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Colorism Bias In Hiring Decisions: Disentangling The Effects Of Hair Type And Skin Tone

Niambi Maia Childress Powell
Wayne State University,

COLORISM BIAS IN HIRING DECISIONS: DISENTANGLING THE EFFECTS OF HAIR TYPE AND SKIN TONE

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NIAMBI MAIA CHILDRESS POWELL

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Committee Co-Chair Date

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Committee Member Date

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Committee Member Date

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Committee Member Date

DEDICATION

This work is dedicated first and foremost to my family: To my parents- Darrillyn Childress and Stanley & Rhonda Childress, who instilled in me that education equaled the freedom to become whatever you dreamed of being in life, and unyieldingly dedicated their time, resources, and love to help me achieve my goals. To all of my siblings, but notably Damali and Imari who helped mold me into the knowledge seeker I am, and taught me to always find the DATA! To my husband Marcus and our daughter Destiny who kept me in good spirits and motivated me to be a champion those nights when I'd rather fall asleep than burn the midnight graduate school oil. And lastly, I'd like to dedicate this research to women of color across the globe. Your hair and skin is beautiful, it's who you are, and it's who the world should appreciate you for- thank you for being my inspiration!

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CHAPTER 1: INTRODUCTION

If you're black, stay back; if you're brown, stick around; if you're yellow, you're mellow; if you're white, you're all right. This historical folk rhyme reflects the African American within-race system of stratification based on skin tone that has persisted in U.S. culture since the country's inception. *Colorism*, as it is commonly termed, can be defined as a "subtype of racial phenotypicality bias in which skin tone is used as a metric by which to discriminate against those outside or within one's own racioethnic group" (Marira & Mitra, 2013, p. 103). The concept of colorism has also been described as encompassing the covariation of other phenotypic features (i.e., nose width, lip fullness, and hair type) with skin tone (Russell, Wilson, & Hall, 1992).

Skin tone bias is not uniquely American, and also exists in cultures around the world – a lasting social imprint reflecting the psychological effects of global colonization by majority groups that were predominantly White (Blauner, 1972). Evidence of the colorism phenomenon has been found in American, European, African, Latino, and Asian populations across the globe (Glenn, 2009). Historically, greater value has been placed on physical features that most closely resemble the phenotypic features of the majority group (Keith & Herring, 1991), thus creating a caste system based on skin color. Across and within most races, lighter is better, as the opening phrase describes.

It is well established that skin tone can be a determinant of socioeconomic status, occupational experience, and ratings of one's attractiveness (Hughes & Hertel, 1990), all of which influence the degree to which a person may be considered for employment and/or promotion at work. Despite its organizational implications, colorism is "ubiquitous, yet understudied" in the I/O literature, as Marira and Mitra (2013) state in the title of their article. Answering their call for further investigation of colorism from an applied organizational perspective, and addressing other gaps in the colorism literature, the current study investigates

the three-way interaction of skin tone, hair type, and job type on selection ratings. Selection ratings are particularly important to study given the underrepresentation of people of color in many occupations. The current study addresses gaps in the colorism literature by: 1) approaching colorism research from an I/O perspective – for which very little empirical evidence currently exists, 2) disentangling the effects of two distinct physical features associated with colorism on hiring decisions, 3) examining the interaction of colorism bias and job type on hiring decisions, and 4) investigating underlying mechanisms (e.g., attractiveness) that elucidate *how* the colorism bias affects employment decisions.

History of Colorism in the U.S.

Colorism defined. Colorism is a type of racially-based bias that describes differential attitudes, beliefs, and treatment toward individuals based on variations in phenotypic facial characteristics (e.g., skin color, nose width, lip fullness, and hair type – though not a "facial" feature) typically associated with certain racial categories (Maddox, 2004). Skin color is widely assumed to be associated with economic and cultural differences (Hollinger, 1999). Systems of cultural stratification based on skin tone inherently involve both racism and colorism, such that *racism* refers to systematic discrimination, prejudice, and institutional power favoring the majority race while inhibiting people of color, and *colorism* captures the systematic privileging of lighter- over darker-skinned people within a racial category (Hunter, 2002). Racism and colorism are interconnected. Colorism may not exist without racist ideals, because the tenets of colorism stem from the historical global ideologies that place greater value on the aesthetic characteristics and culture of Whites (Hunter, 2002).

Colorism through colonization. The roots of colorism reside in the global colonization of indigenous cultures by the dominant cultures mainly composed of European ethnicities. Most

often, White settlers colonized indigenous cultures that were largely composed of dark-skinned people (Hall, 1995). During colonization, colonial value systems were forced onto indigenous cultures, and natives often internalized them (Almaguer, 1994; Barrera, 1979; Fanon, 1967; Jordan 1968). Since then, the effects of colonialism have been transmitted through generations (Blauner, 1972). Concerning colorism in the U.S., Black Americans still value features of the dominant group (i.e., White Europeans) that once enslaved them (Hunter, 2002). As a result of historical colonization and enslavement, Blacks in America internalized the light skin ideal because they had no power to contest the influence of White domination (Hall, 1995). Internalizing colorism bias has caused psychological conflict among Blacks because their skin color difference from Whites is commonly so salient. Even within the African American race, skin complexion is immediately recognized (Hall, 1995). As W. E. B. Dubois discussed, for Blacks, a "double-consciousness" evolved such that Blacks whose skin tones were much darker than those of Whites were socially constrained to act passively in White contexts so as not to offend this socially dominant group, while Black pride still flourished within the Black community (Hall, 1995). This double-consciousness was often referred to with the adage, "We wear one face for the White folks, and another face around our own." Even though colorism existed *within* the Black community, Blacks were accepted to a greater extent by other members of their community.

Colorism fostered the slavery chattel system. Chattel slavery (i.e., individuals treated as commodities) stems from a value system in which Eurocentric features are associated with higher social statuses. Historical evidence indicates that Whites placed greater economic value on slaves of mixed-race parentage and used skin tone or degree of visible White ancestry as a basis for differential treatment (Keith & Herring, 1991). Physical characteristics prototypical of

Africans were viewed as undesirable and signs of inferiority. The widely-held racial ideology of that time perpetuated the idea that Blacks with White ancestry were intellectually superior to those of pure African ancestry (Myrdal, 1944). Slaves with lighter skin were also favored because Whites found them to be more aesthetically pleasing (Keith & Herring, 1991). Eventually, slaves internalized the negative stereotypes associated with "Blackness" and the value Whites placed on "lightness" of skin (Keith & Herring, 1991). According to the laws of the chattel system, Blacks who were lighter-skinned were more frequently assigned jobs within the plantation owner's home (and thus, called "house niggers"), or assigned jobs that entailed more trust and responsibility. These jobs held greater prestige compared to the work assignments given to slaves with darker skin tones (commonly referred to as "field niggers," a moniker that reflected the labor intensive work they were made to do in plantation fields).

Even before the Emancipation Proclamation was signed, the *mulatto* (bi-racial) children of slave masters had more chances than other slaves to be freed by their masters or permitted to purchase their freedom based on affordable financial terms (Franklin 1980; Frazier 1957). This pattern led to the overrepresentation of mulatto Blacks of mixed ancestry in the free Black population and their underrepresentation among slaves (Keith & Herring, 1991). Post-Emancipation, the relationship between skin tone and Black status lessened some but ultimately persisted (Frazier, 1957; Glen, 1963). Blacks who were former house servants were better equipped than former field laborers to negotiate with Whites, thus decreasing their chances of exploitation (Keith & Herring, 1991). The valued occupational skills that former house slaves, who were most often mulattoes, gained while in bondage provided them with opportunities to secure better employment (Landry 1987). Not only did former slaves with lighter skin have better employment opportunities, but those opportunities provided them with skillsets that

facilitated acculturation into broader society (Bond, 1972). Due to visible kinship to former White slave owners, lighter-skinned Blacks were also given more opportunities to advance their education in the Antebellum South (Wirth & Goldhammer, 1944). During the post-Civil War era, almost all Blacks whom Whites considered *prominent* (socially and economically well-off) were fair skinned (Keith & Herring, 1991). The fact that the most successful Blacks were disproportionately lighter-skinned compared to working-[lower-]class Blacks perpetuated colorism stereotypes.

Evidence of colorism in America today. Historically in the U.S., Black middle and upper classes were constructed based on lighter skin tone, which served as a significant status resource (Bond, 1972; Frazier, 1957; Mullins & Sites, 1984). After Emancipation, all-Black schools and social organizations employed many methods to screen for undesirable applicants as a function of skin tone (Maddox, 2004). In most instances, these methods excluded Blacks with darker skin complexions from higher status positions in order to maintain social, educational, and economic distance between the lighter and darker skinned members of the race (Hall, 1992; Maddox & Gray, 2002; Russell, Wilson, & Hall, 1992). Research on skin tone consistently shows that both Whites and Blacks perceive, evaluate, and treat darker-skinned Blacks more negatively than lighter-skinned Blacks (Anderson & Cromwell, 1977; Averhart & Bigler, 1997; Dixon & Maddox, 2005; Hall, 1992, 2003, 2005; Maddox & Chase, 2004; Maddox & Gray, 2002; Wade, Romano, & Blue, 2004). In turn, skin tone is a determinant of one's SES, occupational experience, and attractiveness (Hughes & Hertel, 1990). Astonishingly, the magnitude of disparity with respect to income, education, and SES between light- and dark-skinned Blacks is estimated to equal the size of the gap between Black and White Americans (Hughes & Hertel, 1990).

An emerging body of research has underscored the differential treatment of Blacks in the U.S. based on skin tone (Hagiwara, Cashy, & Cesario, 2012). Klonoff and Landrine (2000) found that dark-skinned Blacks experience discrimination 11 times more often and appraise these experiences as more stressful than light-skinned Blacks. Similarly, Hersch (2010) found that Blacks with lighter skin are less likely to report discriminatory treatment in daily activities and are less likely to report worse treatment due to their skin color. Several studies have revealed that differential treatment of dark- versus light-skinned Blacks may be based on implicit perceptions. For instance, participants identify more negative than positive attributes for darker-skinned Blacks, whereas they identify more positive than negative attributes for lighter-skinned Blacks (Maddox & Gray, 2002). Compared to those with lighter skin, darker-skinned Blacks are more often associated with crime and the general disruption of society (Hall, 1995). Blacks have increasingly internalized negative perceptions of dark skin, viewing it as an obstacle to full assimilation into the dominant American culture (Hall, 1995). These studies point to the continued importance of measuring the effects of skin tone in an effort to develop a more comprehensive social science literature on colorism and to uncover the practical implications of its effects (Hill, 2002).

Attention to race-based biases– especially toward Blacks– is particularly concentrated in the U.S. due to its history of slavery and the country's tumultuous race relations between Blacks and Whites. It was only approximately 53 years ago that the Civil Rights Act of 1964 marked a turning point in organizational selection and promotion practices in the U.S., with the introduction of federally-enforced legislation that protects numerous marginalized groups, including those defined by skin color, from discriminatory workplace practices. Abundant social science research reflects captivation with disparities of Blacks in the U.S.

The study of bias toward Blacks has also been ample in the U.S. due to the size of the Black population in the country. Until the ballooning of the Mexican American population in recent decades, Blacks represented the largest minority group in the country and are still a close second at approximately 13% of the total U.S. population (compared to Mexican Americans constituting ~17%; U.S. Census Bureau, 2015). Compared to Mexican Americans, Black Americans possess more distinct phenotypic features (i.e., Mexican Americans are more likely to have skin tones and racial features that more closely approximate those of Whites). Given the relative size of the African American population to that of White Americans, and their unique cultural story compared to other ethnic minorities, it has been and will continue to be important to understand African Americans' experiences of workplace exclusion. Thus, the current study focused on colorism bias toward the Black American population.

Moving Beyond Investigations of Interracial Colorism Bias

Based on a large body of social science literature, colorism bias towards Blacks is alive and well. The field of I/O psychology would be well-served to move beyond the boundaries of Black and White comparisons of work-related outcomes in order to better uncover the nuances of racial bias. The preponderance of evidence of race-based biases in the I/O literature addresses organizational biases due to *inter-racial* differences (mostly between Black and White races). However, as Marira and Mitra (2013) note, investigations of forms of discrimination that can also be *intra-racial*, such as colorism, are also needed in order to shed light on the experiences of those who are marginalized, even *within* their race, because they possess darker skin tones. Valuable information can be masked when researchers collapse across minority groups (Marira & Mitra, 2013). Similarly, evidence of colorism bias within work contexts might be missed when researchers collapse across phenotypic variations within a racial category. I/O psychologists have

made great strides in addressing the experiences of marginalized workers through both research and public policy, but there is a need to move beyond the homogeneous groups that have traditionally been studied (Marira & Mitra, 2013; Markus, 2008; Ruggs et al., 2013). Colorism is a pervasive type of discrimination with a tangible impact on labor market and organizational outcomes, warranting further attention from I/O psychologists (Marira & Mitra, 2013).

Colorism in Today's Organizations

Aversive racism. Increasingly, racism is expressed in organizational settings in *aversive* forms (Dovidio & Gaertner, 1986, 2000; Kinder & Sears, 1981; McConahay, 1986). *Aversive racism* can be described as a contemporary form of racism. This form of racism manifests in people who 1) endorse egalitarian beliefs and values, 2) have unconscious negative beliefs about Blacks (and other out-groups), 3) consider themselves unprejudiced, and 4) enact discrimination in subtle, ambiguous, and indirect manners – a tactic used to rationalize their behavior as being unrelated to racial discrimination (Dovidio & Gaertner, 2000). This form of discrimination currently flourishes in the face of legal prohibition of blatant racial discrimination (e.g., Benokraitis, 1997; Brief & Barsky, 2000; Brief, Buttram, Elliott, Reizenstein, & McCline, 1995; Deitch et al., 2004; Dipboye & Halverson, 2004). Although legal parameters have helped vastly reduce the prevalence of overt discrimination, they have done less to curtail the perpetration of subtle biases. A key facet of aversive racism is that perpetrators are often are unaware that they are committing racist acts because of their self-proclaimed non-prejudiced values and their tendency to attribute their behavior to factors other than race (Cortina, 2008). McConahay summarizes the underlying beliefs of modern racists (1986, p. 92-93):

> *The principal tenets of modern racism are these: (1) Discrimination is a thing of the past because Blacks now have the freedom to compete in the marketplace and to enjoy those things they can afford. (2) Blacks are pushing too hard, too fast, and into places where they are not wanted. (3) These tactics and demands are unfair. (4) Therefore, recent*

gains are undeserved and the prestige granting institutions of society are giving Blacks more attention and the concomitant status than they deserve.

Colorism may be a more nuanced form of racism through which modern biases/stereotypes emerge undetected (Marira & Mitra, 2013). Employers may stunt the advancement of people of color by aversively discriminating against those with darker skin tones when making hiring decisions. Organizations must adhere to federal guidelines that discourage adverse impact in hiring, so hiring managers' biases may manifest covertly by more frequently selecting and/or promoting those minorities who are fair skinned. In this way, colorism may be a conduit through which modern racist ideologies are enacted. The fact that colorism is an elusive phenomenon to recognize when it operates in organizational settings does not justify the dearth of empirical studies on this topic.

Legal perspectives. Although color is specifically identified as a protected class, U.S. courts have had difficulty interpreting and thus uniformly defending legal claims based on skin tone (Marira & Mitra, 2013). Data from the EEOC (2006) indicates that cases of workplace-related colorism have risen sharply in recent years. Although a few courts have upheld skin tone-based discrimination claims (e.g., Walker v. Internal Revenue Service, 1989), many have not been able to successfully adjudicate these claims. Ronald Turner (1995) analyzed court cases in which light-skinned subordinates charged dark-skinned supervisors with skin tone–based discrimination as well as those in which dark-skinned subordinates charged light-skinned supervisors with preferential treatment of other light-skinned employees. In all lawsuits, employees attempted to use Title VII of the 1964 Civil Rights legislation, but each case was dismissed for a lack of preponderance of evidence (Turner, 1995). This suggests that proving the presence and effect of work-related discrimination based on colorism may be more difficult than proving interracial types of discrimination (Celious & Oyserman, 2001). Federal legislation and

watchdog agencies commissioned to uphold these laws (e.g., the Equal Employment Opportunity Commission, EEOC) depend on the expertise of subject matter experts (SMEs), like I/O psychologists, to provide supporting empirical evidence of discrimination and suggestions for best practices. I/O psychologists acting as SMEs can better serve organizations *and* the legal system by adding the topic of colorism to their body of research knowledge (Marira & Mitra, 2013).

Seminal Research on Colorism Bias from Other Domains

Social psychology has an extensive history of research on the antecedents and outcomes of race-based stereotyping, prejudice, and discrimination (Brigham, 1971; Fiske, 1998; Hamilton, 1981). This research has uncovered the significant influence of racial categorization in social perception. Observers primarily use phenotypic facial characteristics to determine one's racial category membership (Maddox, 2004). Skin tone is commonly categorized as a facial feature (Maddox et al., 2012). Once assigned, perceived racial category membership influences one's interpersonal interactions, attitudes, and behaviors (Fiske, 1998; Fiske & Taylor, 1991; Hamilton, 1981). Most racial phenotypicality bias research demonstrates that the more prototypical a person's facial features are of a particular race, the more likely s/he is to be evaluated based on the stereotypes (more specifically, negative stereotypes) associated with the racial category (Maddox, 2004). Darker-skinned Black Americans are less likely to match the phenotypic features of White Americans, compared to lighter-skinned Black Americans, thereby increasing the likelihood that negative stereotypes of Black Americans will be applied to them (Maddox, 2004; Maddox & Gray, 2002). For Black Americans, the prototypical skin tone (conceptualized as a facial feature) is a medium to dark complexion (Maddox, 2004). Those with

lighter skin do not match the prototype as closely and therefore, more often, report less race-based stigma than dark-skinned Blacks (Klonoff & Landrine, 2000).

Research from social and cognitive psychology shows that individuals tend to prefer lighter skin (Livingston, 2001; Livingston & Brewer, 2002; Porter, 1991; Seeman, 1946). More specifically, people typically prefer Eurocentric facial characteristics in their friends, significant others, acquaintances, and themselves (Averhart & Bigler, 1997; Bond & Cash, 1992; Hill, 1944; Robinson & Ward, 1995; Ross, 1997). Within the Black community, men report preferring lighter-skinned women as mates, a bias of which Black women are aware (Bond & Cash, 1992; Ross, 1997). This line of research also shows that positive characteristics are more frequently associated with light-skinned Blacks, whereas negative characteristics are more frequently ascribed to darker-skinned Blacks (Anderson & Cromwell, 1977; Bayton & Muldrow, 1968; Blair et al., 2002; Maddox & Gray, 2002; Marks, 1943; Sciara, 1971, 1983). For instance, Black teens associate light skin with higher attractiveness, and popularity, but associate darker skin with difficulty finding a mate (Anderson & Cromwell, 1977). Black children more readily remember stories when the characters exhibit stereotypes consistent with the characters' skin tones (i.e., when light-skinned characters hold positive traits and high-status occupations and when dark-skinned Blacks hold negative traits and low-status occupations; Avehart & Bigler, 1997). Similar findings exist for White subjects: stereotyping based on facial features is a function of the degree to which faces are believed to approximate prototypical Afrocentric characteristics (Blair et al., 2002). These patterns replicate for implicit evaluations of Blacks. Prototypical Black faces are associated with more negative implicit evaluations than less prototypical Black faces (Livingston & Brewer, 2002). Further, when primed with highly

prototypical Black faces, participants assign more negative judgments to a person of color than when primed with less prototypical Black faces (Livingston, 2001).

Sociological and anthropological colorism research has also provided evidence of potential preferential treatment of lighter-skinned Blacks. Ample work has demonstrated that lighter-skinned Blacks achieve higher SES compared to darker-skinned Blacks (Edwards, 1959; Frazier, 1957; Freeman, Ross, Armor, & Pettigrew, 1966; Hill, 2000; Hughes & Hertel, 1990; Hunter, 1998; Kreiger, Sidney, & Coakley, 1998; Ranslord, 1970; Seltzer & Smith, 1991). Using data from the 1979-1980 National Survey of Black Americans, Keith and Herring (1991) found that having lighter skin was linked to higher educational attainment, occupational status, and income levels for Blacks. These results held even after controlling for gender, current SES, SES of parents, area of residence, and age, amongst other factors.

