2015

Assessing the Influence of Black Racial Identity on Perceived Discrimination and Professional Success

Clifton Berwise
University of Rhode Island, clifton.berwise@gmail.com

Recommended Citation

ASSESSING THE INFLUENCE OF BLACK RACIAL

IDENTITY ON PERCEIVED DISCRIMINATION AND

PROFESSIONAL SUCCESS

BY

CLIFTON BERWISE

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE

REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

IN

PSYCHOLOGY

UNIVERSITY OF RHODE ISLAND

2015

MASTER OF ARTS THESIS

OF

CLIFTON BERWISE

APPROVED:

Thesis Committee:

Major Professor: Jasmine Mena

Margaret Rogers

Bryan Dewsbury

Nasser H. Zawia

DEAN OF THE GRADUATE SCHOOL

UNIVERSITY OF RHODE ISLAND

2015

Abstract

Racial discrimination is detrimental to the professional success of Black Americans. Black racial identity can potentially mitigate the harmful effects of discrimination on professional success. The present study attempted to add to the literature exploring the interaction of racial identity and perceived discrimination, to measure its influence on educational attainment and occupational prestige. Using a sample of 365 adult Black Americans from the New England area of the United States, this study examined whether racial identity (i.e., Black private regard and Black centrality) moderated the effect of perceived discrimination stress on (a) educational attainment and (b) occupational prestige using two hierarchical multiple regression models. This study also assessed gender differences between Black males and females in their reports of perceived discrimination stress, racial identity, educational attainment and occupational prestige using two multivariate analysis of variance (MANOVA) models.

Consistent with expectations, racial identity, more specifically Black centrality moderated the effect of perceived discrimination stress on educational attainment. However, results differed from expectations, as racial identity did not moderate the effect of perceived discrimination stress on occupational prestige. Furthermore, Black males reported greater amounts of stress from perceived discrimination, supporting the original hypothesis, but there were no significant differences between men and women in regards to educational attainment or occupational prestige. Future directions in research are discussed in consideration of study limitations.

Acknowledgements

      I would like to extend my gratitude to my major professor, Dr. Jasmine Mena, for granting me the use of her data and also mentoring and guiding me throughout this process. Her support, confidence and dedication helped me grow as a researcher and scholar. I would also like to extend my appreciation to my current thesis members, Dr. Margaret Rogers and Dr. Bryan Dewsbury, as they were integral to the completion of this product. Furthermore, I would also like to extend my gratitude to Dr. Donald Cunnigen for his valuable input and feedback on my thesis proposal.

Table of Contents

List of Tables

List of Figures

Introduction

Racial discrimination is detrimental to the professional success of Black Americans. Racial discrimination toward Black Americans has been shown to influence hiring practices, thus contributing to lower rates of employment (Dickerson, 2007). A study conducted by Brown-Iannuzzi, Payne, and Trawalter (2012) about discrimination in hiring practices concluded that when making hiring decisions, employers often imagine their ideal employee as White. This increases the likelihood of hiring White applicants, since they are a better "fit" for the ideal employee. This latent racial discrimination leaves Black Americans at a professional and economic disadvantage.

Discrimination in school settings has been linked to lower academic achievement among Black Americans (Chavous, Rivas-Drake, Smalls, Griffin, & Cogburn, 2008; DuBois, Burk-Braxton, Swenson, Tevendale, & Hardes, 2002; Fisher, Wallace, & Fenton, 2000). Specifically, some factors impacting academic underperformance include impoverished living/teaching conditions and lower teacher expectations (Lee et al., 2011; Milner, 2007; Noguera, 2003). A study conducted by Neblett, Philip, Cogburn, and Sellers (2006) exploring discrimination in schools found that adolescents who encountered more frequent acts of racial discrimination reported lower grades, lower academic curiosity and lower academic persistence. Not surprisingly, school failure during adolescence contributes to difficulties obtaining well-paying jobs and other struggles in adulthood (Altschul, Oyserman, & Bybee, 2006; Kimbrough & Salomone, 1993).

The effects of discrimination on educational attainment and employment patterns appear to work in tandem to limit the professional success of Black Americans. Negative

consequences associated with limited professional success include fewer social, economic and political opportunities as well as poorer health and quality of life. Given the history of discrimination in all facets of social life, it is not surprising to find that Black Americans have had the lowest household incomes and highest rates of unemployment amongst racial groups, unfortunately, these patterns continue (DeNavas-Walt et al., 2013; U.S. Bureau of Labor Statistics, 2014). Negative consequences associated with school failure and unemployment include financial struggle, increases in anxiety and/or depression, and/or increased substance use (Rosenthal, Carroll-Scott, Earnshaw, Santilli, & Ickovics, 2012).

Black Americans have reported a rise in their socioeconomic class during recent years, a pattern mainly attributed to a rise in the attainment of higher academic degrees (Hunt & Ray, 2012; Landry & Marsh, 2011). Yet, despite these observations, they lag behind their White counterparts in degree attainment. Considering the grave consequences associated with unemployment and underemployment, further research is needed to better understand the variables that contribute to professional success among Black Americans. Educational attainment and occupational prestige are two factors that contribute to professional success in modern day American society (Hunt & Ray, 2012). Educational attainment and occupational prestige are two of the most important variables in American society's indicators of socioeconomic status, yet rarely have these variables been analyzed simultaneously (Hunt & Ray, 2012).

Perceived discrimination, and its associated stress, is a barrier to professional success. In fact, racial discrimination is one of the most salient forms of stress that Black Americans encounter on a daily basis (Anderson, 2012; Kessler, Mickelson, & Williams,

1999; Ong, Fuller-Rowell, & Burrow, 2009; Sanders Thompson, 2002) often contributing to weaker academic performance (Neblett et al., 2006) and increased workplace discomfort (Mays, Coleman & Jackson, 1996). The extant literature on education and discrimination focuses predominantly on the academic performance (i.e., grade point average) of children and adolescents, not on the educational attainment (i.e., highest level of schooling) of adults. Numerous studies have identified racial identity as a factor with the potential to mitigate the harmful effects of discrimination (Miller, 1999; Romero, Edwards, Fryberg, & Orduna, 2014; Sellers, Copeland-Linder, Martin, & L'Heureux Lewis, 2006); however, less is known about the possibility that racial identity may moderate the relationship between discrimination stress and professional success. Seeking a better understanding of the concept of Black racial identity as a variable with the potential to mitigate the harmful effects of discrimination on professional success is one way to begin to weaken this pernicious pattern.

Racial identity has been established as a key element in the success or failure of Black Americans. Understanding the relationships between perceived discrimination stress, Black racial identity, educational attainment and occupational prestige may help explain the large number of Black Americans living in disadvantaged situations (Noguera, 2003). Most studies examining education and perceived discrimination have focused on school-aged populations. However, the current study makes a unique contribution to the extant literature by including the perspectives of an adult Black sample.

What is "Black"?

For the purposes of this study, the term "Black" was used to describe participants

who self-identified as racially Black (i.e., individuals of African descent or the Black diaspora within the United States). Though there are important distinctions between ethnicity and race, the goals of the current study pertained to understanding experiences associated with the Black race among individuals of any ethnicity (e.g., African American, Hispanic, etc…). Since this approach incorporates a large array of ethnicities, it embodies a very heterogeneous group. Varying ethnicities include different cultures, values and potentially different experiences; however, conducting research with this inclusive lens allows for an examination of a shared experience of discrimination in American society.

Black people constitute the second-largest racial minority group in America at 13.1% of the U.S. population (U.S. Bureau of the Census, 2012). It is important to note that one cannot easily describe this group due to the vast heterogeneity within. However, an attempt will be made to point out a few issues with broad representation, salience, or distinction. According to Marable's work, the majority of Black Americans are compared to a "third-world population," living an impoverished and underdeveloped life (as cited in Kimbrough & Salomone, 1993 p. 266). For most, this third-world living is due to limited opportunities, forcing many to accept these conditions as the norm and lose sight of other options.

In contrast, recent research has found that over the past few decades, Blacks increasingly identify themselves as middle class (Harris & Khanna, 2010). Understanding the importance of factors that contribute to increased perception of social mobility is imperative to continue this upward trend.

Racial Discrimination

Racial discrimination involves treating people unfavorably based on prejudiced views about individuals' racial group membership. In American society, Black people experience racial discrimination on a regular basis. Racial discrimination is a continuous driver of Black Americans' distress. Daily discrimination has been shown to act as an immediate stressor, while exacerbating the effects of other secondary stressors (i.e., financial or health difficulties; Ong et al., 2009). Racial discrimination has been associated with numerous negative outcomes, (e.g., increased depression and anger, decreased self-esteem, elevated blood pressure and increased alcohol misuse (Krieger & Sidney, 1996; Richman, Boynton, Costanzo, & Banas, 2013; Seaton & Douglas, 2014; Wong, Eccles & Sameroff, 2003).

Racial discrimination occurs in different venues such as schools and the workplace. For example, Black males are marginalized and stigmatized when they are excluded from rigorous classes or are provided with less encouragement and schoolwork (Noguera, 2003). Another example involves the practice of basing career counseling needs on White middle class America and the lack of promotion of Black applicants (Kimbrough & Salomone, 1993). The previous examples of racial discrimination result in a stifling of the professional success of Black Americans.

In the workplace, racial discrimination stress results in anxiety over job performance, lack of upward mobility in the office and involuntary job loss (Kessler et al., 1999). A study conducted by Mays and colleagues (1996) found that once African American women secured employment, racial discrimination led to stress around work performance, predominantly when securing positions that offered promotions, leading to

a decreased likelihood of obtaining a more prestigious position. More research is needed to understand how racial identity functions as a coping strategy to alleviate racial discrimination stress and promote professional success.

Income and Occupation

Historically, Black Americans have had the lowest household incomes and highest rates of unemployment amongst racial groups and these patterns persist (DeNavas-Walt, Proctor, & Smith, 2013; U.S. Bureau of Labor Statistics, 2014; see Figures 1 & 2). Discrimination in hiring practices, such as only hiring Blacks for blue collar work, contributes to these patterns (Allen & Farley, 1986; Dickerson, 2007; Hoover & Yaya, 2010). The typical Black middle class household has an income between $50,000 and $100,000 and the elite Black middle class household earns an income above $100,000 (Lacy, 2007, as cited by Ward, 2008). In 2011, this accounted for 22.3% and 6.8% of the Black American community, respectively. However these values still lag behind Whites, 30.6% of whom have household middle class incomes and 13.3% of whom have elite middle class household income. These income amounts have risen from previous decades, when Blacks held less prestigious positions. However, income inequalities between White and Black Americans continue to grow at all levels of socio-economic status (Hoover & Yaya, 2010; Schneider, 2013), which can lead to discomfort in the workplace.

Chung and Harmon (1999) conducted a study that examined the perception of occupational opportunity and workplace racial discrimination for Black Americans among a sample of Black college students and high school students. Results showed that students believed there were fewer opportunities for Black people to hold more

prestigious occupations. However, students believed that Black people who acquired more prestigious occupations would report more workplace discriminatory acts than Black people in less prestigious positions. It is important to understand the role that discrimination plays in obtaining and maintaining prestigious occupations for Black Americans.
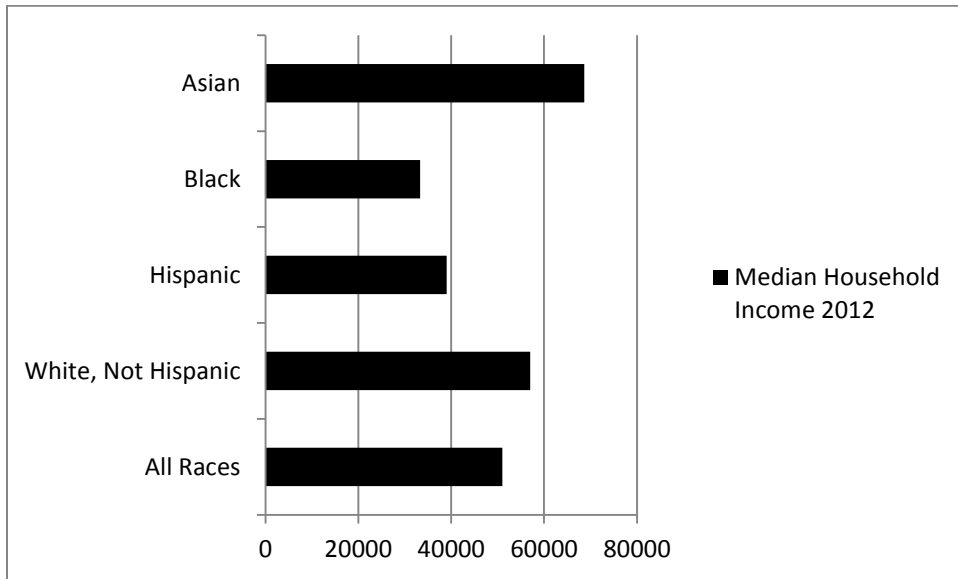
Figure 1. Median American household income by race in 2012.
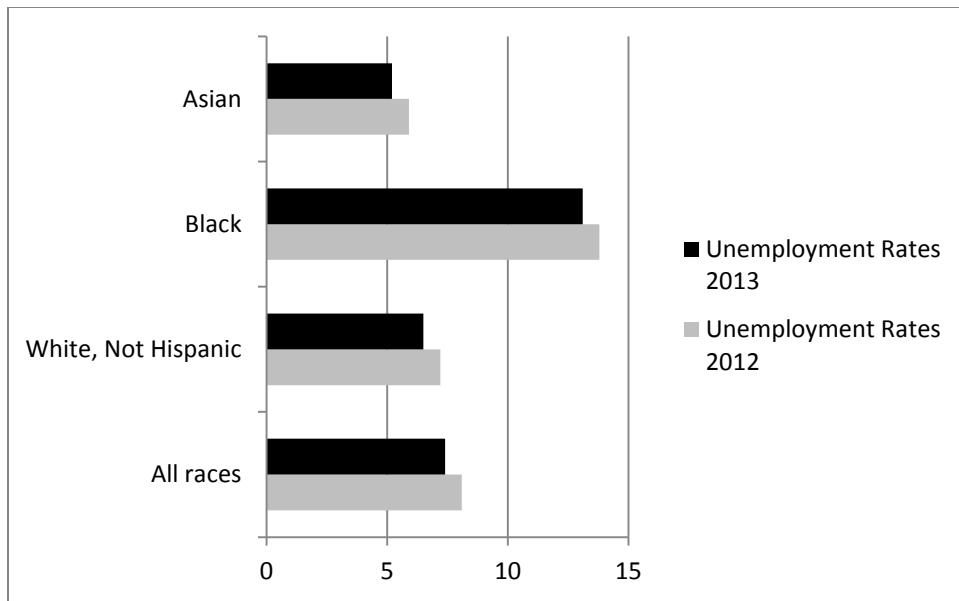
Figure 2. Unemployment rates of Americans by race between the years 2012 and 2013.

