on early adolescent Black girls’ educational beliefs and psychological outcomes. The second aim of the study was to understand the moderating effect of egalitarian messages of racial socialization on the psychological outcomes of early adolescent Black girls. This chapter will provide a brief overview of the key concepts that are pertinent to this study, discussion of the significance of the study, followed by the research questions and hypotheses.

Identity Development

Adolescence is a critical period in the developmental sequence, which is marked by a drastic change in one’s development in all aspects of life. Identity researchers believe this developmental period is critical for the successful development of an individual’s identity (Erikson, 1968; Phinney, 1992; Tajfel & Turner, 1986). As cognitive capacity and abstract thinking increases, adolescents think in new dimensions, and begin to question who they are, and who they want to be in life. Identity formation is accomplished as adolescents participate in new activities and experiment with different roles until they find what fits. This process is often a period of confusion and great decision making.

According to Erikson (1968), adolescents navigate this time period by learning what they should and should not do, what they are good at, and who they are as a person from their interactions with others. Through these social exchanges, adolescents begin to understand who they are in a complex world (Steinberg, 2008). The complexity is compounded for Black adolescents who also have to grasp an understanding of their racial identity during this developmental timeframe.
**Racial Identity**

Racial identity development is conceptualized as a social process by which individuals develop an understanding of who they are based upon the connection to and importance that they perceive about their membership in a racial group (Cross, 1971; Helms, 1993; Sellers, Chauvous, & Cooke, 1998). The development of racial identity is important for racially diverse adolescents, specifically Blacks, whose group is continually stigmatized, stereotyped, discriminated against, and devalued in the United States (Hughes, Manns, & Ford, 2009). The effects of such experiences are seen at an early age.

Clark and Clark’s famous doll studies in the early 1940s were among the first to gather insight into the development of racial identity for Black children (Clark & Clark 1939). These studies opened the door for increased empirical investigation of the racial identity development of Black children and found an adverse relationship between skin tone and the identity development beginning in early childhood (Clark & Clark, 1940). By three years of age, Black children have been shown to endorse negative beliefs about being Black, while attributing positive beliefs towards Whites (Farrell & Olson, 1983). Negative internalized ascriptions to their identity can serve as a risk factor to the development of a positive identity. To understand the adverse effects of experienced racial discrimination by Black girls in society and the educational setting, one must understand the context in which negative schemas and discrimination towards Black girls have developed.

Through daily interactions, Black girls formulate a racial identity that is either positive or negative. A positive racial identity has been shown to be a protective factor that helps Black girls to successfully handle the racism and discrimination that one faces in their daily life (Neblett, 2006). Black females who possess a positive racial identity tend to have increased self-esteem,
group-esteem, overall wellbeing, and educational outcomes (Chavous et al., 2003; French, Seidman, Allen, & Aber, 2006; Jones, Cross, & DeFour, 2007; Twenge & Crocker, 2002). Having a positive racial identity may be particularly important for Black girls’ educational and psychological outcomes. In addition to understanding their racial identity, Black girls must also understand the uniqueness of being a Black female in society.

**Gender development**

In the United States, specific characteristics are ascribed to each gender. Females are stereotyped as passive, conforming, quiet, weak, cooperative, nurturing, and caring; while males are stereotyped as strong, aggressive, competitive, and tough (Pressley & McCormick, 2007). The ideas that children develop about gender are formed by schemas that children have learned (Martin & Halverson, 1981). Gender schemas are the organized understanding of gender-relevant knowledge and beliefs that children learn from adults in their life and society about what it means to be male or female (Levy & Fivush, 1993). Halim, Ruble, Murphy, Greulich and Zosuls, (2014) describe gender schemas as dynamic knowledge representations, which change in response to situations and age. Gender schema theory views children as active constructors of their individual gender schemas. Thus gender schemas are prone to errors and distortions, and vary with culture and with individual social experiences and preferences.

Hamlin and colleagues (2014) found that girls who expressed higher levels of gender centrality and private regard exhibited higher levels of gender rigidity. That is, girls who viewed their gender positively and as important, endorsed more gender-stereotyped rigidity in clothing preference. As girls develop and emerge in their understanding of gender identity, particularly stability, they have stronger gender-stereotyped behaviors, and tend to express their understanding of their gender group in stereotypical fashion.
The role of centrality and gender-typed behaviors have also been associated in other domains. Wigfield and Eccles (2000) found that girls with more central gender identities valued areas associated with their sex and devalued those associated with the other sex. For example, girls with greater gender centrality devalued math more than other girls did. This suggests that the societal impact and messages that are given to girls about their ability is internalized and manifested in their cognitions, feelings, and behaviors about who they are and what they can accomplish. The implications of this value system in regards to education will be discussed later.

**Stereotypes and Blacks Girls**

The messages that Black girls receive in their society, communities, the media, and educational settings work in concert to formulate their identity. Unfortunately, the images presented in the United States of America about Blacks are disproportionately negative portrayals. Black women are often repeatedly confronted with stereotyped representations of who they are. They are expected to be loud, poor, smart-mouthed, sexually promiscuous, prone to criminal behavior and viewed as inferior to other people (Sutherland, 2005). These ascriptions of identity define Black women as a group in Western society and can serve as boundaries on what individuals are able to achieve (Sutherland, 2005). In comparison to White girls, Black girls are perceived by adults and their peers as more likely to display social and overt aggression (Centers for Disease Control and Prevention [CDC], 2009; Putallaz et al., 2007). The stereotyped view that students have of their peers is likely a ramification of the influence of stereotypes in our society. While this shows that these stereotypes are internalized by those who hold judgment, it is presumed that the effect of these stereotypes are internalized and influence the perception that Black females have of themselves. These internalized stereotypes, in turn, have the potential to impact Black girls in the academic setting as well.
Academic Efficacy

Academic efficacy is a person’s judgment about the beliefs in their ability to learn or perform a specific educational task in order to achieve a particular outcome. Academic beliefs influence the motivation, behaviors and the aspirations of students (Bandura, 1997; Bandura, Barbaranelli, Caprara, & Pastrelli, 1996; Bandura & Schunk, 1981). According to social cognitive theory, individuals shape these beliefs from their own experiences, vicarious learning, feedback from others in their life, as well as the affective reactions they attach to situations.

Societal messages that Black girls receive about their academic ability are internalized and manifested in their cognitions, feelings, and behaviors about who they are and what they can accomplish (Collins 2000; Shorter-Gooden, & Washington, 1996). Black girls filter these messages differently based on their previous experiences, racial socialization messages, and perceptions. For girls who believe that they have received an unfair grade, are treated unequally, or are discriminated against by teachers and educational professionals despite the effort they put forth, it can result in unproductive coping strategies and outcomes (Spencer, 1995). The ramifications of discrimination impact educational beliefs, pursuits and psychological outcomes, in positive and negative ways.

A positive academic self-efficacy is theorized to lead to improved persistence on difficult tasks (Bandura, 1997; Marsh, Trautwein, Ludtke, Koller, & Baumert, 2005). This is not surprising since research has found that academic self-efficacy has been shown to positively influence the educational outcomes of Black students and have a positive connection to aspects of racial identity (Awad, 2007). Research investigating the impact of discrimination on the academic self-efficacy of Black students however has been mixed (Okeke, Howard & Kurtz-Costes, 2009; Saunders, Davis, Williams, & Williams, 2004).
Significance of the Problem

Black girls in the United States of America, like their peers of other races are expected to develop a positive identity and to succeed in their educational pursuits. Unlike their White peers however, Black girls are tasked with developing these identities, including a positive racial identity, within a society where they are discriminated against based on their race. The results manifest in a culture where prejudicial ideologies and discrimination against Blacks exists, both structurally at the macro-level and internally at the micro-level (Mitchell, 2008). According to Dupree (2010), these beliefs are ingrained in American culture and learned implicitly as individuals surmise key differences among racial groups based upon behavior, language, economic stability, educational outcomes, developmental outcomes, and other characteristics.

Systemically, these messages are disseminated from the broader macrosystem to the specific individual (Spencer, 1995). In 1979, Bronfenbrenner introduced his ecological systems theory to explain how individuals are impacted by systemic influences both directly and indirectly. Spencer’s phenomenological variant of ecological systems theory (PVEST, 1995) extended Bronfenbrenner’s theory, encompassing an integration of historical, cultural, social, political, and individual factors that influence persons and groups in dynamic ways. Each system contributes its own unique influence on the development of Black girls while simultaneously influencing each system within it.

The microsystem is the system at which the individual is directly affected by their environment. This consists of the daily interactions and relationships with parents, siblings, peers and teachers. The mesosystem consists of two microsystems interacting, such as the interaction between the family and the school. The exosystem consists of those factors that directly impacts the student but that the student is not a direct participant in, such as the teachers’
beliefs and values which were learned in their microsystem. The macrosystem consists of the broader cultural context in which one lives, which encompasses the economic conditions, customs, laws and cultural values of a society. Lastly, the chronosystem represents the element of time and sociohistorical events that are salient during the child’s upbringing. These two outer layers of an individual’s life therefore influences the remaining layers.

The perceptual framework that each Black girl uses to understand their world derives from the racial socialization she receives, the communities she lives in, messages from important adults in her life, and many other factors. Thus, each individual develops their own interpretation of the messages they receive about their racial identity, education, and how discrimination impacts their lives. The PVEST theory therefore, allows this study to gain understanding into the impact of teacher discrimination (risk) on the developmental outcomes of Black girls from their unique perspective, by investigating how racial socialization and racial identity (protective factors) affect their psychological outcomes (coping factors).

While research has investigated the effect of discrimination on Black females, research is limited when studying resilience as an independent variable that is not a byproduct of racial socialization for early adolescent Black girls. Additionally, only one study was found that investigated the effects of discrimination on high school students’ efficacy to combat discrimination (Brittian & Gray, 2014). As such, it is imperative to understand how these cognitive processes are impacted at the onset of adolescence in an effort to understand how prevention and intervention programs can be incorporated in our communities and schools to help this group achieve educationally, socially/emotionally, and psychologically. Therefore, more research is needed to understand how Black girls process these experiences and in turn are able to persist academically and cognitively.
**Problem Statement**

This study aims to first understand the predictive ability of teacher discrimination and racial identity on early adolescent Black girls’ educational beliefs and psychological outcomes. The second aim is to understand the moderating effect of racial socialization on the psychological outcomes of early adolescent Black girls. This study contributes uniquely to the literature in its exclusive focus on the relationship between teacher discrimination and racial identity on problem-solving, resilience, and efficacy to combat discrimination with early adolescent Black girls. As well, this study investigated the moderating effect of racial socialization on the psychological outcomes of Black girls.

**Research Questions and Hypotheses**

The current study seeks to investigate the predictive ability of teacher discrimination and racial identity on early adolescent Black girls’ educational beliefs and psychological outcomes.

**Research Question #1**

What is the predictive ability of teacher discrimination on the racial identity of early adolescent Black girls?