In general, there is a breadth of theoretical and empirical support for the idea that variations in phenotypic features affect impression formation beyond and in the absence of initial racial categorization (Maddox, 2004). The fact that racial phenotypicality influences impression formation beyond initial racial categorization provides support for the importance of disentangling the influence of different phenotypic traits (which vary in strength, or degree of prototypicality) on subsequent judgments. For instance, there is relatively strong evidence that skin pigmentation and face shape (which includes facial features) have different effects on face perception and recognition (Russell, Biederman, Nederhouser, & Sinha, 2007; Russell & Sinha, 2007; Russell, Sinha, Biederman, & Nederhouser, 2006). However, debate exists with regard to whether skin tone or other facial features (e.g., nose width) are more influential when judging one's race (Hagiwara, Kashy, & Cesario, 2012). Most researchers argue that people draw on skin tone more than other facial features when making racial judgments (Brown et al., 1999). Yet

some researchers argue that facial features (e.g., hair type, nose width) are more influential than skin tone in this decision-making (Deregowski, Ellis, & Shepherd, 1975; Gitter & Satow, 1969; Sorce, 1979). Still others contend that skin tone and other facial features are used independently during perception and recognition (e.g., Stepanova & Strube, 2009). These debates revolve around which phenotypes are used most frequently for racial categorizations. Hagiwara and colleagues (2012) posit that because the same phenotypes can be used to make inferences about individuals' attributes within the same racial groups, the aforementioned debates should also be applied to instances of impression formation beyond primary racial categorization. Given that interviewer impressions of applicants can more strongly influence hiring decisions than applicants' credentials (e.g., Kinicki, Lockwood, Hom, & Griffeth, 1990), racio-ethnic phenotypes may influence stereotype activation, and in turn impression formation, ultimately producing colorism-based biases in selection and appraisal (Maddox, 2004).

Although there is substantial cross-disciplinary evidence for the existence of colorism bias, it is worth noting that some empirical work has not found support for negative outcomes due to darker skin tones (Atkinson et al., 1996; Secord, 1959; Secord, Bevan, & Katz, 1956). For example, Black and White clinicians show no differences in diagnoses toward light- or dark-skinned clients (Atkinson et al., 1996). Boundary conditions that limit engagement in colorism bias should therefore be explored (Maddox, 2004).

Colorism Research in I/O Psychology

Colorism research *does* exist in I/O psychology literature, but its presence is sparse. While social psychological research on colorism can inform I/O research, there still exists a:

> *"…need for I/O psychologists to investigate colorism in workplace scenarios based on the fact that I/O psychologists are uniquely positioned to do so. I/O psychologists' knowledge of selection and validation principles, combined with their knowledge of socio-psychological processes and theories of discrimination, give them quite a unique*

> *and complementary tool kit for tackling the problem of colorism in workplace hiring and performance review settings…"* (Marira & Mitra, 2013, p. 104)

To date, the top I/O psychology and organizational behavior journals are almost devoid of empirical studies of colorism (Marira & Mitra, 2013). Here, I discuss the few empirical investigations of colorism from an I/O psychology perspective and colorism theory in an I/O context.

One study revealed that perceptions of applicants' skin tones vary by interviewer race (Hill, 2002). White interviewers report the skin tones of Black respondents as being substantially darker than do Black interviewers (Hill, 2002). Further, interviewers perceive greater variation in the skin tones of same-race respondents than other-race respondents, suggesting that both Black and White Americans may not carefully distinguish the physical characteristics of other-race persons.

It is assumed that having lighter skin affords workplace advantages for all Americans of color (Bell, 1996). Research on work-related incentives has shown that Black Americans (e.g., Hersch, 2006; Goldsmith et al., 2006; Goldsmith et al., 2007) and immigrants (Hersch, 2008) with darker skin tones consistently receive lower pay for similar jobs, compared to their lighter counterparts. Hersch (2008) speculates that the negative effect of darker skin color on wages among U.S. immigrants is unlikely to reflect differences in worker productivity, leaving skin tone as a possible determinant of wage differences. This postulation is based on evidence that attractiveness and obesity affect the likelihood that applicants are invited to interview, but that these characteristics are not related to differences in actual productivity (Rooth, 2009). In essence, employers may draw on skin tone stereotypes to predict workers' suitability for and success in jobs.

Few studies have addressed hiring decision based on skin tone stratification within the Black race (Marira & Mitra, 2013). In Wade et al. (2002), White participants were more likely to accept lighter-skinned than darker-skinned Black applicants for a job, regardless of applicant gender. Similarly, Harrison and Thomas (2009) found that White subjects preferred to hire a lighter-skinned Black man with only a bachelor's degree and limited job experience over a darker-skinned Black man holding an MBA and managerial experience. Russell et al. (1992) suggest that African American employers also possess skin tone bias in favor of lighter-skinned Blacks but that it is difficult to capture evidence of this bias.

As suggested by Marira and Mitra (2013), colorism research should expand to take a two-pronged approach: one stream that addresses the theoretical underpinnings of colorism, and another stream that investigates colorism from an applied perspective. The current state of the colorism literature contains multiple theories and untested perspectives on how colorism manifests and functions (see Maddox, 2004; Marira & Mitra, 2013). Maddox (2004) developed a model of racial phenotypicality that integrates multiple social psychological theories of person perception (e.g., *dual-process model,* Brewer, 1988; *continuum models*, Fiske & Neuberg, 1990). I draw upon Maddox's (2004) model, as discussed below, as a theoretical framework for my hypotheses. The opportunity is ripe for I/O psychologists to contribute to the literature by conducting experimental and quasi-experimental studies that systematically investigate the effect of skin tone on selection and promotion decisions from both target and perpetrator perspectives (Marira & Mitra, 2013). Thus, the field of I/O psychology has great potential to "contribute to psychological knowledge of colorism in workplaces, inform jurisprudence regarding colorism, and also diminish the discriminatory effects of colorism in the work settings" (Marira & Mitra, 2013, p. 105).

Theoretical Framework: Maddox (2004) Model

Maddox (2004) provides a model of racial phenotypicality bias (i.e., colorism) that pulls from several theoretical frameworks to explain the role of phenotype-based expectancies in social representation and judgment (see p. 64). The current study draws on this framework that was developed to map phenotypic prototypicality variation onto well-established theories of social perceptions (Maddox, 2004). This framework incorporates empirically-supported models of person perception (e.g., Blair, Judd, Sadler, & Jenkins, 2002; Maddox & Gray, 2002; Zebrowitz, 1996) that describe how initial racial categorization, possible sub-typing, and perceiver conceptual knowledge combine to produce colorism bias. According to the model (Figure 1), the initial consideration of a target's physical appearance serves as the primary identification of the target's attributes, which then cue salient categories such as race. After initial categorization, the path to judgment occurs through two types of information processing: category-based processing and feature-based processing. Conceptual knowledge influences both of these routes, which are thought to operate mostly independently (although they may work in tandem at times). Below I discuss each of the three mechanisms (category-based processing, feature-based processing, and conceptual knowledge), that mediate target phenotypicality on perceivers' judgments, in more detail.

Category-based processing. According to Maddox and Gray's (2002) model, when racial categorization stems directly from the initial perception of a target's phenotypic features, the category-based route of information processing is engaged. The theory of skin tone bias follows this route of categorical perceptions. According to this theory, skin tone is the most salient phenotypic feature used to make initial racial categorizations of a target (Maddox, 2004). Once good fit is achieved between a target and an ascribed racial group, subsequent judgments

about the target are based on his/her representation of the group. For example, when a person encounters a Black person, a key indicator of that person's race is skin tone. When the perceiver determines that the target's skin tone is representative of the Black race category, s/he will then make assumptions about the person based on Black racial stereotypes (e.g., the person is chronically late because s/he is Black; the person does not speak proper English; the person lives in a ghetto). Stereotypes of a particular race are more likely to be applied to targets who possess typical physical characteristics of that race (Maddox, 2004). Targets perceived as less typical members of the racial group will still be subjected to categorical stereotypes and prejudices, but to a lesser extent (extending the previous example, a lighter-skinned Black person may only be stereotyped as not being punctual, while a darker-skinned Black person may be targeted with all three stereotypes). For Blacks, this means that darker-skinned individuals are at greater risk of being discriminated against due to their more salient Black phenotypicality (Maddox, 2004).

When the perceiver encounters a person who is atypical of the superordinate racial category, *sub-typing* occurs (Maddox, 2004). Sub-typing is the process by which atypical group members are further categorized into a sub-group due to their disconfirmation of the racial stereotypes typically associated with the larger group. In terms of skin tone, light-skinned Blacks are less typical of the Black race than dark-skinned Blacks, only representing an estimated 14-21% of the Black American population (Hill, 2000; Hunter, 1998; Keith & Herring, 1991; Ransford, 1970). Thus, statistically speaking, it is more likely that Americans encounter Blacks with more Afrocentric phenotypic traits (i.e., darker skin tone), thereby reinforcing the association between darker skin tone and negative stereotypes about Black culture. Individuals hold a subconscious desire to maintain their stereotypes (e.g., associating darker skin with traits typically assigned to Blacks), which results in placing light-skinned Blacks into a subcategory

(Maddox, 2004). Because lighter-skinned Blacks are less phenotypical in appearance and are assigned to a unique Black subcategory, they receive more positive judgments. Meanwhile, the negative stereotypes associated with most Blacks who have darker skin are preserved (Maurer et al., 1995; Rothbart & John, 1985). Maddox's (2004) theoretical framework offers a high-level explanatory mechanism for how light-skinned Blacks escape the brunt of negative associations ascribed more often to dark-skinned Blacks.

Feature-based processing. In contrast to category-based processing, the feature-based route of information processing is engaged when a perceiver *directly* associates certain phenotypic features with stereotypic traits (Blair et al., 2002) or race-based evaluations (Livingston & Brewer, 2002). In essence, racially-based stereotype activation occurs because the traits themselves (e.g., dark skin) are associated with negative stereotypes without *first* categorizing the target as Black (in which case, stereotype activation occurs primarily by identifying Blacks as a racial group in general). The development of these associations is said to form over time, influenced by repetitive exposure to category members (Maddox, 2004). The feature-based route is utilized when phenotypic features are believed to carry social information that is over-generalized to other category members with similar features (e.g., all dark-skinned Blacks have strong racial identities; Zebrowitz, 1996). This type of processing may occur in situations in which intraracial distinctions are masked by a perceiver's initial racial categorization of the target (Blair et al., 2002). In line with feature-based processing, *Afrocentric bias theory* (Blair et al., 2002) explains the tendency of Afrocentric features (present in both Blacks and Whites) to influence social perception beyond initial group categorization. The greater the presence of Afrocentric features, the greater the activation of negative associations (Blair et al., 2002).

With regard to the current study, feature-based processing may occur when incorporating hair type into one's evaluation. Hair type may be a feature that influences impression formation and judgments beyond, or in the absence of, initial race categorization. For example, raters may not exhibit differential ratings based on skin tone, despite variation in complexion, if they categorize all Black targets into the superordinate Black race category. However, if the hairstyles among targets range from Afrocentric to Eurocentric, these additional cues may activate feature-based processing because they are processed as more salient phenotypes. Targets with hair that more closely aligns with stereotypical expectations (i.e., Black hair is typically nappy) may experience more discrimination than targets with Eurocentric hair types, despite skin tone. Hair type may also trigger feature-based processing for light-skinned Blacks with natural hair; although they would normally be perceived as atypical because of their light skin, they may instead be considered more ethnic (fitting the superordinate Black category) because of hair type. This effect may in turn evoke negative stereotypes normally "reserved" for those with darker skin. So, although some evaluators may not differentiate between Blacks based on skin tone, other phenotypic features associated with colorism bias may still produce bias through feature-based processing.

Conceptual knowledge. Conceptual knowledge is proposed to influence both the category-based and feature-based routes of information processing in Maddox's model of phenotypic bias (Maddox, 2004). Central to information processing in person perception, conceptual knowledge about racial category membership - or perceptions about the relationship between phenotypic features and a target's personality or behaviors - ultimately feeds impression formation and judgments (Maddox, 2004). For example, many believe that Blacks are not as competent as Whites (Fiske, 2002). This conceptual knowledge likely underscores judgments

about the abilities of Blacks due to category membership. Maddox (2004) discusses many theories that can be used to explain different aspects of colorism and how it operates. The unifying element among all these theories is the notion that conceptual knowledge about physical characteristics has the power to influence racial category representations and subsequent judgments about the category's members (Maddox, 2004).

The Current Study

A number of gaps remain in the colorism literature. One gap is the nascent application of I/O psychology to research on the presence and effects of colorism in the workplace. The present study contributes to the colorism research in I/O psychology literature by further investigating the effect of colorism on workplace outcomes. From this perspective, the Current study situates the investigation of colorism-based biases in a selection context, extending knowledge of the effects of colorism on observers' reactions to targets (e.g., Hagiwara et al., 2004, Stepanova & Strube, 2012).

Another gap is that colorism research is largely devoid of gender comparisons within studies. Studies have focused almost exclusively on Black men as targets of colorism bias, and to date, no Afrocentric features research has assessed Black women solely as targets (Hagiwara et al., 2012; Maddox, 2004). The few studies that have compared the effects of colorism between men and women revealed that experiences of colorism differ as a function of gender (Harrison & Thomas; Hunter, 1998; Keith & Herring, 1991; Maddox & Gray, 2002; Thompson & Keith, 2001). Perceived attractiveness likely plays a role in these distinctions, because physical appearance may influence evaluations of women more than of men (Pinker, 1997). Skin tone as a specific marker of beauty is gendered (Celious & Oyserman, 2001). Thus, women may be judged by their skin tone to a greater extent than men. As mentioned, variations in skin

complexion have been linked to perceived beauty, with lighter skin being viewed as more attractive (Hall, 1995). If individuals with lighter skin are considered more attractive, they are likely to be treated better in both intraracial and interracial settings (Celious & Oyserman, 2001). Afrocentric female features (e.g., skin tone, hair type) are typically not associated with the ideal of American beauty (Shepard, 1980). Blacks widely acknowledge the competing messages about beauty as they relate to skin tone (Celious & Oyserman, 2001). Typically, men are judged less by their physical appearance than are women, thus skin tone distinctions can be considered *most* debilitating for Black women (Celious & Oyserman, 2001). Considering this, the current study focuses exclusively on the effects of colorism bias on Black females in the work context, expanding empirical evidence of colorism against Black women in selection contexts.

This study also addresses a question Marira and Mitra (2013, p. 105) pose about how colorism operates in the workplace: "To what extent can the causal effect of skin tone be teased apart from the influence of other facial phenotypic characteristics…?" Studies that attempt to disentangle the effects of skin tone from other phenotypic traits typically examine the interaction of skin tone with facial traits such as nose width and lip fullness (e.g., Hagiwara et al., 2012; Stepanova & Strube, 2012). The current study expands this literature by examining the interaction of skin tone with an unexplored, ethnically-bound phenotypic feature: hair type. Specifically, I study the effects of Afrocentric "natural" hair types versus Eurocentric hair types. Afrocentric hair types include hairstyles such as braids, dreadlocks, afros, and any style of "kinky" (coarser in texture) Black hair that is worn without straightening agents (i.e., chemical processes and/or styling tools used to straighten hair). Eurocentric hair types worn by Black women include straightened hair as well as weave (i.e., human hair or synthetic extensions that are typically sewn into braids of natural hair along the scalp). The texture of most hair weaves

does not imitate the typical natural Black hair texture. Most varieties are silky and fine, lacking the coarseness of natural Black hair and more closely approximating typical European hair texture characteristics. Within the Black community, a woman's hair is considered "good hair" if it is of the fine and silky Caucasian type, and is considered "nappy" or "bad" if it resembles the naturally Afrocentric kinky variety (Hall, 1995).

However, a natural hair movement is currently occurring among women of color. Similar to the "Black is Beautiful" movement of the 1970's in the U.S., the natural hair movement encourages Black women to embrace their natural hair types by wearing kinky curls, twists, and other styles that take advantage of maintaining chemically unprocessed, healthy hair. One can find hundreds of social media hash-tags like "#naturalistas," "#kinkycurls," and "#teamnatural" that capture the renewed pride in and enthusiasm about natural Black hair types. There are also many tutorial blogs on how to achieve these styles. Despite the popularity of the natural hair movement among many Black women, the question remains as to whether the gatekeepers of employment opportunities perceive these natural hairstyles on Black women as desirable in the work context. Some may perceive these styles as unprofessional or unkempt. These styles may be undesirable in white collar settings because they are viewed as incongruent with stereotypes of professional employees. They may be seen as violating the normative prescriptions of the workplace as they relate to hair styles; and the violation of workplace norms has been linked to disapproval, and even reprimand, at work (Cialdini & Trost, 1998).

For the aforementioned reasons, the study of the independent and interactional effects of Black women's skin tone and hair type on hiring decisions is relevant to the colorism literature. Hair styles and hair type relate to ideals of beauty more strongly for women than men. Gender differences in the weight placed on particular phenotypic characteristics (in this case, hair)

underscore the rationale for focusing on Black women in the current study. For Black women, negative perceptions based on both skin tone and hair type may act independently or additively to negatively affect evaluations of them in the work context. Studying hair type is important because it addresses Black women's unique experiences of colorism and judged attractiveness, as well as phenotypic variations that contribute to colorism biases.

Thus far, I have discussed the independent variables (IVs) of interest in the current study: skin tone and hair type. I will now turn to a discussion of the dependent variable (DV) of interest in this study: selection ratings. Colorism bias based on skin tone and hair type may influence selection ratings – which influence actual hiring decisions – making this DV an important outcome to study. Colorism bias may systematically lower ratings of applicants with more Afrocentric features, causing unfair discrimination against this group early in the selection process.

Rating Biases in Selection

The study of systematic rating biases has a longstanding history in the I/O psychology literature. One perspective investigates systematic biases that result from rater psychometric error, such as halo error (typically inflated ratings; Thorndike, 1920), or contrast effects (ratings based on previous performance ratings) and assimilation effects (matching previous ratings, regardless of change in performance; e.g., Budda, 1984; Murphy et al., 1986; Summer & Knight, 1996). Another perspective investigates systematic stereotype-based rating biases, such as differences in evaluator ratings due to racial discrimination (e.g., Roth et al., 2003). From an applied perspective, the presence of any type of unwanted variance in evaluative judgments compromises fairness in organizational practice. Extraneous sources of variance in hiring decisions or performance ratings constitute criterion contamination (Austin & Villanova, 1992),

which undermines the accuracy and validity of evaluations. In both the selection and performance appraisal domains of I/O research, the influence of visible ratee characteristics has been of continued interest (for examples see Harrison & Thomas, 2009; Ibarra et al., 2010; Landy & Farr, 1980). Because visible ratee characteristics are readily noticeable – racial phenotypicality being one of the most salient (Brown, Ward, Lightbourne, & Jackson, 1999) – they can easily activate raters' stereotypes (Maddox, 2004). These stereotypes ultimately affect raters' inferences and judgments, and in turn may unfairly influence their evaluations.

The I/O psychology literature is replete with evidence of phenotypically-based rating biases in selection and appraisal contexts. In addition to rater biases based on race/ethnicity, gender, attractiveness, and weight are other visible physical features that have commonly been the subject of investigation. For instance, men are consistently more likely to be hired for professional and managerial positions, to receive higher evaluations, and to have greater access to resources and support than women (Cleveland, Stockdale, Murphy, 2000; Dobbins et al., 1988). Raters hold lower perceptions of deserved respect toward both men and women who work in gender inconsistent roles, which in turn, lower evaluative ratings (Heilman & Wallen, 2010). In terms of the role of attractiveness in the work context, attractive people are favored over equally qualified but less attractive people in hiring decisions (Dipboye, Arvey, & Terpstra, 1977; Dipboye, Fromkin, & Wiback, 1975; Raza & Carpenter, 1987), in ratings of likability and competence (Chung & Leung, 1988), in recommendations for salaries and promotions (Frieze, Olson, & Russell, 1991; Jackson, 1983; Ross & Ferris, 1981), and in evaluations of career potential (Cash, Gillen, & Burns, 1977). Biases also exist based on weight perceptions. A meta-analytic investigation demonstrates that overweight individuals are disadvantaged in evaluative workplace outcomes compared to those who are not overweight (Rudolph, Wells, Weller, &

Baltes, 2008). Still, race appears to be the most popular phenotypic feature for study in the I/O literature when investigating systematic biases in evaluative judgments.

The literature on workplace racial discrimination against Black Americans is well-established. The preponderance of empirical evidence from the 1960's through 1990's suggests that, generally, ratings from raters of the same race are higher, albeit situational factors moderate this effect (Kraiger & Ford, 1985; Landy & Farr, 1980). Other research during this period also yielded contrary evidence showing that, on average, Black raters actually gave Whites higher performance ratings than Black ratees (Sackett & Dubois, 1991). More recent meta-analytic work continues to support performance rating differences between Blacks and Whites, although those differences are smaller than previously observed (Roth, Sackett, & Bobko, 2003). In hiring contexts, explicit racist attitudes interact with organizational racial bias climates to predict discrimination (Brief, Dietz, Cohen, Pugh, & Vaslow, 2000). Both implicit and explicit racial attitudes also predict discrimination against ethnic minorities in the absence of negative organizational diversity climates (Blommaert, van Tubergen, & Coendersm, 2012).