Education

Numerous factors contribute to the lower academic performance of Black students including lack of school engagement and/or classroom discrimination (Daresbourg & Blake, 2014; Fordham & Ogbu, 1986; Helms, 2006; Milner, 2007). However, Black students with higher racial centrality (the salience of race to one's identity) scores and higher academic self-concept that were socialized about racial barriers and interracial interactions earned higher grades than Black youth who did not score highly on any of those measures (Chavous et al., 2003; Dotterer, McHale & Crouter, 2009; Witherspoon, Speight, & Thomas, 1997).

Racial identity was also implicated in findings reported by Dotterer and colleagues (2009). Dotterer and colleagues (2009) found that Black students who perceived higher levels of school discrimination and low connection to their racial group had larger grade point average decreases compared to students with a stronger connection

to their racial group. Similarly, Altschul et al. (2006) found that as racial identity strengthened overtime, grades decreased at a slower rate, compared to those with a stable or declining racial identity. These results suggest that racial identity may serve as a buffer against weakened academic performance due to school discrimination. This collection of studies is an indication that Black students with high internal values can succeed academically and a strong racial identity is a contributing factor, though more work is needed to better understand the influence that racial identity has on academic performance and future educational attainment.

Despite an increase in college attendance observed in recent decades (Aud et al., 2013; Garibaldi, 1997; Harvey, 2008), educational attainment in the Black community is still disproportionately low compared to other racial groups. Furthermore, research has shown that some educational attainment scores (i.e., high school graduation or GED completion) do not represent true percentages, as incarcerated individuals are not included and Black males are incarcerated at disproportionately high rates. When incorporating incarcerated Black males, the percentage lacking a high school diploma or its equivalent raises to an estimated 19.2% compared to the reported 14.4% reported in 2010 for non-Hispanic Black males (Ewert, Sykes, & Pettit, 2014). In addition, a study conducted by Hoover and Yaya (2010) investigating educational attainment and income inequality among Blacks, Hispanics and White Americans indicated that Blacks had lower educational attainment scores (9.65 versus 10.35 years of schooling) compared to Whites, contributing to lower overall income.

Black Identity

In 1993, Helms' defined racial identity as "a sense of group or collective identity

based on one's perception that he or she shares a common heritage with a particular group" (as cited by Chavez & Guido-DiBrito, 1999, p. 40). Core aspects of racial identity include: centrality of one's identity, minority status, awareness of racism and private and public regard. Although these labels impact identity, it is difficult to find an operational definition of racial identity (Altschul et al., 2006; Chavous et al., 2003; Cokley & Chapman, 2008).

Physical appearance and social class are often used as "yardsticks" for whether one is Black enough, neglecting the fact that being Black and identifying as Black are different concepts (Harris & Khanna, 2010). Being Black incorporates the phenotypical features associated with Black Americans. Identifying as Black encompasses one's internal feelings about his/her Blackness and how it relates to one's actions or behaviors. A strong Black racial identity can serve as a protective factor during discriminatory or negative situations (Chavous et al., 2003; Dotterer et al., 2009). Black identity has been associated with numerous positive outcomes such as increased self-efficacy, buffering perceived discrimination and building stronger coping skills (Baber, 2012; Sellers & Shelton, 2003; Wong, Eccles, & Sameroff, 2003).

Since there is no consensus on a definition of Black racial identity; the Multidimensional Inventory of Black Identity (MIBI) is recognized for its ability to test various aspects of identity (Sellers, Rowley, Chavous, Shelton & Smith, 1997). As racial identity among Black Americans is a multifaceted experience, the MIBI's multidimensional approach proves valuable in assessing various factors that inform the construct of racial identity. The measure assesses 1) centrality: the extent to which a person defines her or himself with regard to race, 2) ideology: a person's beliefs,

opinions, and attitudes with regard to the way she or he feels that the members of the race should act, and 3) regard: the extent to which individuals feel positively or negatively toward African Americans and their membership in that group (Sellers et al., 1997). This measure offers various distinct views that are integral to the conceptualization of Black racial identity. Despite the difficulty in the construction and measurement of racial identity, understanding this construct seems vital to the professional success of Black Americans.

Gender

Black men and women are socialized differently in terms of the racial identity messages they receive. As such, racial identity socialization moderates how men and women react to experiences of discrimination and ultimately impacts their professional success. Males generally receive more information about racial barriers and females receive more messages about racial pride (Dotterer et al., 2009; Stevenson, McNeil, Herrero-Taylor, & Davis, 2005; Thomas & Speights, 1999). Since there are differing messages, a strong racial identity may affect males and females differently (Chavous et al., 2008).

Boys may adapt to racially discriminatory experiences in school by disengaging with them and minimizing the personal relevance of school (Chavous et al., 2008). In terms of identity, males are more likely to have a pro-Black/anti-White attitude. This attitude possibly serves as a coping mechanism from discriminatory events in school, but often leads to lower GPAs (Witherspoon et al., 1997) and less of a desire for higher levels of educational attainment (Dancy & Brown, 2008; Noguera, 2003). Chavous and colleagues (2008) found, however, that the centrality scores for boys were positively

11

correlated with academic importance and self-concept, demonstrating that a more centralized racial identity denotes an understanding of the importance of academic success for Black males.

Girls report having stronger group identification, which can possibly lead to greater academic resilience relative to boys because of socialization around maintaining positive relationships, including with teachers and faculty (Chavous et al., 2008). Increased group belongingness has been associated with more favorable academic outcomes for African Americans. Walton and Cohen (2007) conducted a study assessing the impact of social belongingness for Black and White first year college students at a small Northeastern college. They found that Black students who felt that their worries about campus belongingness was shared with many upper year students, displayed greater improvement in their college GPA during the fall semester of their second year than Black students who did not believe other shared their worries about campus belongingness. As a follow-up to the previous study, Walton and Cohen (2011) asked those participants to report their GPAs upon their graduation from college and found that the academic performance of Black students in the social belongingness group continued to improve, while the academic performance of those in the control group either maintained or decreased. Although, speaking more generally about group membership, these studies provide evidence that increased messages about group identification can lead to more positive academic outcomes. Since Black females receive more messages about group identification, this may help explain the superior academic performance of Black females' relative to that of Black males.'

It is interesting to note that in a study conducted by Dotterer et.al. (2009), girls

who experienced more discrimination, and had low ethnic identity, had lower school bonding scores. In the same study, boys with stronger ethnic identity had higher school bonding scores, regardless of experiences with discrimination (Dotterer et al, 2009). The findings reported by Dotterer and colleagues lend further support for the premise that gender moderates the experiences of discrimination and racial identity.

Black women have higher rates of college degree attainment than Black men (Krymkowski & Mintz, 2011), resulting in opportunities to earn higher incomes and attain more prestigious occupations than Black men. Furthermore, studies have shown that large numbers of Black men are underemployed, working for pay and/or utilizing skills below expectations, and report a higher prevalence of racism (Jones Johnson, 1990; Kreiger & Sidney, 1996), while Black women deal with the intersection of racial and gender discrimination, often leading to unfavorable outcomes (e.g., fewer opportunities to advance skills or obtain promotional opportunities (Mays et al., 1996). Previous research indicates that gender differences with respect to perceived discrimination, racial identity, educational attainment and occupational prestige may exist, but more research is needed to better understand the gender differences among Black Americans.

In sum, the literature indicates that we need more research that examines the effect of racial identity on racial discrimination and assesses how the two interact to influence professional success in Black Americans. Furthermore, the literature shows that more research needs to be conducted in consideration of gender differences among Black Americans in regards to their racial identity, appraisal/reports of discrimination and professional success.

The Current Study

The current study aims were to measure the moderating effects of racial identity on the relationship between perceived discrimination stress and educational attainment and occupational prestige among a Northeastern Black American sample. Since this community has a high risk of economic disadvantage in the U.S., measuring the effect of perceived discrimination stress, as moderated by racial identity, on professional success can provide a snapshot into one form of coping in our society. Furthermore, this study aimed to add to the literature by elucidating the relationships between racial identity, educational attainment and occupational prestige among Black adults in American society. Also, the study measured gender differences in reports of racial identity, perceived discrimination stress and professional success.

Guiding theory. The ecological systems theoretical framework (Bronfenbrenner, 1994) informed the present study which investigates the connection between racial identity, perceived discrimination, and their combined impact on professional success. Ecological systems theory suggests that development is influenced by the experiences, roles and activities within multiple interacting environmental systems (Bronfenbrenner, 1994; Sameroff, 2010; Spencer, Dupree & Hartmann, 1997; Figure 3). Although there are multiple interacting systems, the current study focused predominantly on the interactions of microsytems and mesosystems. Spencer and colleagues' (1997) phenomenological variant of ecological systems theory (PVEST), suggests that one's perception or self-appraisal of the system has a greater influence than the physical system itself. Therefore, continuous perceived discrimination among Black Americans from microsystems or mesosystems can lead to negative outcomes such as underachievement or lower school

attachment. However, racial identity or receiving positive messages about Black

Americans from parents or peers may buffer negative effects and lead to positive

outcomes.

Chronosystems: e.g., change or stability

Macrosystems: e.g., overarching beliefs
in an ascribed culture

Exosystems: e.g., parent's or spouse's
work place, school

Mesosystems: e.g., interaction
of school, home, workplace

Microsystems: e.g., home,
school, peers, workplace
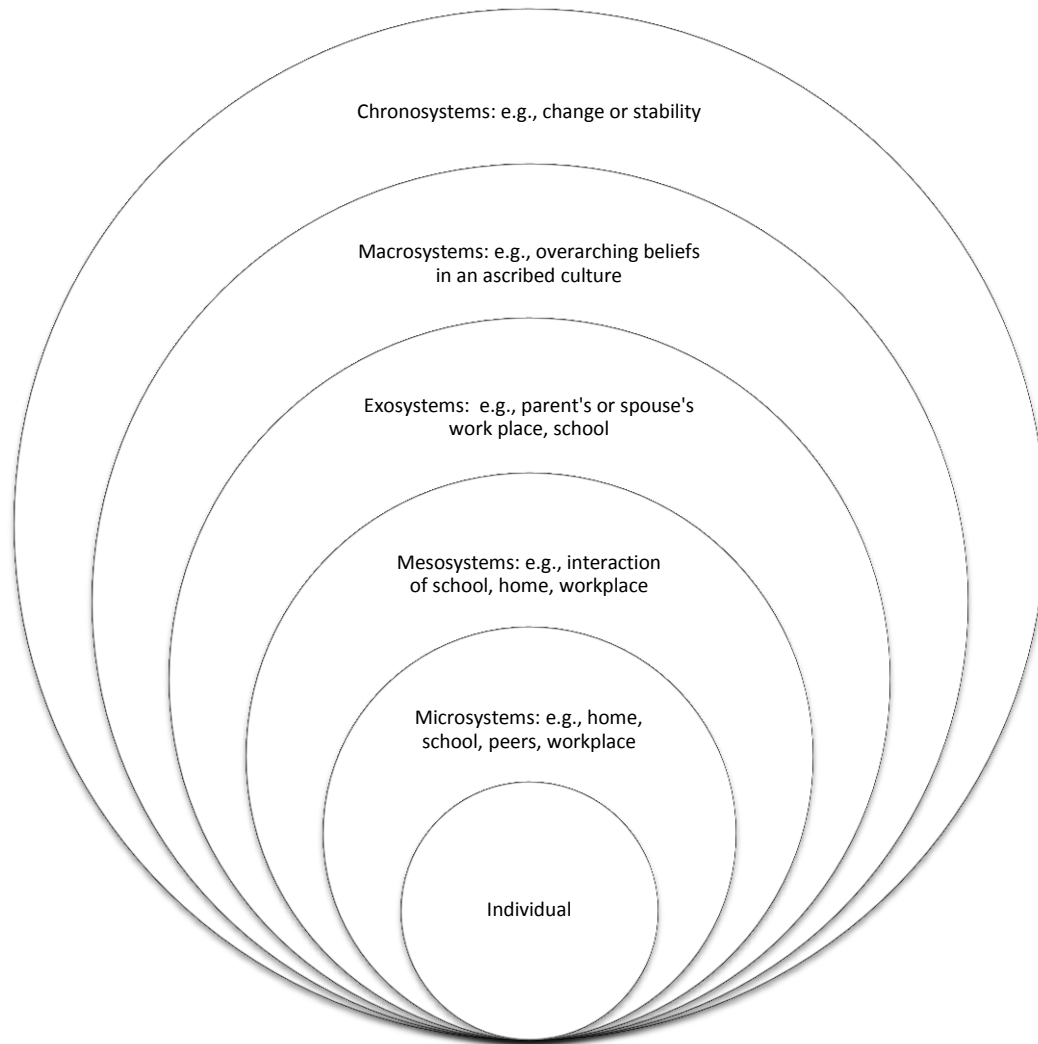
Individual

Figure 3. Bronfenbrenner's Ecological Systems Model of individual interaction.

Study variables. There were six variables in this study. Perceived discrimination stress was the sole independent variable. The three moderating variables were all aspects of Black racial identity and included: 1) Black private regard, 2) Black public regard and 3) Black centrality. Black public regard was initially included in the current study; however, it was removed from the analyses due to problems with the psychometric properties of the measure. The two outcome variables included: 1) educational attainment and 2) occupational prestige. The resulting findings are based on five variables.

Research Hypotheses

The following hypotheses were tested:

1. It was predicted that perceived discrimination stress would be negatively associated with educational attainment

2. It was predicted that perceived discrimination stress would be negatively associated with occupational prestige

3. It was predicted that Black private regard and Black centrality would moderate the relationship between perceived discrimination stress and educational attainment

4. It was predicted that Black private regard and Black centrality would moderate the relationship between perceived discrimination stress and occupational prestige

5. It was predicted that male participants would report higher levels of perceived discrimination stress compared to female participants

6. It was predicted that female participants would report higher educational attainment and would hold positions with higher occupational prestige compared to male participants

Method

Participants

The current study was conducted using a sample of participants originally recruited for another study (Mena, Almond, & Poindexter, 2014). All participants were over the age of 18 and self-identified as racially Black. Purposive sampling (Shadish, Cook, & Campbell, 2002) was used to recruit participants who identified as Black because they could speak to the experiences under exploration in the primary study. Participants were recruited from the New England area via paid use of Survey Sampling International (SSI), a participant recruitment company that collects data for individuals or companies across different mediums (e.g., internet or telephone services). Potential participants sign up to join a participant pool after learning about SSl, (e.g., via SSI's website). After collecting participants in this bank, SSI targeted participants that met study criteria and offered them the opportunity to participate in the study. SSI recruitment services consists of payment per participant recruited to complete the survey.