**Hypothesis Question #1**

It is hypothesized that as teacher discrimination increases, Black girls will have lower levels of connection to heritage and importance of race. Brittian and Gray (2015) reported that differential treatment received in the school setting towards Black students has been shown to negatively impact their racial identity, specifically their connection to heritage.

**Research Questions #2**

What is the predictive ability of teacher discrimination and racial identity on the educational beliefs for early adolescent Black girls?
Hypothesis #2

Black girls that report higher levels of teacher discrimination are predicted to show less importance for school. Studies have shown that teacher discrimination has resulted in decreases in academic engagement for Black students (Brittian, 2014; Crosnoe, 2011). More specifically, teacher discrimination has been noted to negatively impact Black students’ future beliefs about the importance of school. Brittian et al (2014) observed that 8th grade Blacks with higher reports of teacher discrimination, viewed school as less important in 11th grade than their 8th grade peers who reported less teacher discrimination. The racial identity literature is varied on the influence of racial identity and educational outcomes (Chavous, Rivas, Smalls, Griffin, & Cogburn, 2008; Fordham & Ogbu 1986). However, due to the historical value that Blacks have placed on the importance of education, and previous research supporting a positive relationship between racial centrality and private regard (both of which are represented in the racial identity variables of this study) it is hypothesized that racial identity will positively predict educational beliefs for early adolescent Black girls (Smalls, White, Chavous & Sellers, 2007).

Research Question #3

What is the predictive ability of teacher discrimination and racial identity on the psychological outcomes for early adolescent Black girls?

Hypothesis #3

Black youth’s adjustment is negatively impacted when they attempt to cope with stressors that are beyond their control (Edlynn, Gaylord-Harden, Richard & Miller, 2008; Seaton, Upton, Gilbert & Volpe, 2014). Such instances have led to decreased self-esteem, depressive symptoms, loneliness and suicidal-ideation (Hall-Lande, Eisenberg, Christenson & Neumaker-Szainer, 2007; Stanton-Salazar & Spina, 2005). Racial discrimination encountered within the school setting
could very well be viewed by Black youth as a stressor that is beyond their control. This may result in unproductive coping strategies, which negatively effects psychological well-being. As such, these experiences are hypothesized to have an indirect effect on Black student’s ability to cope. Therefore, it is suspected that external stressors that students cannot control, such as racial discrimination experienced in the school setting by teachers, will have a negative effect on other areas of psychological well-being. More specifically, it is suspected that as reported discrimination increases from teachers, Black girl’s resiliency and problem-solving, as well as their efficacy to combat discrimination will decrease. Racial identity is hypothesized to predict both variables of psychological outcomes. The socialization that Black girls receive in the home environment teach them to problem solve as well as provide them with the skills to navigate the risks that they encounter in their life (Peters, 2002).

Research Question #4

Are egalitarianism racial socialization messages a moderating factor against school discrimination for the psychological outcomes of early adolescent Black girls?

Hypothesis #4

It is hypothesized that racial socialization will serve as a protective factor for both measures within psychological outcomes. While researchers have reported that Black youth’s adjustment is negatively affected when tasked with coping with stressors out of their control due to unproductive coping strategies racial socialization may serve as a protective factor, moderating the negative outcomes (Seaton et al, 2014). According to Brittian, perceived discrimination from adults is thought to be beyond a student’s control since they do not have the power to change the behavior. However, racial socialization literature suggests that Black youth are provided with strategies and skills to combat discriminatory situations they encounter in their
environments, including those deemed outside of their control. What’s more, literature suggests that receiving messages of racial socialization provides Black girls with skills to protect against discriminatory experiences they encounter, thus preparing them psychologically. As a result, it is hypothesized that Black girls that report receiving more messages of racial socialization will feel more prepared to combat discriminatory experiences and will also know how to overcome these experiences. Therefore, it is suspected that racial socialization will serve as a protective factor, moderating the effects of discrimination by teachers.

Early adolescence is a critical time in the developmental period for children. This chapter provided a brief overview that explores the ways in which teacher discrimination is related to Black girls’ development of their racial identity, educational beliefs, and psychological resilience. Chapter two will provide a detailed background of the literature.
Chapter 2

The previous chapter provided a brief discussion of the literary constructs that work in conjunction in the development of early adolescent Black girls in the United States. This chapter will provide a more in-depth discussion of the literature on the aforementioned variables and their relationship with Black girls, as well as the theoretical frameworks that provide a conceptual context.

Introduction

In the United States, race is a master status (Aspinall & Song, 2013). Race is the first physical characteristic a person notices about an individual, apart from his or her gender. This observation allows people to categorize others into racial schemas that contain expectations about the social, emotional, and cognitive potential, which is maintained about a racial group. While racial schemas impact the attitudes, beliefs, motivations, and behaviors of the schema holders, racial schemas also have an impact on individuals within the identified racial group (Aspinall & Song). The ramifications of racial schemas can be seen through the educational, psychological, and social/emotional functioning of the targeted racial group. Although racial discrimination has been found to negatively impact the educational and psychological functioning for Black people, more investigation is needed on the impact of discrimination in schools and the outcomes of early adolescent Black girls.

Identity

Racial Identity

Developing a healthy identity during adolescence is a complicated task and this may become more complex for adolescents who belong to diverse populations in the United States (Erikson, 1968). For students from diverse backgrounds, specifically Black girls, their identity
exploration during this period includes examining the meaning of their group membership in the context of mainstream society both cognitively and affectively (Phinney, 1992; 1998). The increased cognitive demand and awareness of discriminatory experiences in schools makes this developmental period ideal for studying the impact of discrimination on the educational and psychological outcomes of this group.

Research on the relationship between the racial identity of Black students and school-related outcomes has produced conflicting findings (Harper & Tuckman, 2006). Some studies have found that when Black students hold strong racial identities, their academic achievement and academic identification decreases, especially when they view being Black as antithetical to doing well in school (Fordham, 1988, 1996; Fordham & Ogbu, 1986; Noguera, 2003). Other scholars have found that racial identity is a facilitative and protective factor in education for Black students, even buffering the effects of racial discrimination (Sellers, Copeland-Linder, Martin, & Lewis, 2006; Wong, Eccles, & Samerooff, 2003). However, other researchers have argued that there is not an overarching linear relationship between racial identity and academic outcomes for Black students, but rather that it varies depending on the nature of the students’ racial identity (Harper & Tuckman, 2006).

The development of a positive racial identity has been shown to be a protective factor for culturally diverse students, particularly Blacks (Awad, 2007; Worrell, 2008). A protective factor, as defined by the Centers for Disease Control (2014), is an individual or environmental characteristic, condition, or behavior that reduces the effects of stressful life events (i.e. discrimination). These factors suggest an increase in an individual’s ability to avoid risks or hazards, and promote social and emotional competence to thrive in all aspects of life, currently and in the future (CDC, 2014). Research has found that Black girls with a positive racial identity
have increased self-esteem, group-esteem, educational attainment, and overall well-being (French, et al., 2006; Jones et al., 2007; Twenge & Crocker, 2002).

The beliefs and values formed by Black girls as they develop their identity derive from their interactions with family, friends, and society (Phinney, 1992). These relationships are particularly important for early adolescent Black girls who place high value on the judgment they receive from others during their identity formation (Travis & White, 2000). As Black girls explore their multiple identities, they experience positive and negative reinforcement from those they encounter during this process. Brown, Dykers, Steele, and White (1994) discussed the relational nature of identity, indicating that while individuals construct possible selves it is parents, friends, schools, the media, and other social institutions that dictate the way those possible selves should behave, speak, and think.

**Gender identity and adolescence**

Identity development involves multiple facets such as race, gender, ethnicity, career, and religious identity. During adolescence, Black girls are specifically learning their gender and race identity. There are several questions that may arise as this group comes to understand who they are and how they fit into America’s society. The suggested questions may include: How do Black girls fit into the world as a female, specifically as a Black female? Can Black girls separate the identity of being a female and the identity of being a Black female? In what situations can they separate the identities of gender and race? How does the world view them as a Black female? Do they accept those ideals? How do they figure out which to endorse and which to reject?

Gender identity is the endorsement of a certain gender as a part of one’s sense of self (i.e., who a person is as a unique individual). The self develops based on the interaction of the individual within the larger social world, including culture and historical periods (i.e., macro and
which defines the attitudes, behaviors, and experiences appropriate for girls and boys. In the mainstream culture, the traditional female role encourages communal qualities, such as being warm, expressive, nurturing, yielding, and dependent. In contrast, the traditional male role encourages agentic qualities, such as being self-reliant, assertive, competent, self-sufficient, and independent (Britner & Pajares, 2001; Catsambi, 1995; Helmreich & Spence, 1978). As such, gender roles reflect an individual’s understanding of the larger sociocultural concepts. Black girls choose to adopt certain behaviors based on their endorsement or integration of those roles into their own gender identities (Clemans, DeRose, Graber, & Brooks-Gunn, 2010).

Many scholars have discussed how the female role within Black culture emphasizes self-reliance and assertiveness alongside caring and nurturance (Childs, 2005; Morris, 2007; Townsend, Thomas, Neilands, & Jackson, 2010; Ward, 2004). Self-reliance and assertiveness conflict with the traditional feminine characteristics in society. Consequently, Black males and females are more similar to each other in terms of agentic and communal qualities compared to White males and females (Buckley & Carter, 2005; Smith & Midlarsky, 1985).

In line with these cultural variations in gender roles, research has found different patterns of adjustment for Black and White adolescents. For White girls, this stage of life is often associated with increased insecurities about their abilities, negative views of their physical appearance, worrying about what others think of them, and declining self-esteem; whereas these outcomes were not found for Black girls (Brown et al., 1998; Buckley et al, 2005; Greene & Way, 2005; Twenge & Crocker, 2002). In general, during early adolescence, Black girls have a more positive view of themselves when compared with White girls, and there are most often no differences when compared with boys (both Black and White boys). These patterns have been interpreted as reflecting the more flexible gender roles for Black girls as compared with the
dominant White view of femininity, which may serve as protective factor for Black girls’ identity development (Buckley et al, 2005; Eccles & Barber, 1993).

**Black Girls and Education**

The attainment of a college degree provides individuals with the chance to achieve upward mobility and economic stability. However, for many Black girls, unequal educational opportunities have created barriers to this opportunity. Black girls are twice as likely to be high school dropouts as their White peers and have the lowest 4-year completion rate for a bachelor’s degree when compared with their peers of other races (50.6% Asian, 47.3% Caucasian, 32.5% Hispanic, and 23.7% Black). As the dropout rate for Black girls increased between the years of 2010 to 2013, their White counterparts’ dropout rate decreased (Plucker, Hardesty, & Burroughs, 2013). If this negative trajectory continues for Black girls, they will continue to fall further behind that of their peers of other races, thus increasingly hindering their economic stability in the future.