The Fair Employment Council found that more than 20% of employers gave White applicants preferential treatment over Blacks (Brief et al., 2005). White men with criminal records are actually more likely to get callbacks for job interviews than Black men with the same qualifications and no criminal history (Pager, 2003). There is even evidence that having a Black-sounding name renders an applicant 50 times less likely to get a callback than an applicant with a White-sounding name (Pope, 2003). Despite evidence of disparate treatment and adverse impact during the applicant review stage, many Blacks do advance to the interview portion of the selection process. Most interviews are still conducted in person though, which allows for possible color-based biases to affect hiring decisions (Harrison & Thomas, 2009). Harrison and

Thomas (2009) argue, "although Blacks may often be at a disadvantage when applying for jobs, not all Blacks are disadvantaged equally, and the burden that Blacks may face is highly dependent on whether they have light or dark skin" (p. 136).

Research that moves beyond the well-documented interracial discrimination in selection systems, and sheds light on *intra*racial differences, can help illuminate how members of the same race may differentially experience racial discrimination. The racial homogenization typically used in selection bias research mandates the use of stereotypes for in-group and out-group interactions, masking the meaningful differential experiences of people with varying skin tones within a race. It is important to investigate further marginalization of sub-groups within stigmatized racial groups. Such research can provide insight into how discrimination may be exacerbated by sub-group membership. Studies such as this one may illuminate the need to ensure fair hiring practices not only for Blacks as a homogenous protected class, but particularly for darker-skinned Blacks, whom may be viewed as less desirable applicants. Black applicants with lighter skin are perceived as more closely mirroring the aesthetic desirability of White applicants. Whiteness in America is associated with higher competence – a highly valued characteristic when comparing employees for selection (Fiske, 2002). Due to these associations, White employers rate lighter-skinned Blacks as more appealing for hire (Hunter, 2002). Historically, it was considered better business practice for employers to hire light-skinned Blacks over darker ones, and this practice appears to persist today (Hunter, 2002; Ross, 1997).

Examining selection ratings (i.e., scores that inform hiring decisions and/or recommendations for employment) is particularly important. This facet of the selection process determines whether Blacks have the opportunity to prove their value to an organization through actual job performance. Once on the job, Blacks have a *better* chance of sustaining economic

stability and climbing the SES ladder through career growth (despite evidence of discrimination and hindrances once on the job). If dark-skinned Blacks, in comparison to their light-skinned counterparts, are unfairly and disproportionately weeded out of the selection process before given the opportunity to demonstrate their performance, the pattern of discriminatory treatment based on colorism biases will continue to keep them at a societal disadvantage.

Mediators of the Relationship between Racial Phenotypes and Selection Ratings

Perceived racial identity strength. The Afrocentric bias theory (Blair et al., 2002) states that racial category beliefs, and/or evaluations, mediate the associations between physical features and other personal factors (e.g., personality traits, behaviors; Maddox, 2004). Racial beliefs are generally driven by stereotypes associated with the racial group. Thus, conceptual knowledge is typically based on stereotypes. Most cultural stereotypes about Blacks are negative in nature (Maddox, 2004), so the route between Afrocentric phenotypic characteristics and subsequent judgments is primarily driven by negative conceptual knowledge about Blacks. The amount of "Blackness" one appears to possess (physically) may negatively influence observers' attitudes and behaviors. Research supports this assumption: Blacks with stronger Afrocentric features are perceived, evaluated, and treated more negatively than Blacks with weaker Afrocentric features (Hagiwara et al., 2012). Blair et al. (2002) demonstrated that White participants rated Blacks with stronger Afrocentric features as being more likely to possess stereotypical Black traits (e.g., laziness, strong musical and athletic abilities, hostility). It is plausible then, that the link between phenotypical features and perceived traits could be explained by other types of individual differences.

Perceived racial identity strength may be one such individual difference that might explain the relationship between observers' perceptions of one's Afrocentric features and

subsequent judgments of him/her. Racial identity is defined as the importance of a person's racial group to his or her self-image (see Luhtanen & Crocker, 1992; McCoy & Major, 2003; Turner, Hogg, Oakes, Reicher & Wetherell, 1987). When observers (e.g., interview raters) make inferences about one's racial identity strength, they likely base their assessments on the extent to which the person's traits fit the stereotypical Black phenotype. A series of studies by Wilkins and colleagues (2010) support this idea. They found that the degree to which an individual looks like a prototypical member of his or her racial group (e.g., darker skin, natural hair for Blacks) positively relates to participants' perceptions of the individual's racial identity strength. In these studies, the accuracy of the racial identity perceptions was validated such that Black participants also reported a positive relationship between their skin tone and own racial identity strength (Wilkins et al., 2010). When Blacks are believed to have strong racial identities, Whites express more negative attitudes and behavioral intentions toward them, compared to when racial identity is believed to be weak (Kaiser & Pratt-Hyatt, 2009). Whites also show less prosocial behavior toward Blacks who emphasize their minority group membership (Dovidio, Gaertner, Shnabel, Saguy & Johnson, 2009).

Several explanations exist for Whites' negative reactions to Black racial identity (Harrison & Thomas, 2009). Strong Black American ethnic identity is widely understood to have evolved from the shared experience of systematic discrimination (Harrison & Thomas, 2009), a truth that most Whites feel uncomfortable addressing. Another explanation is rooted in the work on in-group/out-group theory by Dovidio, Gaertner, and colleagues (e.g., Dovidio et al., 2009, Dovidio & Gaertner, 2000; Dovidio, Gaertner, & Kawakami, 2002; Dovidio, Gaertner, Kawakami, & Hodson, 2002). Believing one has a strong Black identity reinforces the stereotypes and prejudice inherent in colorism. Understanding predictors of racial identity

perceptions is important because identity inferences largely affect how minorities are evaluated and treated (Dovidio et al., 2009; Kaiser & Pratt-Hyatt, 2009; Sanchez & Bonam, 2009). The relationship between phenotypic prototypicality and hiring decisions may operate through perceptions of racial identity strength. Applicants who possess stronger Afrocentric features may be perceived as having higher levels of racial identity, thereby decreasing hiring recommendations for them. As noted earlier, studies of race are typically homogenized (e.g., if you're Black, you're just Black; Celious & Oyserman, 2001). However, constructing race in this way is problematic because it perpetuates generalizations about the Black community, the racial identity of its members, and the consequences of those identities (Balibar, 1996). Therefore, in the present study, the mediating effects of perceived racial identity are examined from a within-race perspective, studying how relationships differ for Black targets with varying levels of Afrocentric features.

Physical attractiveness. Collins (1991) contended that standards of beauty privilege Whiteness through the degradation of Blackness. If identity is relational, beautiful people are only defined in relation to others who are defined as less attractive. Collins (1991) proposed that White beauty is based on the racist assumption of Black ugliness. Colorism includes the premise that Blacks with Eurocentric (versus Afrocentric) hair textures and facial features are perceived as more attractive and intelligent (Russell et al., 1992). Both Black and White perceivers hold this bias. Blacks rate both men and women with lighter skin as more attractive (Hill, 2000), with the relationship being "strong and monotonic" for women targets (i.e., a steady increase of attractiveness ratings from "very dark" to "very light", p. 392). Other research shows that, cross-culturally, men find women with a more Eurocentric appearance more attractive than women

with an Afrocentric appearance (Cunningham, Roberts, Barbee, Druen, & Wu, 1995; Hamilton &Trolier, 1986; Martin, 1964).

Historically, Afrocentric female features have not been associated with the ideal of American beauty (Shepard, 1980). U.S. advertising practices perpetuate the link between perceived beauty and skin tone by more frequently featuring Black women with Eurocentric than Afrocentric features (Keenan, 1996). Studies of advertisements in Ebony magazine (a publication published by Blacks with content aimed toward Black audiences), from the 1950's through the 1990's, showed that Black females with Eurocentric features were shown more frequently (Van Goodlow, 1993). Even written descriptions of attractiveness in Black magazines (e.g., Ebony) like "beautiful", "gorgeous", and "lovely" were more often associated with Black women with more Eurocentric features (Fears, 1998). As Hall (1995) states, these ideals "…necessitated that light-skinned, green-eyed Vanessa Williams be the first among her ethnic peers to adorn the crown of Ms. [sic] America" (p. 176). These powerful effects of attractiveness are divisive and create advantage for light-skinned African American women, such that they have greater access to wealth, high SES marriage partners, and majority-assimilation criteria that darker-skinned African American females do not have (Hall, 1995). Black women engage in many tactics to appear more Eurocentric, such as straightening their hair, bleaching their skin, wearing colored contacts, and even undergoing plastic surgery – all signs that many Black women have internalized Eurocentric beauty ideals (Maddox, 2004). Black women see this beautification process as a means to increase their value, such that greater beauty (i.e., greater Eurocentrism) increases the ability to get a job, be promoted, attain greater education, and attract a high-status husband (Anzalduia, 1987; Hill & Collins, 1991; Moraga, 1983; Webster & Driskell, 1983).

The positive association between lighter skin tone and attractiveness predisposes those with lighter skin to be treated more favorably in everyday interactions (Celious & Oyserman, 2001). More attractive individuals are assumed to have more positive personality characteristics (Dion, Berscheid, & Walster,1972) and more favorable qualities, affording them better interpersonal treatment than unattractive individuals (e.g., Alam & Dover, 2001; Langlois et al., 2000). Attractive people are even held, cuddled, and kissed more as infants and considered more sociable, warm, interesting, outgoing, humorous, and socially adept as adults (Zanden & Wilfrid, 1997; Feingold, 1992). All of these characteristics would make an applicant more desirable to an organization. Therefore, I posit that physical attractiveness may be an additional mediating mechanism (in addition to racial identity) through which Afrocentric features influence hiring decisions.

Moderation: The Role of Job Type

The current study also investigates the role of job type in the activation of colorism biases in hiring decisions, addressing another one of Marira and Mitra's (2013) recommendations for future research. The history of the U.S. chattel system may have instilled lasting beliefs about the assignment of various types of work to African Americans based on skin tone (Frazier, 1957; Keith & Herring, 1991). During slavery and after emancipation, for Blacks, having lighter skin led to increased opportunities to learn skilled trades, while possessing darker skin historically led to the assignment of labor intensive and menial work (Bond, 1972). Did these beliefs set the stage for evaluations in current organizational selection/promotion contexts? Blacks in America encounter difficulty ascending the professional ladder: they are less likely to be selected for professional roles and to achieve positions in the *C-Suite* (Ibarra, 1993; Thomas, 2001), suggesting that discrimination may be at play in these contexts. More specific to colorism, the

size of the disparity between light- and dark-skinned African Americans consistently equates to the size of the gap between Black and White Americans with respect to education, income, and SES (Hughes & Hertel, 1990). This evidence suggests that Blacks with lighter skin tones may be disproportionately selected for better job opportunities. The current study investigates how phenotypic features interact with job type to determine when these features most strongly cue perceptions of racial identity and attractiveness, subsequently affecting hiring decisions.

Although women make up more than half of the U.S. population, earn 60% of Bachelor's degrees, 47% of law degrees, 48% of medical degrees, over 44% of business and management degrees, comprise 59% of the college-educated entry-level workforce, and occupy 52% of all professional positions, they still only account for 14.6% of executive officers, 8.1% of top earners, and 4.6% of Fortune 500 CEOs (Warner, 2014). The statistics for women of color reflect an even wider gap. Black women comprise roughly 6.75% of the U.S. population (U.S. Census, 2013). All women of color only account for 11.9% of managerial and professional positions; only 5.3% are African American women (Warner, 2014). In most professional or executive roles, Black women are tokens. Tokenism refers to minorities being viewed as symbols or "token" employees due to their underrepresentation in groups (Kanter, 1977). Token group members are more likely to face dominant group members' stereotyped perceptions, creating barriers to their influence in groups (Kanter, 1977). Research has also supported the tendency for token group members to be perceived negatively and sometimes treated with contemptuous ridicule or even mockery (Maass & Clark, 1984; Nemeth & Wachtler, 1983). Token group members are often doubted and mistrusted; as a result, being labeled a token (or self-identifying as one) often causes discomfort, isolation, and self-doubt (Kanter, 1977). Being labeled a token is even powerful enough to interfere with the one's performance (Powell, 1993). Due to their high visibility,

tokens face additional performance pressure and may be negatively singled out on the basis of their difference (rather than due to their accomplishments).

Considering the negative work outcomes associated with tokenism, Black women often try their best to blend in with majority group (i.e., White) members (Banks, 2000; Collins 1991). In predominantly White organizations, Black women may be able to assimilate more easily when they possess fewer Afrocentric features. Thus, many Black women may work to minimize features that make them stand out as tokens (Banks, 2000). Although skin tone is not easily masked, it is fairly easy to wear hairstyles that are more Eurocentric. There is an unspoken fear among Black women executives that wearing hairstyles that are "too ethnic" will pronounce perceptions of tokenism and evoke disapproval of Whites (Kwateng, 2011). This fear is legitimized in comments made by an editor of *Glamour* magazine to a group of attorneys, referring to Afros as "a real no-no" and dreadlocks as "truly dreadful" and stating that it is "shocking that some people still think it is appropriate to wear those hairstyles at the office" (Jezebel Blog, 2007). This fear may not be as pronounced for Black women with naturally occurring Eurocentric features (e.g., lighter skin, more Eurocentric hair) because they don't stand out from the majority as much (Hall, 1995). In line with tokenism literature, I contend that Black women who occupy professional or executive roles may be at greater risk of falling prey to the negative outcomes of colorism bias due to their low representation in these positions (Warner, 2014). More specifically, Black women who possess Afrocentric features (e.g., darker skin, natural hair) may be more salient tokens than Black women with Eurocentric features (e.g., lighter skin, straightened hair), amplifying negative perceptions and ultimately lowering selection ratings for white collar jobs.

In contrast, Black women with Afrocentric features who apply for blue collar jobs may not experience this bias as often due to greater stereotype congruency between their appearance and their job. Although statistically there are more Black women in white collar jobs than in blue collar jobs (Warner, 2014), women who possess Afrocentric characteristics may be viewed as better fitting blue collar roles. The chattel system of slavery may have led to stereotype congruency between Afrocentric features and manual (often lower paying) labor (Keith & Herring, 1991; Thompson, 2009). An additional, practical explanation for the possible stereotype congruency between Afrocentric features and blue collar work is that these jobs are often less predicated on appearance due to their labor intensity (Scott, 2015). For instance, consider a manufacturing job on an assembly line. In this job, employees do not interface with the public. Although Eurocentric hair types may be considered more attractive and appealing (Hall, 1995), expectations about attractiveness may be less important in blue collar roles. Natural hairstyles that require minimal upkeep (e.g., braids, dreadlocks, short afros, or natural kinky curls) may be deemed more acceptable in a factory where employees "sweat their hair out." Selection decisions are often based on the extent to which the stereotypes of applicants match the stereotypes associated with jobs (Heilman, 1983). Stereotypes associated with Black women include low cognitive ability, strong will, and independence (Cesare, Dalessio, & Tannenbaum, 1988; Hosoda, Stone, & Stone-Romero, 2003). These stereotypes do not map onto requirements of certain jobs (e.g., computer salesperson with technical expertise, an outgoing personality, and a high customer service orientation; Cesare et al., 1988). Rater decisions regarding selection of Blacks are influenced by the stereotypical view that Blacks are low in cognitive ability levels (Schmitt & Lappin, 1980). Because of this perception, raters may view Blacks as more suitable than Whites for physical jobs requiring lower levels of cognitive ability (Hosoda, Stone, &

Stone-Romero, 2003; Schmitt & Lappin, 1980). Considering this, I postulated that the relationship between Afrocentric features and hiring decisions may be weaker for Black women applying for blue collar jobs. Taken together, I examined job type (white versus blue collar) as a moderator in the relationship between phenotypic features (i.e., skin tone, hair type) and perceptions (i.e., perceived racial identity, attractiveness) that ultimately influence selection ratings.

CHAPTER 2: HYPOTHESES

I began with a hypothesis about the main effect of skin tone on selection ratings for Black women, replicating findings by Harrison and Thomas (2009) and Wade et al. (2004):

> **Hypothesis 1:** *Lighter skin tone positively relates to selection ratings for Black women, such that a continuum of preference based on skin tone exists, from light to medium to dark skin.*

Research on the relationship between colorism and work-related evaluations is still in its infancy, reflecting a scarcity of colorism research from an I/O psychology perspective. Although I anticipated obtaining results similar to Harrison and Thomas (2009), additional empirical evidence for colorism effects is needed through replication in order to build upon this literature.

I also explored a novel phenotypic feature – hair type – that is another component of colorism. Most studies investigating colorism bias focus primarily on skin tone, but calls have been issued to disentangle the effects of skin tone from other phenotypic features (e.g., Marira & Mitra, 2013). Colorism includes the notion that Blacks with facial features *and* hair textures that are more Eurocentric (versus Afrocentric) are viewed as more attractive and intelligent (Russell et al., 1992). Further, perceived attractiveness influences impression formation and judgments during the selection process (Celious & Oyserman, 2001; Hunter, 2002). Thus, I hypothesized that an effect similar to that for skin tone exists between hair type and selection ratings:

> **Hypothesis 2:** *Black women with Eurocentric hair styles receive higher, more preferential selection ratings than Black women with Afrocentric hair styles.*

Considering these phenotypic features in tandem, I anticipated that skin tone and hair type interact to predict selection ratings such that dark-skinned applicants with Afrocentric hair would receive the least favorable selection ratings and that light-skinned applicants with

Eurocentric hair would receive the most favorable selection ratings. That is, I hypothesized an additive effect of these features. Further, I predicted that a linear relationship exists between the interaction of skin tone and hair type in predicting selection ratings. I predicted that skin tone takes precedence over hair type because it is often considered the most salient feature of one's appearance, and so is likely to be more influential (Brown et al., 1999; Hall, 1998; Hagiwara et al., 2012). The following hypothesis addresses the effects of these two phenotypes in tandem:

> **Hypothesis 3:** *Skin tone and hair type interact in predicting selection ratings, such that skin tone will take precedence over hair type to produce the following pattern (from highest selection ratings to lowest): light skin x Eurocentric hair → light skin x Afrocentric hair → medium skin x Eurocentric hair → medium skin x Afrocentric hair → dark skin x Eurocentric hair → dark skin x Afrocentric hair.*

Skin color and hair type may affect selection ratings, but *how*? Little empirical evidence has addressed mediators that explain the processes by which phenotypic features influence outcomes. Investigating drivers of selection bias adds depth to our understanding of how colorism operates. Although Harrison and Thomas (2009) theorize that attractiveness may explain gender differences in colorism, they did not directly test this variable. Attraction is a key factor for women on the job market, as attractiveness is linked to assumptions about competence and personality, among other factors (Maddox, 2004). Hypotheses 4a and 4b addressed the main effects of skin tone and hair type on selection ratings via attractiveness perceptions in order to understand the unique impact of each feature on attractiveness ratings. Thus, I hypothesized the following regarding the mediating role of perceived attractiveness:

Hypothesis 4a: *Attractiveness mediates the relationship between applicant skin tone and selection ratings, such that Black women with lighter (versus darker) skin are perceived as more attractive, leading to more preferential selection ratings.*

Hypothesis 4b: *Attractiveness mediates the relationship between applicant hair type and selection ratings, such that Black women with Eurocentric (versus Afrocentric) hair styles are perceived as more attractive, leading to more preferential selection ratings.*

Harrison and Thomas (2009) also theorized (but did not empirically test the idea) that racial identity perceptions may explain the relationship between phenotypic features and the likelihood of hiring Black candidates. Empirical evidence supports the positive relationship between degree of phenotypic prototypicality and perceived racial identity strength (Wilkins et al., 2010), as well as the relationship between perceptions of strong Black identity and negative evaluations (Harrison & Thomas, 2009). However, no study to date has tested perceived racial identity strength as a mediator between phenotypic features and selection ratings. Filling this void in the literature, I posited that:

Hypothesis 5a: *Perceived racial identity strength of applicants mediates the relationship between applicants' skin tone and selection ratings, such that Black women with lighter (versus darker) skin are believed to have weaker racial identities, thus leading to higher selection ratings.*

Hypothesis 5b: *Perceived racial identity strength of applicants mediates the relationship between applicants' hair type and selection ratings, such that Black women with Eurocentric (versus Afrocentric) hair are believed to have weaker racial identities, thus leading to higher selection ratings.*

Last, I hypothesized that job type moderates the relationships between phenotypical characteristics and the mediators of selection ratings (i.e., perceived racial identity and attractiveness). Marira and Mitra (2013) called for research that explores the moderating effect of job type. The severity of colorism may vary based on the role an applicant is seeking. Theories of tokenism and role congruency provide theoretical rationale for why Black women in white versus blue collar jobs (respectively) may experience differential colorism bias during selection. Because Afrocentric features may be more congruent with stereotypes of the typical factory worker, the strongest negative evaluations of Afrocentric features should occur in white collar settings. That is, in white collar settings, Afrocentric features (e.g., darker skin, Afrocentric hair) may place Black women at a greater disadvantage because these features amplify their token status and are incongruent with stereotypes of the job. As a result, observers are apt to perceive women with Afrocentric features applying to white collar positions (versus blue collar positions) as having higher racial identity strength and as less attractive, thus leading to less favorable selection ratings. Therefore, I hypothesized the following regarding the role of job type:

Hypothesis 6a-b: *Job type (white versus blue collar) moderates the relationships between applicant* ***skin tone*** *and (a) perceived attractiveness, such that Black women with lighter skin are perceived as even more attractive – thus receiving higher selection ratings - when applying for white (versus blue) collar jobs, and (b) perceived racial identity strength, such that Black women with lighter skin are believed to have even weaker racial identities – thus receiving higher selection ratings - when applying for white (versus blue) collar jobs.*

Hypothesis 7a-b: *Job type (white versus blue collar) moderates the relationships between applicant* ***hair type*** *and (a) perceived attractiveness, such that Black women*

with Eurocentric hair are perceived as even more attractive – thus receiving higher selection ratings - when applying for white (versus blue) collar jobs, and (b) perceived racial identity strength, such that Black women with Eurocentric hair are believed to have even weaker racial identities – thus receiving higher selection ratings - when applying for white (versus blue) collar jobs.