A total of 365 participants (200 females, 164 males, 1 did not report gender) were included in the current study. Participants ranged in age from 18 to 83 years ($M = 38.95$, $SD = 15.01$). Most participants identified as ethnically non-Hispanic ($N = 246$, 67.4%), while 97 (26.6%) identified as Hispanic. Furthermore, 211 (57.8%) participants reported that they were currently employed. Additional information about participant demographic characteristics is provided in Table 1.

Table 1

Demographics Information of Overall Sample and by Gender

Variables	Overall Mean (SD)/N	%	Male	Female
Age	38.95 (SD = 15.01)		38.82	39.12
Gender				
Male	164	44.9		
Female	200	54.8		
Did not report	1	.3		
Ethnicity				
Hispanic	97	26.6	42	55
Non-Hispanic	246	67.4	109	136
Missing	22	6.0	13	8
Sexual Attraction				
Attracted to Opposite Sex	327	92.4%	147	180
Attracted to Same Sex	20	5.6%	11	9
Attracted to Both Sexes	7	2.0%	3	4
Marital Status				
Single	141	38.6	61	80
In a Relationship	69	18.9	34	35
Married	114	31.2	56	58
Divorced	30	8.2	11	18
Widowed	8	2.2	1	7
Missing	3	.8	1	2
Employment Status				
Employed	211	57.8	107	103
Unemployed	151	41.4	56	95
Missing	3	.8	1	2

Note. N = 365

Procedure

The present study was a secondary data analysis of a study conducted in

accordance with the following procedures. Participants were recruited in summer 2013

after approval by the URI Institutional Review Board. Participants were directed to a

secure and encrypted online survey administration website (SurveyMonkey) where they

completed the study survey. Once participants accessed the site, they were asked the two screening questions: (*Are you 18 years of age or older?* and *Do you identify as Black – any ethnicity including Hispanic?*). Negative responses to either or both screening questions led participants out of the survey to a page thanking them for their interest. Affirmative responses to both screening questions led participants to the informed consent form. After indicating that they understood the consent form, they were presented with demographic questions and the survey. Participants were allowed to skip questions they did not feel comfortable answering. After survey completion, participants were thanked for their participation and directed to a link where they could opt to enter a raffle by submitting their email addresses on a separate site (to protect confidentiality) for a chance to win one of two $50 Amazon gift certificates. Survey completion took between 15-20 minutes. No identifying information or IP addresses were collected.

Instrumentation

     Demographic questions. Participants were asked to indicate various demographic characteristics including age, gender, sexual orientation, marital status, educational attainment, employment status, and current occupation (see Appendix A).

     Schedule of Racist Events Scale. Perceived discrimination stress was measured with the Schedule of Racist Events scale (SRE), a self-report 35-item inventory that assesses the frequency of perceived racist events in one's lifetime, recently, and asks for an appraisal of how stressful the experience was for the participant (see Appendix B; Landrine & Klonoff, 1996). Seventeen items ask how often events occurred utilizing a 6-point Likert scale (1 = *If this has NEVER happened to you*, 6 = *If this has happened more than 70% of the time*). In addition to frequency of event, 17 items ask about how stressful

the situation was utilizing a 6-point Likert scale (1 = *Not at all,* 6 = *Extremely*). One item

asks how s/he perceives her/his life would be different if s/he had not been treated in a

racist and/or unfair way on a 6-point Likert scale (1= *Same as now,* 6 = *Totally different).*

Although the SRE has three subscales, *Recent Racist Events, Lifetime Racist Events* and

Appraised Racist Events, for the purposes of this study, only the *Appraised Racist Events*

subscale was used. Ratings of this subscale are added to obtain a total score ranging from

17 – 102. Higher scores indicate greater perceived stress associated with racist life

events. In previous studies, Cronbach's α has been reported as .95 and split-half

reliability coefficient as .82. Validation studies have also indicated this measure has

adequate concurrent validity (Klonoff & Landrine, 1999; Landrine & Klonoff, 1996). As

presented in Table 2 internal consistency for *Appraised Racist Events* for the current

study, as measured by Cronbach's α, was .97.

      Multidimensional Inventory of Black Identity. Racial identity was measured

using the 21-item MIBI (see Appendix C; Sellers et al., 1997). This measure has three

subscales: *Private Regard, Public Regard* and *Centrality.* Private regard measures how

positive or negative an individual feels toward Black people and being a member of that

group. A sample item in the private regard subscale is, "*I am happy that I am Black.*" A

higher score on this subscale indicates that an individual feels positive toward Black

people and his/her membership in that group. In contrast, public regard refers to the

extent to which an individual feels that others view his/her race positively or negatively.

A sample item in the public regard subscale is, "O*verall, Blacks are considered good by*

others." A higher score on this scale indicates that an individual believes that others view

Black people positively. Centrality measures whether race is a core part of an individual's

self-concept. A sample item in the centrality subscale is, "*Being Black is an important reflection of who I am*." A higher score on this scale indicates that an individual is more likely to define her/himself by her/his racial identity over other identities (e.g., gender or occupation).

All responses used a 7-point Likert scale from (1 = *strongly disagree,* 7 = *strongly agree)*. Each subscale is scored separately. First, reverse scoring of specific items is conducted by subtracting the participant response from eight. After reverse scoring is complete, the average of the scale's scores is calculated and used as the subscale's overall score. The MIBI has well-established face validity because it was conceptualized using the Multidimensional Model of Racial Identity (Sellers et al. 1997). Furthermore, centrality (Cronbach's α =.77) has adequate consistency. Private regard has a relatively low level of internal consistency (Cronbach's α =.60), however it is used here because the cutoff was established at .60 by the developers' research. The developers dropped public regard from the analysis because this factor only had two items; no reliability or validity was reported. Furthermore, although public regard was a subscale originally assessed in this study, it was dropped from the primary analyses because internal consistency ratings were deemed below suitable levels. As presented in Table 2, internal consistency for Black private regard as measured by Cronbach's α was .77 and internal consistency for Black centrality as measured by Cronbach's α was .59.

Table 2

Internal Consistencies of Scales

	Overall Sample	Male	Female
Perceived Discrimination Stress	.97	.97	.97
Private Regard	.77	.77	.77
Centrality	.59	.48	.64

Occupational prestige. All participants were asked their employment status and current occupation. They were allowed to write in their current occupation, which was coded utilizing the Four Factor Index of Social Status (see Appendix D; Hollingshead, 2011). This index utilizes four scales to measure household or individual social status. Past studies have used the Four Factor Index to calculate individual and family statuses in American society through use of education, occupation, sex and marital status (Adams & Weakliem, 2011). For the purposes of the current study, only the occupational scale was used.

To use the occupation scale, each participant's occupation is compared to the extensive Hollingshead (2011) list which categorizes different occupations based on perceived positional prestige (e.g., 1 = *Menial service worker*, 9 = *High Executives* or *Major Professionals*). Original prestige levels were determined in conjunction with the occupation assignments and occupation groups created by the National Opinion Research Center (NORC) and 1970 US Census Bureau. The occupational scale and NORC assignments are highly correlated ($r = .927$; Hollingshead, 2011) which provides support for the convergent validity of the scale.

<center>**Results**</center>

Preliminary Analyses

An *a priori* power analysis conducted in G*power 3.1 for linear multiple regressions fixed model, R^2, deviation from zero analysis revealed that a sample size of 85 would suffice for a moderate effect size, $f = .15$, $\alpha = .05$, $\beta = .80$ and four independent variables. Another power analysis was conducted for MANOVA: Special effects and interactions indicating that a sample size of 158 would be suitable for a moderate effect size, $f^2 = .0625$, $\alpha = .05$, $\beta = .80$ for two groups, one predictor and two response variables. An additional power analysis was conducted for MANOVA: Special effects and interactions indicating that a sample size of 196 was suitable for a moderate effect size, $f^2 = .0625$, $\alpha = .05$, $\beta = .80$ for two groups, one predictor and four response variables. These preliminary analyses indicated that the study was adequately powered to detect effects.

Exploratory data analysis and descriptive statistics were assessed to confirm that the data met assumptions of normality, homoscedasticity, linearity and homogeneity of regressions. Skewness and kurtosis values for perceived discrimination stress, educational attainment and occupational prestige were within normal limits satisfying the assumption of normality for these variables. Evaluation of variances and scatterplots allowed for assessment of the assumptions of homoscedasticity and linearity which were also within normal limits. Assessment of correlations did not indicate multicollinearity between gender, our primary grouping variable, and any dependent variables allowing us to accept the assumption of homogeneity of regressions.

Occupational prestige scores were calculated for those participants who reported being currently employed. Since 53% of participants did not report their employment

<center>23</center>

status, they were not included in the occupational prestige analysis; however they may have been included in the educational attainment analysis if they reported their level of education.

Missing data was found across the perceived discrimination stress variable. Since 14.5% of the data for this variable was missing and found to be missing completely at random, multiple imputation methods were used to replace missing values (Cheveret, Seaman & Resche-Rigon, 2015; Graham, 2009). However, since there were no significant differences in the results when analyses were conducted using the original data set and the multiply imputed datasets, the results reported below are based on the original dataset.

Descriptive statistics for the participants' age, gender, ethnicity, sexual orientation, marital status and employment status are displayed in Table 1. Frequencies for educational attainment and occupational prestige are displayed in Tables 3 and 4 respectively.

Internal consistency analyses (overall sample and by gender) were conducted to assess the psychometric characteristics of the scales used in the current study. Coefficient alphas for perceived discrimination stress, Black private regard and Black centrality variables for the overall sample ranged from .59 to .97. When observed by gender, Coefficient alphas for perceived discrimination stress, Black private regard and Black centrality variables for males ranged from .48 to .97 and for females the range was from .64 to .97. Internal consistencies for all scales for the overall sample and gender groups are displayed in Table 2. Descriptive statistics for these scales are displayed in Table 5. The results of the four main analyses that were conducted to test the study hypothesis are

presented below.

Table 3

Educational Attainment of Overall Sample and by Gender

Attainment Level	Overall Sample (%)	Male (%)	Female (%)
<8th grade	2 (.5%)	2 (1.2)	0 (0.0)
Some HS	21 (5.8%)	7 (4.3)	14 (7.0)
HS/GED	80 (21.9%)	37 (22.6)	43 (21.5)
Some College	142 (38.9%)	69 (42.1)	73 (36.5)
BA/BS	89 (24.4%)	36 (22.0)	52 (26.0)
Graduate Degree	27 (7.4%)	12 (7.3)	15 (7.5)
Did not report	4 (1.1%)	1 (.6)	3 (1.5)

Table 4

Occupational Prestige of Overall Sample and by Gender

Prestige Level	Overall Sample (%)	Male (%)	Female (%)
1	10 (2.7)	6 (3.7)	4 (2.0)
2	11 (3.0)	9 (5.5)	2 (1.0)
3	6 (1.6)	4 (2.4)	2 (1.0)
4	12 (3.3)	7 (4.3)	5 (2.5)
5	29 (7.9)	7 (4.3)	22 (11.0)
6	21 (5.8)	10 (6.1)	11 (5.5)
7	35 (9.6)	20 (12.2)	15 (7.5)
8	35 (9.6)	12 (7.3)	22 (11.0)
9	10 (2.7)	5 (3.0)	5 (2.5)
N/A	196 (53.7)	84 (51.2)	112 (56.0)

Table 5

Descriptive Statistics for Perceived Discrimination and Racial Identity

Variables	N	M	SD	Minimum	Maximum
Perceived Discrimination Stress	312	51.87	25.92	17.00	102.00
Black Private Regard	365	5.31	1.26	1.00	7.00
Black Centrality	365	4.18	1.05	1.00	7.00

Analyses

Pearson correlations were conducted to assess the relationships between perceived discrimination stress and the outcome variables. Two separate hierarchical multiple regression models were conducted, one for each outcome variable. The models measured the effect of perceived discrimination stress, Black private regard and Black centrality on each outcome variable. The interaction effect of perceived discrimination stress and Black private regard and Black centrality were measured to test for a moderation effect on each outcome variable. In addition, two multivariate analysis of variance (MANOVA) models were conducted to test gender differences amongst the outcome variables.

Discrimination and Professional Success

To test the hypothesis that perceived discrimination stress would be negatively associated with educational attainment, Pearson product-moment correlations among the variables were obtained. Perceived discrimination stress was not significantly correlated with educational attainment among the overall sample ($r = .06$, $p = .25$). To test the

hypothesis that perceived discrimination stress would be negatively associated with occupational prestige, Pearson product-moment correlations among the variables were obtained. Perceived discrimination stress was not significantly correlated with occupational prestige among the overall sample ($r = -.09$, $p = .24$).

Significant correlations across the overall sample included the relationship between perceived discrimination stress and Black private regard and perceived discrimination stress and Black centrality. Other significant correlations across the overall sample included the relationship between Black private regard and Black centrality, as well as, educational attainment and occupational prestige. Correlations among the variables for the entire sample are displayed in Table 6. Significant correlations differed when assessing gender differences, (e.g., perceived discrimination stress was significantly correlated with occupational prestige for males ($r = -.13$, $p < .05$), but this correlation was not significant for females ($r = -.01$, $p = .94$)). Correlations among the variables for males and females are provided in Tables 7 and 8, respectively.