The National Assessment of Educational Progress (NAEP) assesses students’ progress in a range of subjects from grades 4 through 12. In 2012, fourth grade Black students only advanced 1% in mathematics and reading achievement from 1996 to 2011, while White students increased 6% in mathematics and 1.5% in reading achievement during this timeframe. It appears that Black students in our educational system are continuing to struggle and fall behind at alarming rates.

Black girls across the United States have lower academic outcomes than their female counterparts of other ethnicities (Gross, Kaufamann, & Frohlich, 2014). The barriers to educational attainment faced by Black girls develop in many forms such as racial and gender stereotypes, lack of quality educational opportunities, and discriminatory discipline practices.
Not only do these barriers result in significantly lower high school graduation rates for Black girls as compared to their peers of other races, it also impacts their enrollment in Science, Technology, Engineering, Arts, and Mathematics (STEAM) majors and Gifted and Talented Programing. This mainly applies to girls from low socioeconomic areas (Belgrave, 2009).

Negative perceptions of Black female behavior often develop from prejudice, which lead teachers to assume that Black girls require greater social correction and thus lead to increased disciplinary referrals (Blake, Butler, Lewis, & Darensbourg, 2010). The U.S. Department of Education reports that while 11% of Black girls have been suspended from school, only 3% of White girls have been suspended nationwide (US DOE, 2012). According to the National Women’s Law Center (2014), a suspension or expulsion in middle school is the greatest predictor of arrest among girls in later adolescence. Research has shown that Black adolescent girls receive discipline due to differences between their cultural socialization and White teachers’ perceptions and expectations of what is identified as appropriate female behavior (Morris, 2007). These events can have a negative impact on the school environment for Black girls, creating a feeling of alienation and lack of school support.

For instance, when Black girls are outspoken or stand up for themselves with authority figures they are disproportionately disciplined. Black girls are at greater risk than other females of receiving citations for dress code violations and for talking back to teachers, as well as for much less severe behaviors such as gum chewing, perceived defiance, and failure to comply with prior discipline (Archer-Banks & Behar-Horenstein, 2012). Additionally, when Black girls show assertiveness while in the K-12 educational system, it places them at a greater risk for inequitable disciplinary practices even though assertiveness is usually viewed as a positive trait (Morris, 2012). As a result, Black females are placed in a no-win situation: they either conform to
mainstream gender stereotypes and become silent and passive; or they advocate for themselves and get disciplined for defying those expectations, even though they are counterintuitive to the gender socialization they receive in the home (NWLC, 2014).

In their study of junior high school students, Wong et al. (2003) found that perceived discrimination at school (by peers and teachers) was negatively related to subsequent measures of adolescents’ self-esteem. Also, reports of discrimination at school were associated with higher levels of anger, depressive symptomatology, perceptions of friends’ negative characteristics, and involvement in problem behaviors. For Black girls, messages received from family that, (a) promote connection with the Black community; (b) increase awareness of racism; and (c) instill a belief that achievement relates to being Black, may be important factors in increasing the importance of educational attainment for this group (Oysterman, Harris, and Bybee, 2001). The messages that girls receive from their family are both direct and indirect. Direct messages include parental involvement: helping with homework, conversations about academic expectations, and consequences when those expectations are not met. Indirect messages that girls receive come from parental role modeling. Parental role modeling refers to messages about the importance of school that parents project nonverbally (Belgrave, 2009). For example, a single parent with an 8th grade education who is struggling financially may nonverbally convey that education is important to circumvent the same hardships later in life for her daughter, even if they do not talk about it directly.

Students also receive educational messages within the school setting. Black female students who feel that they are understood, accepted, and respected in the school environment have better academic outcomes (Rollock, 2007). In addition, the messages received from the
media either endorse or reject ideas of educational achievement for this group. More research is needed to understand how these situations may help shape their own personal value of education.

Black girls’ beliefs in their ability to achieve a specific educational outcome are influenced by their experiences in school (i.e. discrimination) and their ability to problem solve and overcome challenges, which in turn influences the value that they develop for school in their life. Students who possess higher academic efficacy have been shown to set higher goals for themselves, challenge their abilities, and have higher GPAs than those with a lower academic self-efficacy (Hudley, 2009; Skinner, Zimmer-Gembeck, Connell, Eccles & Wellborn, 1998). A higher academic self-efficacy in Black students has been correlated with a higher GPA and serves as a protective factor (Hudley, 2009). Specifically, Saunders et al. (2004) reported that academic efficacy accounted for 28% of the variance in achievement for Black girls as compared with 8% for their Black male peers. As such, it is important to understand the impact that stereotypes have on this group.

**Stereotypes**

There are several stereotypes of Black women that are portrayed in America’s society. The dominating Sapphire, from the 1970’s sitcom, *Amos and Andy*, depicts a woman who is bossy, demeans men, and is subsequently seen as a bitch for her actions. The depiction of Black women as a Welfare Queen depicts a portrayal of one who is lazy, unemployed, taking advantage of government resources and uneducated (Nadasen, 2007). These stereotypical images continue to influence society’s views of Black women and girls. Black girls continually struggle to counteract these inaccurate images that are rooted in prejudice and racism. Black women and girls continue to struggle with the portrayal of these negative historical images.
Positive Stereotypes

While the aforementioned stereotypes illicit a negative connotation about Black Women, the stereotype of Superwoman (also referred to as Strong Black Woman and modern day Mammy) typically elicits an image of empowerment and strength among Black women (Collins, 2004). It embodies a symbolism of Black women’s fortitude, nurturing nature and tenacity. Fortitude embodies the representation of strength, independence, and resilience in Black women. This notion suggests that, compared with other women, Black women are less dependent on others, naturally strong and able to easily recover from the challenges that are presented in their lives. The nurturing nature embodies the representation of Black women as primary caregivers of others and secondary care for themselves. The term others, is not confined to biological family members, but extends to individuals who are in the Black woman’s life. The Black woman is therefore viewed as a support system in and of herself, providing spiritual, emotional, and/or financial support to those she loves. This suggests that Black women are self-sacrificing, caring, and equipped to continually provide support for those she loves. Lastly, tenacity embodies the Black woman’s ability to continually progress forward despite the hardships and obstacles that she encounters in her life. Therefore, this implies that Black women have the ability and knowledge/strength/wisdom/resilience to move forward regardless of their circumstances.

Negative Stereotypes

In addition, there are negative stereotypes of Black women. For example, the stereotypical image of Black females as the highly sexualized Jezebel depicted as a light skinned woman, with long hair, who is perceived as seductive, manipulative, and unable to control her sexual urges (Mitchell & Herring, 1998; West, 1995). A more recent depiction of sexualized Black girls is referred to as a “Thot” (that hoe over there), which symbolizes girls as hoes, sluts,
or sexual objects. As a result, these depictions serve as symbols of what Black girls can become. The implications of Jezebel or ‘Thot’ influence the way they may view themselves (e.g., as sexual objects) and their behavioral motivations (e.g., lack of value for school because they can use their body to attain income in their lives). An image where their success is not dependent on education and therefore it does not maintain value. The drastic contrasts between these representations of what it means to be a Black woman, is one that must be negotiated among Black girls, as they enter adolescence and begins to discover who they are as a person.

Sutherland (2005) interviewed seven 16-year-old Black girls in an effort to understand how these girls have been affected by living in a racially prejudiced society. The teens expressed concerns in dealing with discrimination based upon race, skin complexion, and socioeconomic status. Despite the hardships, all seven girls viewed being Black as an important part of their identity and expressed their responsibility to represent their race in a positive image through appropriate behaviors. Behaviors such as being loud, ghetto, and smart-mouthed were not seen as acceptable and thought to belong to less intelligent Blacks. Therefore, it is essential to further understand how these beliefs were derived.

In the United States, being a “Black woman” carries a particular meaning in the minds of society. Black women are viewed in a particular manner, which they are repeatedly confronted with defending their behavior (Sutherland, 2005). Black women are often expected within the larger society to hold particular values and to exhibit particular behaviors. They are expected to be loud and smart-mouthed. They are expected to be poor and likely to be thieves. They are expected to be sexually promiscuous, prone to criminal behavior and viewed as inferior to other people (Jones & Shorter-Goode, 2003). In a culture dominated by a Eurocentric standard of beauty, Black women also learn, in myriad ways, that they are not considered as attractive—
especially those with dark complexions—as those with blonde hair and blue eyes. Because these ascriptions of identity define Black women as a group, they can serve as boundaries on what individuals believe their potential to be, and can have a negative impact on their racial identity (Sutherland, 2005).

Black females have historically and are presently perceived in a number of ways by society. In comparison to White girls, Black girls are perceived more likely to display social and overt aggression (Centers for Disease Control and Prevention [CDC], 2009; Putallaz et al., 2007) and are perceived by peers as exhibiting greater levels of overt and social aggression (Putallaz et al., 2007). This may be due to racial bias influenced by the media’s stereotypical portrayal of Black females as being angry and hostile (Collins, 2004). Black girls continually fight to counteract these inaccurate images that are rooted in prejudice and racism. The portrayal of these historical images is one that Black females, women and girls, still struggle to overcome today. Such prejudicial thoughts and stereotypical views lend way to discriminatory experiences for Black girls.

**Discrimination**

To gain an understanding of the origin of discrimination in the United States school system, we must first briefly discuss its historical underpinnings. The enslavement of Blacks in the United States of America initiated the creation of a racial and cultural hierarchy where Blacks and their culture was framed as inferior to that of their White counterparts. Although this mindset began with the advent of slavery, the deeply engrained beliefs (stereotypes) created a society that discriminated against Blacks based on race. Through illegal and legalized structures, these practices have become engrained in individuals and institutions (e.g., the school system) thus creating barriers and stressors for this group.
Black students have experienced discriminatory experiences in schools since their integration into *mainstream schools* in 1954. The 1954 ruling of the *Brown v. Board of Education* case was seen as a landmark decision creating equal educational opportunities for Black students. Scholars suggest that this decision was detrimental to educational and mental health of Black students and culture (Morris, 2012). While other scholars have debated whether this decision was more helpful or harmful for Black student success. Nevertheless, there is no debate surrounding the negative impact that racial discrimination has on the educational and mental health outcomes for individuals in this group. Research has found that racial discrimination in school has deleterious effects for psychological well-being, anger, racial identity, depressive symptomology, academic self-concept, self-esteem, academic motivation, externalizing behaviors, and psychiatric symptoms for Black students (Chavous, Rivas-Drake, Smalls, Griffin & Cogburn, 2008; Greene, Way, & Pahl, 2006; Sanders-Phillips, 2009). Racial discrimination in the K-12 school system occurs at all levels, starting with the system and permeating to the individual levels.