Thus, Hypothesis 6a states that the effects from Hypothesis 4a will be amplified in white collar jobs; Hypothesis 6b states that the effects from Hypothesis 5a will be amplified in white collar jobs; Hypothesis 7a states that the effects from Hypothesis 4b will be amplified in white collar jobs; Hypothesis 7b states that the effects from Hypothesis 5b will be amplified in white collar jobs.

CHAPTER 3: METHODS

To test the study hypotheses, I used a quasi-experimental design. I varied target hair type and skin tone to investigate their direct effects on selection ratings, as well as on the mediating effects of perceived racial identity strength and attractiveness. I also varied job type (blue or white collar) to test its moderating effect on perceptions of racial identity strength and attractiveness. Six target photos and two applicant vignettes (to manipulate job type) were used in a 3 (skin tone: light, medium, dark) X 2 (hair type: Afrocentric, Eurocentric) X 2 (job type: blue or white collar) between-subjects design. Before conducting the primary study, I administered a pilot test to ensure the validity of the target photo manipulations.

Pilot Study

To ensure that the six target photos of hypothetical job candidates were valid manipulations of the focal variables, I pilot-tested perceptions of Afrocentricity of skin tone (i.e., degree of darkness) and hair type of a variety of photos. I used these tests of the stimuli to select photos in which perceived hair type and skin tone conditions significantly differed from one another in appropriate directions.

Participants

Participants were recruited through both Amazon's Mechanical Turk (MTurk) and the psychology student participant pool at a Midwestern university. Because MTurk was used for the primary study data collection, MTurk workers were included in the pilot sample to ensure that the stimuli were valid among MTurk workers (see more about the MTurk worker population in the Primary Study Participants section). The only inclusion requirement was that participants were age 18 or older, which all participants met. The final pilot sample included 104 participants

(44 from MTurk; 60 from student research pool). The mean age was 29.33 years. The sample was primarily White (51%). See Table 1 for detailed demographic statistics.

Stimuli

The target pictures were tested to ensure they were valid manipulations of the independent variables (skin tone, hair type). Color photos were used to improve the validity and realism of the photos, compared to black and white photos used in other colorism studies (e.g., Harrison & Thomas, 2009). All pictures were of the same person in order to hold constant all other facial features; only skin tone and hair styles were altered. Twenty-four photos were included in the pilot study to test combinations of applicant skin tone (light, medium, or dark) and different hair styles (Eurocentric and Afrocentric), as well as methods of skin tone manipulation (e.g., digital versus make-up application).

Target skin tone was manipulated in two ways to determine which method appeared more realistic. In one set of target photos, skin tone was manipulated by a professional make-up artist using professional-grade theatrical makeup and lighting (see Appendix A). In a second set of photos, skin tone was altered digitally (see Appendix B). A professional hair stylist created four hairstyles (two Eurocentric, two Afrocentric) using wigs made of human hair. The Eurocentric styles were created using silky, straightened hair (one style was long and one was a chin-length bob; see Appendices A-B). The Afrocentric styles were created with coarser, kinky hair (one look was an up-do and the other was an afro; see Appendices A-B). The purpose of testing two Eurocentric and two Afrocentric hair styles was to determine which best exemplified Euro- versus Afrocentric hair styles. Photos were taken of the model with each of the four hairstyles for each of the three skin tones. The digital variations of skin tone were created using the same baseline skin tone (the model's medium brown complexion) across the four hair styles.

Procedure

Participants viewed one randomly-selected target photo of the 24 possible photos (skin x hair x method of skin tone alteration). They rated the target's skin tone on a scale from 1 (lightest) to 9 (darkest). A manipulation check was included to ensure that participants perceived the target as belonging to the correct racial category (options included Black or White). Hair type was rated on a 9-point scale, with 1 being the most Eurocentric (defined as "hair that is fine, silky in texture, free of kinks, and looks very manageable") and 9 being the most Afrocentric (defined as "hair that is coarser in texture and looks as if it lacks any straightening agents; styles typically worn by Black women with ethnically 'natural' looking hair").

Additionally, participants estimated the model's age, presented in categorical brackets that approximate[1] younger, middle, and older age (e.g., "young = 18- 30"; Finkelstein, Ryan, King, 2013). The model's actual age was 30. Youth (ages 18-30) has been linked to relatively positive stereotypes, and middle-age is associated with the most positive stereotypes (Finkelstein et al., 2013). Any significant differences in perceived age between the twelve photos may lead to differences in attractiveness, and thus, selection ratings. Measuring perceptions of target age ensured that differences in attractiveness and selection ratings in the primary study are not due to differences in the target's perceived age.

Statistical Analyses

Paired-sample t-tests were performed to determine whether participants accurately differentiated the two applicant hair types as Afrocentric and Eurocentric. Of the four hair styles, I selected one Eurocentric and one Afrocentric style based on which styles differed the most from one another.

[1] The scale contained four age categories, compared to Finkelstein, Ryan, King (2013) who used three categories, in order to capture more variation in perceptions of the target's age.

An ANOVA was utilized to assess differences in perceptions of skin color across photos. It was expected that the light-skinned applicant would be rated the lightest and the dark-skinned applicant would be rated the darkest. Pairwise comparisons were used to check the nature of differences between skin tone groups.

The absence of significant differences in perceived age was sought; such that participants were expected to rate the target as belonging to the same age category in all photos, regardless of skin tone and hair type. Chi-square tests were used to test the significance of differences in the perceived age of the target.

Primary Study

Participants

Participants for the primary study were recruited through MTurk. MTurk samples are frequently used to recruit subjects for social science research studies (Behrend, Sharek, Meade, & Wiebe, 2011; Buhrmester, Kwang, & Gosling, 2011). The MTurk worker population is substantially more representative of the U.S. population than commonly-used university student convenience samples (Behrend et al., 2011; Buhrmester et al., 2011; Paolacci, Chandler, & Ipeirotis, 2011), making results more generalizable and well-suited for employee-based research (Landers & Behrend, 2015). Most MTurk workers participate in MTurk research as a leisure activity to pass time and to earn some money but that it is typically not their primary source of income (Ipeirotis, 2010). The following are demographics of the MTurk worker population: 1) most workers are from the U.S. or India (Ipeirotis, 2010; Ross et al., 2010, 2) roughly 55% are women (Ipeirotis, 2010; Mason & Watts, 2009; Suri & Watts, 2011; Ross et al., 2010); 3) 60% are over age 30 (Landers & Behrend, 2015), average age is 32 (Suri & Watts, 2011); 4) 78%

hold at least a Bachelor's degree (Landers & Behrend, 2105); 5) workers are employed across a variety of industries (Landers & Behrend, 2015; Suri & Watts, 2011).

To be eligible for participation, participants had to reside in the U.S., currently work for pay outside MTurk at least part time (20 or more hours per week), be at least 18 years of age, and have at least a 95% acceptance rate (i.e., requestors approved 95% of the workers' MTurk tasks).[2] Prescreening questions were used to determine if workers met these criteria. Participant race was not restricted to Black and White so that supplemental analyses could be conducted regarding whether the hypotheses hold for raters of different races and whether differences in direction and/or strength of relationships surface based on participants' ethnic group memberships. A minimum of 30 participants per cell was sought, for a minimum total sample of 360 participants (Wilson et al., 2007).

The initial sample contained 425 participants. Five participants were removed because they did not meet the eligibility requirements. Thirty additional cases were removed due to failing the manipulation check (explained further below). Six cases were also removed due to evidence of inefficient response effort. The final sample contained 384 participants, 53.7% of whom were female. The mean age was 36.8 years. Racial composition was: 77.5% White, 7.8% Asian, and 6.5% Black (see Table 2 for other races/ethnicities). Fifty-eight percent of participants reported having a college or graduate degree. The most frequently-reported industries of work were: military (15.6%), community and social services (12.7%), and farming, fishing and forestry (9.9%). Mean tenure was 10.22 years in one's profession and 6.89 years in one's organization. The most frequently reported income category was $51,000-$70,000 per year. All participant demographic data is provided in Table 2.

[2] MTurk workers cannot sign up for MTurk unless they are at least 18 years of age, and MTurk also tracks their workers' US status and acceptance rates. Age, hours worked outside of MTurk, and US residency were also asked as pre-screen questions when participants entered the Qualtrics survey site.

Participants received a monetary incentive ($1.75). Given the estimated 20-minute completion time for the survey, this incentive equates to an hourly wage of $5.25, which is more than three times the $1.38 hourly reservation wage for MTurk workers (i.e., the lowest wage for which workers will agree to work; Chilton et al., 2010). MTurk delivers payment directly to each participant's account, obviating the need to collect any identifying information about participants.

Procedure

Qualtrics software was used to create the survey and served as the online platform through which individuals participated. The study was listed as an external HIT (HIT = human investigation task) on MTurk – an indication to workers that the survey resides on a server outside of Amazon's server. Eligible MTurk workers were redirected to the survey on Qualtrics via a link in the MTurk frame. Administering the survey in Qualtrics was preferred over administering it in MTurk for data security reasons, as the Qualtrics account is housed on secure university servers.

The study was a between-subjects 3 (skin tone: light, medium, dark) X 2 (hair type: Eurocentric or Afrocentric) X 2 (job type: blue or white collar) design, for a total of 12 conditions. The random assignment feature in Qualtrics was used to randomly assign each subject to only one condition.

At the beginning of the survey, participants answered additional questions about their eligibility to participate (i.e., hours of work per week, age, country of residence). A Qualtrics feature was also used to determine whether participants were using an IP address in the U.S., further confirming their residence. If participants did not meet these inclusion criteria, they were re-directed to the end of the study. If deemed eligible, participants were presented with an online

consent form; if they agreed to participate, they were required to select an "I consent" option to continue the study. Eligible participants were told that they would complete a series of questions about a job applicant. The purpose of the study was described as a pilot for a company that wanted to test new items for selection rating measures. Participants were told that they would view elements of an applicant's materials for either a marketing and sales position (white collar) or a manufacturing position (blue collar). The application included the applicant's stated objectives and answers to basic employment qualification questions- which were held constant between conditions.

Participants read a short job description of the available position, adjacent to the applicant's information and picture (see Appendix C). The applicant vignette included a short objective (e.g., *Seeking a position in manufacturing and production…,* or *Seeking a position in marketing and sales…*[3]*)* plus the applicant's answers to biodata/experience questions (e.g., Question: *Years of experience?* Answer: *5 years*). Biodata/experience questions and answers were held constant for both job types. Candidates then responded to questions about: 1) selection ratings of the applicant (i.e., likelihood that they would select that applicant for the relevant position), 2) applicant attractiveness, and 3) perceived racial identity strength of the applicant.

Following these focal measures, a manipulation check was included to ensure that participants perceived the target as belonging to the correct racial category (Black or White). Participants were also asked to identify the color of the applicant's suit jacket pictured in the vignette from a set of three options. This second manipulation check was presented immediately

[3] The jobs used to represent white and blue collar jobs were chosen, because a) they fit descriptions of blue versus white collar jobs: the term *white* collar refers to work that is knowledge intensive, non-routine, and unstructured; *blue* collar refers to work that entails physical labor, such as in a factory or workshop (businessdictionary.com); and b) the total representation of women in sales versus production, operative, and laborer occupations is comparable (48% and 55%, respectively; Gabriel & Schmitz, 2007).

after the applicant vignette was displayed, so respondents paying attention should have been able to answer correctly. In addition, participants were asked to identify the applicant's gender. These manipulation checks ensured participants sufficiently attended to the stimuli. Participants who answered the manipulation check items incorrectly were removed from the final dataset. Insufficient effort response items (IER; Huang, Curran, Keeney, Popski & DeShon, 2012) were also dispersed throughout the survey. These three items were used to further detect participants who may have responded insufficiently due to lack of attentiveness to the survey instructions and items (see DeSimone, Harms, & DeSimone, 2014). Candidates who answered in agreement or as neutral were coded as responding insufficiently and removed from the dataset.

Next, participants completed individual difference measures. Prior to answering these questions, participants read a cover story stating that past research has shown that relationships between rater and ratee characteristics can influence ratings, so the current study aimed to mitigate these effects on the testing materials. Because some of the individual difference measures pertained to race, this cover story was used to minimize participants' suspicions that their responses were central to the study's purpose, which could influence their ratings.

Finally, participants answered demographic questions regarding their race/ethnicity, age, gender, education level, annual income, professional tenure, and organizational tenure, and industry of work (based on Bureau of Labor Statistics industry categorizations, 2015). These variables were collected to determine their usefulness as control variables or to be used in supplemental analyses. At the end of the survey, participants received a code to enter in MTurk to indicate completion.

Measures

All measures and their items appear in Appendices D- L.

Selection rating. Participants were instructed to pretend they were the hiring manager for the position in the vignette and to rate their likelihood of hiring the applicant for the job. Five items adapted from Stevens and Kristoff (1995) were used (α = .92). Example items are: "*This applicant is qualified for the job,"* and "*I would offer this applicant a job*." The items were rated from 1 (*strongly disagree*) to 7 (*strongly agree*). These items stem from two highly correlated sub-scales used to measure perceived suitability for and likelihood of attaining an organizational pursuit (Stevens & Kristoff, 1995). The scales were also highly correlated in the current study sample (r = .90), so in line with previous studies (e.g. Stevens & Kristoff, 1995), they were combined into one construct in this study.

Perceived racial identity strength. Perceived racial identity of the applicant was measured using nine items adapted from the Multidimensional Inventory of Black Identity– teen (MIBI-t; Scottham, Sellers, & Nguyên, 2008). The MIBI-t scale stemmed from the adult version of the MIBI (Sellers, Rowley, Chavous, Shelton, & Smith, 1997), which was designed to measure three stable dimensions of the Multidimensional Model of Racial Identity (MMRI; Sellers, Smith, Shelton, Rowley, & Chavous, 1998): Centrality (the extent to which a person normatively defines her/himself with regard to race), Ideology (beliefs, opinions, and attitudes with respect to the way s/he feels Blacks should act), Regard (affective and evaluative judgments of his/her race). The MIBI contains lengthy items that are difficult to translate from self-report into the other-report format necessary for this study, so the MIBI-t was adopted. The MIBI-t items are shorter in length and thus, were easier to convert to the other-referent response format. In addition, the MIBI-t is shorter than the adult version. Although the MIBI-t was designed for teens, its items parallel those of the MIBI. Given the similarities between the two scales and the benefits of the teen version, the MIBI-t was used in the current study. The MIBI-t has been

validated in multiple samples (Rivas-Drake, Hughes, & Way, 2009; Seaton, Yip, & Sellers, 2009).

The MIBI-t contains seven sub-scales: Centrality (the extent to which individuals normatively emphasize racial group membership as part of their overall self-concept), Public Regard (the extent to which individuals believe that others view the African American community in a positive or negative manner), Private Regard (the extent to which individuals feel positively or negatively toward the African American community as well as how they feel about membership in this community), Nationalist (the uniqueness of being African American; characterized by support from African American organizations and preference for African American social environments), Assimilationist (the similarities between African American and mainstream American societies), Oppressed Minority (the similarities between African Americans' experiences and those of other oppressed minority groups), Humanist (the similarities among all people regardless of race). In the current study, only Centrality, Private Regard, and Nationalism were used. These sub-scales were chosen because their items were most valid for adaptation to an *other*-referenced response format. The information in the sub-scales that were excluded would be more difficult for participants to infer about pictured applicants. For example, one item from the Public Regard sub-scale is, "People from other races think that Blacks have made important contributions." This question would have to be re-worded as, "This person [the applicant] feels that people from other races think that Blacks have made important contributions," which is a challenging sentence to comprehend and a difficult applicant opinion about which to infer. The sub-scales included in the study contain items that are the most direct and clear in describing the core concepts of the racial identity strength construct.

MIBI-t items were rated from 1 (*strongly disagree)* to 5 (*strongly agree).* Sample items are "*This person feels close to other Black people,"* and *"This person is proud to be Black."* The coefficient alpha was .88.

Attractiveness. Perceived attractiveness of the applicant was measured using five items from the Ohanian (1990) semantic differential scale of perceived attraction. The items were rated on a 7-point scale with descriptors at the highest and lowest anchor points (e.g., 1- *unattractive* to 7- *attractive*). This scale has been validated in multiple samples and shows high reliability (Ohanian, 1990). The coefficient alpha in the current sample was .91.

Individual differences. Participants' own racial identities were measured using the Multigroup Ethnic Identity Measure-Revised (MEIM-R; Phinney & Ong, 2007). This scale is an updated version of the widely used Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992; Roberts et al., 1999). The revised scale contains six items that assess two dimensions: *exploration* (efforts to learn more about one's group and participation in ethnic cultural practices) and *commitment* (positive affirmation of one's group, as based on social identity theory see, Tajfel & Turner, 1986; and a clear sense of commitment as defined by Marcia, 1980). Items were rated from 1 (*strongly disagree*) to 7 (*strongly agree*). A sample item is "*I have a strong sense of belonging to my own ethnic group."* The coefficient alpha was .91.

While early work on ethnic identity produced scales that were ethnicity-specific (e.g., Felix-Ortiz et al., 1994; Suinn, Ahuna, & Khoo, 1992), the MEIM was designed to be a general measure that could assess identities across diverse ethnic groups (and participants in the current study represented many racial/ethnic groups). The commitment and exploration subscales have been shown to be valid and contain high reliability (Phinney & Ong, 2006). The strength of participants' racial identities may influence their perceptions of the target's racial identity

strength and may affect their in-group or out-group biases (Dovidio et al., 2009). Racial identity strength may particularly affect Black participants' ratings of the target's attractiveness. For instance, Black participants with strong racial identities might perceive women with more Afrocentric features as more ethnically "pure" and therefore more attractive (Bond & Cash, 1992; Celious & Oyserman, 2001; Hall, 1992, 1995).

State positive and negative affect was measured with the Positive and Negative Affect Scale (PANAS; Watson, Clark, & Tellegen, 1998). The PANAS consists of 20 words that describe positive and negative emotions such as "*distressed", "irritable",* and *"enthusiastic."* Participants rated the extent to which they experienced each emotion "today" from 1 (*very slightly or not at all*) to 5 (*extremely*). Reliability was high for positive affect (PA; α = .92) and negative affect (NA; α = .93). NA consists of feelings of disgust, anger, contempt, and fear (Watson et al., 1988). Participants experiencing high NA while taking the survey could engage in greater colorism bias (Forgas, & Moylan, 1991). In contrast, high PA may mask evidence of colorism bias (Park & Banaji, 2000).

Social desirability was measured using the SD-17 scale (Stober, 2001). Items were rated using a true/false dichotomy. An example item is *"In traffic I am always polite and considerate of others."* The SDS-17 is valid and reliable (α = .72 and a test-retest correlation of .82 across four weeks, Stober, 1999; α = .80, Stober, 2001). The coefficient alpha in the current sample was .86. Due to the sensitive nature of questions in this study (e.g., attitudes toward race), some participants could respond in socially desirable ways. The inclusion of this measure allows for the detection of and statistical control of such bias.