Table 6

Correlations Matrix of Perceived Discrimination, Racial Identity and Professional

Success for Overall Sample

Variable	1	2	3	4	5
1. Perceived Discrimination Stress	-				
2. Black Private Regard	-.12*	-			
3. Black Centrality	.34**	.31**	-		
4. Educational Attainment	.06	.06	.05	-	
5. Occupational Prestige	-.09	.05	-.01	.39**	-

Note. N=365, * p < .05, **p < .01

Table 7

Correlations Matrix of Perceived Discrimination, Racial Identity and Professional

Success of Male Subsample

Variable	1	2	3	4	5
1. Perceived Discrimination Stress	-				
2. Black Private Regard	-.14**	-			
3. Black Centrality	.41**	.33**	-		
4. Educational Attainment	.08*	.03	.06	-	
5. Occupational Prestige	-.13**	-.01	-.14**	.39**	-

Note. N=164, * p < .05, **p < .01

Table 8

Correlations Matrix of Perceived Discrimination, Racial Identity and Professional

Success of Female Subsample

Variable	1	2	3	4	5
1. Perceived Discrimination Stress	-				
2. Black Private Regard	-.08*	-			
3. Black Centrality	.30**	.32**	-		
4. Educational Attainment	.05	.08**	.05	-	
5. Occupational Prestige	-.01	.10*	.10*	.36**	-

Note. N=200, * p < .05., **p < .01

Discrimination, Racial Identity and Professional Success

A hierarchical multiple regression was conducted to test the hypothesis that Black private regard and Black centrality would moderate the relationship between perceived discrimination stress and educational attainment (see Figure 4). The dependent variable was educational attainment and the predictor variable in Step 1 was perceived discrimination stress. Black private regard and Black centrality were added in Step 2. Two interaction terms, representing Black private regard x Perceived discrimination stress and Black centrality x Perceived discrimination stress, were added in Step 3. Step 1 of the hierarchical multiple regression did not result in statistically significant results, indicating that perceived discrimination stress accounted for approximately .1% of the variance in educational attainment ($R = .07$, $R^2 = .004$, $F (1, 307) = 1.37$, $p = .24$).

Black private regard and Black centrality were added in Step 2 of the hierarchical multiple regression. Results did not indicate a statistically significant prediction,

indicating that Black private regard and Black centrality accounted for an additional .7% of the variance in educational attainment ($R = .12$, $R^2 = .016$, $F (3, 305) = 1.69$, $p = .17$).

The interactions of Black private regard x Perceived discrimination stress and Black centrality x Perceived discrimination stress were added in Step 3 of the hierarchical multiple regression. In step 3, the interaction effects accounted for an additional 2.1% of the variance, yielding a significant effect on educational attainment ($R = .19$, $R^2 = .036$, $F (5, 303) = 2.35$, $p < .05$). A summary of the hierarchical multiple regression results for educational attainment is displayed in Table 9.

Specifically, the interaction of Black centrality x Perceived discrimination stress significantly contributed to the variance of educational attainment ($B = .006$, $\beta = .79$, $p = .01$). Since there was a significant interaction effect on educational attainment, a simple effect analysis was conducted to clearly define the nature of the interaction. This strategy has been used in past research to clarify the effect of a moderator to examine its effect at two levels (Chao, Wei, Good, & Flores, 2010; West, Aiken, & Krull, 1996). A simple slope regression analysis was conducted to examine the simple slopes for the lower (i.e., one standard deviation below the mean score) and higher (i.e., one standard deviation above the mean score) levels of perceived discrimination stress at the lower (i.e., one standard deviation below the mean score) and higher (i.e. one standard deviation above the mean score) levels of Black Centrality. Figure 5 indicates that the simple slope was significant at higher levels of Black centrality ($B = .01$, $\beta = .16$, $p = .03$), but not at lower levels of Black centrality ($B = -.004$, $\beta = -.11$, $p = .20$). That is, the association between perceived discrimination stress was stronger at higher levels of Black centrality.

A second hierarchical multiple regression was conducted to test the hypothesis

that Black private regard and Black centrality would moderate the relationship between perceived discrimination stress and occupational prestige (see Figure 4). The dependent variable was occupational prestige and the predictor variable in Step 1 was perceived discrimination stress. Black private regard and Black centrality were added in Step 2. Two interaction terms, representing Black private regard x Perceived discrimination stress and Black centrality x Perceived discrimination stress, were added in Step 3. Step 1 of the hierarchical multiple regression did not result in statistically significant results, indicating that perceived discrimination stress accounted for .5% of the variance in occupational prestige ($R = .11$, $R^2 = .012$, $F(1, 145) = 1.74$, $p = .19$).

Black private regard and Black centrality were added in Step 2 of the hierarchical multiple regression. Results did not indicate statistically significant results, indicating that Black private regard and Black centrality decreased the amount of variance accounted for in occupational prestige by .6% ($R = .12$, $R^2 = .015$, $F(3, 143) = .72$, $p = .54$).

The interactions of Black private regard x Perceived discrimination stress and Black centrality x Perceived discrimination stress were added in Step 3 of the hierarchical multiple regression. In step 3, results did not indicate a statistically significant interaction effect, as the model further decreased the amount of variance accounted for in occupational prestige by 2% ($R = .12$, $R^2 = .015$, $F(5, 141) = .43$, $p = .83$). A summary of the hierarchical multiple regression results for occupational prestige is displayed in Table 10.

Table 9

Summary of Hierarchical Multiple Regression with Perceived Discrimination Stress and

Black Racial Identity as Predictors of Educational Attainment

Variable	R	R^2	ΔR^2	F^a	p
Step 1	.07	.004	.001	1.37	.24
Perceived Discrimination Stress					
Step 2	.13	.016	.007	1.69	.17
Perceived Discrimination Stress					
Black Private Regard					
Black Centrality					
Step 3	.19	.036	.02	2.29	.046
Perceived Discrimination Stress					
Black Private Regard					
Black Centrality					
Perceived Discrimination Stress* Black Private Regard					
Perceived Discrimination Stress * Black Centrality					

Note. N = 308, For Step 1, $F(1, 307)$; For Step 2, $F(3, 305)$

Table 10

Summary of Hierarchical Multiple Regression with Perceived Discrimination Stress and

Black Racial Identity as Predictors of Occupational Prestige

Variable	R	R^2	ΔR^2	F^a	p
Step 1	.11	.012	.005	1.74	.19
Perceived Discrimination Stress					
Step 2	.12	.015	-.006	.718	.54
Perceived Discrimination Stress					
Black Private Regard					
Black Centrality					
Step 3	.12	.015	-.02	.431	.83
Perceived Discrimination Stress					
Black Private Regard					
Black Centrality					
Perceived Discrimination Stress * Black Private Regard					
Perceived Discrimination Stress * Black Centrality					

Note. N = 146, For Step 1, F (1, 145); For Step 2, F (3, 143)
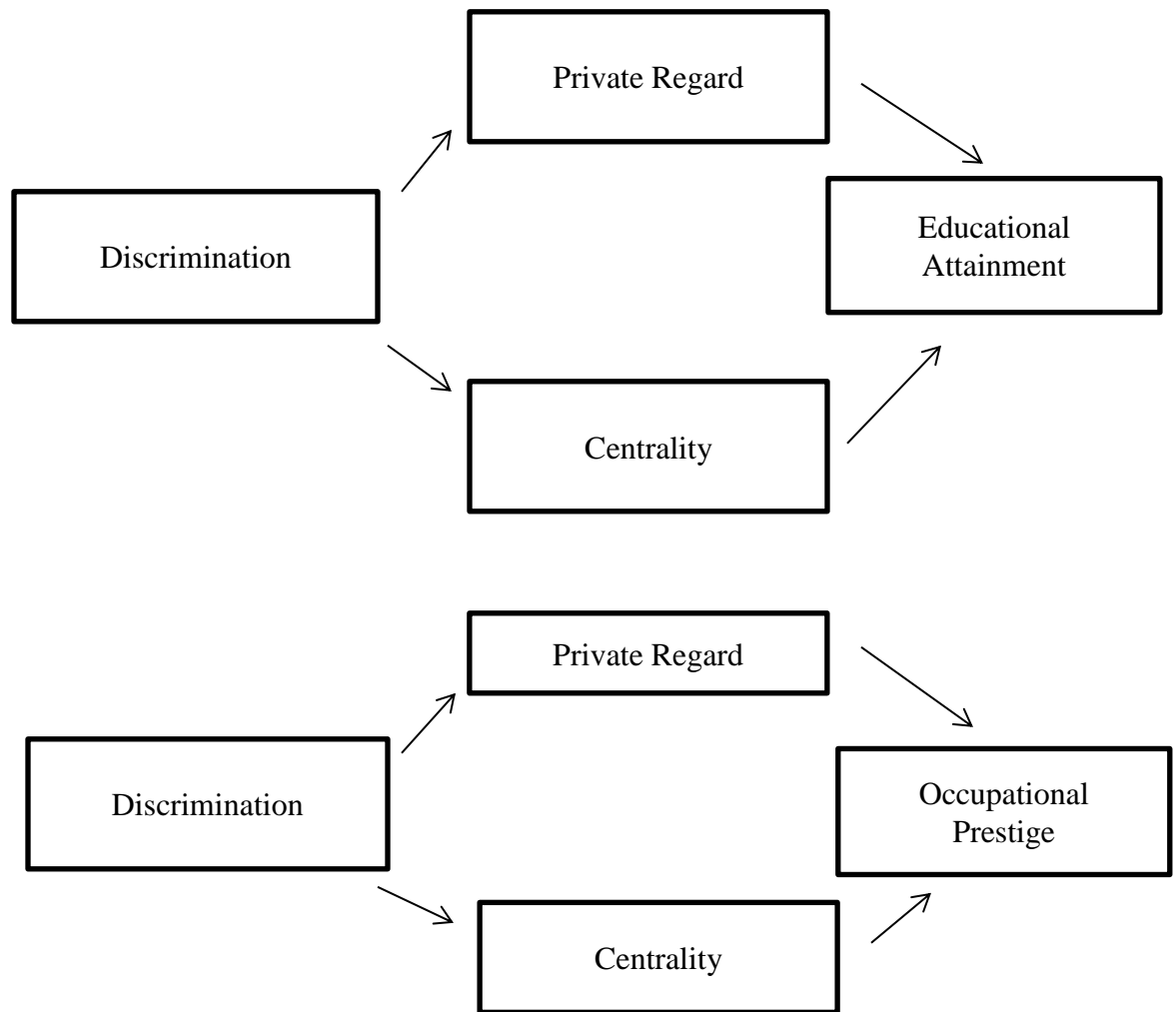
There were two outcome variables, thus two separate hierarchical multiple regressions were conducted. The effect of discrimination, and the individual elements of identity on each outcome were measured in step one. The interaction effect of discrimination and each element of identity were measured to test for a moderation effect on each outcome variable.

Figure 4. Moderation models predicting the impact of discrimination and racial identity on educational attainment and occupational prestige.
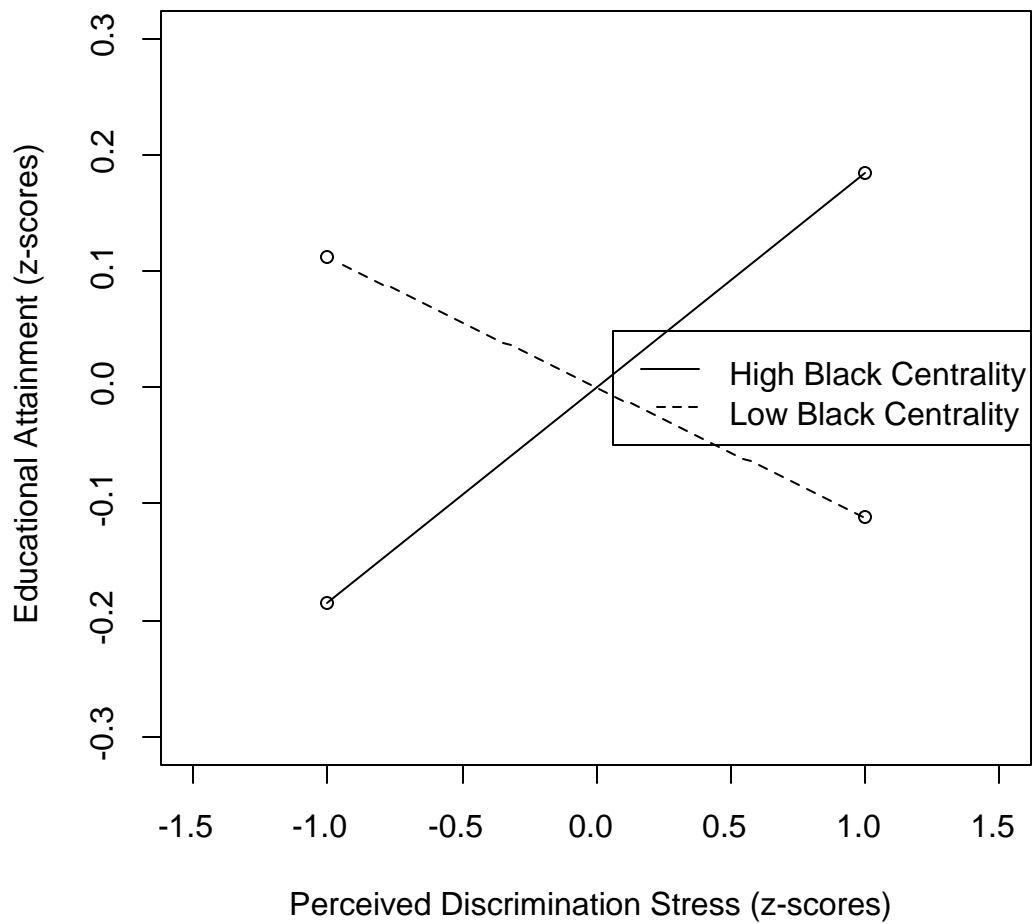
Figure 5. Simple slope regression interaction effects of perceived discrimination stress

and Black centrality on educational attainment, with Black centrality as a moderator.

Gender, Discrimination and Professional Success

Two separate one-way multivariate analyses of variance (MANOVA) tests were conducted to investigate the relationship between gender and perceived discrimination stress, educational attainment and occupational prestige. In the first MANOVA, the independent variable was gender and the dependent variables were perceived discrimination stress, Black private regard and Black centrality. The MANOVA yielded significant results, $F(3, 307) = 3.32$, Wilks' Lambda $= .97$, $p = .02$, partial $\eta^2 = .03$. Follow-up tests revealed that the effect of gender was significant for perceived discrimination stress, $F(1, 310) = 7.09$, $p < .05$, $R^2 = .02$. Using the guidelines provided by Cohen (1988) where effect size estimates are interpreted as small (.01), medium (.06), and large (.14), the effect size yielded by this test represents a small effect. The results did not reach significance for Black private regard or Black centrality.