**Systemic Discrimination**

The educational experiences that Black students experience varies according to each school district. At the micro-level, Black girls’ cognitions shape their perception and school experience. On the systems level, differences are noted to be the consequence of the inequity and inequality of socioeconomic conditions and funding of school systems (Anyon, 1997). Living in poverty or a low-income community influences the quality of education that children have access to. Additionally, financial expenditures are directly impacted, with less money per child invested into the community schools in these areas. As a result, children in lower socioeconomic neighborhoods, who are typically children of color, are often subjected to conditions of
overcrowding, inexperienced teachers, underfunding, and inadequate course offerings (Hamrick & Stage, 2004). For instance, school size and class size have been shown to have both direct and indirect effects on school environment and achievement. In schools with higher enrollment (e.g., 400-750 students) and larger class sizes, teacher attitudes and collective responsibility along with student achievement are lower (Hedges & Konstantopoulos, 2000; Lee & Loeb, 2000).

Stewart, Stewart, and Simons (2007) found that neighborhood disadvantage, which reflected racially segregated economic conditions, was significantly related to Black adolescents’ educational aspirations. Specifically, their findings indicated that living in a disadvantaged and resource-poor neighborhood is a risk factor that decreases the chances of viewing college as highly important beyond individual-level attributes (e.g., family income, parental education) and key neighborhood control variables (e.g., violence, stability, and cohesion). Furthermore, Nichols, Kotchick, McNamara and Haskins (2009) found a 31% increase in the educational aspirations among students who lived in less disadvantaged communities compared with their peers in higher areas of disadvantage. The ramifications that poor socioeconomic living conditions have on educational beliefs and outcomes are significant. More importantly, the ideologies that Black girls endorse about themselves as individuals, which comes from the messages received from family and society, shapes their view of themselves and their ability to overcome experiences of discrimination.

**Academic Discrimination**

Black girls face educational discrimination in the forms of racial and gender stereotypes, lack of quality educational opportunities, and discriminatory discipline practices (Plucker et al., 2013). Not only do these barriers result in significantly lower high school graduation rates for Black girls as compared to their peers of other races, it also impacts their enrollment in Gifted
and Talented and Science, Technology, Engineering and Mathematics (STEM) Programming. This is especially true for girls from low socioeconomic neighborhoods (Belgrave, 2009).

Gifted and Talented educational programming services are provided to students who have proven to be intellectually capable through grades and cognitive assessments. These services give students the opportunity to participate in advanced course work, as well as exposure to a wide range of educational opportunities. Participation in these programs provides more preparation for college while also increasing psychological outcomes and economic stability later in life. Nationwide, the underrepresentation of students of color in Gifted and Talented educational programs has been a growing concern. While 50% of White students are enrolled in schools that offer Gifted and Talented programs, only 15% of Black students are enrolled in schools that offer these programs. This leaves Black students at a disadvantage when it comes to having access to these programs. Additionally, of the students in schools that offer Gifted and Talented programs, 60% of White students compared with 9% of Black students are enrolled in Gifted and Talented programs. In addition to having disproportionate representation in Gifted and Talented programming, Black students are also underrepresented in Science, Technology, Engineering and Math (STEM) programming.

The disproportionate representation of Black girls in STEM programming is “the product of a stratified American educational system that shapes academic and career choices” (Perry, Link, Boelter, & Leukefeld, 2012) in conjunction with “the social and cultural beliefs of society rather than a difference in intellectual ability or capability” (Hill, Corbett, & Rose, 2010). Careers in STEM provide an opportunity for Black girls to reduce gender and racial gaps in income and occupational growth, yet only 2 percent of professionals in this field are Black females as compared to 20 percent of their White counterparts (Perry et al., 2012).
Many Black girls are not encouraged to pursue careers in this area. Ong, Wright, Espinosa & Orfield, (2011) reported that over three-fourths of ethnically diverse women working in STEM fields stated that they were never identified for STEM programming and 40% of them were actively discouraged from pursuing such programming while in school. Tyson, Darity, and Castellino (2005) reasoned that a consequence of underrepresenting Black students in advanced classes is a result of the perpetuated beliefs (stereotypes) about Black’s intellectual ability.

The educational opportunities that Black students have access to are not equal according to citation. Compared with their peers of other racial groups, Black girl’s success grows in disparity. Distinct differences in teacher quality, access to materials and resources, access to advanced educational programming, and beliefs in achievement ability are thought by scholars to be the result of racial discrimination within our school systems (Hamrick & Stage, 2004).

In a 2011 study conducted by O’Connor, Lewis and Mueller, the researchers used qualitative interviews to investigate the racial identity of three high achieving Black high school girls in a stratified academic hierarchy. Investigation revealed that each of the girls differed in their perception, approach, and understanding of their racial identity. Experiences of overt discrimination and micro aggressions were central themes. For example, one participant explained that she was asked if she would be able to handle to academic work and being asked repeatedly in front of the class if she understood the material. Despite participant differences, there was a shared belief of responsibility to counter the perpetuated stereotype of Blacks and girls as less intelligent and less capable of rigorous academic work, to create a positive image of Black girls, and to prove teachers wrong.

In this qualitative investigation, exists a responsibility within these teenagers to dispel stereotypes about Black girls that are held within society and in their educational settings. For
example, the notation that displaying behaviorally appropriate ways and excelling in school is “acting White” while being loud or animated is “acting Black” and unacceptable. While this is not blatantly stated, the unconscious manifestations are represented in the teachers views the students, the students’ views of other Blacks and the belief that they must act a specific way to portray a positive image. The stereotypical views that are held about Black girls are internalized within these girls, society and their educational system.

**Protective Factors**

**Racial Socialization**

Racial socialization consists of messages and strategies that Black parents and significant others involved persons transmit to their children which communicates techniques to help them succeed in mainstream society, despite their marginalized status in the United States (Boykin & Toms, 1985; Peters, 2002; Spencer, 1983). More specifically, Black children are provided with tools that they can use to overcome racial based barriers and/or to moderate incidents of racial discrimination that have occurred.

While racial socialization messages are grouped as one overarching category, research has demonstrated that there are specific types of racial socialization messages that Black parents transmit to their children; however, researchers often use a variety of names for these messages. For this reason, when studying how racial socialization relates to the development and resilience of Black children, it is important to understand how the authors are conceptualizing and operationally defining the term. Although there are multiple terms used to discuss various types of racial socialization, researchers typically agree on four categories of messages: cultural socialization, preparation for bias, promotion of mistrust and egalitarianism (Hughes, Smith, Stevenson, Rodriguez, Johnson, & Spicer, 2006). Each of these categories conveys a different type of socialization to Black girls and are communicated simultaneously, based on the
circumstance. As each general category of racial socialization is discussed below, the authors
will also provide alternative names that each term has been used in the literature.

Cultural socialization includes the transmission of cultural values, knowledge, practices,
and history. In the literature, this specific form has also been referred to as, ethnic pride, pro-
Black attitudes, racial pride, Afrocentric home cultural pride reinforcement, cultural appreciation
of legacy, cultural immersion, and overt and covert socialization (Hughes et al., 2006).
According to researchers, cultural socialization includes Black culture and traditions that are
thought to increase the racial pride of Black children (Boykin et al, 1985; Neblett, White, Ford,
Phillip, Nguyen, & Sellers, 2008). These messages can be delivered explicitly and implicitly,
which are provided across each developmental stages. Explicit messages include talking to
children about influential historical events and people; while implicit messages include exposing
children to food, books, and art from their culture (Hughes et al, 2006). In the National Survey
of Black Americans (Jackson & Gurin, 1997), Black youth reported that approximately 23% of
the messages that their parents conveyed about racial socialization were cultural socialization
messages. As well, cultural socialization messages are reported to be the most frequently used
form of racial socialization messages among Black parents (Coard, Wallace, Stevenson, &
Brotman, 2004; Hughes, 2003). While cultural socialization messages aim to prepare Black
children for mainstream society by instilling a sense of cultural pride, preparation for bias takes a
slightly different approach.

Preparation for bias messages prepare Black children for discriminatory experiences by
bringing awareness to the different types of situations they may encounter due to their race and
providing coping strategies (Hughes et al., 2006). Preparation for bias messages have also been
referred to as racial awareness, racial barrier awareness, racial barriers, cultural alertness to
discrimination, cultural coping with antagonism, racism struggles socialization, racism teaching, proactive responses to racial discrimination, teaching about discrimination, among many other terms within the literature (Hughes et al, 2006). In the National Survey of Black Youth, Black youth reported that approximately 13% of the racial socialization messages that they received from their parents were preparation for bias. As a group, Black parents were found to use this form of socialization significantly more than other racial groups (Hughes, et al., 2006; Jackson et al., 1997). This is assumed to be a product of the oppression that Blacks have encountered across the chronosystem within the United States. While cultural socialization messages are provided across all developmental stages, preparation for bias messages generally begin around adolescence when children’s cognitive capacity for understanding complex constructs further develops (Hughes & Johnson, 2001).

Unlike the previous two types of racial socialization, egalitarianism messages emphasize individual characteristics and/or avoid race related discussions completely (Hughes et al., 2006; Spencer, Cunningham, & Swanson, 1995). Related terms within the literature are mainstream socialization, silence about race, humanitarian values, cultural endorsement of mainstream, individualistic/universalistic, equality, adaption, and respect for others (Brega & Coleman, 1999; Constantine & Blackmon, 2002; Demo & Hughes, 1990; Phinney & Chavira, 1995; Stevenson, Cameron, Herrero-Taylor, & Davis, 2002; Thomas & Speight, 1999). The aim of this type of message is to help prepare Black children by emphasizing skills and characteristics that will allow them to succeed in the mainstream society. These messages project the value of hard work, equality, respect, perseverance, and self-acceptance among other characteristics (Boykin & Toms, 1985; Hughes & DuMont, 1993). Egalitarianism messages, like cultural socialization, are
communicated across the developmental sequence to Black children. Subsequently, this author reasons that these messages are the ones that students frequently receive in the school setting.

Promotions of mistrust messages are those, which emphasize mistrust in cross-racial interactions (Hughes et al., 2006). Other terms used in the literature are cultural mistrust, promotion of mistrust, cautious/defensive, cultural distance, and mistrust Whites (Demo et al., 1990; Hughes & Chen, 1997; O’Connor et al., 2000; Thomas & Speight, 1999). While this may sound similar to the preparation for bias messages because it brings awareness to discrimination, the distinction is that preparation for bias provides coping strategies whereas promotion of mistrust messages does not (Hughes et al., 2001).

Messages received about education.

Black girls receive messages about education from family, friends, and society. The messages received about education from family are typically accompanied by messages about their race/ethnicity. This connection has developed as a result of the societal views that continue to be held about Blacks in the United States. For adolescents, as they begin to form a sense of identity, they receive a wide variety of messages about their ability to achieve as Blacks in this country.

For Black girls, direct and indirect messages received from family that, (a) promote connection with the Black community; (b) increase awareness of racism; and (c) instill a belief that achievement is connected with being Black may be important factors in increasing academic outcomes (Oystermann, et al., 2001). Direct messages include parental involvement, helping with homework, conversations about academic expectations, and consequences when those expectations are not met. Indirect messages that girls receive come in the form of nonverbal
messages about the importance of school that parent’s project through parental role modeling (Belgrave, 2009). In turn, these racial socialization methods impact the adjustment of this group.