Insufficient effort responding (IER). IER was assessed using three items from Huang et al. (2014). The items were rated using the same scales as the measures in which they were

embedded. An example item is *"I eat cement occasionally."* Items were scored such that any reported disagreement with a false statement (i.e., slightly disagree, somewhat disagree, strongly disagree) was coded as attentive responding (i.e., non-IER) while agreement was coded as IER (IER = 1, attentive = 0). This scale has been validated (Huang et al., 2014) and contained high reliability in the present study ($\alpha = .85$).

Demographic variables. Participants identified their age, gender, race, education, estimated annual household income, current occupation and industry (Bureau of Labor Statistics, 2015), organizational tenure, and occupational tenure. Age and organizational/occupational tenure were presented as continuous variables using a dropdown menu. Gender, race, education, income, occupation, industry, and income were presented categorically.

Statistical Analyses

ANOVAs were used to test Hypotheses 1 and 2 with regard to the main effects of skin tone and hair type, respectively, on selection ratings. It was expected that there would be a continuum from dark to light skin, with selection ratings increasing as skin tone gets lighter, supporting Hypothesis 1. Pairwise comparisons were used to examine whether the three groups significantly differed in expected directions. I also expected that applicants with the Eurocentric hair style would receive higher selection ratings than those with the Afrocentric hair style, supporting Hypothesis 2.

Hypothesis 3 was tested via an ANOVA and subsequent pairwise comparisons. It was expected that skin tone and hair type would interact in predicting selection ratings, such that skin tone would be a stronger predictor than hair type, yielding the following pattern (from highest selection ratings to lowest): light skin x Eurocentric hair → light Skin x Afrocentric hair → medium skin x Eurocentric hair → medium skin x Afrocentric hair → dark skin x Eurocentric

hair → dark skin x Afrocentric hair. Pairwise comparisons were examined to determine whether the six conditions significantly differed from one another in those expected directions.

I used the PROCESS macro for SPSS (Hayes, 2015) to test Hypotheses 4-7. The PROCESS macro is an SPSS add-on designed to test moderation, mediation, and conditional process analysis[4] (Hayes, 2015). For Hypothesis 4(a - b), it was expected that attractiveness would mediate the relationships of applicant skin tone and hair type with selection ratings, such that applicants with lighter skin or more Eurocentric hair would be perceived as more attractive, leading to more preferential selection ratings. Regarding Hypothesis 5 (a – b), it was expected that perceived racial identity strength of applicants would mediate the relationships between applicants' phenotypic features and selection ratings, such that applicants with lighter skin or more Eurocentric hair would be rated as having weaker racial identities, thus leading to higher selection ratings. Model 4 of the PROCESS macro (see Appendix M; Hayes, 2013) was used to test Hypotheses 4 and 5. First, PROCESS was used to test relationships between the IVs (skin tone, hair type) and mediators (perceived racial identity strength and attractiveness), and between the mediators and the DV (selection rating). Testing for mediation involved using bootstrapping to test for the significance of indirect effects when the mediator was included in the model.

For Hypotheses 6 and 7, it was expected that job type (white vs. blue collar) would moderate the relationships between applicants' phenotypic features and both perceived racial identity strength and attractiveness, such that the effects from Hypotheses 4 and 5 would be

[4] "PROCESS uses an ordinary least squares or logistic regression-based path analytic framework for estimating direct and indirect effects in simple and multiple mediator models, two and three way interactions in moderation models along with simple slopes and regions of significance for probing interactions, conditional indirect effects in moderated mediation models with a single or multiple mediators and moderators, and indirect effects of interactions in mediated moderation models also with a single or multiple mediators...PROCESS can estimate moderated mediation models with multiple mediators, multiple moderators of individual paths, interactive effects of moderators on individual paths, and models with dichotomous outcomes" (Hayes, 2015)

amplified in white collar jobs (in comparison to blue collar jobs). Model 8 of the PROCESS macro was used to test these moderated-mediation models (see Appendix N; Hayes, 2013).

CHAPTER 4: RESULTS

Pilot Study

First, I compared pilot ratings of the photos in which skin color was manipulated using make-up versus digitally.[5] Ratings of skin tone were similar, suggesting either photo type could be used in the focal study. However, because the model's facial expression was held constant in more instances of the digitally altered photos[6], these photos were selected for the primary study. Additional pilot data (i.e., open-ended comments about the target photo) also revealed that targets whose skin tone was altered with make-up appeared somewhat less realistic. For example, one participant commented, "It looks like very thick makeup and lighting." This further supported the use of the digitally altered photos in the focal study.

Skin tone. Scale means, standard deviations, and ranges for all variables are in Table 3. The mean skin tone rating for the light skin condition was below the scale midpoint (M = 4.26 on a 9-point scale), although not significantly different from the midpoint ($t(45) = -1.07$, $p > .05$). The means for the medium and dark skin tone categories were both above the midpoint and significantly different from the midpoint of the scale (M = 6.69; $t(28) = 12.19$, $p < .05$; and M = 7.66; $t(28) = 25.38$, $p < .05$, respectively). The light complexion dimension was normally distributed, with skewness of .10 (SE = .35) and kurtosis of -.41 (SE = .69). Ratings for skin tone in the medium complexion dimension were also normally distributed, with a skewness of -.84 (SE = .43) and kurtosis of .95 (SE = .85). Skin tone ratings for the dark complexion condition were normally distributed, with skewness of -.23 (SE = .43) and kurtosis of .20 (SE = .85). A

[5] Hair styles could not be digitally imposed on the model, and wigs were used. Therefore, four baseline pictures, each with a different hair style (the two potential Afrocentric and two potential Eurocentric styles), had to be used to create the digitally altered photos.

[6] The two different hairstyles used in the primary study stemmed from two different actual pictures- 1 for each wig. These baseline pictures held constant baseline skin tone from which to be digitally altered, but may have had slight deviation in facial expression; as compared to the make-up altered condition in which facial expression slighlt deviated across all 6 target photos.

one-way analysis of variance test was utilized to test differences in perceived skin color across conditions (light vs. medium vs. dark). Results supported the proposed notion that there were significant differences, $F(2,101) = 82.36$, $p < .05$ (observed power > .80; $\eta_p^2 = .62$). Post-hoc analyses (pairwise comparisons) showed that the differences were in the expected directions, such that the light-skinned applicant was rated the lightest and the dark-skinned applicant was rated the darkest. There were no significant differences in skin tone ratings due to sample source (MTurk versus student pool; $t(102) = -.42$, $p > .05$). Chi-square tests were used to determine whether the perceived age of the target varied based on skin tone. In accordance with Wilson and colleagues' (2007) rule of thumb, a minimum of five participants per cell was ensured (Wilson, Van Voorhis, & Morgan, 2007). Results yielded no significant differences in perceived age between the skin tone conditions ($\chi^2 = 4.3$, $df = 6$, $p > .05$).

Hair type. The long Eurocentric hair style was rated, on average, as being approximately at the midpoint of the Afrocentricity scale ($M = 4.36$), and thus not significantly different from the midpoint ($t(32) = -.35$, $p > .05$. The short Eurocentric style was rated above, and significantly different from, the midpoint ($M = 5.25$; $t(23) = 1.96$, $p < .05$); thus perceived as more Afrocentric than the longer Eurocentric hair. The afro and up-do Afrocentric styles were also rated above, and were significantly different from, the scale midpoint ($M = 7.96$, $t(24) = 23.54$, $p < .001$; and $M = 6.90$, $t(19) = 7.07$, $p < .001$, respectively). The distribution for the Eurocentric long hair style condition was normally distributed, with skewness of .32 ($SE = .41$) and kurtosis of -.58 ($SE = .80$); as was the distribution of the short Eurocentric hair type ratings, with skewness of .47 ($SE = .47$) and kurtosis of -.29 ($SE = .92$). The distribution of ratings for the afro style Afrocentric condition was also normal, with skewness of -.61 ($SE = .46$) and kurtosis of .99 ($SE = .90$). The distribution for the up-do Afrocentric condition was non-normal. There

was significant negative skew at alpha level .05, -1.72 (*SE* = .51), and the distribution was significantly platykurtic, 5.12 (*SE* = .99). To determine whether participants accurately differentiated the applicant hair types, independent samples t-tests were conducted. When collapsing across skin tone conditions, the afro was rated the most Afrocentric (*M* = 7.96, *SD* = 2.25), and the long hair style was rated the most Eurocentric (*M* = 4.36, *SD* = .74). These means significantly differed, $t(41) = -8.61$, $p < .05$. There were no significant differences in hair type ratings due to sample source (MTurk versus student pool; $t(100) = -1.81$, $p > .05$). These results support using the afro hairstyle to represent the Afrocentric hair condition and the long wig to represent the Eurocentric hair condition in the primary study.

Primary Study

Descriptive statistics for all primary study variables appear in Table 4. Zero-order bivariate correlations of all included study variables and control variables are in Table 5.

Control variables. Most bivariate zero-order correlations were significant and in the expected directions. Positive and negative affect related to more study variables than did social desirability or participant ethnic identity strength, and were the only two proposed control variables to significantly correlate with the outcome variable. Considering this and the moderate sample size (and, therefore, the need to conserve degrees of freedom), only positive and negative affect were included as covariates in analyses.

Hypothesis 1. Broken down by skin tone, the mean selection rating fell above the midpoint of the scale for the light (*M* = 5.96), medium (*M* = 6.05), and dark (*M* = 5.78) skin tone conditions. The distribution for selection ratings in the light skin tone group was non-normal, with a significant negative skew of -1 (*SE* = .21), and significantly leptokurtic with kurtosis of 1.74 (*SE* = .42). In the medium skin tone condition, the distribution was also non-

normal, following a similar pattern, with negative skew of -1.53 (*SE* = .21) and leptokurtic at 3.43 (*SE* = .42). The dark skin condition also yielded a non-normal distribution of selection ratings, with significant negative skew of -1.36 (*SE* = .22) and being significantly leptokurtic 2.78 (*SE* = .43).

An analysis of covariance (ANCOVA) was used to test for significant differences in selection ratings based on skin tone, while controlling for NA and PA. Results did not yield support for significant differences between the skin tone conditions on selection ratings, $F(2,359) = 2.60$, $p > .05$. Although the dark skin category received the lowest selection ratings, the medium complexion group received the highest ratings, followed by the light-skinned group- which was not in the order expected. Results were also non-significant when analyses were run without controlling for NA and PA. Hypothesis 1 was not supported.

Hypothesis 2. When observed by hair type, the mean selection rating fell above the midpoint of the scale ($M_{\text{Afrocentric}} = 5.96$; $M_{\text{Eurocentric}} = 5.90$). For the Eurocentric condition the distribution of selection ratings was significantly negatively skewed at -.90 (*SE* = .18), while kurtosis was not significant at .65 (*SE* = .35). In the Afrocentric condition, the distribution of selection ratings also showed significant negative skew of -1.66 (*SE* = .17) and was significantly leptokurtic with kurtosis of 4.23 (*SE* = .34).

An ANCOVA was run to investigate differences in selection ratings based on hair type, while controlling for NA and PA**.** Selection ratings did not differ between the Eurocentric and Afrocentric hair types, $F(1,360) = .06$, $p > .05$. Results were also non-significant when analyses were run without controlling for NA and PA. Hypothesis 2 was not supported.

Hypothesis 3. ANCOVA was used to test whether skin tone and hair type interacted in predicting selection ratings while controlling for NA and PA, with skin tone being a stronger

predictor of ratings than hair type. Job type conditions were collapsed to yield six skin tone x hair type conditions. Skin tone and hair type did not interact in predicting selection ratings, $F(5,356) = 1.28$, $p > .05$. Mean selection ratings from highest to lowest were: medium skin x Eurocentric hair ($M = 6.10$) → light Skin x Afrocentric hair ($M = 6.03$) → medium skin x Afrocentric hair ($M = 5.97$) → light skin x Eurocentric hair ($M = 5.83$) → dark skin x Afrocentric hair ($M = 5.79$) → dark skin x Eurocentric hair ($M = 5.74$). Results were also non-significant when analyses were run without controlling for NA and PA. Hypothesis 3 was not supported.

Hypotheses 4a. The PROCESS macro for SPSS (Hayes, 2015) was used to test Hypotheses 4-7 regarding the mediating effects of perceived attractiveness and racial identity strength and the moderating effects of job type. Positive and negative affect were entered as covariates in all PROCESS analyses. For Hypothesis 4a, PROCESS Model 4 was used to test attractiveness as a mediator between skin tone and selection ratings. The mean ratings for attractiveness fell above the midpoint of the scale within each skin tone category ($M_{Light} = 4.34$; $M_{Medium} = 4.30$; $M_{Dark} = 4.08$). The light skin tone condition was normally distributed on ratings of attractiveness, with skew of -.87 ($SE = .21$) and kurtosis of -.22 ($SE = .43$). The medium skin tone condition showed some deviation from normalcy for the attractiveness distribution, with significant negative skew of -2.97 ($SE = .21$), and significantly leptokurtic with kurtosis of 4.86 ($SE = .43$). The dark skin tone condition was normally distributed on ratings of attractiveness with skew of -.82 ($SE = .22$) and kurtosis of -.72 ($SE = .44$).

Conditional PROCESS analysis yielded a statistically significant unstandardized regression coefficient between skin tone and attractiveness ($b = -.15$, $p < .05$; see Table 6 and Figure 3), as well as between attractiveness and selection ratings ($b = .26$, $p < .001$). The

significance of the indirect effect of skin tone on selection, when attractiveness was entered as a mediator, was tested using bias-corrected bootstrapping procedures. Unstandardized indirect effects were computed for 1,000 bootstrapped samples, using 95% confidence intervals for significance testing. The indirect effect was statistically significant (b = -.04, 95% CI [-.08, -.00]), indicating that the difference between c and c' was statistically significantly different from zero. Full mediation is suggested because the indirect relationship between skin tone and selection ratings only became significant with attraction in the model. The Sobel test (a normal theory test for indirect effect) also yielded support for the presence of mediation (Z = -1.99, p < .05). Hypothesis 4a was supported.

Hypothesis 4b. The mean ratings for attractiveness fell above the midpoint of the scale within each of the hair type categories ($M_{\text{Afrocentric}}$ = 4.45; $M_{\text{Eurocentric}}$ = 4.02). When observed by hair type, attractiveness ratings for the Eurocentric condition were normally distributed with skew of -1.23 (SE = .18) and kurtosis of -.81 (SE = .36). The distribution of attractiveness ratings in the Afrocentric hair condition showed a slight deviation from normality, with significant negative skew of -.38 (SE = .17); kurtosis was normal at .08 (SE = .34).

Results of the PROCESS Model 4 conditional analysis yielded evidence of attraction as a mediator of the relationship between hair type and selection ratings. The unstandardized regression coefficient between hair type and attractiveness was statistically significant (b = .40, p < .001; see Table 7 and Figure 4), as was the unstandardized regression coefficient between attractiveness and selection ratings (b = .28, p < .001). Bootstrapping procedures produced a significant unstandardized indirect effect (b = .11, 95% CI = [.05, .19]); again, suggesting full mediation. The Sobel test supported the presence of mediation as well (Z = 3.13, p < .01). However the results did not support the relationship as hypothesized- such that the Eurocentric

hair type would be perceived as more attractive. Contrarily, it was the Afrocentric hair type condition was rated as more attractive than the Eurocentric hair type condition, and thus received higher selection ratings.

Hypothesis 5a. The mean ratings for perceived racial identity strength of the applicant were slightly above the midpoint of the scale within each skin tone category (M_{Light} = 3.73; M_{Medium} = 3.72; M_{Dark} = 3.71). The distributions for perceived racial identity strength were normal within all three skin tone dimensions: light skin tone condition skew was .16 (*SE* = .22) and kurtosis was 1 (*SE* = .43); medium skin tone condition had skew of 1.09 (*SE* = .21) and kurtosis of -1.75 (*SE* = .42); and the dark skin tone condition had skew of 1.38 (*SE* = .22) and kurtosis of -1.55 (*SE* = .43).

PROCESS Model 4 was used to test Hypotheses 5a regarding the mediating role of perceived racial identity strength in the skin tone to selection ratings relationship. The unstandardized regression coefficient between skin tone and perceived racial identity strength of the applicant was not significant (*b* = -.02, *p* > .05; see Table 8 and Figure 5), and neither was the unstandardized regression coefficient between perceived racial identity strength and selection (*b* = .13, *p* > .05). Bootstrapping procedures yielded a non-significant, unstandardized indirect effect of -.00, 95% CI = [-.02, .01]. The Sobel test also yielded non-significant results for the normal theory test for indirect effects (*Z* = -.49, *p* > .05). Hypothesis 5a was not supported.

Hypothesis 5b. The mean ratings for perceived racial identity of the applicant fell just above the midpoint of the scale within each hair type category ($M_{Afrocentric}$ = 3.78; $M_{Eurocentric}$ = 3.65). The distributions for perceived racial identity strength were normal for both the Eurocentric (skew = 1.65, *SE* = .18; and kurtosis = 1.61, *SE* = .34) and Afrocentric (skew = .24, *SE* = .17 and kurtosis = -1.40, *SE* = .34) conditions. Hypothesis 5b yielded a non-significant

unstandardized regression coefficient between hair type and perceived racial identity strength of the applicant (b = .11, p > .05; see Table 9 and Figure 6). The unstandardized regression coefficient was also non-significant for the relationship between perceived racial identity strength and selection ratings (b = .13, p > .05). Bootstrapping procedures yielded a non-significant unstandardized indirect effect (b = .05, 95% CI = [-.00, .06]). The Sobel test of indirect effects also yielded non-significant results (Z = 1.11, p > .05). Hypothesis 5b was not supported.

Hypothesis 6a. For Hypotheses 6 and 7, moderated mediation was proposed such that job type (white vs. blue collar) would moderate the relationship between applicants' phenotypic features and both attractiveness and perceived racial identity strength, respectively. PROCESS Model 8[7] was used to test the proposed moderated mediations. The observed index of moderated mediation[8] (Hayes, 2015) did not yield support for the moderated mediation effect (b = -.04, 95% CI = [-.03, .12]) for Hypothesis 6a. Conditional indirect effects of the interaction on selection ratings, situating attractiveness as a mediator, yielded a significant unstandardized regression coefficient for the white collar job type (b = -.06, 95% CI = [-.13, -.01]), but not the blue collar job (b = -.02, 95% CI = [-.07, .02]). The indirect effect through attractiveness did not significantly differ between the white and blue collar groups. Hypothesis 6a was not supported (see Table 10 for OLS regression results; see Figure 7 for moderated mediation results).

Hypothesis 6b. Moderated mediation was not supported as tested by the index of moderated mediation (b = -.06, 95% CI = [-.20, .06]) for Hypothesis 6b. Results of conditional

[7] This specifies a *first stage* moderation, as specified by Preacher, Rucker, & Hayes (2007), wherein the moderator is proposed to affect the relationship between the IV and the mediator; as opposed to a *second stage* moderated mediation model, wherein the moderator is positioned between the mediator and the DV.

[8] This index provides the most direct test of moderated mediation, as it quantifies the effect of the indirect effect of the IV on the DV through the mediator. Hayes (2015) recommends using bias-corrected bootstrapping for statistical inference. When the moderator is dichotomous, this is a test of equality of the conditional indirect effects in the two groups.

indirect effects of hair type on selection, mediated by attraction, yielded significant results for both white collar (*b* = .15, 95% CI = [.06, .28]) and blue collar (*b* = .09, 95% CI = [.02, .19]) jobs. The indirect effect through attraction strength did not significantly differ between the white and blue collar groups. Hypothesis 6b was not supported (see Table 11 for OLS regression results; see Figure 8 for moderated mediation results).

Hypothesis 7a. Moderated mediation was not supported as tested by the index of moderated mediation (*b* = .00, 95% CI = [-.02, .03]). Conditional indirect effects, accounting for perceived racial identity strength in the model, were not significant for the white collar (*b* = -.00, 95% CI = [-.03, .01]) or blue collar (*b* = -.06, 95% CI = [-.02, .01]) conditions. Hypothesis 7a was not supported (see Table 12 for OLS regression results; see Figure 9 for moderated mediation results).

Hypothesis 7b. Moderated mediation was not supported as tested by the index of moderated mediation (*b* = .02, 95% CI = [-.00, .06]) for Hypothesis 7b. Conditional indirect effects, accounting for perceived racial identity strength in the model, were not significant for the white collar (*b* = .01, 95% CI = [-.01, .05]) or blue collar (*b* = -.06, 95% CI = [-.02, .01]) conditions. Hypothesis 7b was not supported (see Table 13 for OLS regression results; see Figure 10 for moderated mediation results).