In the second MANOVA, the independent variable was gender and the dependent variables were educational attainment and occupational prestige. The MANOVA did not produce significant results, $F(2, 162) = 2$, Wilks' Lambda $= .98$, $p = .14$, partial $\eta^2 = .02$. Since the main effect was not significant, follow up tests were not conducted.

Discussion

Racial discrimination is associated with adverse effects on the academic performance (Hope, Skoog & Jagers, 2015) and occupational success (Pager & Western, 2012) of Black Americans. Racial identity has been identified as a potential buffer or moderator of the effect of racial discrimination (Banks & Kohn-Wood, 2007; Jones, Lee, Gaskin & Neblett, 2014; Romero et al., 2014). The current study sought to assess the influence of racial identity as a moderating factor on the impact of perceived discrimination stress as it influenced educational attainment and occupational prestige in a sample of Black American adults.

The present study adds to the dearth of knowledge about the interaction between racial identity and discrimination and particularly how these variables influence the professional success of Black American adults. This population is infrequently studied in the literature regarding levels of educational attainment and occupational prestige. The phenomenological variant of the ecological systems theory (Spencer et al., 1997) helped guide this research, stating that the self-appraisal of interacting systems in one's life has a greater influence than the actual systems themselves. The specific part of the theory most relevant to the study involved assessing the interaction of the perceptions of discrimination and identity within the micro and mesosystems of individual participants. Since, the current study assessed perception of identity and perceptions of discrimination stress, the PVEST framework was sufficiently informative as appraisal of systems were evaluated, not physical systems.

Variables associated with professional success need to be identified and addressed within the Black American community, as they are a historically marginalized group

whose educational attainment and occupational prestige outcomes consistently lag behind

the majority group in the U.S. Furthermore, when seeking to examine professional

success among Black Americans, few studies examine educational attainment and

occupational prestige simultaneously, as in this study. This strategy provides a more

accurate assessment of the overall impact of perceived discrimination and the role of

racial identity on the professional success of Black American adults.

Results demonstrate that perceived discrimination stress was not significantly

correlated with educational attainment for the overall sample, contrary to the original

hypothesis. These results counter what was found by Wong et al. (2003) who reported

findings that there was a negative correlation between discrimination and ratings of

academic motivation and belief in academic competence in Black adolescents. These

results may have been impacted by some form of selection bias, as participants completed

a computer survey, indicating an increased likelihood of a generally more affluent

sample. Furthermore, the results may have been impacted by the high education level of

this sample which is more representative of the middle class. Vincent, Rollock, Ball &

Gillborn (2013) found Black Americans from middle class backgrounds were more likely

to receive socialization messages about racial discrimination, thus leading to lower levels

of perceived distress and potentially leading to the non-statistically significant impact on

educational attainment in the current study. Since the mean educational attainment of this

sample was having "some college," these individuals could have perceived

discriminatory acts as less of a barrier to their educational attainment. Also, as

individuals reached higher levels of educational attainment, they may have created better

coping skills to deal with discriminatory acts and appraise the act to a lower severity,

such as forming formal and informal networking groups (Grier-Reed, 2013) or having a strong identification with a religious faith (Hayward & Krause, 2015). However, it is important to note, that perceived discrimination stress was significantly correlated with educational attainment when only assessing correlations for males, despite not being significant for the overall sample. This signifies that perceived discrimination stress may influence the educational attainment of males differently than it does for females.

Results also demonstrate that perceived discrimination stress was not significantly correlated with occupational prestige, contrary to the original hypotheses. These results counter what was found by Din-Dzietham et al. (2004). Din Dzietham and colleagues found that 62% of African Americans reported workplace discrimination, evident by lack of opportunity and growth, causing distress. These results may have been influenced by the sample's occupational prestige status being above the mean status of Black Americans. Participants with more prestigious positions may have appraised discriminatory acts against them as less of a barrier to their fulfillment of prestigious occupations compared to those in less prestigious positions. Also, Black Americans in more prestigious occupations may value the positive accomplishments and look at their successes as accolades that are both individual and for the Black community, which in turn may serve as a buffer for ambiguous discriminatory events (Carson, 2009; Wingfield & Wingfield, 2014), allowing less room to appraise discriminatory actions as negatively. However, it is important to note, that perceived discrimination stress was significantly correlated with occupational prestige when only assessing correlations for males, despite not being significant for the overall sample. This signifies that perceived discrimination stress may influence the occupational prestige of males differently than it does for

females.

Of further consideration is the potential impact that stereotype threat could have played in this study. Stereotype threat is defined as a situation in which a member of a group fears that his or her performance will perpetuate a negative stereotype about his or her group (Steele & Aronson, 1995; Wasserberg, 2014). As most participants had above average occupational prestige status and/or educational attainment scores, they may have been less likely to classify negative school or workplace experiences as discrimination, and more likely to attribute these experiences to the stereotype that Black Americans (as themselves) perform worse in school or in the workplace. This could have been a potential confounding variable in the present study, as these attributions possibly moderate the appraisal of racially discriminatory experiences in this sample.

As hypothesized, the results of the study demonstrate that racial identity, specifically Black centrality, appears to moderate the effect of perceived discrimination stress on educational attainment. These results support findings reported by Ani (2013) who discussed "African hope theory," indicating that among high achieving Black children, a focus on racial/ethnic identity led to functional academic behavior. These results also supported findings reported by Marsh (2012), who found that young high-achieving Black women were able to maintain and use their racial identity as motivation to succeed academically currently and in the future. It is important to note that on its own, perceived discrimination stress did not have a significant association with educational attainment, but when paired with Black centrality, the interaction led to significant results in the moderation model. More specifically, at higher levels of perceived discrimination stress, individuals with high Black centrality had significantly higher levels of

educational attainment, compared to those with lower Black centrality. This indicates that Black centrality has a positive influence on educational attainment when individuals perceive more discrimination stress. However, at low levels of Black centrality, the relationship between educational attainment and perceived discrimination stress is not meaningful (see Figure 5).

It is also noteworthy to highlight the difference in psychometric reliability of the centrality subscale between the two gender groups. For females, the coefficient α was .64 and for males, it was .49. Since centrality measures how salient race is to one's overall identity, the increased reliability of this scale for females provides further evidence that Black females received more socialization messages about racial pride than Black males. Since females learn about racial pride, there is an increased likelihood they will appraise race as a stronger part of their identity. In contrast,, if males receive more socialization messages about racial barriers, there is a decreased likelihood of making race a core part of their identity. This conclusion coincides with longitudinal study findings reported by Richardson et al., (2014) about the impact of socialization and experiences with racial discrimination on racial identity among Black adolescents. Results indicate that in a cluster analysis that yielded four different groups, Black males were over-represented in the low centrality, low private regard and average public regard cluster, as they were found to experience more frequent discrimination and were less likely to receive coping messages from their parents. These findings provide evidence that Black males may appraise race as less central to their identity because of fewer messages about racial pride.

Counter to what was hypothesized in the current study, the results demonstrate

that racial identity does not appear to moderate the effect of perceived discrimination stress on occupational prestige. It is important to note that on its own, perceived discrimination stress did not have a significant interaction with occupational prestige, which could have contributed to the lack of a significant interaction in the moderation model. Furthermore, 53% of the sample did not report employment status for an assortment of reasons (e.g., retired, students, did not specify most recent occupation). This lowered the power to detect effects and could have weakened the effect of the moderation model on occupational prestige. In addition, the participants in this group may have had additional resources that contributed to their success aside from racial identity. Resources such as higher household income as a child, more access to reading materials (Vincent et al., 2013) and internal qualities such as being an adaptive perfectionist (Elion, Wang, Slaney & French, 2012) have been found to influence the occupational prestige of Black Americans.

Furthermore the results of the study offered support for gender differences among this sample. Black males reported a greater amount of perceived discrimination stress than Black females. This supports the results published by Dottolo and Stewart (2008) and Banks, Kohn-Wood, and Spencer (2006) who found that many middle aged Black adults were more worried about their sons and the unfair treatment they would receive from institutions and officials, (e,g., police officers) and that Black men reported more everyday discrimination than Black women. Black men perceive a greater negative impact associated with discriminatory acts compared to Black females. This may be associated with Black males' constantly being perceived as a threat or more violent just because of their appearance, therefore causing others to exhibit more discriminatory

behaviors toward them, such as rejecting them from jobs (Corprew & Cunningham, 2011). Also, this finding may be related to the racial socialization messages that Black males receive, which prompt them to be more sensitive to discriminatory acts against them (Chavous, 2008; Dotterer, 2009). These results have implications that speak to the importance for Black males to develop more positive coping skills that could act as a buffer against the high levels of discrimination and associated stress that they consistently face in American society. However these results also provide evidence of how distressing the environment and society can be for Black males.

The results also demonstrate that compared to Black males, Black females did not report higher levels of professional success, as measured by the combined effect of educational attainment and more prestigious occupations. This result counters the findings that Black males lag behind Black females in educational achievement (Harper, 2006; Strayhorn, 2010). Past research has found that it appears that Black females have developed skills that help them obtain more professional success in American society. Research has identified social support, self-help coping and self-determination as some of these skills (Linnabery, Stuhlmacher, & Towler, 2014; Seawell, Cutrona & Russell, 2014; Thomas, Hoxha & Hacker, 2013). It is important to get a better understanding of how these factors as well as others contribute to Black females' success and create interventions to foster the growth of the overall Black American community. Due to the abundance of research that supports females' higher educational attainment and more prestigious occupations, it is imperative to consider the small sample size in occupational prestige analyses as a contributing factor to the lack of significant findings. Furthermore, the high educational attainment and occupational prestige of the overall sample could

have masked gender differences present in a more representative sample.

Notably, when looking at overall gender differences, in males, perceived discrimination stress had significant correlations with all other variables, Black private regard and occupational prestige being negative correlations. This supports previous research indicating that Black males are more heavily impacted by racial discrimination than Black females (Brodish, et al. 2011; Jenkins, 2006; Noguera, 2003). For Black females, Black private regard was found to have a significant correlation with all other variables, while it only had a statistically significant correlation with Black centrality among males. This finding may indicate that how Black female participants felt about their racial group significantly impacts their professional success and perception of discrimination. In contrast, for Black males, how they feel about their racial group had little to no bearing on their professional success and/or perception of discrimination stress. Also, the occupational prestige ratings for Black females had statistically significant positive correlations with all other variables aside from perceived discrimination stress. This supports previous literature that Black females endorse greater messages of racial pride in their racial identity compared to Black males (Chavous, 2008; Thomas, Hoxha & Hacker, 2013).

These findings indicate that more research examining gender difference among Black samples is needed. Further analyses based on gender differences were not conducted in the current study because this would exceed the scope of the original hypotheses. However, since these results were discovered as planned analyses were conducted, it was important to introduce these noteworthy findings. Finally, this study was not adequately powered to conduct separate gender-based moderation analyses.

Limitations

Secondary data analysis precludes the ability to collect additional data that would be valuable to questions under study. For example, perceptions about discrimination in the school setting, longitudinal data collection, qualitative descriptions about participant experiences, data about the resources available at their respective schools, or other barriers that may have impeded educational attainment and/or occupational prestige. Also, since this is an adult population, we have no measure of geographic location of schooling. We have no knowledge of participants' past economic status and how that influenced their perceived discrimination stress or racial identity. Future research should gather longitudinal qualitative data about participant experiences to better capture the resources and barriers these individuals encountered as a student and in the workforce.

The sample used in the current study was an atypical representation of Black Americans. The sample had above average mean scores in both the educational attainment and occupational prestige scales, which could have contributed to skewed ratings of perceived discrimination stress and racial identity. This could be attributed to the nature of recruitment for this study, consisting of willing participants with the time and resources to complete an online electronic survey, likely from their own home. As the sample participants were selected from a bank compiled by the recruitment company, and then targeted based on the needs of the researchers, these participants' desire to participate in online research resulted in a highly specific sample and does not mirror the general population of Black Americans. Future research should strive to seek opportunities to gain a more representative sample of Black Americans, possibly by proactively recruiting in different community settings such as churches, community

recreational centers and/or barber shops and beauty salons.

The low internal consistency estimate of the Black centrality subscale of racial identity was another limitation of the study. Since the Cronbach α was .59, the reliability of the scale is below optimal. Scales with low internal consistency are prone to more standard error which could have contributed to the non-significant results in the current study. Further studies should incorporate measures of identity with more internally consistent subscales to reduce the amount of error accounted for in analyses. Furthermore, the measure used to calculate occupational prestige has not been updated since the 1970s. Although, it still appeared to rank positions fairly, the list of occupations mentioned in the Hollingshead four factor index of social status (Hollingshead, 2011) did not incorporate more modern occupations which were excluded from analyses involving occupational prestige and reduced the overall power of the study. Future research should seek to create or incorporate a more current occupation rating scale, allowing for more accurate levels of occupational prestige.

In addition, adults 18 years old and older were recruited for the primary study; therefore a wide range of age-related perspectives is incorporated into one analysis. Only 47% of the participants reported occupations that could be coded into the prestige measure. The other 53% of participants were excluded from occupational prestige analyses, reducing the power of those models. Since there was such a wide age range for this study, there can be various reasons for not reporting current occupation (e.g., students, retirement, etc…), grouping the participants into age groups would also help clarify the lack of occupational reporting and maximize the sample size of the participants. Future studies should focus on samples of specific age groups to assess

differences in patterns longitudinally across age groups.

Also, the current study found non-significant results for the overall sample across multiple analyses but significant results when evaluating individual gender groups. Future studies should run separate analyses to assess differences between gender groups.

Finally, the sample was limited to the Northeast geographic region. Future studies should be conducted measuring these constructs across all regions of the US, as one's experience in the Northeast can be vastly different from one's experience in the South or elsewhere.

Implications

Despite the study's limitations, it has provided insight into the impact of perceived discrimination stress, racial identity, gender and their impact on professional success, specifically for Black American adults, a population that is underrepresented in research. Results have shown that Black Americans who have more advanced educational attainment and/or higher occupational prestige, report lower amounts of stress from racially discriminatory acts. This finding implies that there are other factors that contribute to coping with discriminatory experiences, predominantly for professionally successful Black Americans. We can learn from these individuals' coping styles when creating interventions to work with other Black Americans who appraise racial discrimination as more stressful. Results can also inform community programs on how perceptions of discrimination stress and aspects of Black racial identity (i.e., Black centrality) are moderated by gender. These results highlight the positive effects associated with Black females who have a positive Black identity, but has also helped further identify the need for more factors that contribute to resiliency in males due to

discrimination stress. This study adds to a limited amount of literature highlighting systemic/environmental based factors that contribute to the professional success/failure of Black Americans. Finally, this study increases awareness of societal influences, such as, the detrimental impact discrimination has on professional success rather than "blaming the victim," deficit-oriented approaches.