While researchers have reported that Black youth’s adjustment is negatively affected when tasked with coping with stressors out of their control due to unproductive coping strategies (Seaton, et al., 2014), racial socialization may serve as a protective factor, moderating the negative outcomes. According to Brittian (2014), perceived discrimination from adults is assumed to be beyond a student’s control since he or she does not have the power to change the behavior. However, racial socialization literatures suggest that these particular messages provide Black youth with strategies and skills to combat discriminatory situations they encounter in their environments, including the school setting. Additionally, literature suggests that receiving messages of racial socialization provides Black girls with skills to protect against discriminatory experiences they encounter, thus preparing them psychologically. As a result, it is hypothesized that Black girls that report receiving more messages of racial socialization will feel more prepared to combat discriminatory experiences and will also know how to overcome these experiences. It is suspected that racial socialization will serve as a protective factor, moderating the effects of discrimination by peers and teachers.

**Theoretical Framework**

**PVEST**

The main developmental task for all adolescents is to gain a sense of fidelity, the ability to learn to live by the norms of society (Erikson, 1968). This task often creates turmoil and difficulty as adolescents enter puberty and gain increased cognitive capacity. When adolescents integrate new information from their environment and begin to understand how the aspects of their identity fit together, they begin to understand how they fit in society. Each aspect of identity has a position of dominance or subordinance that impacts the adolescents’ identity development.
based on the norms of their society. In the United States, the norms of society position Black adolescent girls in a position of subordination by race and gender.

The Phenomenological Variant of Ecological Systems Theory (PVEST) is an inclusive framework of human development that provides a developmental, process-oriented, and context specific focus (Spencer, 1995; 1997). As a systemic model, PVEST encompasses an integration of historical, cultural, social, and political factors that influence individuals and groups in dynamic ways. According to PVEST, each individual and group develops their identity and understanding of their world and environment based upon their own unique perceptions and beliefs.

PVEST asserts that adolescent development occurs as the result of five integrated factors: net vulnerability, net stress management, reactive coping strategies, stable coping responses and life-stage coping outcomes (see Figure 1). Each component within this model has a direct or indirect influence on the subsequent components, thus allowing a continuous cycle of change. Net vulnerability (Factor 1) is comprised of the risks and protective factors that adolescents encounter within their environment. Net stress management (Factor 2) encompasses the adolescents’ perceptions of the experiences that either encourage or hinder their ability to respond to tasks they encounter. Reactive coping strategies (Factor 3) refer to the adolescents’ immediate approach to problem-solving which may be adaptive or maladaptive. These strategies are influenced by direct feedback from others in the environment. Stable coping responses (Factor 4), which are influenced by the reactive coping strategies, are the emergent identities that define how the adolescent views themselves in the environment which leads to life-stage coping outcomes (Factor 5). These life-stage coping outcomes are the productive and unproductive ways in which individuals handle situations in their life, that in turn impacts net vulnerability (Factor
Within this framework, as adolescents encounter new experiences and learn new strategies (adaptive or maladaptive) for handling challenges, they are continually changing their perceptions of themselves and how they fit within their environments. This model provides a lens for understanding the ways in which racial identity and discrimination impacts Black girls’ educational views and psychological outcomes in the context of adolescence. As Black middle school girls develop their identity, they are confronted with multiple risk factors such as—discrimination, negative views of Black females and intellectual capability, racism, systemic barriers; as well as protective factors such as—positive racial identity, racial socialization, high self-esteem, and positive adult figures.

**MMRI**

The Multidimensional Model of Racial Identity (Sellars, et al, 1998) describes racial identity development in regards to the ascribed values and ideologies Black youth possess about their group membership. According to this model, four dimensions of Black racial identity fluctuate throughout the lifespan: (a) racial saliency – how meaningful being Black is in a particular context or situation, (b) racial centrality – the extent to which being Black is a core part of an individual’s self-concept, (c) racial regard – positive or negative feelings that one attributes to being Black, and (d) racial ideology – one’s attitudes and opinions about how Blacks should act. Racial regard encompasses two aspects: private regard (how one feels about Blacks and their group membership) and public regard (how one thinks other people feel about Blacks).

**Limitations of Existing Research**

Racial discrimination is a pervasive stressor that Black students experience to varying degrees (Smith & Fincham, 2015). Discrimination in school has been shown to impact the health, educational and psychological outcomes of Black students (King, 2003; Landrine &
Klonoff, 1996; Stewart, Baumer, Brunson, & Simons, 2009). The type of discrimination students receive has been shown to have differential effects. For Black girls, discrimination from teachers has resulted in lowered self-esteem, increased depressive symptoms, and decreased perception of the importance of school; while discrimination from peers has been associated with decreases in aspects of racial identity, school self-concept, and utility value of school (Brittian, 2014; Cogburn, Chauvous & Griffin, 2011; Dotterer, McHale & Crouter, 2009).

Racial socialization messages are the mechanisms used by Black parents to protect their children from the discriminatory experiences they encounter in their daily lives. While research on the impact of discrimination in school has investigated outcomes with Black girls, research has not sought to understand how specific subcomponents of racial socialization are impacted by these discrimination experiences. More specifically, resilience is considered to be a byproduct of racial socialization that allows students to overcome discrimination experiences. Although this variable is discussed within racial socialization research, few studies have investigated the specific variable apart from racial socialization. In addition, implicit in messages of racial socialization is the hope that Black students will learn to combat discrimination. However, this too is a byproduct of racial socialization that has not been studied separately.

Research has been mixed on the impact that discrimination in school has on the academic self-efficacy of Black girls. Some studies have found that experiences of discrimination by teachers have negatively impacted Black girls, whereas others have found no correlation. It is suspected that these differences may result from methodology and treatment design differences.

This author postulates that school discrimination will negatively impact academic self-efficacy, resiliency, and efficacy to combat discrimination for early adolescent Black girls. More
specifically, based on previous research, it is suspected that discrimination by teachers will have the greatest impact on the academic and psychological outcomes of Black girls.

This chapter provided the literary background relevant to understanding how early adolescent Black girls’ racial identity, educational beliefs, and psychological outcomes are shaped and related to discriminatory experiences across systems, with a specific focus on schools. Next, the proposed research methods and design is described in detail.
Chapter 3

Methods

This study sought to first understand the predictive ability of teacher discrimination and racial identity on early adolescent Black girls’ educational beliefs and psychological outcomes. The second aim of the study was to understand the moderating effect of egalitarian racial socialization on the psychological outcomes of early adolescent Black girls. This chapter discusses the research methods and design that were used to understand the relationship between these variables. The following four research questions were answered: 1) What is the predictive ability of teacher discrimination on racial identity for early adolescent Black girls, and 2) What is the predictive ability of teacher discrimination and racial identity on the educational beliefs of early adolescent Black girls, 3) What is the predictive ability of teacher discrimination and racial identity on the psychological outcomes of early adolescent Black girls, and lastly 4) do egalitarian racial socialization messages serve as a moderating factor against teacher discrimination and the psychological outcomes of early adolescent Black girls.

Participants

Participants for this study came from the Maryland Adolescent Development in Context Study (MADICS) conducted by Eccles and colleagues from 1990-2000. The sample of 1,482 families with adolescent children is unique in that it includes a large proportion (61%) of African-American families and a broad range of socio-economic status among both African-American and European-American families. The sample is drawn from a county with several different ecological settings including rural, low income, and high risk urban neighborhoods.

MADICS includes extensive measures on multiple contexts of development - ranging from the family to the peer group, the neighborhood, and the school. In addition, the researchers
were very careful to include measures of parallel constructs in each of the contexts, thus providing much better information on which to compare the influence of these various contexts on development.

The sample is broadly representative of different socioeconomic levels, which was measured by family’s income before taxes. The average family income of the participants in 1990 was normally distributed around a mean of $45,000-$49,000 (range $5,000-$75,000). White families reported significantly higher incomes in 1990 than the African American families.

The main purpose of this longitudinal study was to study the influence of context on individual behavior and to examine successful pathways through adolescence. The study sought to describe and understand the influences of social context on the psychological determinants of behavioral choices and to illustrate developmental trajectories from middle childhood through adolescence and into young adulthood.

The in-home survey for Wave 3 took place in 1993 (during the adolescents' eighth grade year) when 1449 families were relocated and 1060 were reinterviewed (76% of those still living in Prince George's County). The Wave 3 sample does not differ from the sample at Wave 1 in terms of parents' education, income, race, and both marital and employment status. The constructs covered in Wave 3 were similar to those in Wave 1 for both target youth and parents, with a greater emphasis on race and ethnicity constructs and some additional measures of family processes and relationships. Parents were also asked about their expectations and aspirations for their child and about their perceptions of the child's psychological functioning and abilities.

Although the data collection was completed between 16 to 25 years ago, the data collected still provides relevant information that can be used for statistical analysis. First, this data set is one of the only large scale data sets that is representative of a diverse group of Black
and White Americans. Second, the data set also is the only the authors were aware of that provide longitudinal data collection of surveys from both students and their families that encompasses racial identity data. Thirdly, disparate social and economic conditions that were of concern in 1990-2000 are still present for Black students and their families in 2016.

Data Collection. Data collection began in the Fall of 1991 as the adolescents entered middle school. Four waves of data were collected from the adolescents, parents (both primary and secondary care givers), older siblings, school records, and the 1990 census data banks via in-home and telephone interviews and self-administered questionnaires while the youth were in middle and high school. Two additional waves took place when one and three years post high school graduation. These were self-administered questionnaires and were filled out only by the youth.

In the fall of 1991, letters were sent to the homes of 1,700 seventh graders of select schools in Prince George's County, Maryland. The letter asked for parents' permission for their seventh grader (target child) and his/her parent to participate in the study. The primary caregiver was asked to participate in a face-to-face interview that lasted approximately 50 minutes and to complete a self-administered questionnaire that took about 30 minutes. The target child was asked to participate in a 50-minute face-to-face interview and a 30-minute self-administered questionnaire. This procedure was repeated in the spring of 1993. During the following months, two brief confidential telephone interviews were conducted with the primary caregiver and the target child to assess the child's transition into the eighth grade. Between the months of July and October of 1993, the process was repeated with only the parent being interviewed by telephone to evaluate the child's transition into ninth grade.
Many of the questions asked during the face-to-face interview and in the self-administered questionnaire were pre-coded questions. However, the face-to-face interview also included open-ended questions to learn more about parental aspirations for the children, as well as the child's own aspirations. The questionnaires included a broad range of items about the family dynamics, family and peer relationships, resources, well-being and stressors, as well as a broad array of indicators of adolescent development.

Missing data for the current study was handled utilizing a listwise case deletion. This method was chosen to handle the missing data due to the low percentage of missing data within each variable. Each variable contained less than five percent of missing data which enabled the researchers to use listwise case deletion.