CHAPTER 5: DISCUSSION

In summary of the results, the current study investigated the direct effects of two phenotypic characteristics – skin tone and hair type – on selection ratings. It also addressed the indirect effects of these characteristics on selection, mediated by attractiveness and racial identity strength. Analyses yielded no support for significant direct effects of either characteristic on selection ratings; though effects of both skin tone and hair type on selection ratings were fully mediated by perceptions of attractiveness. Perceptions of the applicant's racial identity strength did not mediate the relationships between skin tone nor hair type and selection. No evidence was yielded for the proposed moderated mediations; job type did not moderate the indirect effects of skin tone or hair type on selection, when mediated by attractiveness or racial identity strength. Each of these findings is discussed in detail below.

Hypothesis 1. There was no direct relationship between skin tone and the selection ratings given to pictured applicants. The hypothesis that there would be a linear relationship between skin tone and favorability of ratings was not supported. It was expected that the applicant with the lightest skin tone would receive the highest ratings, followed by the medium-skinned applicant, and then the darkest skinned applicant. Raters actually rated the medium skin tone category as a better candidate for hiring, followed by the lightest-skinned applicant, with the darkest applicant being the least preferred, as expected. Although there was not a lot of variance in selection scores, and they were all rated pretty favorably. Through supplemental analyses, I also examined whether individual differences of the raters (e.g. race, ethnic identity strength of raters, income, education level, and professional or occupational tenure) may have driven differences in selection ratings based on skin tone. No rater characteristics explained differences in selection ratings of the applicant.

Considering how rater race may affect the expression of colorism bias within Black America, some research suggests that medium skin toned Blacks may actually experience *less* discrimination than both very dark *and* very fair-skinned Blacks (Hall, 1990, 1992). Blacks who are of a medium brown complexion represent the most typical skin shade of the racial group and thus have reported feeling "protected" in their racial identity amongst other Blacks (Hall, 1992). This sense of protection may stem from the ability of medium-skinned Blacks to operate more fluidly within their own ethnic group, because most Blacks are of medium complexion (Hall, 1990; Maddox, 2004). Another perspective touts that preference for lighter skin tones is most common only when physical attractiveness alone is being considered; but when other characteristics are considered (e.g., personality, or job type), preference emerges for mid-range skin tones relative to either extreme (Gullickson, 2005). When considering a Black woman for employment selection perhaps a more comprehensive set of characteristics is considered in this way, resulting in the same preference for medium skin tone. Since Blacks with medium-toned skin have the largest representation, they may be less susceptible to the skin tone biases that the less typical subcategories of Blacks – very light or very dark – experience (Hall, 1992). Most of the research on the effects of colorism on medium skin-toned minorities has explored this phenomenon from an intraracial perspective, but there is not as much work exploring whether the same holds true of skin tone-based perceptions from non-Blacks.

Social and cognitive perspectives have provided evidence that stereotyping based on facial features is a function of the degree to which faces are believed to approximate prototypical Afrocentric characteristics (Blair et al., 2002) and that prototypical Black faces are associated with more negative implicit evaluations than less prototypical Black faces (Livingston & Brewer, 2002). Further, when primed with *highly* prototypical Black faces, participants assign more

negative judgments to a person of color than when primed with less prototypical Black faces (Livingston, 2001). As used in the aforementioned research (Blair et al., 2002; Livingston, 2001; Livingston & Brewer, 2002), the term *prototypicality* may be understood in literal terms as "a standard or typical example" (Merriam-Webster, 2017). The darkest-skinned Black targets- those with the most Afrocentric features- were presented in these previous studies as the most *prototypical* Black person, or in other words, the "standard or typical example" of a Black person. But is this what people truly perceive as the most typical example of a Black American person? Research showing that "prototypical" Black people are evaluated the most negatively may, more specifically, be showing that the perception of what the "blackest-looking" Black person looks like (the stereotypical prototype) is the darkest-skinned Black person, with the widest nose, and kinkiest hair- a prototype which is overgeneralized and not truly representative of the most typical Black American person. Black *prototypicality* in these research streams may be understood to mean those with the most Afrocentric features, with Afrocentricity meaning how closely features approximate those considered prototypically African. This follows the tenets of *Afrocentric bias theory* which explains the tendency of Afrocentric features to influence social perception beyond initial group categorization (Blair et al., 2002). In reality, the most typical Black Americans are not the darkest in terms of skin tone. The most typical Black Americans are of a medium brown complexion. Very fair-skinned Blacks and very dark-skinned Blacks are atypical representations of the skin tone norm for Black Americans (Maddox, 2004), and thus may both be perceived less favorably than medium skin-toned Blacks. For the darkest Blacks, they may be perceived least favorably because they are the most Afrocentrically prototypical (Blair et al., 2002). Very light-skinned Blacks- despite their similarities to European Americans giving rise to a historical preference for them over very dark–skinned Blacks

(Livingston, 2001; Livingston & Brewer, 2002)- may still be viewed slightly less favorably than medium skinned Blacks because they are still an atypical representation of the Black American skin tone norm.

Hall's (1990, 1992) research yielded evidence for the preference of medium skin-toned Blacks by other Blacks. The findings of the current study may suggest that this preference for medium skin-toned Blacks exists within other races. Most of the participants in the current study were White, and there were many other races present in the sample. In this instance, a very diverse sample of participants found the medium skin-toned woman most desirable for hire. In a selection context, medium brown Black individuals may receive slightly less discriminatory behavior than very light-skinned Blacks, by both Black raters and those of other races, because of their normative skin tone color.

This is in contrast to theories hinged on similarity-based attraction which support Whites favoring the lightest-skinned Blacks due to their Eurocentric features (Maddox, 2004; Maddox & Gray, 2002). Most participants in the current study were White, and overall higher selection ratings were given to the medium skin-toned applicants. Although the light-skinned applicant still received more favorable ratings than the dark-skinned applicant, as expected, the favorability of the medium complexion applicants over the lightest-skinned applicants was surprising. This finding is interesting and should be explored further, as less research has been done on medium skin tones in comparison to their lighter and darker counterparts. The current study did not entirely replicate findings of earlier research showing that employers, particularly White employers, rate lighter-skinned Blacks as the most appealing for hire (Hunter, 2002). In the current study, medium complexion Blacks were rated more positively than light-skinned Blacks, who were rated better than dark-skinned Blacks.

Another thing to note about the results for Hypothesis 1 is that they may have been an artifact of the lack of physical fidelity of the applicant pictured. Specifically, the light skin target photos may have appeared unrealistic to participants. The digitally altered photos may not have been perceived as naturally fair-skinned Black women. Due to the effects of the digital altering used to adjust the skin tone in the photos, the lightest condition may have appeared "washed out" and unrealistic. The lack of realism in the photo may have translated into slightly lower selection scores because participants may have thought she looked unnatural, and thus had a slightly negative reaction to the applicant's appearance. The pilot study did yield qualitative feedback indicating that some participants thought the target appeared unrealistic due to the obvious lighting, make-up, and wigs being used. These comments were sparse and mostly pertained to the target photos in which only make-up was used to alter the skin tone. For these reasons they were deemed negligible for the purposes of the primary study (that contained only digitally altered photos). However, the current findings may point towards negative perceptions of an anomalous face having a more noticeable effect on subsequent ratings in a hiring context. The anomalous face overgeneralization hypothesis provides an ecological explanation for this in theorizing that we adaptively respond to facial qualities that may indicate being diseased or having bad genes (Zebrowitz, Fellous, Mignault, & Andreoletti, 2003; Zebrowitz & Rhodes, 2004). This learned response can be overgeneralized to people who are quite healthy, but whose faces resemble those that are unfit (Zebrowitz & Montepare, 2008). If this held true for the participants in this study, the unnatural paleness of the Black woman pictured may have given raters the subconscious impression that she was a sickly individual who, despite her qualifications, may not have been as fit for the job as the medium complexion woman.

Perhaps the primary and secondary categorizations of an individual's race, and subsequently the Afrocentricity or phenotypicality of their racial features, does not in and of itself have a direct effect on selection ratings. An alternate explanation is that the relationship between skin tone and selection ratings operates entirely through another construct. The full mediation of skin tone and selection by attractiveness, which is discussed in further detail below, is a likely reason for failure to find any significant direct effects.

Hypothesis 2. There was no evidence of a direct relationship between hair type and selection ratings. The applicant pictured with the Afrocentric hair actually received more positive selection ratings than the applicant with the Eurocentric hair. Although the differences were not significant, perhaps the Afro seemed more befitting of the Black applicant, and thus positively influenced selection ratings. The woman with Afrocentric hair may have made raters feel more comfortable, fulfilling the Black woman perceived prototype- the *definition of a Black woman.* The tenets of Colorism theory presume that Blacks with more Eurocentric hair textures are viewed as more attractive and intelligent (Russell et al., 1992). To the contrary, women with Afrocentric hair may be viewed as more authentic and confident, and thus better applicants. As noted by Bellinger (2007), Black women's hair styles convey a statement that has the power to influence the type of treatment received from others. In more recent decades, the development of a positive mindset toward natural hair has been encouraged (Davis-Sivasothy, 2011) as a result of the willingness of Black women to represent themselves more diversely (U.S. Census Bureau, 2010). The increasing popularity of natural hair care blogs and styling tips for Black women in the media continue to increase awareness and understanding, and positively affect the movement of encouraging a positive image of natural hair for Black women (Alston & Ellis-Hervey, 2014; Jeffries & Jeffries, 2014). The findings of the current study point towards the possibility that this

mindset may be expanding beyond the Black community, resulting in more positive treatment toward Black women sporting natural hair styles. As organizations become more global, principles of diversity and inclusion are more valued which may have more recently translated into increased acceptance, if not preference, for Black women with natural hair in the workplace.

However, this explanation is in contrast to previous studies of Black women wearing natural hairstyles in a professional context, which have found that natural hair is often perceived as unkempt and unemployable (Abdullah, 1998; Badillo, 2001; Rock, George, & Stilson, 2009; Thompson, 2009). Some research has even provided support for employers taking "penalizing actions to prohibit natural hair in the workplace" (Thompson, 2009, p. 836). This contrast in findings may be a reflection of a changing landscape in selection biases over time. Natural Black hair may be viewed as more acceptable than in the past. Further research should explore more variations of hairstyles that span the spectrum of Euro- to Afrocentric. Perhaps styles like dreadlocks or cornrows would still result in more negative selection decisions, because they are seen as *too* Afrocentric- on the extreme end of the spectrum. These styles may still be deemed undesirable in professional contexts. Another possibility is that the appearance of *neatness* in a hairstyle may mitigate the activation of negative stereotypes associated with very Afrocentric hair. The styles used in the current study, although Afrocentric in hair type, were very neat and professional. An Afro that was more in its natural state- not neatly trimmed- and appeared less tidy, may be viewed more negatively by potential employers. Although perceived as untidy, and thus unprofessional, the appearance of wild-looking hair may sometimes just be the actual appearance of Black hair in its natural form. Future studies should vary the amount of styling applied to natural Black hair to see whether or not this has an effect on selection ratings.

Hypothesis 3. Skin tone and hair type did not interact to predict selection ratings as expected. The dark-skinned applicant with Afrocentric hair did not receive the least favorable selection ratings, and the light-skinned applicants with Eurocentric hair did not receive the most favorable selection ratings. I predicted that skin tone would take precedence over hair type because it is generally considered the most salient facial feature (Brown et al., 1999; Hall, 1998; Hagiwara et al., 2012). However, in the current sample, there was no evidence of any additive effect or linear relationship between skin tone and hair type in predicting selection ratings. The medium-skinned applicant with Eurocentric hair received the most favorable selection ratings, followed by the light-skinned applicant with Afrocentric hair. The darkest-skinned applicant was rated the least favorable, but Afrocentric hair was favored more than Eurocentric hair on this applicant.

The results of this study show that the relationship between skin tone and hair type may be more complicated than hypothesized. In a study of racial face recognition, Sergant (1984) showed that faces are in fact judged not simply on individual features, but on the sum of their configuration. It is possible that each combination of skin, hair, and facial features of the applicant yielded a unique reaction due to the configuration of these features. A Black woman with a medium complexion and Eurocentric hair could be accepted most because she represents the complexion norm of the Black American race (Gullickson, 2005), while simultaneously appearing more attractive and competent because of the Eurocentricity of her hair (Russell et al., 1992).

The explanation for a light-skinned Black woman with an Afro being preferred over a light-skinned woman with Eurocentric hair is more puzzling. People may have considered the lightest-skinned applicant to be racially ambiguous, and in such cases used the Afro as the main

indicator of the applicant's race. There is evidence that identical faces can be perceived as different races when a secondary physical marker- like hair- is changed to that of another race (MacLin, & Malpass 2001). In this case, it could be that the light-skinned applicant's race was ambiguous because her skin was so fair, yet her other facial features, such as nose width and lip fullness, were prototypical of the Black race. The Afro may have appeared more congruent with the other facial features and helped participants feel more confident in their judgment of her race being Black, despite the woman's skin being very light. From this perspective, it may have been more difficult for participants to racially categorize the light-skinned woman with straight hair. This ambiguity (and perhaps perceptions of an anomalous face) may have given way to an adverse reaction, seemingly strong enough that the ratings for this applicant were lower than both medium-skinned applicants and the Afrocentric-haired, light-skinned applicant. The fact that the darkest-skinned applicant was rated higher with Afrocentric rather than Eurocentric hair may also be a result of the congruity of skin tone and hair type. Raters may expect a woman with darker skin to wear more Afrocentric hairstyles, and rate her more favorably because she fits a preconceived notion, or seems authentic. A very dark skinned woman with straight, long, Eurocentric hair may seem less authentic than one with an Afro.

Hypothesis 4a. Attractiveness of the woman pictured fully mediated the relationship between skin tone and selection ratings. Skin tone was a significant predictor of attractiveness. When the applicant photos were analyzed by skin tone alone, participants rated the lightest woman as the most attractive and the darkest woman as the least attractive, as expected. Attractiveness significantly related to selection ratings, but not in the pattern expected. The indirect effect of skin tone on selection though attractiveness was significant, although the direct relationship between skin tone and selection ratings was not. The *causal steps approach* of

mediation analyses, popularized by Baron and Kenny (1986), calls for evidence of a significant relationship between *X* and *Y* as a prerequisite for determining mediation. This approach has become criticized by many researchers for various reasons. One of those reasons is that this approach is considered to possess the lowest power compared to other methods of mediation analyses (Fritz & MacKinnon, 2007; MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). Another criticism is that the causal steps approach bases the significance of the indirect effect on a series of hypothesis testing, rather than on the quantification of the intervening effects (Hayes, 2009). Hayes (2009, p. 411) best describes this argument, stating, "The more nulls that must be rejected in order to claim an indirect effect, the more likely the analyst will go away empty handed. It makes more sense to minimize the number of tests one must conduct to support a claim." In response to criticism of the traditional Baron and Kenny approach, alternative approaches to making inferences about intervening variables, like bias-corrected bootstrapping, have gained more traction (Hayes, 2009). Bootstrapping methods have more power and are regarded as more valid for testing the effects of intervening variables (MacKinnon, Lockwood, & Williams, 2004; Williams & MacKinnon, 2008). The use of these methods does not require the *c* path to be significant as a precursor for the presence of significant indirect effects. The PROCESS macro (Hayes, 2015), used to test indirect effects in the current study, uses bias-corrected bootstrapping for significance testing, so finding the total effect to be non-significant did not rule out the possibility of significant indirect effects. It should be considered though, that the indirect effects in the current study were not found to be very strong using CI intervals for significance testing. The negative upper bound was very close to zero, with a negative lower bound.

Interestingly, the women in the medium skin tone condition received the highest selection rating overall, despite being rated as the second most attractive group. This is contrary to the hypothesized relationship, in which the lightest woman would have been perceived as the most attractive, and in turn received the highest selection ratings. Although she was rated as the most attractive, she was not rated the most favorably for selection. This may be interpreted as evidence that perceptions of attractiveness work in combination with other perceived characteristics of an applicant to influence hiring decisions (Gullickson, 2005). As discussed above, although the medium-skinned applicant was perceived as slightly less attractive than the light-skinned applicant, the familiarity of her skin tone may have caused her to be received in a more positive light. What can be concluded from the results of the current study is that darker-skinned women were perceived as less attractive than both the light- and medium-skinned women, and thus received the lowest selection ratings; but further research is needed to shed light on differences between medium and light-skinned targets.

Hypothesis 4b. Attractiveness also fully mediated the relationship between hair type and selection ratings. Contrary to the hypothesis though, Afrocentric-haired women were perceived as more attractive compared to those with Eurocentric hair, thus receiving higher selection ratings overall. This may further indicate that perceived attractiveness is based on the total configuration of facial features, not just hair alone (Sergent, 1984). Or perhaps Afrocentric styles appear more attractive on Black women because they fit congruency expectations. The strong relationship between attractiveness and selection ratings has been documented many times (Dipboy et. al., 1977; Dipboye et. al., 1975; Raza & Carpenter, 1987), which the current study corroborates with a moderately-sized positive correlation between these variables. The current findings warrant further research on how physical features associated with colorism, other than

skin tone, interact with other perceived traits and characteristics to affect workplace and other outcomes.

Hypothesis 5a. Perceived racial identity strength did not mediate the relationship between skin tone and selection ratings. The association between applicant skin tone and perceived racial identity strength of the applicants was in reverse order of what was hypothesized in line with previous findings (e.g., Wilkins et al., 2010). The lightest woman was rated as having the strongest Black racial identity, followed by the medium complexion woman, and then the darkest woman. Participants may have varied perceptions racial identity strength based on skin tone in tandem with hair type. It is possible that the Afro on the light-skinned applicant was perceived as the most salient indicator of racial identity strength- despite the woman having very light skin. A very fair-skinned woman may be perceived as trying to make a strong statement about her race, and that she is proud of it, by sporting an Afro. Participant reactions to this study conditions may have underscored the current finding of light-skinned applicants being perceived as having the strongest racial strength. If the Afro is more salient on the light-skinned woman due to incongruence, participants may have perceived the light-skinned applicant as having even stronger racial identity than the medium- and dark-skinned women with the same hair. Although perceived racial identity strength did not predict selection ratings in the model, perceived racial identity strength significantly negatively correlated with selection ratings (i.e., the mediator significantly related to the outcome variable). This study provides some evidence for the relationship between perceived racial identity strength and selection ratings, but the role of skin tone in explaining this relationship is less clear. Continued research investigating the relationship between differing phenotypic characteristics, their perceived degree of Afrocentricity, and perceived racial identity strength is warranted.

Hypothesis 5b. Perceived racial identity strength also did not mediate the relationship between hair type and selection ratings. However, as expected, applicants with Afrocentric hair were perceived as having stronger racial identity than those with Eurocentric hair, and this relationship was significant. Some research has supported the notion that Black women have started to reject Westernized beauty standards and have more appreciation for natural hair, and thus have more self-appreciation (Davis-Sivasothy, 2011; Ellis-Hervey, Doss, Davis, Nicks, & Araiza, 2016). This self-appreciation may translate into perceived ethnic pride, or racial identity strength which- contrarily to hypothesized- may even be related to positive perceptions of authenticity (Davis-Sivasothy, 2011). This type of positive perception may actually work in favor for a Black woman job applicant who has natural hair, a theory which the current findings and those of Harrison & Thomas (2009) point towards support for.

Taken together, the findings of Hypotheses 5a and 5b could be interpreted as evidence that although perceived racial identity strength may have a relationship with some physical characteristics, it may not have a strong direct influence on selection decisions. There has, however, been research suggesting the contrary- that racial identity strength can play a direct role in hiring evaluations. For example, previous studies have found significant relationships between the degree of Afrocentricity, and/or racial phenotypicality, of one's physical features and both perceived and self-identified racial identity strength (e.g. Kaiser & Pratt, 2009; Wilkins et al., 2010); and further, that perceptions of strong racial ethnic identification can lead to negative evaluations of ethnic minorities. Research investigating how this relationship interacts with other perceptions of the target, and that examining this relationship in a selection context, is less documented in the literature. One study by Barron and colleagues yielded evidence that perceptions of strong ethnic minority identities can work in their favor when being considered

for hire (Barron, Hebl, & King, 2011). In that study, ethnic minorities who wore baseball caps with slogans of ethnic pride or identity were viewed more favorably during interracial interactions in both employment pre-screen processes and face-to-face interviews. A postulated explanation for this relationship is that hiring managers may expect applicants to present themselves in an ethnically identifiable manner (Branscombe, Schmitt, & Harvey, 1999). Hiring managers know they are in a position of power and may be more fearful of being perceived as discriminatory by candidates who have strong racial identities. This fear may result in impression management by hiring managers who are trying to overcompensate when interacting with applicants from underrepresented racial groups (Shelton, 2003), particularly when those applicants seem to strongly identify with their race or ethnicity. It is plausible that this impression management by hiring managers may also be triggered when one's ethnic identity strength is not expressly stated (e.g., words on their clothes), but is conveyed through other means- like an applicant's hair style for example. Participants in the current study may have rated the targets with Afrocentric hairstyles higher, even though they rated their ethnic identity as stronger, as a way of managing their image and attempting to prove (even to themselves) that they were making non-discriminatory selection recommendations.