Future Directions

The present study is among the first to explore variables related to both educational attainment and occupational prestige in a sample of Black Americans. Furthermore, the study contributes to the limited knowledge about the interaction of racial identity and perceived discrimination in this population. Future examinations should strive to incorporate a larger sample of Black Americans located in geographically diverse areas. Overall, larger samples would likely strengthen research findings, increase power, and increase the external validity of the findings.

Since race is such a broad construct and the Black race incorporates many different ethnicities, future examinations should assess the difference between ethnic groups (e.g., Hispanics, Caribbean American or African American) to assess group differences in professional success. Also, since the study consisted of participants who were predominantly of a higher educational attainment or more prestigious occupations, future research should categorize two separate groups for educational attainment (e.g., low attainment versus high attainment) and two separate groups for occupational prestige (e.g., low prestige versus high prestige). Analyses should be conducted between each of these four groups to assess any differences in perceived discrimination or racial identity. Further assessment of these groupings would help distinguish between differences in

more professionally successful groups of Black Americans and less professionally successful groups of Black Americans.

Furthermore, gender played a significant role as a moderator for reports of discrimination and racial identity. Future research should conduct separate analyses by gender evaluating the moderating effect of racial identity on perceived discrimination as indicated by professional success outcomes. These results may contribute to the literature about the differential effects of discrimination of Black males and Black females. Finally, given that the current study did not indicate racial identity as a significant moderator of the relationship between perceived discrimination and occupational prestige among Black Americans, investigators should try to identify other variables that function as moderators amongst this population in order to determine factors that serve important functions in their professional success.

Conclusion

The present study attempted to add to the literature exploring the interaction of racial identity and perceived discrimination and to measure its influence on educational attainment and occupational prestige. Differing from expectations, racial identity did not moderate the effect of perceived discrimination stress on occupational prestige but did for educational attainment. Furthermore, reporting more stress from racial discriminatory events did not correlate with lower educational attainment or less prestigious occupations. However, consistent with previous findings, gender differences were found between males and females on reports of perceived discrimination stress, but not for educational attainment and occupational prestige.

The present study demonstrates that multiple environmental factors relate to the

professional success of Black Americans. There are many studies that detail the impact of

discrimination on Black Americans, but few that discuss factors that contribute to

positive outcomes in this population. The use of alternative research methods to assess

the influence of variables such as discrimination, racial identity and other factors on the

outcomes of Black Americans is important. Future studies should examine the differences

between ethnicity, socioeconomic status and gender groups to assess their varied impact

on the lives of Black Americans to better inform interventions for this population. In fact,

since there are so many different variables that contribute to the overall success or failure

of Black Americans' professional success, it is important to learn how they interact to

create the most effective community and individual interventions for Black Americans.

Appendix A
Demographic Questions
The following questions ask you about personal demographics:

1. What is your current age? _____

2. What is your gender?
   - ☐ Male
   - ☐ Mostly Male
   - ☐ Intersex
   - ☐ Mostly Female
   - ☐ Female
   - ☐ I choose not to answer

3. What is your race? _____

4. What is your ethnicity? _____

5. What is the highest level of education you have achieved?
   - ☐ 8th grade or less
   - ☐ Some high school but did not graduate
   - ☐ High School Diploma/GED
   - ☐ Some college (e.g. one year, associate degree)
   - ☐ College degree (e.g. Bachelor's Degree)
   - ☐ Graduate degree and/or Professional degree (e.g. MA, MS, PhD)

6. Are you currently employed?
   - ☐ Yes
   - ☐ No

6a. If yes, what is your current occupation? _____

7. How would you describe your sexual orientation?
   - ☐ Only attracted to women
   - ☐ Mostly attracted to women
   - ☐ Equally attracted to men and women
   - ☐ Mostly attracted to men
   - ☐ Only attracted to men
   - ☐ I choose not to answer

8. What is your current relationship status?
   - ☐ Single
   - ☐ In a relationship
   - ☐ Married/Partnered
   - ☐ Divorced/Separated
   - ☐ Widowed

Schedule of Racist Events (SRE)

Please think about your ENITRE LIFE, from when you were a child to the present. For each question, please circle the number that best captures the things that have happened to you.

Use these numbers:
   Circle 1 = If this has NEVER happened to you
   Circle 2 = If this has happened ONCE IN A WHILE (less than 10% of the time)
   Circle 3 = If this has happened SOMETIMES (10-25% of the time)
   Circle 4 = If this has happened A LOT (26% - 49% of the time)
   Circle 5 = If this has happened MOST OF THE TIME (50 – 70% of the time)
   Circle 6 = If this has happened ALMOST ALL OF THE TIME (more than 70% of the time)

For the question "How stressful was this for you" Use these numbers 1 (Not at all) to 6 (Extremely)

1. How many times in your entire life have you been treated unfairly by teachers and professors because you are Black?

   How stressful was this for you? 1 2 3 4 5 6

2. How many times in your entire life have you been treated unfairly by your employers, bosses and supervisors because you are Black?

   How stressful was this for you? 1 2 3 4 5 6

3. How many times in your entire life have you been treated unfairly by your coworkers, fellow students and colleagues because you are Black?

   How stressful was this for you? 1 2 3 4 5 6

4. How many times in your entire life have you been treated unfairly by your people in service jobs (store clerks, waiters, bartenders, bank tellers and others) because you are Black?

   How stressful was this for you? 1 2 3 4 5 6

5. How many times in your entire life have you been treated unfairly by strangers because you are Black?

   How stressful was this for you? 1 2 3 4 5 6

6. How many times in your entire life have you been treated unfairly by people in helping jobs (doctors, nurses, psychiatrists, case workers, dentists, school counselors, therapists, social workers and others) because you are Black?

How stressful was this for you? 1 2 3 4 5 6

7. How many times in your entire life have you been treated unfairly by neighbors because you are Black?

   How stressful was this for you? 1 2 3 4 5 6

8. How many times in your entire life have you been treated unfairly by institutions (schools, universities, law firms, the police, the courts, the Department of Social Services, the Unemployment Office and others) because you are Black?

   How stressful was this for you? 1 2 3 4 5 6

9. How many times in your entire life have you been treated unfairly by people that you thought were your friends because you are Black?

   How stressful was this for you? 1 2 3 4 5 6

10. How many times in your entire life have you been accused or suspected of doing something wrong (such as stealing, cheating, not doing your share of the work, or breaking the law) because you are Black?

    How stressful was this for you? 1 2 3 4 5 6

11. How many times in your entire life have people misunderstood your intentions and motives because you are Black?

    How stressful was this for you? 1 2 3 4 5 6

12. How many times in your entire life did you want to tell someone off for being racist but didn't say anything?

    How stressful was this for you? 1 2 3 4 5 6

13. How many times in your entire life have you been really angry about something racist that was done to you?

    How stressful was this for you? 1 2 3 4 5 6

14. How many times in your entire life were you forced to take drastic steps (such as filing a grievance, filing a lawsuit, quitting your job, moving away, and other actions) to deal with some racist thing that was done to you?

    How stressful was this for you? 1 2 3 4 5 6

15. How many times in your entire life have you been called a racist name like n_____, coon, jungle bunny or other names?

How stressful was this for you? 1 2 3 4 5 6

16. How many times in your entire life have you gotten into an argument or a fight about something racist that was done to you or done to somebody else?

    How stressful was this for you? 1 2 3 4 5 6

17. How many times in your entire life have you been made fun of, picked on, pushed, shoved, hit or threatened with harm because you are Black?

    How stressful was this for you? 1 2 3 4 5 6

18. How different would your life be now if you HAD NOT BEEN treated in a racist and unfair way:

    Same as now=1
    A little different=2
    Different in a few ways=3
    Different in a lot of ways=4
    Different in most ways=5
    Totally different=6
    In your entire life?

Revised Multidimensional Inventory of Black Identity (MIBI)

Please answer to what extent you agree or disagree with the following statements regarding your racial identity. Use the following 7-point scale:

1. *Overall, being Black has very little to do with how I feel about myself.
    1   2   3   4   5   6   7
    (Strongly disagree)   (Strongly agree)

2. In general, being Black is an important part of my self-image.
    1   2   3   4   5   6   7
    (Strongly disagree)   (Strongly agree)

3. My destiny is tied to the destiny of other Black: people.
    1   2   3   4   5   6   7
    (Strongly disagree)   (Strongly agree)

4. *Being Black is unimportant to my sense of what kind of person I am.
    1   2   3   4   5   6   7
    (Strongly disagree)   (Strongly agree)

5. I have a strong sense of belonging to Black people.
    1   2   3   4   5   6   7
    (Strongly disagree)   (Strongly agree)

6. I have a strong attachment to other Black people.
    1   2   3   4   5   6   7
    (Strongly disagree)   (Strongly agree)

7. Being Black is an important reflection of who I am.
    1   2   3   4   5   6   7
    (Strongly disagree)   (Strongly agree)

8. Being Black is not a major factor in my social relationships.
    1   2   3   4   5   6   7
    (Strongly disagree)   (Strongly agree)

9. I feel good about Black people.
    1   2   3   4   5   6   7
    (Strongly disagree)   (Strongly agree)

10. I am happy that I am Black.
    1   2   3   4   5   6   7
    (Strongly disagree)   (Strongly agree)

11. I feel that Blacks have made major accomplishments and advancements.
1   2   3   4   5   6   7
(Strongly disagree)   (Strongly agree)

12. I believe that because I am Black, I have many strengths.
1   2   3   4   5   6   7
(Strongly disagree)   (Strongly agree)

13. I often regret that I am Black.
1   2   3   4   5   6   7
(Strongly disagree)   (Strongly agree)

14. Blacks contribute less to society than others.
1   2   3   4   5   6   7
(Strongly disagree)   (Strongly agree)

15. Overall, I often feel that Blacks are not worthwhile.
1   2   3   4   5   6   7
(Strongly disagree)   (Strongly agree)

16. Overall, Blacks are considered good by others.
1   2   3   4   5   6   7
(Strongly disagree)   (Strongly agree)

17. In general, others respect Black people.
1   2   3   4   5   6   7
(Strongly disagree)   (Strongly agree)

18. Most people consider Blacks, on the average, to be more ineffective than other racial groups.
1   2   3   4   5   6   7
(Strongly disagree)   (Strongly agree)

19. Blacks are not respected by the broader society.
1   2   3   4   5   6   7
(Strongly disagree)   (Strongly agree)

20. In general, other groups view Blacks in a positive manner.
1   2   3   4   5   6   7
(Strongly disagree)   (Strongly agree)

21. Society views Black people as an asset.
1   2   3   4   5   6   7
(Strongly disagree)   (Strongly agree)

Appendix D
Hollingshead Occupational Coding Scale
D. The Occupational Factor

The occupation a person ordinarily pursues during gainful employment is graded on a nine-step scale. Wherever possible, the scale has been keyed to the occupational titles used by the United States Census in 1970, and the three-digit code assigned by the census is given (Greene et al. 1969: 77-84). However, the occupational titles assigned by the census are not precise enough to delineate several occupational categories, especially proprietors of businesses, the military, farmers, and persons dependent upon welfare. Therefore, the occupational scale has departed from the titles and codes used by the census for a number of occupations and occupational groups.

OCCUPATIONAL SCALE
Score 9. Higher Executives, Proprietors of Large Businesses, and Major Professionals
a. Higher executives: chairpersons, presidents, vice-presidents, assistant vice-presidents, secretaries, treasurers;
b. Commissioned officers in the military: majors, lieutenant commanders, and above, or equivalent;
c. Government officials, federal, state, and local: members of the United States Congress, members of the state legislature, governors, state officials, mayors, city managers;
d. Proprietors of businesses valued at $250,000 and more
e. Owners of farms valued at
f. Major professionals (census code list).

Occupational Title	Census Code
Actuaries	034
Aeronautical engineers	006
Architects	002
Astronautical engineers	006
Astronomers	053
Atmospheric scientists	043
Bank officers	202
Biologic scientists	044
Chemical engineers	010
Chemists	045
Civil engineers	010
Dentists	062
Economists	091
Electrical/electronic engineers	012
Engineers, not elsewhere classified	023
Financial managers	202
Geologists	051
Health administrators	212
Judges	030
Lawyers	031

Life scientists	054
Marine scientists	052

Score 8. Administrators, Lesser Professionals, Proprietors of Medium-Sized Businesses
a. Administrative officers in large concerns: district managers, executive assistants, personnel managers, production managers;
b. Proprietors of businesses valued between $100,000 and $250,000;
c. Owners and operators of farms valued between $100,000 and $250,000;
d. Commissioned officers in the military; lieutenants, captains, lieutenants, s.g., and j.g., or equivalent;
e. Lesser professionals (census code list).

Occupational Title	Census Code
Accountants	001
Administrators, college	235
Administrators, elementary/secondary school	240
Administrators, public administration	222
Archivists	033
Assessors, local public administration	201
Authors	181
Chiropractors	061
Clergymen	086
Computer specialists	005
Computer systems analysts	004
Controllers, local public administration	201
Curators	033
Editors	184
Farm management advisors	024
Industrial engineers	013
Labor relations workers	056
Librarians	032
Musicians/composers	185
Nurses, registered	075
Officials, public administration	222
Personnel workers	056
Pharmacists	064
Pilots, airplane	163
Podiatrists	071
Sales engineers	022
Statisticians	036
Teachers, secondary school	144
Treasurers, local public administration	201

Score 7. Smaller Business Owners, Farm Owners, Managers, Minor Professionals
a. Owners of smaller businesses valued at $75,000 to $100,000;
b. Farm owners/operators with farms valued at $75,000 to $100,000;30

c. Managers (census code list);
d. Minor professionals (census code list);
e. Entertainers and artists.