**Measures**

**Development and testing of measures.** Many of the items come from other large-scale longitudinal studies. Items on neighborhoods and communities came from the National, and the Denver, Youth Studies (Elliott, Menard, Rankin, Elliott, Wilson and Huizinga, 2006). Items on family perceptions, mental health, problem-solving, and perceived economic situation came from Conger et al.'s Iowa Youth and Family Study (Conger, Ge, Elder, Lorenz, & Simons, 1994; Conger, Lorenz, Elder, Melby, Simons, & Conger, 1991), as well as the National Study of Children (Allen, Moore, Kuperminc, Bell, 1998). Items on values and importance placed on academic domains came from The Michigan Study of Adolescent Life Transitions (Eccles, Midgley, Buchanan, Wigfield, Reuman, & MacIver, 1993).

**Teacher discrimination.** One aspect of youth’s racial discrimination experiences in the school was assessed with a measure developed by the MADICS primary investigators. The Teacher Discrimination scale consisted of items that reported the frequency with which youth
reported experiencing racial discrimination in the school by a teacher. The perceived discrimination by teachers’ scale included four items which asked how frequently students felt their teachers called on them less, graded them more harshly, disciplined them more harshly, and thought they were less smart due to their race. The Cronbach’s alpha for this scale was .88. Both of the measures used a 5-point Likert scale ranging from 1 = never to 5 = everyday, with lower numbers representing less endorsement of the item.

**Socioeconomic status.** Socioeconomic status was operationalized pretax income. The parental participants in this study reported a pretax income ranging from less than $5,000 to more than $75,000. This was measured on a Likert-type scale with values ranging from 1 = less than 5K to 16 = more than 75K.

**Racial identity.** Two aspects of racial identity were measured: *Importance of Ethnicity* and *Connection to Ethnic Heritage*. *Importance of Ethnicity* contained three items that asked participants, “how important is your racial background to the daily life of your family, how important is it for you to know about your racial background and how proud are you of your racial background”. The items were measured on a four point Likert scale with responses ranging from 1 = not at all to 4 = very, with lower numbers representing less endorsement of the item. The Cronbach’s alpha for the scale was .63. The *Connection to Ethnic Heritage* scale contained four items: I have a close community of friends because of my race/ethnicity, people of my race/ethnicity have a culturally rich heritage, I have meaningful traditions because of my race/ethnicity, and people of my race/ethnicity are very supportive of each other. The items were measured on a five point Likert scale with responses ranging from 1 = not at all true of me to 5 = extremely true of me, with lower numbers representing less endorsement of the item. The Cronbach’s alpha for the scale was .72.
**Educational outcomes.** Educational outcomes were measured by the *Perceived Importance of Schooling* scale. This three item scale required participants to respond to the following questions: I have to do well in school if I want to be a success in life, schooling is not so important for kids like me, and getting a good education is the best way to get ahead in life for the kids in my neighborhood. This scale was measured on a five point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree, with lower numbers representing less endorsement of the item. The Cronbach’s alpha for the scale was .55.

**Psychological well-being.** Psychological Well-Being was measured using two scales: *Efficacy to Combat Discrimination* and *Youth’s Perception of Own Resiliency and Problem Solving*. *Efficacy to Combat Discrimination* was a four item scale that asked participants to respond to the following statements: there is little you can do to avoid racial discrimination at school, there is little you can do to avoid racial discrimination by your peers, there is little you can do to avoid racial discrimination at the job you will have in the future and there is little your parents can do to protect you from racial discrimination. This scale was measured on a four point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree, with lower numbers representing less endorsement of the item. The Cronbach’s alpha was .82.

*Youth’s Perception of Own Resiliency and Problem Solving* was a four item scale that asked participants to respond to the following questions: are you very good at figuring out problems and planning how to solve them, are you very good at carrying out the plans you make for solving problems, are you very good at bouncing back quickly from bad experiences and are you good at learning from your mistakes. This scale was measured on a five point Likert scale ranging from 1 = almost never to 5 = almost always, with lower numbers representing less endorsement of the item. The Cronbach’s alpha for this scale was .68.
Racial socialization. Racial socialization was measured using the *Youth's Perception of Parents Strategies for Dealing with Discrimination* scale. This six item scale asked participants how often do your parent(s) suggest that good ways to deal with racial discrimination are to: do better than everyone else in school, have faith in God, do your best and be a good person, not blame yourself when you experience racial discrimination, try hard to get along with people and stand up and demand your rights. The scale was measured on a five point Likert scale ranging from 1 = never to 5 = every day, with lower numbers representing less endorsement of the item. The Cronbach’s alpha for this scale was .80.

Research Design

Operational Definitions of Variables.

**Independent variables.** The predictor variables for this study were teacher discrimination and racial identity. Teacher discrimination is operationalized as behaviors that teachers display towards participants that are perceived by participants to be a result of their racial background. Racial identity is operationalized as those beliefs and attributions that one possesses about their racial background.

**Control variables.** Socioeconomic status measured by total parent income level was used as a control variable for this study.

**Dependent variables.** This study contained two sets of outcome variables: educational beliefs and psychological outcomes. Educational beliefs were defined as the value that participants believed school had in their life. Psychological outcomes were defined as student’s beliefs in their ability to problem-solve and overcome experiences of racial discrimination.

**Moderator Variable.** Racial socialization is defined as the strategies and skills that participants have been taught for managing experiences of racial discrimination.
Procedures

The researcher requested and was granted access to the MADICS deidentified longitudinal data from Henry A. Murray Research Archive. Wave 3 of the MADICS data was collected during the participants 8th grade year and chosen for analysis in this study. The current study included the self-reported data of the early adolescent Black females that completed their 8th grade year, which will be those from Wave 3. This data was chosen to study early adolescents and to capture the ideas and beliefs of this group. Wave 3 was chosen specifically because it was the only wave in the study that captured early adolescent Black girls and racial identity data. Only participants whose data was complete on all variables will be included in the analysis. To select the cases that match the research criteria (Black, female, & middle school) the select cases function was used.

Power analysis

The power analysis program GPower 3.0.10 was used to calculate the number of participants that are needed to conduct a regression analysis with a specified effect size. GPower indicated that 107 participants are needed to elicit a medium effect size, using an alpha of .05 with two independent variables.

Preliminary Data Analysis

Preliminary data analysis was conducted to assess the percentage of missing data and the five assumptions pertinent to hierarchical multiple regression analysis (normality, linearity, homoscedacity, multicollinearity, and autocorrelation). Preliminary analysis revealed that each scale contained less than five percent of missing data and all assumptions were met.

Scale Creation. The developers of the MADICS dataset created a codebook containing the scales that were used in Wave 3 of the dataset. This included the scale name, individual
questions included in the scale, mean, standard deviation, number of participants, and Cronbach’s alpha. The compute variable function was used to create each scale, which was then divided the entire scale by the number of items that were used to create it. This technique created continuous variables instead of categorical. The researchers chose to create continuous scales because it allows for more detailed examination of the relationship between variables. Table 1 includes the scale, number of participants, number of items and Cronbach’s alpha for each scale. The researcher used this codebook to create the scales needed for this study based upon the selected population for the current study.

In the original codebook created by the MADICS researchers, the scales were categorical and used a Likert-Type scale, ranging from 1-4 or 1-5. To ascertain if the scales were valid and reliable for the population in this study, reliability analysis was used to determine the Cronbach’s alpha and factor loadings for each original scale and factor analysis were conducted. Reliability for all scales ranged from .550 to .863 and factor analysis revealed that each scale contained one factor. Alpha levels of .70 and above are the desired reliability level to render a scale reliable and interpretable.

In the current sample and previous research with Black youth, scales with Cronbach’s alpha levels of .50-.69 have been used. In the current study, the scales with Cronbach alphas below .70 are three and four item scales. In the MADICS dataset, some scales originally contained alphas lower than the .70 standard, were still deemed valid and reliable, and have been used in current publications (see Table 2). For these reasons, the researchers decided that it was acceptable to use the scales with Cronbach’s alpha below .70 in the current study.
**Data Analysis**

Question one was analyzed using a linear regression analysis, whereas questions two and three were analyzed using a Hierarchical Multiple Regression analysis. These analyses were chosen due to their ability to understand the predictive nature of one variable on another. Question four was analyzed using the PROCESS software add-on to understand if egalitarian messages of racial socialization had a moderating effect on the psychological outcome variables (see Figure 2). This add-on uses an ordinary least squares regression while estimating the moderating effects of one or more variables to make conducting a moderation analysis easier than conducting traditional regression interactions (Hayes, 2013). The PROCESS software add-on is available for download from http://www.processmacro.org/download.html.
Chapter 4

Results

This chapter provides the results that were generated from the methodological design used to investigate the three research questions. The descriptive statistics and correlations are presented for all variables, and the hierarchical multiple regression analyses are presented for questions one and two, followed by the moderation results from question four.

Descriptive Statistics

For the overall sample (N = 261), the descriptive statistics and correlations are presented below in Table 3 and Table 4. The household income for the sample was slightly above the sample median (M = 9.63 [\$40,000 - \$50,000], SD = 4.43), showing that the majority of participants came from middle class families. Black girls reported few instances of teacher discrimination (M = 1.57, SD = .84) and racial identity variables varied with higher scores reported for the importance of race (M = 3.58, SD = .53), and moderate scores for connection to heritage (M = 2.21, SD = .88). Importance of school received high scores (M = 4.30, SD = .67), while girls rated their ability to problem solve in the moderate range (M = 3.79, SD = .66), and their efficacy to combat discrimination was below the midpoint (2.21, SD = .72). Lastly, girls received above average racial socialization messages (M = 3.26, SD = .94).

Teacher discrimination was negatively correlated with importance of school ($r = -.25, p < .01$), efficacy to combat discrimination ($r = .32, p < .01$), and connection to heritage ($r = .23, p < .01$). Connection to heritage was correlated with income ($r = .21, p < .01$), importance of race ($r = .26, p < .01$), efficacy to combat discrimination ($r = .28, p < .01$), and racial socialization ($r = .21, p < .01$). Racial socialization was also correlated with problem solving ($r = .14, p < .05$).
Research Question 1 Results

*What is the predictive ability of teacher discrimination on the racial identity of early adolescent Black girls?*

Teacher discrimination was examined to determine its predictive ability on two aspects of racial identity: importance of race. As seen in Tables 5, teacher discrimination did not emerge to be a significant predictor for importance of race ($F(2, 245) = 1.73, p = .18$). However, teacher discrimination was significant in predicting connection to heritage for this sample of early adolescent Black girls ($F(2, 238) = 14.52, p < .01, R^2 = 11$). Socioeconomic status was entered in the first step of the model as a control variable and accounted for 5% of the variance ($F(1,239) = 12.75, p < .01, R^2 = 5$). At step 2 of the model, teacher discrimination accounted for 5% of the variance in connection to heritage ($\beta = .24, t(.07) = 3.93, p < .00$).