Clothing and hairstyles are variables an individual *chooses* and so may be more closely tied to perceptions of one's racial identity strength. On the other hand, skin tone is not considered a malleable trait and thus may be less strongly related to perceptions of another's racial identity. The findings support differences between various physical characteristics in their ability to influence perceptions of racial identity strength: hair type significantly related to perceived racial identity strength, while skin tone did not. Although racial identity strength did not mediate the relationship between either of these physical characteristics and selection ratings, the observed

relationships warrant further exploration of the link between perceived racial identity strength and selection decisions, in both inter- and intra-racial interpersonal pre-employment interactions.

Hypothesis 6a. The indirect effect of skin tone on selection ratings through attractiveness did not significantly differ between the white and blue collar groups. Although attractiveness did mediate the relationship between skin tone and selection ratings, the effect was not amplified in white collar jobs such that it was significantly different from the effect in blue color jobs. The mediation effect was not in the pattern hypothesized; the medium complexion (rather than lightest-skinned) applicant received the highest selection ratings, despite being rated second most attractive. So the hypothesis regarding job type as a moderator (such that the proposed mediation would be amplified in white collar jobs) was not supported. PROCESS analyses did reveal a significant direct relationship between job type and selection ratings, but this relationship did not surface in any other analyses (including standalone correlations) and so is not likely meaningful. This direct relationship was not expected though, given that job type was situated as a moderator between Afrocentric features and attractiveness. Working in a blue collar versus white collar job was not expected to directly relate to likelihood of hire without considering other factors, such as the variables in the current model.

The current study did not yield evidence of a significant relationship between job type and attractiveness. Historically, research has found that attractiveness stereotypes influence perceptions of job suitability or hiring potential (e.g. Heilman & Saruwatari, 1979; Jackson, 1983), but these studies did not propose that job type directly influenced perceived attractiveness of applicants. Although in most cases physical attractiveness may influence pre-employment evaluations (Dipboy et. al., 1977; Dipboye et. al., 1975; Heilman & Saruwatari, 1979; Jackson, 1983; Raza & Carpenter, 1987), job type may not moderate the link between physical features

and attractiveness. Perhaps the moderated mediation proposed in this study would surface in an alternative model, wherein job type moderates the relationship of perceived attractiveness with selection ratings. Future research exploring these relationships should test alternate models to help better tease out the interaction of job type and attraction in predicting colorism bias.. The current study, however, did not yield support for the interactive effect of physical characteristics and job type on attractiveness.

Another interesting finding was that white collar applicants received higher selection ratings overall, compared to blue collar job applicants. This may point towards a general tendency to assign lower pre-employment ratings based on industry or job type. Raters may perceive women applying for white collar jobs as more intelligent or capable and thus find them more favorable than women applying for blue collar jobs, despite their having similar work experience and educational backgrounds. Blue-collar work is associated negative stereotypes. Thomas (1989) noted that some people believe blue-collar workers in non-supervisory roles do not have career aspirations and work just to earn a living (Torlina, 2003). The general belief is that blue collar work is highly supervised and routine (Hennequin, 2007) and thus requires lower competence. The reality is that today's blue-collar work is often complex and can involve extensive training (Pialoux & Beaud, 1999), which require job applicants to be highly competent at the required skills. If this job type bias existed in the current study, it may have masked the effects of colorism bias. Regardless of the applicant's hairstyle or skin tone, she may have been view less favorably if she worked in a blue-collar job. The fact that applicants to blue collar jobs were women may have also negatively affected their selection favorability. Cejka and Eagly (1999) demonstrated that participants typically assume that in masculine, male-dominated occupations, stereotypically masculine attributes are necessary for success. Women applying for

blue collar work in the current study may have been perceived as less capable of success in a manufacturing job, resulting in lower ratings than those applying to white collar jobs. Gender role expectancies of masculine and feminine jobs may also mask effects of colorism bias.

Hypothesis 6b. Job type also did not moderate the relationship between hair type and attractiveness, when attractiveness was situated as a mediator to selection ratings. Again, the proposed mediation (Hypothesis 4b) was not of the nature expected, such that Afrocentric hair was rated as more attractive than Eurocentric hair, which related to higher selection ratings.

As postulated in the results of Hypothesis 6a, this moderated mediation model may not capture the nature of the relationship between job type, attractiveness, and selection ratings. The same argument about the potential influence of gender-job fit expectancies can be reiterated here; job type may have masked the effects of colorism. Regardless of different hairstyles, Black women who apply to blue collar jobs may be rated as less favorable than those who apply to white collar jobs. This relationship may not interact with perceived attractiveness, or perhaps just not in the manner hypothesized. Future research should continue to investigate how a wider range of hair styles are perceived based on the job industry to which one is applying. In some instances (e.g., modeling), the job type may affect perceptions of attractiveness. It would be interesting to explore this further to better understand the relationships between certain physical markers, perceived attractiveness, and job type.

Hypotheses 7a-b. Job type also did not moderate the relationships between skin tone or hair type with perceived identity strength of applicants. Job type was not related to perceived racial identity strength and may operate in a manner similar to attractiveness- as a mediator. The type of job to which a person is applying may not affect perceived racial identity strength. Whether it is a blue or white collar job, an evaluator's perception of how strongly an applicant

identifies with his/her race may not change in light of the industry. As mentioned, skin tone is not a trait people can easily manipulate and so may have less influence on perceptions of one's racial pride. Hiring managers from manufacturing plants and marketing firms may similarly perceive an Afrocentric hairstyle as communicating strong racial identity. Barron et al. (2011) found that markers of racial pride positively influenced the quality of interpersonal interactions during the hiring process, compared to applicants without these markers. Although all of the stores sampled in Barron et al. (2011) were in the same industry, the results show that across many organizations, racial identity was perceived as stronger when job seekers expressed it. Perhaps this is true across industries. If an applicant displays an outward manifestation of his/her racial identity, it may be influential in the hiring process, regardless of the job type.

In line with future research recommendations for Hypotheses 6a and 6b, I would suggest that we continue to investigate the role of job type in the context of colorism. Future research should explore alternate statistical models regarding the roles of job type, perceived racial identity strength, and colorism bias. Based on the results of the current study, job type does not seem to affect the relationship between physical characteristics and perceived racial identity strength, but to better understand how colorism bias (and the physical features which define it) operates in relation to job type, we need more insights. Job type may moderate the relationships between physical characteristics associated with colorism and selection ratings, but it may not moderate the relationships between these physical characteristics and the mediators in the current study.

General Discussion

Although colorism research has gained traction in the social sciences literature over the past few decades (for examples see Anderson & Cromwell, 1977; Averhart & Bigler, 1997;

Brown et al., 1999; Dixon & Maddox, 2005; Hall, 1992, 2003, 2005; Maddox & Chase, 2004; Maddox & Gray, 2002; Stepanova & Strube, 2009), the implications of this bias in organizational selection contexts is not well understood (Harrison & Thomas, 2009). Often overshadowed by studies of interracial discrimination, colorism bias research attempts to understand the discrimination that may occur across those within one race due to social preference for European-like physical features (Harrison & Thomas, 2009; Marira & Mitra, 2013). The goal of this study was to contribute to the colorism bias literature by disentangling the effects of hair type and skin tones on hiring decisions for Black women, and by testing mediators and moderators of this relationship in order to better understand how colorism bias operates in selection contexts. The results of the current study suggest that colorism bias affects hiring decisions for Black women via attractiveness. In isolation, variations in skin tone or hair type did not directly relate to hiring decisions, a finding that is in contrast to previous studies that found a direct effect of skin tone on hiring recommendations or decisions (e.g. Harrison & Thomas, 2009; Wade et al., 2004). The current study expanded the colorism literature by investigating the effects of multiple physical features associated with colorism bias, by testing the interactive and additive effects of these features on selection decisions, and by testing mediating explanatory mechanisms for colorism bias.

Although the relationships were not statistically significant, the current study yielded interesting results for the relationship between both skin tone and hair type with selection ratings. The medium complexion skin tone group received the highest selection ratings, followed by the light-skinned applicant, and lastly the darkest-skinned applicant. This is in contrast to what was anticipated using the Maddox model (2004) as a theoretical framework. According to the Maddox model, raters should have engaged in feature-based and/or category-based processing,

drawing on conceptual knowledge, which in turn activates more negative Black stereotypes for those with the most salient Black phenotypicality (i.e., the darkest skin, or coarsest hair; see Maddox, 2004). Following this framework, with regard to skin tone, one would expect that categorical processing of skin tone as the most salient racial phenotypic feature would be used to make initial racial categorizations and further stereotypical judgments (Maddox, 2004). Even though this held true for the darker-skinned individuals who received the lowest ratings, the current study's results were in contrast to what Maddox (2004) proposed as *sub-typing*, a type of secondary perceptual processing in which atypical category members (i.e., light-skinned Blacks) receive the least discrimination due to their distance from the prototype of racial phenotypicality. In contrast, the present results introduce the possibility of preference for medium skin-toned Black women. This finding is compelling considering that in Harrison & Thomas (2009), the same pattern was found for Black women with higher education: the applicants with medium skin tone were rated the highest for selection decisions. The presence of this pattern across two similar studies may suggest that theoretical models that propose that colorism discrimination worsens with the darker skin may lack some boundary conditions. Popular theoretical frameworks (e.g., Maddox, 2004) that describe how colorism bias manifests imply that increasingly lighter skin is associated with more positive ratings, may need to expand to account for differences between three skin tone groups (light, medium, and dark). Colorism theories like those proposed by Maddox (2004) are not entirely in line with findings that yield evidence of medium brown skinned individuals being evaluated most favorably. The way in which phenotypicality of race is used in Maddox's colorism theory somewhat masks the differences between medium skin-toned Blacks and their lighter and darker counterparts. Considering actual proportional representation of the race, medium complexion Blacks are the most typical and may

actually be *less* likely to be associated with negative stereotypes and evaluations as a result of this. This was the case for women job applicants in both the Harrison & Thomas (2009), and the current study- in which medium skin-toned Black women received the most favorable evaluations for hiring decisions. There may be notable differences between very dark-skinned Black women and medium- and light-skinned Black women, but a negligible difference in preference for lighter- versus medium-skinned Black women (Harrison & Thomas, 2009 yielded support for this). Interestingly though, the expected pattern between skin tone and favorability of ratings (favorability increases from darker to lighter skin tone) did emerge for male applicants in the Harrison & Thomas (2009) study. These findings highlight the need to revisit colorism bias theories and to further investigate not only differences between light, medium, and dark skin tones, but possible gender differences present in the effects of colorism.

The results of the current study also suggest that re-theorizing may need to be applied in regards to a possible preference for Afrocentric hair over Eurocentric hair on Black women. In the current study, the applicant with the Afrocentric hair received higher selection ratings than the one with Eurocentric hair. In line with feature-based perceptual processing theory proposed in the Maddox model (2004), Afrocentric hair type was expected to be perceived as more closely aligned with stereotypical expectations of Blacks (i.e., Black hair is typically nappy) and therefore activate more discriminatory behaviors as compared to targets with Eurocentric hair types, despite skin tone. Hairstyles are thought to be an additional feature that activates feature-based processing because they are very salient phenotypes (Maddox, 2004). If participants in the current sample were using feature-based processing, consistent with Maddox (2004) and the Afrocentric bias theory (Blair et al., 2002), they should have rated the Afrocentric-haired group as least suitable for hire. In re-conceptualizing colorism bias theories to account for features

other than skin tone, researchers should account for alternative patterns of perception of and preference for varying degrees of different features. The current results are compelling in that they show a preference for Afrocentric hair styles on Black women job-seekers. Also to be considered is that hair type may be more influential than skin tone in determining attractiveness and subsequent likelihood of hire.

The Maddox model (2004) also describes the influence of rater-perceived conceptual knowledge about the target racial group in forming judgments. If conceptual knowledge about a racial group (or physical features common to that group) is negative, it should exacerbate discriminatory behavior that has been activated by category or feature-based processing (Maddox, 2004). The current results suggest that having an Afrocentric hair style or medium skin tone may not activate negative conceptual knowledge about Blacks in the manner Maddox (2004) theorized. Raters may use their conceptual knowledge about an entire race, or even prominent racial markers, to inform their overall judgments of minorities. However, the extent to which certain physical features *themselves* evoke varying degrees of discrimination is less clear, as the current results do not support the Maddox (2004) framework as expected.

Further, it should also be noted that colorism bias may not manifest in selection contexts via the person-perception process that Maddox (2004) described. This framework may be more fitting as an explanation for intra- and interracial interactions with less important outcomes. Hiring situations are high stakes and thus may show less direct evidence of colorism bias (Kaiser & Pratt, 2009). As mentioned above in reference to Hypotheses 6a and 6b, people making hiring decisions may not allow negative conceptual knowledge about a group, or the racial phenotypicality of their features, to heavily influence their selection decisions. It is also possible that the generally held conceptual knowledge about Blacks with medium skin and/or Afro-styled

hair is more positive than previously theorized, or stated differently, Eurocentric features may not always be preferred over Afrocentric features in certain contexts. Future colorism theories should incorporate more boundary conditions to help identify situations in which colorism may be more or less pronounced.

The current study advances research on colorism in hiring contexts by exploring attractiveness and racial identity strength as mediators and moderated mediation of these relationships by job type. Attractiveness fully mediated the relationships of skin tone and hair type with selection recommendations. While no significant direct relationships surfaced between either of these physical features and selection, both hair type and skin tone were significant predictors of attractiveness. Perhaps in interpersonal interactions, an evaluator is more likely to associate physical characteristics like hair or skin tone to perceived attractiveness first, which then influences selection decisions. Research has found that attractiveness is positively linked to perceived competence (Harrison & Thomas, 2009; Umberson & Hughes, 1987). Black women with more Eurocentric features have also been found to be perceived as more beautiful than those with Afrocentric features (Fears, 1998). Although previous research supports the link between skin tone and perceptions of attractiveness such that, generally, Blacks with darker skin are perceived as less attractive than those with lighter skin (Celious & Oyserman, 2001; Hall, 1992, 1995), the results of the current study reveal otherwise, and suggest that this relationship may not operate in the manner typically hypothesized in colorism research. Ellis-Hervey and colleagues (2016) offer a possible explanation for the divergent findings in the present study. They suggest that there is an increasing Western acceptance of a more authentic standard of beauty. This is in direct juxtaposition to the formerly narrow beauty standards in society (Nelson, 2013). As stated in the Ellis-Hervey et al. (2016) study, "Accepting women, regardless of skin

tone and hair style and color, is a new standard, competing with the more fickle beliefs society has accepted for generations" (Ellis-Hervey, et al. 2016, p.870). Also interestingly, in the current study hair type related to attractiveness more strongly than did skin tone. Since attractiveness fully mediated the relationships to selection ratings, this point towards the possibility of hair styles holding more weight than skin tone in hiring decisions. Expanding theory about colorism bias should continue to involve further delineation the effects of different physical features on the expression of colorism bias.

Although the existing literature may suggest occupational stereotype congruency (Heilman, 1983) between Afrocentric features and manual labor jobs (Keith & Herring, 1991; Thompson, 2009), or tokenism of Black women in white collar jobs (Banks, 2000; Kwateng, 2011), as possible explanations for the moderating role of job type in colorism bias expressed during hiring decisions, results of the current study did not yield support for the moderation by job type as proposed. Despite the failure of significant moderation by job type surfacing here, job type may affect the manifestation of colorism bias under other conditions or when other mediators are considered.

Limitations and Future Research

The current study did not fully corroborate previous findings regarding ultimate preference for the lightest-skinned women with Eurocentric hair. As mentioned above, future research should further examine the effects of colorism bias through a wider lens than the typically binary one which pits light against dark skin. More research should closely examine the nuances between medium-skinned Black women and their lighter and darker counterparts, as well as reactions to medium skin-toned Blacks in general. Some research supports the preference

for medium-skinned Black women, but this has mostly been tested within Black (Gullickson, 2005) and has not yet been thoroughly examined in employment contexts.

Surprisingly, Afrocentric hair was rated as more attractive than Eurocentric hair. Future research should expand upon this finding and investigate the extent to which different hairstyles are perceived as Afrocentric and how they interact with other perceptions of applicants to influence pre-employment decisions (e.g., the interaction of more Afrocentric hair styles with variables such as perceived competence, warmth, and/or general likability). Skin tone and hair type did not interact in the expected pattern either. This signals the need for future studies to attempt to further disentangle the possible additive effects of these phenotypic characteristics.

The present study presented target photos in color, whereas former studies did not. In Harrison & Thomas (2009), skin tone was manipulated with Adobe Photoshop, but participants viewed applicant photos in black and white. Wade and colleagues (2004) indicated differences in applicant skin tone in written format. It is plausible that the current study presented the most realistic manipulation of target skin tone and hair type. This method may have heightened the sense of fidelity for participants and thus evoked reactions from participants that more closely mirror reactions in real hiring scenarios. However, there is also a chance that the manner in which stimuli was altered in the current study was insufficient. Although pilot data showed that participants perceived the three skin tones and two hair types as distinct, there was qualitative feedback that the person in the photo looked odd or that the manipulation was too obvious. Minimal feedback such as this surfaced for both the digital and make-up only altered photos though. One shortcoming of studies in the colorism literature, including the current research, may be the failure to successfully mimic and realistically alter the stimuli photos. Future studies should continue to improve the realism of stimuli, and perhaps even compare different types of

stimuli within the same study to compare differences in effects based on how the stimuli is presented. The job type manipulations in this study may also not have been perceived as distinct enough from one another. Future studies that investigate the role of job type in colorism discrimination should similarly try to ensure that the stimuli presented are correctly perceived very distinctly- as blue versus white collar. The current study did not collect this type of information on how well stimuli used in the actual study were perceived, so it is possible that the stimuli manipulations may not have functioned as well as expected.

In the current study, racial identity strength did not play a critical role in explaining colorism bias during the hiring process. This may be due to the use of the MTurk participant sample, which may not have been representative of the U.S. hiring manager demographic (and thus not representative of their hiring decisions). The null finding might also be due to the inability of raters to determine an applicant's racial identity without more salient cues (e.g., in Baron et al., 2011, targets wore clothing that expressed racial identity strength through expressions like "Proud to be a Hispanic"). Continued investigation into what influences perceptions of an applicant's racial identity strength would be helpful in understanding the role of this construct in colorism bias manifestation.

The issue of generalizability of these results to typical U.S. hiring managers can be extended to the other hypotheses in the current study as well. The MTurk sample may have had different characteristics than most U.S. hiring managers. Future studies should also attempt to use samples of real hiring managers, or samples that consist of participants who have at least had managerial experience. Being that the primary aim of this study was to investigate colorism bias as an organizational phenomenon in a simulated hiring context, failure to use participants who were experienced in making hiring decisions may have limited generalizability (Davison, &

Burke, 2000). In addition to managerial experience, this population was younger- generationally speaking- than that of the typical hiring manager who is typically later-middle-aged and mid-career. This may have had an effect on results in that younger generations may show less engagement in colorism bias, and thus, generational differences in colorism bias should also be investigated in future studies.

The current study contained a quasi-experimental design, the strength of which is its ability to demonstrate causality between phenotypic features and hiring decisions. However, the design only captures one facet of the selection process: the hiring recommendation. Although hiring decisions only occur at a single time point, future studies on colorism in selection contexts could adopt a longitudinal approach by investigating the manifestation of colorism bias throughout different stages of selection (i.e., recruitment screenings, multiple on-site visits like in-person assessments and rounds of interviews). It could be that colorism bias affects Black women candidates differently at various points of the candidate pre-screen funnel, so future experiments should try to mimic a more realistic hiring process which would allow for the observation of expressed colorism bias during the various stages of the selection process.

Another limitation of the current study is that only Black women were used as the target stimuli. Further research should investigate the differences in colorism-based discrimination across genders and multiple ethnicities. There is evidence that gender differences do exist in colorism bias expression (Harrison & Thomas; Hunter, 1998; Keith & Herring, 1991; Maddox & Gray, 2002; Thompson & Keith, 2001), but empirical evidence from an applied perspective is sorely lacking (Marira & Mitra, 2013). This study contributes to explaining colorism effects for women targets, but findings could be strengthened by comparing the effects to male targets.