Occupational Title	Census Code
Actors	175
Agricultural scientists	042
Announcers, radio/television	193
Appraisers, real estate	363
Artists	194
Buyers, wholesale/retail trade	205
Computer programmers	003
Credit persons	210
Designers	183
Entertainers	194
Funeral directors	211
Health practitioners	073
Insurance adjusters, examiners, investigators	326
Insurance agents, brokers, underwriters	265
Managers, administration	245
Managers, residential building	216
Managers, office	220
Officers, lodges, societies, unions	223
Officers/pilots, pursers, shipping	221
Operations/systems researchers/analysts	055
Painters	190
Postmasters, mail supervisors	224
Public relations persons	192
Publicity writers	192
Purchasing agents, buyers	225
Real estate brokers/agents	270
Reporters	184
Sales managers, except retail trade	233
Sales representatives, manufacturing industries	281
Sculptors	190

Score 6.Technicians, Semiprofessionals, Small Business Owners
a. Technicians (census code list);
b. Semiprofessionals: army, m/sgt., navy, c.p.o., clergymen (not professionally trained), interpreters (court);
c. Owners of businesses valued at $50,000 to $75,000;
d. Farm owners/operators with farms valued at $50,000 to $75,000.

Occupational Title	Census Code
Administrators, except farm--allocated	246
Advertising agents/salesmen	260

Air traffic controllers	164
Athletes/kindred workers	180
Buyers, farm products	203
Computer/peripheral equipment operators	343
Conservationists	025
Dental hygienists	081
Dental laboratory technicians	426
Department heads, retail trade	231
Dietitians	074
Draftsmen	152
Embalmers	165
Flight engineers	170
Foremen	441
Foresters	025
Home management advisors	026
Inspectors, construction, public administration	213

Score 5. Clerical and Sales Workers, Small Farm and Business Owners
a. Clerical workers (census code list);
b. Sales workers (census code list);
c. Owners of small business valued at $25,000 to $50,000;
d. Owners of small farms valued at $25,000 to $50,000.33

Occupational Title	Census Code
Auctioneers	261
Bank tellers	301
Billing clerks	303
Bookkeepers	305
Bookkeeping/billing machine operators	341
Calculating machine operators	342
Cashiers	310
Clerical assistants, social welfare	311
Clerical workers, miscellaneous	394
Clerical/kindred workers---	396
Clerical supervisors	312
Clerks, statistical	375
Collectors, bill-account	313
Dental assistants	921
Estimators	321
Health trainees	923
Investigators	321
Key punch operators	345
Library assistants/attendants	330
Recreation workers	101
Tabulating machine operators	350
Telegraph operators	384

Telephone operators	385
Therapy assistants	084
Typists	391

Score 4. Smaller Business Owners, Skilled Manual Workers, Craftsmen, and Tenant Farmers
a. Owners of small businesses and farms valued at less than $25,000;
b. Tenant farmers owning farm machinery and livestock;
c. Skilled manual workers and craftsmen (census code list);
d. Noncommissioned officers in the military below the rank of master sergeant and C.P.O34

Occupational Title	Census Code
Airline cabin attendants	931
Automobile accessories installers	401
Bakers	402
Blacksmiths	403
Boilermakers	404
Bookbinders	405
Brakemen, railroad	712
Brickmasons/stonemasons	410
Brickmason/stonemason apprentices	411
Cabinetmakers	413
Carpenters	415
Carpenter apprentices	416
Carpet installers	420
Cement/concrete finishers	421
Checkers/examiners/inspectors, manufacturing	610
Clerks, shipping/receiving	374
Compositors/typesetters	422
Conductors, railroad	226
Constables	963
Counter clerks, except food	314
Decorators/window dressers	425
Demonstrators	262
Detectives	964
Dispatchers/starters, vehicles	315
Drillers, earth	614
Dry wall installers/lathers	615
Duplicating machine operators	344
Electricians	430
Electrician apprentices	431
Electric power linemen/cablemen	433
Electrotypers	434
Engineers, locomotive	455
Engineers, stationary	545

Engravers, except photoengravers	435
Enumerators	320

Score 3. Machine Operators and Semiskilled Workers (census code list)

Occupational Title	Census Code
Animal caretakers	740
Asbestos/insulation workers	601
Assemblers	602
Barbers	935
Blasters/ Powdermen	603
Boardinghouse/Lodginghouse keepers	940
Boatmen/ Canalmen	701
Bottling operatives	604
Bulldozer operators	412
Bus drivers	703
Canning operatives	604
Carding, lapping, combing operatives	670
Chauffeurs	714
Child care workers, except private household	942
Conductors/motormen, urban rail transit	704
Cranemen/ derrickmen/ hoistmen	424
Cutting operatives	612
Deliverymen	704
Dressmakers/seamstresses, except factory	613
Drill press operatives	650
Dyers	620
Excavating/grading/road machine operators except bulldozer	436
Farm services laborers, self-employed	824
File clerks	325
Filers/polishers/sanders/buffers	621
Fishermen/oystermen	752
Forklift/tow motor operatives	706
Furnacemen/smelters/pourers	622
Furniture/wood finishers	443
Graders/sorters/manufacturing	623
Grinding machine operatives	651
Guards/watchmen	962

Score 2. Unskilled Workers (census code list)

Occupational Title	Census Code
Bartenders	910
Busboys	911
Carpenter's helpers	750
Child care workers, private household	980
Construction laborers, except carpenters' helpers	751

Cooks, private household	981
Cooks, except private household	912
Crossing guards/bridge tenders	960
Elevator operators	943
Food service, except private household	916
Freight/materials handlers	753
Garage workers/gas station attendants	623
Garbage collectors	754
Gardeners/groundskeepers, except farm	755
Hucksters/peddlers	264
Laborers, except farm---allocated	796

Score 1. Farm Laborers/Menial Service Workers (census code list)

Occupational Title	Census Code
Attendants, personal service	933
Attendants, recreation/amusement	932
Baggage porters/bellhops	934
Bootblacks	941
Chambermaids, maids, except private household	901
Cleaners/charwomen	902
Dishwashers	913
Farm laborers, wage workers	931
Farm laborers/farm foremen/kindred workers---allocated	846
Janitors/sextons	903
Laundresses, private household	983
Maids/servants, private household	984
Newsboys	266
Personal service apprentices	945
Private household workers---allocated	986
Produce graders/sorters, except factory/farm	625
Stockhandlers	762
Teamsters	763
Vehicle washers/equipment cleaners	764
Ushers, recreation/amusement	953

Bibliography

Adams, J., & Weakliem, D. L. (2011). August B. Hollingshead's four factor index of

    social status: From unpublished paper to citation classic. *Yale Journal of*

    *Sociology, 8,*11-20.

Allen, W. R., & Farley, R. (1986). The shifting social and economic tides of Black

    America, 1950-1980. *Annual Review of Sociology, 12* (1), 277-306. doi:

    10.1146/annurev.soc.12.1.277

Altschul, I., Oyserman, D., & Bybee, D. (2006). Racial-ethnic identity in mid-

    adolescence: Content and change as predictors of academic achievement. *Child*

    Development, 77(5), 1155-1169. doi: 10.1111/j.1467-8624.2006.00926.x

Anderson, E. (2011). *The cosmopolitan canopy: Race and civility in everyday life.* New

    York, New York: W.W. Norton & Company, Inc.

Anderson, K. F. (2012). Diagnosing discrimination: Stress from perceived racism and the

    mental and physical health effects. *Sociological Inquiry, 83* (1), 55-81. doi:

    10.1111/j.1475-682X.2012.00433.x

Ani, A. (2013). In spite of racism, inequality, and school failure: Defining hope with

    achieving Black children. *The Journal of Negro Education, 82* (4), 408-421.

Aud, S., Wilkinson-Flicker, S., Kristapovich, P., Rathbun, A., Wang, X., Zhang, J.,

    Notter, L., Nachazel, T., & Dziuba, A. (2011). The condition of education 2013

    (NCES 2013-037). U.S. Department of Education, National Center for Education

    Statistics. Retrieved from http://files.eric.ed.gov/fulltext/ED542714.pdf

Baber, L. D. (2012). A qualitative inquiry on the multidimensional racial development

    among first year African American college students attending a predominantly

white institution. *The Journal of Negro Education, 81 (1),* 67-81. Retrieved from

http://0-

web.a.ebscohost.com.helin.uri.edu/ehost/pdfviewer/pdfviewer?sid=4f0f43f1-

4716-4824-a236-b00bad1fda79%40sessionmgr4002&vid=45&hid=4101

Banks, K. H., Kohn-Wood, L. P., & Spencer, M. (2006). An examination of the African

American experience of everyday discrimination and symptoms of psychological

distress. *Community Mental Health Journal, 42* (6), 555-570. doi:

10.1007/s10597-006-9052-9

Banks, K. H., & Kohn-Wood, L. P. (2007). The influence of racial identity profiles on the

relationship between racial discrimination and depressive symptoms. *Journal of*

Black Psychology, 33 (3), 331-354. doi: 10.1177/0095798407302540

Brodish, A. B., Cogburn, C. D., Fuller-Rowell, T. E., Peck, S., Malanchuk, O., & Eccles,

J. S. (2011). Perceived racial discrimination as a predictor of health behaviors:

The moderating role of gender. *Race and Social Problems, 3*, 160-149. doi:

10.1007/s12552-011-9050-6

Bronfenbrenner, U. (1994). Ecological models of human development. In M. Gauvain &

M. Cole (Eds.), *Readings on the development of children* (pp. 37-43). NY:

Freeman. (Reprinted from *International Encyclopedia of Education*, pp. 1643-

1647, by Elsevier Sciences, Ltd., 1994, Oxford, England.

Brown-Iannuzzi, J. L., Payne, B. K., & Trawalter, S. (2012). Narrow imaginations: How

imagining ideal employees can increase racial bias. *Group Processes &*

Intergroup Relations, 16(6), 661-670. doi: 10.1177/1368430212467477

Carson, L. R. (2009). ''I am because we are:'' Collectivism as a foundational

characteristic of African American college student identity and academic achievement. *Social Psychological Education, 12*, 327-344. doi: 10.1007/s11218-009-9090-6

Chao, R. C., Wei, M., Good, G. E., & Flores, L. Y. (2011). Race/Ethnicity, color-blind racial attitudes, and multicultural counseling competence: The moderating effects of multicultural counseling training. *Journal of Counseling Psychology, 58* (1), 72-82. doi: 10.1037/a0022091

Chavez, A. F., & Guido-DiBrito, F. (1999). Racial and ethnic identity and development. *New Directions for Adult and Continuing Education* (pp. 39-47). doi: 10.1002/ace.8405

Chavous, T. M., Bernat, D. H., Schmeelk-Cone, K., Caldwell, C. H., Kohn-Wood, L., & Zimmerman, M. A. (2003). Racial identity and academic attainment among African American adolescents. *Child Development, 74*(4), 1076-1090. doi: 10.1111/1467-8624.00593

Chavous, T. M., Rivas-Drake, D., Smalls, C., Griffin, T., & Cogburn, C. (2008). Gender matters, too: The influences of school racial discrimination and racial identity on academic engagement outcomes among African American adolescents. *Developmental Psychology, 44*(3), 637-654. doi: 10.1037/0012-1649.44.3.637

Chevret, S., Seaman S., & Resche-Rigon, M. Multiple imputation: A mature approach to dealing with missing data. *Intensive Care Medicine, 41*, 348-350. doi: 10.1007/s00134-014-3624-x

Chung, Y. B., & Harmon, L. W. (1999). Assessment of perceived occupational

opportunity for Black Americans. *Journal of Career Assessment, 7* (1), 45-62.

doi: 10.1177/106907279900700104

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. San Diego, CA:

Academic Press.

Cokley, K. O., & Chapman, C. (2008). The roles of ethnic identity, anti-white attitudes,

and academic self-concept in African American student achievement. *Social

Psychology of Education, 11*(4), 349-365. doi: 10.1007/s11218-008-9060-4

Corprew, C. S., Cunningham, M. (2012). Education tomorrow's men: Perceived school,

support, negative youth experiences, and bravado attitudes in African American

adolescent males. *Education and Urban Society, 44*(5), 571-589. doi:

10.1177/0013124511406534.

Darensbourg, A. M., & Blake, J. J. (2014). Examing the academic achievement of Black

adolescents: Importance of peer and parental influences. *The Journal of Black

Psychology, 40 (2),* 191-212. doi: 10.1177/0095798413481384

Dancy, T. E. E., & Brown, M. C. (2008). Unintended consequences: African American

male educational attainment and collegiate perceptions after Brown v. Board of

Education. *American Behavioral Scientist, 51* (7), 984-1003. doi:

10.1177/0002764207312001

DeNavas-Walt, C., Proctor, B. D., & Smith, J. C. (2012). Income, poverty, and health

insurance coverage in the United States: 2011. Retrieved March 31, 2015 from

http://www.infoplease.com/ipa/A0104552.html

DeNavas-Walt, C., Proctor, B. D., & Smith, J. C. (2013). Income, poverty, and health

insurance coverage in the United States: 2012. Retrieved March 29, 2014. US

Bureau of Census Statistics.

Dickerson, N. T. (2007). Black employment, segregation, and the social organization of

metropolitan labor markets. *Economic Geography, 83(3),* 283-307. doi:

10.1111/j.1944-8287.2007.tb00355.x

Din-Dzietham, R., Nembhard, W. N., Collins, R., & Davis, S. K. (2004). Perceived stress

following race-based discrimination at work is associated with hypertension in

African-Americans. The metro Atlanta heart disease study, 1999-2001. *Social*

Sciences & Medicine, 58 (3), 449-461. doi: 10.1016/S0277-9536

Dottolo, A. L., & Stewart, A. J. (2008). "Don't ever forget now, you're a Black man in

America": Intersections of race, class and gender in encounters with the police.

Sex Roles, 59, 350-364. doi: 10.1007/s11199-007-9387-x

Dotterer, A. M., McHale, S. M., & Crouter, A. C. (2009). Sociocultural factors and

school engagement among African American youth: The roles of racial

discrimination, racial socialization, and ethnic identity. *Applied Developmental*

Science, 13(2), 61-73. doi: 10.1080/10888690902801442

DuBois, D. L., Burk-Braxton, C., Swenson, L. P., Tevendale, H. D., & Hardesty, J. L.