Research Question 2 Results

*What is the predictive ability of teacher discrimination on the educational beliefs of early adolescent Black girls?*

Two components of racial identity: connection to heritage and importance of race and teacher discrimination were examined to understand their predictive ability for the educational beliefs of early adolescent Black girls using a hierarchical multiple regression. In the first block of the analysis, socioeconomic status was entered as the control variable. In the second block, the two racial identity components were entered, followed by teacher discrimination in the third block.

The third step of the model, which is displayed in Table 6, revealed that racial identity and teacher discrimination were significant predictors for Black girls’ educational beliefs, $F(4, 230) = 2.90, p < .05, R^2 = .05$, accounting for 5% of the variance in the educational beliefs. A further look into the
analysis revealed that connection to heritage ($\beta = -0.02$, $t(0.05) = -0.25$, $p = 0.81$) and importance of race ($\beta = 0.06$, $t(0.09) = 0.85$, $p = 0.40$) were not significant predictors of the educational beliefs for Black girls but teacher discrimination was a significant predictor ($\beta = -0.20$, $t(0.06) = 3.06$, $p < 0.01$).

**Research Question 3 Results**

*What is the predictive ability of teacher discrimination and racial identity on the psychological outcomes of early adolescent Black girls?*

Psychological outcomes contain two separate variables: resiliency and problem solving and efficacy to combat discrimination. As such, the results for this question were divided into the results of resiliency and problem solving (3a) and efficacy to combat discrimination (3b).

**Research Question 3a Results**

As shown in Table 7, the third step of the model revealed that racial identity and teacher discrimination were significant predictors for Black girls’ ($F(4, 227) = 3.19$, $p < 0.05$, $R^2 = 0.05$), accounting for 5% of the variance in resiliency and problem solving for this group. A further look into the analysis revealed that importance of race ($\beta = 0.09$, $t(0.09) = 1.40$, $p = 0.16$) was not a significant predictor of resiliency and problem solving while connection to heritage ($\beta = 0.14$, $t(0.05) = 2.06$, $p < 0.05$) and teacher discrimination ($\beta = -0.18$, $t(0.06) = 2.75$, $p < 0.01$) were significant predictors.

**Question 3b Results**

A hierarchical multiple regression was conducted on early adolescent Black girls. The second step of the model ($F(3, 226) = 7.01$, $p < 0.01$, $R^2 = 0.06$) showed that racial identity is a significant predictor of efficacy to combat discrimination, and the third step ($F(4, 225) = 7.96$, $p < 0.01$, $R^2 = 0.12$) of the model revealed that racial identity and teacher discrimination were
significant predictors for Black girls’ accounting for 6% and 12% of the variance in efficacy to combat discrimination. As presented in Table 7, connection to heritage was the only racial identity that significantly predicted efficacy to combat discrimination ($\beta = .18$, $t(.06) = 2.65$, $p < .01$). At step three, teacher discrimination showed itself to be a significant predictor of efficacy to combat discrimination above and beyond racial identity ($\beta = .09$, $t(.09) = 1.40$, $p = .16$).

**Research Question 4 Results**

*Is racial socialization a moderating factor against teacher discrimination and the psychological outcomes of Black girls.*

Psychological outcomes contain two separate variables: resiliency and problem solving and efficacy to combat discrimination. The overall model was not significant for resiliency and problem solving $F(4, 212) = 1.74$, $p = .14$. The overall model was significant for efficacy to combat discrimination $F(4, 209) = 6.76$, $p < .01$ but the moderation analysis did not produce a significant interaction ($N = 214$), $b = .03$, 95% CI [-.20, .09], $t = -.77$, $p = .44$. 
Chapter 5
Discussion

Early adolescent Black girls in the United States are faced with many risk factors in the pursuit of their education. Using the conceptual framework of the Phenomenological Ecological Variant of Systems theory, this study sought to understand how risk factors such as teacher discrimination and protective factors such as racial identity and racial socialization, influence the educational beliefs and psychological outcomes for early adolescent Black girls. This chapter first provides a discussion of the results for each research question to understand if the original hypotheses were met. Next, a comprehensive discussion is presented to discuss the implications of the results, limitations of the current study and directions for future research.

Research Question 1 Discussion

It was hypothesized that teacher discrimination would have a negative relationship with importance of race and connection to heritage but this was not the finding. Contrary to previous research, teacher discrimination did not predict a change in students’ importance of their race but more surprisingly, it had a positive relationship with connection to heritage, accounting for 5% of the variance (Harper & Tuckman, 2006; Noguera, 2003). While this seems counterintuitive on the surface, the average reported level of teacher discrimination for this sample was between never and a couple times a year, indicating early adolescent Black girls reported very low levels of discrimination from their teachers.

This brings forth the question of what do Black girls perceive as discriminatory experiences? Although educational data shows that Black girls are disproportionately sanctioned for their behavior in the educational system, the participant results did not support this (Blake, Butler, Lewis, & Darenbourg, 2011; Morris 2007; Raffaele, Mendez, & Knoff, 2003). There
appears to be a disconnect between the results of the current study and the lived experiences for early adolescent Black girls. It is unknown if the early adolescent Black girls in this study have limited reports of discriminatory experiences in the school because of their inability to recognize discriminatory offenses, because they actually are not experiencing elevated levels of discrimination, because of the racial socialization they have received thus far, or due to their socioeconomic status. Although discrimination experiences were hypothesized to decrease ones’ connection to heritage, the racial socialization experiences that Black girls have received thus far may be serve as a protective factor in these initial instances of discrimination. However, the discrepancy may lay in the different sources of data collected. The quantitative reports collected through individual schools and school districts are able to detect disparities in the disciplinary action that is received among Black and White students. This however, does not mean that the Black girls who are receiving these sanctions recognize them as acts of discrimination from their teachers. Particularly if the girls attend schools that have a majority Black student population.

Even though reported levels of teacher discrimination were low, it is suspected that the discrimination experiences that Black girls experience may actually reinforce their connection to their race. As was demonstrated in Sutherland’s (2005) qualitative study, discriminatory experiences that high school Black girls experienced increased their drive and objective to prove their teachers wrong and be a positive representation of their race. As well, at low levels it is quite possible that teacher discrimination has not reached an adequate threshold to cause a negative impact on Black girls’ racial identity.

**Research Question 2 Discussion**

In line with previous research, teacher discrimination emerged as a significant predictor in the educational beliefs of Black girls. Although teacher discrimination only accounts for 5% of
the variance in educational beliefs for Black girls in middle school, the negative effect of these
discriminatory actions are believed to magnify as this group progresses through school. One
thought behind this is that early adolescence is a time when Black girls are first beginning to
think abstractly and integrate abstract and complex information in their lives from their
environment. As such, at this early stage of cognitive increase, Black girls may not be
particularly aware of the discriminatory events that occur and therefore may not interpret
discriminatory actions in a negative way.

Teacher discrimination early on has been shown to negatively impact the educational
outcomes such as graduation rates for Black girls from high school. Educational beliefs, such as
the importance that Black girls place on school are thought to be directly related to this decrease
in educational outcomes for this group. However, as girls continue to develop and progress
through the educational experience and life, it may become easier for them to recognize
discrimination and thus interpret experiences as discrimination due to their increased life
experience and knowledge. Teacher discrimination was found to account for 5% of the change in
middle school Black girls’ educational beliefs, but this is thought to be the catalyst for the
disproportionate disciplinary and dropout rates of Black girls in high school (Archer-Banks, et al,
2012; Blake, et al., 2011).

It was particularly surprising that neither of the racial identity variables (connection to
heritage and importance of race) emerged as significant predictors of educational beliefs. This
outcome contradicts the literature which shows a positive connection between racial identity and
educational beliefs (Chavous et al., 2003; Spencer et al., 1997). One reason for this outcome may
be the specific aspect of educational beliefs that were investigated in this study. As such, it is
important for teachers to be aware of the messages that they transmit to Black girls. In order for
teachers to do this they must first be aware of their own biases and stereotypical beliefs that they hold about Black girls.

**Research Question 3a Discussion**

Connection to heritage was found to be a significant predictor for Black girls’ resiliency and problem solving. These results are in line with research that has found there to be a positive relationship between Black girls’ racial identity and their resiliency (Sellars et al., 2006; Spencer et al., 1995; Stanton-Salazar & Spina, 2005). The current findings have added to the literature in their finding that racial identity is positively related to Black girls’ perception of their ability to solve problems as well. Typically, research discusses the resiliency of Black students as an overarching concept, but it is important to understand the components that help Black girls in their ability to overcome the obstacles they encounter. One aspect that contributes to a students’ resiliency and overall self-efficacy is their ability to accomplish a task and problem-solve, which is key for their educational success and psychological well-being (Boykin & Toms, 1985; Hughes et al., 2001; O’Connor et al., 2011; Seaton et al., 2014).

Teacher discrimination was a significant predictor for the psychological outcomes of resiliency and problem solving for Black girls. As hypothesized, there was an indirect relationship between these variables. This supports the belief that teacher discrimination may be viewed by Black girls’ as out of their control as hypothesized (Brittian, 2014). When Black girls see an act as outside of their control, such as teacher discrimination, it decreases their ability to use their cognitive skills to overcome the problem. Consequently, students that do not possess the skills to use effective problem solving in the educational setting may be at increased risk for lower academic achievement, increased behavioral concerns, and decreased educational value. However, Black girls that possess higher levels of connection to heritage may be less susceptible
to the effects of teacher discrimination, thus confirming previous research of the protective effects of racial identity.

**Research Question 3b Discussion**

Teacher discrimination and racial identity were significant predictors of Black girls’ efficacy to combat discrimination. Specifically, there was a direct relationship between early adolescent Black girls’ connection to heritage and their efficacy to combat discrimination. This finding corroborates with previous research that suggests that racial identity is a protective factor for Black girls. This aspect of racial identity did not have predictive ability when teacher discrimination was added to the model, thus confirming the hypothesis that teacher discrimination predicts Black girls’ belief in their ability to overcome discrimination above and beyond racial identity.

As predicted, teacher discrimination was a significant predictor of efficacy to combat discrimination above and beyond racial identity. However, the positive relationship between these variables contradicts the findings of Brittian (2014), who found a negative relationship between these variables and Black high school girls. The current sample of girls’ perception in their ability to resist discrimination by teachers increases with more instances. One explanation for this is that as this group encounters more instances of discrimination, they learn strategies and skills to help them protect themselves from these risks. Such skills and strategies appear to serve as protective factors for early adolescent Black girls’ ability to fight discrimination, but does not provide enough protection to protect their resiliency and problem solving in general. This is understandable, as individuals are never resilient in all areas of life (Luthar, 2006). As such, it is possible that the Black girls in this sample feel competent in their ability to protect themselves against discrimination but do not feel competent in their ability to solve problems outside
discrimination. A hypothesis for this lack of generalization of resiliency and problem solving may be that Black girls use many of their resources to overcome discrimination, which increases stress, and leaves them depleted in other areas of their life (Cunningham, Corpew, & Becker, 2009; Sanders-Phillips, Settles-Reaves, Walker, & Brownlow, 2009).

For early adolescent Black girls who have not encountered as many discriminatory experiences as high school students, they view themselves as capable of resisting discriminatory experiences in the school setting. The belief that early adolescent Black girls have in their ability to combat discrimination is suspected to decrease as they encounter more discriminatory experiences with less and less success. The very nature of being an adolescence and novice in their experiences and perception therefore, may serve as a protective factor in these early stages of development, but decrease later in their educational career.

**Research Question 4 Discussion**

Racial socialization did not emerge as a moderating factor for either of the psychological outcomes as hypothesized for early adolescent Black girls. The type racial socialization variable used in this study is classified as egalitarian. This type of racial socialization emphasizes messages of character development, respect, and equality (Hughes et al., 2006). Based upon the results, it is speculated that this form of racial socialization may not be effective in moderating the negative impact of discrimination for early adolescent Black girls. A better form to investigate as a moderator may be in the form of cultural socialization or preparation for bias. Such messages convey a sense of cultural pride through the knowledge of history and racial pride messages to Black girls and prepare them for specific discriminatory incidents. Although the egalitarianism messages measured in this study did not serve a protective role for these two specific psychological outcomes, it does not negate its importance in the lives of Black girls.
Egalitarianism messages are emitted across the developmental span and prepare Black girls to function and succeed in mainstream society. However, the utility of these messages in preparing Black girls for the risk factors associated with discrimination appears to be missing. One reason that messages of egalitarianism may not be useful in protecting Black girls from discriminatory experiences is because these messages do not explicitly teach individuals how to recognize or cope with discriminatory experiences they encounter. Rather, this form of socialization teaches colorblindness, which possibly hinders Black girls’ ability to recognize discriminatory infractions.

**Implications for Educational Outcomes**

The school environment is supposed to be a safe space for students that helps them to develop their social, emotional, academic, and cognitive skills. Such experiences can leave Black girls feeling like the school environment is a hostile place (Koonce, 2012). However, a positive developmental trajectory in these areas is stunted when students encounter risks in their environment. In the school environment, early adolescent Black girls face immediate risks in their microsystem when they experience discriminatory experiences by their teachers. In the present study, teacher discrimination had a negative effect on educational beliefs and resiliency and problem solving.

In line with previous research, the current sample of girls reported low levels of discrimination by their teachers (Noguera, 2003; Swanson et al., 2003). Although not analyzed in this study, is it suspected that the lower levels of discrimination are related to the middle class status of the students in this sample. It is well documented that the quality of education that Black students receive is correlated with their socioeconomic status. Students who attend schools in neighborhoods that have higher socioeconomic status have more funding, better qualified
teachers, increased achievement, and more parental involvement (Anyon, 1997; Hamrick et al.,
2004; Nichols et al., 2009; Stewart et al., 2007).

Despite the low level of incidences, there were still negative effects on early adolescent
Black girls’ perception of the value that they place on education and their perception of their
resiliency and problem solving. Given the relational nature of Black culture, and the results of
the current study, it is suspected that it takes fewer instances of discrimination to negatively
impact the educational outcomes of this group (Boykin et al, 1995). Additionally, if early
adolescent Black girls do not view school as important or useful for their success, they are less
likely to persevere in the educational setting, thus increasing the achievement gap and high
school dropout rates. This researcher suspects that a decrease in academic efficacy at this early
stage, may generalize to other areas of Black girls lives. Within the school setting, teachers and
administrators have the ability to counteract these negative interactions by creating safe spaces
for students and implementing interventions daily practices that increase academic efficacy and
expand early adolescent Black girls’ cognitive skills.

**Implications for Teachers and Administrators**

The actions of teachers, both positive and negative have an influence on the students they
interact with in the school setting. More often than not, the negative interactions that teachers
convey towards their students, are implicit acts, learned subconsciously throughout their ecological
systems. As can be seen in this study, the discriminatory actions exhibited by teachers are
negatively related to the educational beliefs and resiliency & problem solving of early adolescent
Black girls. Teacher discrimination has been negatively related to decreases in academic efficacy,
resiliency, self-esteem, academic self-concept & academic motivation (Brittian, 2014; Chauvous
et al., 2008). The effects of teacher discrimination and discriminatory risk factors however are not
limited to early adolescent Black girls. Negative effects have been shown across grade levels and are amplified by the time students reach high school (Brittian, 2014 & Greene et al, 2006).

The negative outcomes produced in this study are not an isolated event, but rather a systemic problem. The historical background of the United States of America has created a prejudicial environment which has sustained across time. Fortunately for teachers and administrators, they have the ability to make changes within their schools. In order to make these changes, teachers and administrators must become aware of the ways in which early adolescent Black girls and other students of color are being discriminated against. Implementation of prevention and intervention programs for staff directed at 1) understanding systemic discrimination, 2) systemic discrimination and the school setting, 3) understanding and changing personal biases, 4) strengthening student-teacher relationships, and 5) culturally responsive classroom behavior management. Programming in these areas will work to dismantle the stereotypical views that are held towards Black females in an effort to decrease discriminatory occurrences and increase educational outcomes and psychological functioning long-term.

**Implications for Mental Health**

The goals of the educational system are to help students reach their potential and produce students who will become productive members of society (Peifer, 2014). These goals cannot be accomplished when students psychological functioning is impaired. Psychological functioning or mental health in the literature includes constructs such as: self-esteem, efficacy, resilience, problem-solving, depressive symptoms, positive racial identity, behavioral problems (Cogburn et al., 2011; Greene et al., 2006). For early adolescent Black girls, it is particularly important that they feel psychologically safe in the school setting, meaning they are free of the psychological resources needed to navigate the risk factor of discrimination.
Early adolescent Black girls are at increased risk of negative educational outcomes when they encounter teacher discrimination, even in low levels. Such outcomes result in decreased high school and college graduation rates, lower socioeconomic status, increase health impairment and mental health problems. What’s more, teacher discrimination has been negatively correlated with students’ resiliency and problem-solving. These are two critical cognitive skills that are needed in every aspect of life. Students who lack resiliency and problem-solving are more likely to have decreased efficacy and self-concept, lower grades and increased behavioral problems and depressive symptoms (Blake et al., 2011, Brittian, 2014). As such, integrating prevention and intervention programs in schools that educate teachers and administrators on systemic practices and biases that contribute to the discriminatory experiences of early adolescent Black girls can help create an environment that allows this group to flourish.

**Limitations**

The current study contributed uniquely to the literature in its focus on early adolescent Black girls, psychological outcomes, and investigating the moderating effect of racial socialization. However, there are some limitations that should be noted. First, the current study used a hierarchical multiple regression analysis which is a correlational method of investigation. Therefore, while relationships were found among teacher discrimination and each of the dependent variables causation cannot be made. Another limitation of the current study is that it utilized preexisting data which already contained specific scales and limited the variables which could be investigated for the targeted population. Lastly, although the results were significant, some of the reliability coefficients were below the acceptable .70 alpha level.

**Future Research**
Future studies should consider an in depth look into which questions of teacher discrimination are most influential for early adolescent Black girls. As well, a qualitative investigation to gain an understanding of the perceived discriminatory experiences of early adolescent Black females in the school setting. Although teacher discrimination was reported in the current study, levels were very low, suggesting that a better understanding of the manifestation of discrimination for this group. For example, questions specific to dress code violation and assertiveness may be included. What’s more, a look into which questions

Egalitarianism messages of racial socialization were measured as a moderator and were not found to be significant. Future studies would add to the literature in their investigation of the influence of specific questions within this type of racial socialization. In addition, future research should explore the moderating effect of other forms of racial socialization such as cultural socialization, preparation for bias, and promotion of mistrust on the psychological outcomes of early adolescent Black girls. Also, researchers should investigate the influence of different type of racial socialization experiences across the developmental sequence for Black girls, in an effort to gain an understanding of which form of messages are most beneficial for the psychological outcomes of Black girls at each stage.

This in turn speaks to the homogeneity that has typically been applied to the research of Black children as whole, without aiming to see how Black boys and girls may experience racism and discrimination differently in the school setting. This is quite surprising given the heterogeneity that is applied to Black boys and girls in regards to: development, emotion, cognition, relationships, behavior, and socialization. Why would their perceptions and need for differentiation in understanding their educational and discriminatory experiences be any different?
References


Aspinall, P. J., & Song, M. (2013). Is race a ‘salient…’or ‘dominant identity’ in the early 21st century: The evidence of UK survey data on respondents’ sense of who they are. Social Science Research, 42(2), 547-561.


Constantine, M. G., & Blackmon, S. M. (2002). Black adolescents' racial socialization


self-concept, interest, grades, and standardized test scores: Reciprocal effects models of causal ordering. *Child development, 76*(2), 397-416.


main2012/pdf/2013456.pdf


Table 1.

Scale Information

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<th>Number of Items</th>
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<th>MADICS Cronbach’s Alpha</th>
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*p<.05; **p<.01; ***p<.001
Table 5.

*Hierarchical Regression of Teacher Discrimination Predicting Importance of Race and Connection to Heritage*

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<tr>
<th></th>
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<td>.04</td>
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<td>$\Delta R^2$</td>
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<td></td>
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<tr>
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<td>$F_1 (1, 239) = 12.75^{***}$</td>
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<td>$\Delta$ in F-value for step 2</td>
<td>$F(2, 245)=1.73$</td>
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<td></td>
<td>$F_2 (2, 238) = 14.52^{***}$</td>
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<td>.05</td>
<td>.05</td>
<td>.26**</td>
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<tr>
<td>$F_1 (1, 245) = .86$</td>
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*p < .05, **p < .01, ***p < .001*
Table 6.

Hierarchical Regression of Teacher Discrimination and Racial Identity Predicting Educational Beliefs

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<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>B</td>
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<tr>
<td>Intercept</td>
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<tr>
<td>∆ R2</td>
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<td>0.01</td>
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<td>F (1, 230)</td>
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*p < .05, **p < .01, ***p < .001
Table 7.

Hierarchical Regression of Teacher Discrimination and Racial Identity Predicting Resiliency and Problem Solving & Efficacy to Combat Discrimination

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<tbody>
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<td>SE</td>
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<td>Step 2</td>
<td>B</td>
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</table>

*p < .05, ** P < .01, *** p < .001
Figure 1

PVEST Diagram

- Net Vulnerability
  - Protective Factors
  - Risk Factors

- Net Stress Management
  - Challenges
  - Supports

- Reactive Coping Strategies
  - Adaptive
  - Maladaptive

- Stable Coping Responses
  - Positive
  - Negative

- Life Stage Coping Outcomes
  - Productive
  - Unproductive
Figure 2

Moderation Diagram

Teacher Discrimination → Racial Socialization → Psychological Outcome
Figure 3

Moderation Question 4a
Figure 4

Moderation Question 4b