(2002). Race and gender influences on adjustment in early adolescence:

Investigation of an integrative model. *Child Development, 73(5),* 1573 – 1592.

doi: 10.1111/1467-8624.00491

Elion, A. A., Wang, K. T., Slaney R. B., & French, B. (2012). Perfectionism in African

American students: Relationship to racial identity, GPA, self-esteem, and

depression. *Cultural Diversity and Ethnic Minority Psychology, 18* (2), 118-127.

doi:10.1037/a0026491

Ewert, S., Sykes, B. L., & Pettit, B. (2014). The degree of disadvantage: Incarceration

 and inequality in education. *The ANNALS of the American Academy of Political*

 and Social Science, 651, 24-43. doi: 10.1177/0002716213503100

Fisher, C. B, Wallace, S. C., & Fenton, R. E. (2000). Discrimination distress during

 adolescence. *Journal of Youth and Adolescence, 29(6)*, 679 – 695. doi:

 10.1023/A:1026455906512

Fordham, S., & Ogbu, J. U. (1986). Black students' school success: Coping with the

 burden of acting White. *The Urban Review, 18(3),*176-206. doi:

 10.1007/BF01112192

Garibaldi, A. M. (1997). Four decades of progress… and decline: An assessment of

 African American educational attainment. *The Journal of Negro Education, 66*

 (2), 105-120. doi:10.2307/2967221

Graham, J. W. (2009). Missing data analysis: Making it work in the real world. *Annual*

 Review of Psychology, 60, 549-576.

Harper, S. R. (2006). Peer support for African American male college achievement:

 Beyond internalized racism and the burden of 'Acting White.' *The Journal of*

 Men's Studies, 14 (3), 337-358.doi: 10.3149/jms.1403.337

Harris, C. A., & Khanna, N. (2010). Black is, Black ain't: Biracials, middle-class Blacks,

 and the social construction of blackness. *Sociological Spectrum, 30*(6), 639-670.

 doi: 10.1080/02732173.2010.510057

Harvey, W. B. (2008). The weakest link: A commentary on the connections between k-12

 and higher education. *American Behavioral Scientist, 51* (7), 972-983. doi:

 10.1177/0002764207312000

Hayward, R. D., & Krause, N. (2015). Religion and strategies for coping with racial

    discrimination among African Americans and Caribbean Blacks. *International*

    Journal of Stress Management, 22 (1), 70-91. doi: 10/1037/a0038637

Helms, J. E. (2006). Fairness is not validity or cultural bias in racial-group assessment: A

    quantitative perspective. *American Psychologist, 61* (8), 845-859. doi:

    10.1037/0003-066X.61.8.845

Hollingshead, A. B. (2011). Four Factor Index of Social Status. *Yale Journal of*

    Sociology, 8, 21-52.

Hoover, G. A., & Yaya, M. E. (2010). Racial/Ethnic differences in income inequality

    across US regions. *The Review of Black Political Economy, 37* (2), 79-114. doi:

    10.1007/s12114-010-9057-z

Hope, E. C., Skoog, A. B., & Jagers, R. J. (2015). 'It'll never be the White kids, it'll

    always be us': Black high school students' evolving critical analysis of racial

    discrimination and inequity in schools. *Journal of Adolescent Research, 30* (1),

    83-112. doi: 10.1177/0743558414550688

Hunt, M. O., & Ray, R. (2012). Social class identification among Black Americans:

    Trends and determinants, 1974–2010.*American Behavioral Scientist, 56*(11),

    1462-1480. doi: 10.1177/0002764212458275

Jenkins, T. S. (2006). Mr. Nigger: The challenges of educating Black males within

    American society. *Journal of Black Studies, 37,*127-155. doi:

    10.1177/0021934704273931

Jones, S. C. T., Lee, D. B., Gaskin, A. L., Neblett, E. W. (2014). Emotional response

    profiles to racial discrimination: Does racial identity predict affective patterns?

Journal of Black Psychology, 40 (4), 334-358. doi: 10.1177/0095798413488628

Jones Johnson, G. (1990). Underemployment, underpayment, attributions, and self-

esteem among working Black men. *Journal of Black Psychology, 16* (2), 23-43.

doi: 10.1177/00957984900162003

Kimbrough, V. D., & Salomone, P. R. (1993). African Americans: Diverse people,

diverse career needs. *Journal of Career Development, 19*(4), 265-279. doi:

10.1007/BF01354629

Kessler, R. C., Mickelson, K. D., & Williams, D. R. (1999). The prevalence, distribution,

and mental health correlates of perceived discrimination in the United States.

Journal of Health and Social Behavior, 40 (3), 208-230. doi:10.2307/2676349

Klonoff, E. A., & Landrine, H. (1999). Cross-validation of the Schedule of Racist Events.

Journal of Black Psychology, 25(2), 231-254. doi:

10.1177/0095798499025002006

Krieger, N., & Sidney, S. (1996). Racial discrimination and blood pressure: The

CARDIA study of young Black and White Adults. *American Journal of Public

Health, 86* (10), 1370-1378. doi:10.2105/AJPH.86.10.1370

Krymkowski, D. H., & Mintz, B. (2011). College as an investment: The role of

graduation rates in changing occupational inequality by race, ethnicity, and

gender. *Race and Social Problems, 3* (1), 1-12. doi: 10.1007/s12552-011-9038-2

Landrine, H., & Klonoff, E. A. (1996). The schedule of racist events: A measure of racial

discrimination and a study of its negative physical and mental health

consequences. *Journal of Black Psychology, 22(2),* 144-168. doi:

10.1177/00957984960222002

Landry, B., & Marsh, K. (2011). The evolution of the new Black middle class. *The Annual Review of Sociology, 37*, 373-394. doi: 10.1146/annurev-soc-081309-150047

Lee, F. A., Lewis, R. K., Sly, J. R., Carmack, C., Roberts, S. R., & Basore, P. (2011). Promoting positive youth development by examining the career and educational aspirations of African American males: Implications for designing educational programs. *Journal of Prevention & Intervention in the Community, 39(4),* 299-309. doi: 10.1080/10852352.2011.606402

Linnabery, E., Stuhlmacher, A. F., & Towler, A. (2014). From whence cometh their strength: Social support, coping, and well-being of Black women professionals. *Cultural Diversity and Ethnic Minority Psychology, 20* (4), 541-549. doi: 10.1037/a0037873

Marsh, K. (2013). "Staying Black" : The demonstration of racial identity and womanhood among a group of young high-achieving Black women. *International Journal of Qualitative Studies in Education, 26* (10), 1213-1237. doi: 10.1080/09518398.2012.731536

Mays, V. M., Coleman, L. M., & Jackson, J. S. (1996). Perceived race-based discrimination, employment status, and job stress in a national sample of Black women: Implications for health outcomes. *Journal of Occupational Health Psychology, 1* (3), 319-329. doi: 10.1037//1076-8998.1.3.319

Mena, J., Almond, A., & Poindexter, B. (2014). [Impact of adaptive responses on the relationship between perceived racial discrimination and physical and mental health]. Unpublished raw data.

Miller, D. B. (1999). Racial socialization and racial identity: Can they promote resiliency

    for African American adolescents? *Adolescence, 34* (135), 493-501.

Milner, H. R. (2007). African American males in urban schools: No excuses-Teach and

    empower. *Theory Into Practice, 46* (3), 239-246. doi:

    10.1080/00405840701402281

Neblett, E. W., Philip, C. L., Cogburn, C. D., & Sellers, R. M. (2006). African American

    adolescents' discrimination experiences and academic achievement: Racial

    socialization as a cultural compensatory and protective factor. *Journal of Black*

    Psychology, 32 (2) 199-218. doi: 10.1177/0095798406287072

Noguera, P. A. (2003). The trouble with Black boys: The role and influence of

    environmental and cultural factors on the academic performance of African

    American males. *Urban Education, 38*(4), 431-459. doi:

    10.1177/0042085903038004005

Ong, A. D., Fuller-Rowell, T., & Burrow, A. L. (2009). Racial discrimination and the

    stress process. *Journal of Personality and Social Psychology, 96* (6), 1259-1271.

    doi: 10.1037/a0015335

Pager, D. & Western, B. (2012). Identifying discrimination at work: The use of field

    experiments. *Journal of Social Issues, 68 (2)*, 221-237. doi: 10.1111/j.1540-

    4560.2012.01746.x

Richman, L. S., Boynton, M. H., Costanzo, P., & Banas, K. (2013). Interactive effects of

    discrimination and racial identity on alcohol-related thoughts and use. *Basic and*

    Applied Social Psychology, 35, 396-407. doi: 10.1080/01973533.2013.803966

Richardson, B. L., Macon, T. A., Mustafaa, F. N., Bogan, E. D., Cole-Lewis, Y., &
Chavous, T. M., (2015). Associations of racial discrimination and parental
discrimination coping messages with African American adolescent racial identity.
Journal of Youth and Adolescence, 44 , 1301-1317. doi: 10.1007/s10964-014-
0196-6

Romero, A. J., Edwards, L. M., Fryberg, S. A., & Orduna, M. (2014). Resilience to
discrimination stress across ethnic identity stages of development. *Journal of
Applied Social Psychology, 44,* 1-11. doi: 10.1111/jasp.12192

Rosenthal, L., Carroll-Scott, A., Earnshaw, V. A., Santilli, A., & Ickovics, J. R. (2012).
The importance of full-time work for urban adults' mental and physical health.
Social Science & Medicine, 75, 1692-1696. doi:10.1016/j.socscimed.2012.07.003

Sameroff, A. (2010). A unified theory of development: A dialectic integration of nature
and nurture. *Child Development, 81(1)*, 6- 22. doi: 10.1111/j.1467-
8624.2009.01378.x

Sanders Thompson, V. L. (2002). Racism: Perceptions of distress among African
Americans. *Community Mental Health Journal, 38* (2), 111-118.

Schneider, M. P. A. (2013). Illustrating the implications of how inequality is measured:
Decomposing earnings inequality by race and gender. *Journal of Labor Research,
34* (4), 476-514. doi: 10.1007/s12122-013-9168-y

Seaton, E. K., & Douglas, S. (2014). School diversity and racial discrimination among
African-American adolescents. *Cultural Diversity and Ethnic Minority
Psychology, 20* (2), 156-165. doi: 10.1037/a0035322

Seawell, A. H., Cutrona, C. E., & Russell, D. W. (2014). The effects of general social

support and social support for racial discrimination on African American

women's well-being. *Journal of Black Psychology, 40* (1), 3-26.

doi:10.1177/0095798412469227

Sellers, R. M., Copeland-Linder, N., Martin, P. P., & L'Heureux Lewis, R. (2006).

Racial identity matters: The relationship between racial discrimination and

psychological functioning in African American adolescents. *Journal of Research*

on Adolescence, 16 (2), 187-216. doi:10.1111/j.1532-7795.2006.00128.x

Sellers, R. M., Rowley, S. A. J., Chavous, T. M., Shelton, J. N., & Smith, M. A. (1997).

Multidimensional inventory of Black identity: A preliminary investigation of

reliability and constuct validity. *Journal of Personality and Social*

Psychology,73(4), 805-815. doi: 10.1037/0022-3514.73.4.805

Sellers, R. M., & Shelton J. N. (2003). The role of racial identity in perceived racial

discrimination. *Journal of Personality and Social Psychology, 84 (5),* 1079-1092.

doi: 10.1037/0022-3514.84.5.1079

Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-*

experimental designs for generalized causal inference. Boston, MA: Houghton

Mifflin Company.

Spencer, M. B., Dupree, D., & Hartmann, T. (1997). A phenomenological variant of

ecological systems theory (PVEST): A self-organization perspective in context.

Development and Psychopathology, 9, 817-833. doi:

10.1017/S0954579497001454

Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test

performance of African Americans. *Journal of Personality and Social*

Psychology, 69 (5), 797-811. doi: 10.1037/0022-3514.69.5.797

Stevenson, H. C., McNeil, J. D., Herrero-Taylor, T., & Davis, G. Y. (2005). Influence of
perceived neighborhood diversity and racism experience on the racial
socialization of Black youth. *Journal of Black Psychology, 31* (3), 273-290. doi:
10.1177/0095798405278453

Strayhorn, T. L. (2010). The role of schools, families, and psychological variables on
math achievement of Black high school students. *The High School Journal, 93*
(4), 177-194. doi

Thomas, A. J., Hoxha, D., & Hacker, J. D. (2013). Contextual influences on gendered
racial identity development of African American young women. *Journal of Black
Psychology, 39* (1), 88-101. doi: 10.1177/0095798412454679

Thomas, A. J., & Speight, S. L. (1999). Racial identity and racial socialization attitudes
of African American parents. *Journal of Black Psychology, 25* (2), 152-170. doi:
10.1177/0095798499025002002

U.S. Bureau of Census Statistics. (2012). Retrieved December 10, 2013, from
http://quickfacts.census.gov/qfd/states/00000.html

U.S. Bureau of Labor Statistics. (2014). Retrieved March 29, 2014 from
http://www.bls.gov/cps/cpsaat05.pdf

Vincent, C. Rollock, N., Ball, S., & Gillborn, D. (2013). Raising middle-class Black
children: parenting priorities, actions and strategies. *Sociology, 47* (3), 427-442.
doi: 10.1177/0038038512454244

Ward, C. (2008). Blue-chip Black: Race, class, and status in the new Black middle class.
Berkeley: University of California Press. *Journal of Black Psychology, 34(2),*

234-240. doi: 10.1177/0095798407310543

Wasserberg, M. J. (2014). Stereotype threat effects on African American children in an

urban elementary school. *The Journal of Experimental Education, 82* (4), 502-

517. doi: 10.1080/00220973.2013.876224

Walton, G. M., & Cohen, G. L. (2007). A question of belonging: Race, social fit, and

achievement. *Journal of Personality and Social Psychology, 92* (1), 82-96. doi:

10.1037/0022-3514.92.1.82

Walton, G. M., & Cohen, G. L. (2011). A brief social-belonging intervention improves

academic and health outcomes of minority students. *Science Magazine, 331*,

1447-1451. doi: 10.1126/science.1198364

West, S. G., Aiken, L. S., Krull, J. L. (1996). Experimental personality designs:

Analyzing categorical by continuous variable interactions. *Journal of Personality,*

64 (1), 1-48.

doi:10.1111/j.1467-6494.1996.tb00813.x

Wingfield, A. H., & Wingfield, J. H. (2014). When visibility hurts and helps: How

intersections of race and gender shape Black professional men's experiences with

tokenization. *Cultural Diversity and Ethnic Minority Psychology, 20* (4), 483-

490. doi: 10.1037/a0035761

Witherspoon, K. M., Speight, S. L., & Thomas, A. J. (1997). Racial identity attitudes,

school achievement, and academic self-efficacy among African American high

school students. *Journal of Black Psychology, 23* (4), 344-357. doi:

10.1177/00957984970234003

Wong, C. A., Eccles, J. S., & Sameroff, A. (2003). The influence of ethnic discrimination

and ethnic identification on African American adolescents' school and

socioemotional adjustment. *Journal of Personality*, *71 (6)*, 1197-1232. doi:

10.1111/1467-6494.7106012