Colorism *is* a global phenomenon (Blauner, 1972; Glenn, 2009), so studies investigating instances of colorism in applied settings should increasingly include targets of different ethnicities. Cross-cultural research also has the potential to reveal how colorism bias operates in different parts of the world. Asian and Eastern Indian cultures have caste systems that place individuals with darker skin at a disadvantage (Jha, & Adelman, 2009; Parameswaran, & Cardoza, 2009). It would be interesting to see how results vary in populations in which hair types are less variable. More specifically, in a country like India, although there is a wide range of skin tones, hair is mostly all Eurocentric in texture and length. In these populations, the additive effects of a phenotypic feature such as hair type may be less meaningful because there is less variation. Or perhaps, other facial features such as nose width and lip fullness play a larger role in influencing colorism bias in cultures such as this one.

With increasing globalization, it will be important for U.S. organizations to understand how colorism bias operates on a global scale. In today's world, many large U.S. organizations are very ethnically diverse and include employee populations that are comprised of U.S. citizens working in the states, U.S. expatriate workers on assignments abroad, and expatriate immigrant workers in the U.S., to name a few. Colorism bias may have differential effects on all of these different types of employees. For example, does colorism bias operate similarly for Black Americans working in South Africa? Does the fact that they are Black *Americans* override the caste system in place between White South Africans, those of mixed racial heritage, and those of purely African roots? Do U.S. hiring managers apply colorism bias to Indian immigrants who come to the U.S. with specialized, sought-after skills? Or does the high demand for the skills they provide override colorism bias towards these individuals? Studies have found that Black Americans (see Hersch, 2006; Goldsmith et al., 2006; Goldsmith et al., 2007) and U.S.

immigrants from a variety of ethnicities (Hersch, 2008) with darker skin tones, receive lower pay and work incentives compared their lighter-skinned counterparts, signaling the importance of studying colorism through a multi-ethnic lens. The preponderance of this evidence, including the current findings, underscore the need of future research to examine how colorism operates within and across cultures, not only during the selection process, but also during the lifecycle of an employee.

We need to expand the colorism body of research also by examining differences in colorism by rater race. The current sample did not include a sufficient number of participants in each race category to analyze the results by rater race. A key factor of colorism is that it is also observed *intra*-racially, so future studies could add to the literature by uncovering the interaction of rater and ratee race in colorism bias expression during organizational selection. For example, I would speculate that not only Blacks rating other Blacks show preference for medium skin-tones, but that White raters express this preference too. Previous research found support for the interaction of interviewer-interviewee race, related to differences in perception of skin tone in interviews interactions (Hill, 2002). Considering this evidence, we should further explore how those interactions affect the expression of colorism bias, while also taking into account the particular stage of the selection process (i.e., resume screening, such as video pre-screens in which a hiring manager or recruiter can see the candidate before deciding to interview versus actual interviews, which occur further downstream).

Practical Implications and Conclusion

Evidence of workplace discrimination due to colorism bias may compel organizations to become more familiar with colorism and its possible deleterious effects on work outcomes. Unbeknownst to many organizations, colorism bias may occur in various domains, including

organizational selection (Harrison & Thomas, 2009; Marira & Mitra, 2013). Organizational leaders and HR managers should familiarize themselves with colorism bias, as it can be a barrier to equal opportunity for darker-skinned minorities. Promoting awareness by including colorism in the ethnic diversity conversation can aid in reducing its presence in organizations.

The results of the current study revealed that perceived applicant attractiveness was the main driver of colorism bias in hiring decisions. Organizations should continue to educate hiring managers and recruiters about the presence of attractiveness bias during the selection process. Providing specific information about a candidate's qualifications and person-organizational fit has been found to successfully mitigate attractiveness bias (Eagly, Ashmore, Makhijani, & Longo, 1991; Watkins & Johnston, 2000). Other researchers have suggested that organizations provide interventions centered on developing "complicated" understanding in their hiring managers, which involves heightening their sense of awareness of others by challenging their beliefs about those groups via problem-solving exercises (Bartunek, Gordon, Weathersby, 1983). This type of cognitive complexity has been shown to mitigate outgroup stereotyping (Wagner & Schonbach, 1984), so it may also mitigate attractiveness biases.

Interventions aimed at changing the organizational culture and work norms should attempt to unlink attractiveness norms from organizational values (Dipboye, 2005). Hiring managers must remain aware that individuals with varying physical appearances (perhaps tied to their ethnic roots) can add a lot of value to those organizations that really value diversity, because these individuals embody part of those core organizational values (Dipboye, 2005). Job candidates can also learn how to successfully manage interactions with hiring managers who look physically different from them by developing strategies for put hiring managers at ease (Hebl, Tickle, & Heatherton, 2000). Specifically, candidates can highlight their strengths and fit

with organizational values, which will draw attention away from their appearance. As Dipboye (2005, p. 296) stated, "…eliminating bias against unattractive persons is likely to involve more than educating employees, but will often require changing the norms of the organization, modifying behavioral patterns that perpetuate the bias, and helping people deal with the strong feelings evoked by stigmas." This type of organizational change management can also be applied to directly combatting colorism bias.

Like discrimination toward other protected classes, colorism bias carries the potential for legal ramifications that may translate into increased organizational costs. In addition, victims of colorism bias likely experience negative work and personal outcomes. Considering the importance of adhering to fair hiring practices, findings of the current study can help provide insight into designing interventions to prevent or reduce colorism bias. I/O psychology research has much to contribute to the understanding, prevention, and reduction of colorism bias (Marira & Mitra, 2013). It is my hope that the current study will serve as a catalyst for other applied researchers to investigate colorism bias in the workplace and decrease its presence in organizations through evidence-based practice.

Table 1

Pilot Study Participant Demographics

		Frequency (*n*)	Percentage (%)
Race/Ethnicity			
	Asian, Asian American, or Pacific Islander	9	8.7
	Black, African, or African American	14	13.5
	Hispanic or Hispanic American	7	6.7
	Middle Eastern, Arab, or Arab American	14	13.5
	Native American or Alaskan Native	1	1
	White, European, or European American	53	51
	Mixed Ethnicity	6	6
		Mean	Standard Deviation
Age		29.33	11.21

Note. Age (*n*= 90); Race (*n*= 104). Age reported in years.

Table 2

Primary Study Participant Demographics

		Frequency (*n*)	Percentage (%)
Gender			
	Male	175	46.3
	Female	203	53.7
Race/Ethnicity			
	Asian, Asian American, or Pacific Islander	30	7.8
	Black, African, or African American	25	6.5
	Hispanic or Hispanic American	14	3.7
	Middle Eastern, Arab, or Arab American	5	1.3
	Native American or Alaskan Native	2	0.5
	White, European, or European American	297	77.5
	Mixed Ethnicity	10	2.7
		Mean	Standard Deviation
Age		36.8	10.32
Income		3.57	156
Education Level		5.56	0.83
Professional Tenure		10.22	7.79
Organizational Tenure		6.89	5.37

Note. Age (*n*= 148); Income (*n*= 139); Education Level (*n*= 148); Professional Tenure (*n*= 141), Organizational Tenure (*n*= 141). Income and education level were reported by participants on categorical scales: Income (1= less than $20k; 2= $25-$35k; 3= $36-$50k; 4= $51-$70k; 5= $71-$85k; 6= $86-$100k; 7= over $100k), Education Level (1= Less than 7th grade; 2= Junior high/middle school - 9th grade; 3= Partial high school- 10th or 11th grade; 4= High school graduate; 5= Partial college; 6= College graduate; 7= Graduate degree). Age, professional tenure, and organizational tenure were reported in years.

Table 3

Pilot Study Scale Descriptive Statistics

	(*n*)	Mean	SD	Scale
Skin Tone				
Light	46	4.26	1.51	1 – 9
Medium	29	6.69	0.97	1 – 9
Dark	29	7.66	0.67	1 – 9
Hair Type				
Eurocentric Long	33	4.36	2.25	1 – 9
Eurocentric Short	24	5.25	1.87	1 – 9
Afrocentric Afro	25	7.96	0.74	1 – 9
Afrocentric Updo	20	6.90	1.52	1 – 9
Target Age			Frequency(n)	Percentage (%)
	18 – 25		14	13.5
	26 – 35		75	72.1
	36 – 45		13	12.5
	46 – 55		2	1.9

Note. Measures of Afrocentricity/Eurocentricty of hair styles were collapsed across photos with varying skin tones. Measures of skin tone were collapsed across hair types. The categorical scale for perceived target age is in years.

Table 4

Primary Study Scale Descriptive Statistics

	(*n*)	Mean	SD	Scale
Attractiveness	377	4.24	1.08	1 – 7
Light Skin Tone		4.34	1.03	1 – 7
Medium Skin Tone		4.30	1.06	1 – 7
Dark Skin Tone		4.08	1.15	1 – 7
Eurocentric Hair		4.02	1.14	1 – 7
Afrocentric Hair		4.45	0.99	1 – 7
White Collar		6.06	0.92	
Blue Collar		5.83	0.91	
Perceived Racial Identity Strength	379	3.72	0.62	1 – 5
Light Skin Tone		3.73	0.68	1 – 5
Medium Skin Tone		3.72	0.61	1 – 5
Dark Skin Tone		3.71	0.56	1 – 5
Eurocentric Hair		3.65	0.59	1 – 5
Afrocentric Hair		3.78	0.64	1 – 5
White Collar		3.74	0.60	
Blue Collar		3.71	0.64	
Selection	383	5.90	0.92	1 – 7
Light Skin Tone		5.96	0.82	1 – 7
Medium Skin Tone		6.05	0.89	1 – 7
Dark Skin Tone		5.78	1.03	1 – 7
Eurocentric Hair		5.90	0.86	1 – 7
Afrocentric Hair		5.96	0.97	1 – 7
White Collar		4.28	1.17	
Blue Collar		4.22	1.01	

Table 5

Variable Zero-Order Correlations

	Scale Name	1	2	3	4	5	6	7	8	9	10
1	Rater Ethnic Identity Strength†	(.91)									
2	Positive Affect†	.39**	(.92)								
3	Negative Affect†	-.09	-.22**	(.93)							
4	Social Desirability†	.23**	.23**	-.23**	(.86)						
5	Skin Tone	.03	.08	-.05	.04	(--)					
6	Hair Type	-.07	.01	.12*	-.01	-.05	(--)				
7	Attractiveness	.04	.22**	-.09	.10	-.10	.19**	(.91)			
8	Perceived Racial Identity Strength	.19**	.15**	-.05	-.05	-.01	.10	-.04	(.88)		
9	Job Type	-.01	-.05	.07	.09	.15**	-.02	-.03	-.02	(--)	
10	Selection	.07	-.12*	-.11*	-.02	-.08	.03	.33**	.11*	-.13	(.92)

Note: Scale reliabilities are shown in parentheses on the diagonal. Social desirability is measured on a true/false binary scale and total scores can range from 1-16 points. Skin tone was coded as 1, 2, or 3 from lightest to darkest. Hair type was coded on a binary scale: 1 = Eurocentric; 2 = Afrocentric. Job type was coded on a binary scale: 1 = Marketing, Sales, & Service; 2 = Manufacturing.

** $p < .01$. * $p < .05$.

† Control variable

Table 6

Relationship between Skin Tone and Selection Ratings through Attractiveness

		Attractiveness (M_1)			Selection Ratings (Y)	
		Coeff.	95% CI		Coeff.	95% CI
Skin Tone (X)	$a_1 \rightarrow$	-.15* (.07)	-.28 , -.01	$c' \rightarrow$	-.05 (.06)	-.16 , .06
Attractiveness (M_1)				$b_1 \rightarrow$	.26*** (.05)	.17 , .35
Positive Affect (U_1)	$a_2 \rightarrow$	.24*** (.07)	.11 , .37	$b_2 \rightarrow$	.04 (.06)	-.06 , .16
Negative Affect (U_2)	$a_3 \rightarrow$	-.08 (.08)	-.25 , .08	$b_3 \rightarrow$	-.08 (.07)	-.23 , .05
Constant	$i_{M1} \rightarrow$	3.91*** (.31)	3.31 , 4.51	$i_Y \rightarrow$	4.88*** (.31)	4.27 , 5.50
		$R^2 = .05$ $F(3, 353) = 6.61, p < .001$			$R^2 = .11$ $F(4, 352) = 11.18, p < .001$	

Note: Unstandardized OLS Regression Coefficients with Confidence Intervals (Standard Errors in Parentheses)
*$p < .05$. **$p < .01$. ***$p < .001$.

Table 7

Relationship between Hair Type and Selection Ratings through Attractiveness

		Attractiveness (M_1)			Selection Ratings (Y)	
		Coeff.	95% CI		Coeff.	95% CI
Hair Type (X)	$a_1 \rightarrow$	.40*** (.11)	.19 , .62	$c' \rightarrow$	-.09 (.10)	-.28 , .10
Attractiveness (M_1)				$b_1 \rightarrow$	.28*** (.05)	.19 , .37
Positive Affect (U_1)	$a_2 \rightarrow$	.23*** (.07)	.11 , .36	$b_2 \rightarrow$	.04 (.07)	-.07 , .15
Negative Affect (U_2)	$a_3 \rightarrow$	-.05 (.08)	-.22 , .12	$b_3 \rightarrow$	-.10 (.07)	-.24 , .04
Constant	$i_{M1} \rightarrow$	2.96*** (.33)	2.31 , 3.61	$i_Y \rightarrow$	4.90*** (.31)	4.28 , 5.51
		$R^2 = .08$			$R^2 = .11$	
		$F(3, 353) = 9.77$, $p < .001$			$F(4, 352) = 11.22$, $p < .001$	

Unstandardized OLS Regression Coefficients with Confidence Intervals (Standard Errors in Parentheses)
*$p < .05$, **$p < .01$, ***$p < .001$

Table 8

Relationship between Skin Tone and Selection Ratings through Perceived Racial Identity Strength

		Perceived Racial Identity Strength (M_1)			Selection Ratings (Y)	
		Coeff.	95% CI		Coeff.	95% CI
Skin Tone (X)	$a_1 \rightarrow$	.02 (.04)	-.10 , .05	$c' \rightarrow$	-.11 (.06)	-.22 , .01
Perceived Racial ID strength (M_1)				$b_1 \rightarrow$	.13 (.08)	-.03 , .28
Positive Affect (U_1)	$a_2 \rightarrow$	.12** (.04)	.04 , .20	$b_2 \rightarrow$	.10 (.06)	-.02 , .21
Negative Affect (U_2)	$a_3 \rightarrow$	-.11 (.07)	-.10 , .09	$b_3 \rightarrow$	-.10 (.07)	-.25 , .03
Constant	$i_{M1} \rightarrow$	3.39*** (.18)	3.03 , 3.75	$i_Y \rightarrow$	5.52*** (.37)	4.79 , 6.26
		$R^2 = .03$ $F(3, 356) = 3.33, p < .05$			$R^2 = .04$ $F(4, 355) = 3.34, p < .05$	

Unstandardized OLS Regression Coefficients with Confidence Intervals (Standard Errors in Parentheses)
*$p < .05$, **$p < .01$, ***$p < .001$

Table 9

Relationship between Hair Type and Selection Ratings through Perceived Racial Identity Strength

	Perceived Racial Identity Strength (M_1)			Selection Ratings (Y)		
		Coeff.	95% CI		Coeff.	95% CI
Hair Type (X)	$a_1 \rightarrow$	.11 (.06)	-.01 , .24	$c' \rightarrow$	.02 (.10)	-.17 , .21
Perceived Racial ID strength (M_1)				$b_1 \rightarrow$	.13 (.08)	-.02 , .29
Positive Affect (U_1)	$a_2 \rightarrow$	.12** (.04)	.04 , .20	$b_2 \rightarrow$	.10 (.06)	-.02 , .20
Negative Affect (U_2)	$a_3 \rightarrow$	.01 (.05)	-.09 , .11	$b_3 \rightarrow$	-.10 (.07)	-.25 , .04
Constant	$i_{M1} \rightarrow$	5.29*** (.38)	2.76 , 3.54	$i_Y \rightarrow$	3.15*** (.20)	4.53 , 6.04
		$R^2 = .03$ $F(3, 356) = 3.33, p < .01$			$R^2 = .03$ $F(4, 355) = 2.55, p < .05$	

Unstandardized OLS Regression Coefficients with Confidence Intervals (Standard Errors in Parentheses)
*$p < .05$, **$p < .01$, ***$p < .001$

Table 10

Relationship between Skin Tone and Selection Ratings through Attractiveness, Moderated by Job Type

		Attractiveness (M_1)			Selection Ratings (Y)	
		Coeff.	95% CI		Coeff.	95% CI
Skin Tone (X)	$a_1 \rightarrow$	-.15* (.07)	-.28 , -.01	$c'_1 \rightarrow$	-.07 (.06)	-.19 , .05
Attractiveness (M_1)				$b_1 \rightarrow$	.26*** (.05)	.16 , .37
Job Type (W)	$a_2 \rightarrow$	-.01 (.11)	-.23 , .21	$c'_2 \rightarrow$	-.22* (.09)	-.40 , -.03
X x W	$a_3 \rightarrow$	.15 (.14)	-.13 , .43	$c'_3 \rightarrow$	.00 (.12)	-.23 , .24
Positive Affect (U_1)	$a_4 \rightarrow$	.24** (.07)	.11 , .37	$b_2 \rightarrow$	.04 (.06)	-.07 , .17
Negative Affect (U_2)	$a_5 \rightarrow$	-.09 (.08)	-.25 , .08	$b_3 \rightarrow$	-.08 (.07)	-.23 , .06
Constant	$i_{M1} \rightarrow$	3.64*** (.27)	3.12 , 4.17	$i_Y \rightarrow$	4.78*** (.37)	4.06 , 5.50
		$R^2 = .06$ $F(5, 351) = 4.25$, $p < .001$			$R^2 = .13$ $F(6, 350) = 8.66$, $p < .001$	

Unstandardized OLS Regression Coefficients with Confidence Intervals (Standard Errors in Parentheses)

Note: *$p < .05$, **$p < .01$, ***$p < .001$. Skin tone and job type are mean centered.

Table 11

Relationship between Hair Type and Selection Ratings through Attractiveness, Moderated by Job Type

		Attractiveness (M_1)			Selection Ratings (Y)	
		Coeff.	95% CI		Coeff.	95% CI
Hair Type (X)	$a_1 \rightarrow$	.40*** (.11)	.18 , .62	$c'_1 \rightarrow$	-.08 (.10)	-.27 , .11
Attractiveness (M_1)				$b_1 \rightarrow$	.28*** (.05)	.18 , .39
Job Type (W)	$a_2 \rightarrow$	.02 (.11)	-.20 , .24	$c'_2 \rightarrow$	-.20* (.09)	-.38 , -.01
X x W	$a_3 \rightarrow$	-.21 (.23)	-.65 , .23	$c'_3 \rightarrow$	.27 (.19)	-.10 , .64
Positive Affect (U_1)	$a_4 \rightarrow$	.23*** (.07)	.10 , .36	$b_2 \rightarrow$	.05 (.06)	-.07 , .17
Negative Affect (U_2)	$a_5 \rightarrow$	-.06 (.08)	-.25 , .08	$b_3 \rightarrow$	-.08 (.08)	-.22 , .07
Constant	$i_{M1} \rightarrow$	3.62*** (.27)	3.09 , 4.14	$i_Y \rightarrow$	4.69*** (.36)	3.97 , 5.40
		$R^2 = .08$ $F(5, 351) = 6.29$, $p < .001$			$R^2 = .13$ $F(6, 350) = 8.07$, $p < .001$	

Unstandardized OLS Regression Coefficients with Confidence Intervals (Standard Errors in Parentheses)

Note: *$p < .05$, **$p < .01$, ***$p < .001$. Skin tone and job type are mean centered.

Table 12

Relationship between Skin Tone and Selection Ratings through Perceived Racial Identity Strength, Moderated by Job Type

	Perceived Racial Identity Strength (M_1)			Selection Ratings (Y)		
		Coeff.	95% CI		Coeff.	95% CI
Skin Tone (X)	$a_1 \rightarrow$	-.03 (.04)	-.11 , .05	$c'_1 \rightarrow$	-.12* (.06)	-.24 , -.01
Perceived Racial ID Strength (M_1)				$b_1 \rightarrow$	.12*** (.08)	-.03 , .27
Job Type (W)	$a_2 \rightarrow$	-.05 (.07)	-.18 , .08	$c'_2 \rightarrow$	-.21* (.10)	-.40 , -.01
X x W	$a_3 \rightarrow$	.00 (.08)	-.16 , .16	$c'_3 \rightarrow$	.03 (.12)	-.21 , -.26
Positive Affect (U_1)	$a_4 \rightarrow$	.12** (.04)	.04 , .20	$b_2 \rightarrow$	.09 (.07)	-.04 , .23
Negative Affect (U_2)	$a_5 \rightarrow$	-.00 (.05)	-.11 , .10	$b_3 \rightarrow$	-.10 (.07)	-.25 , .04
Constant	$i_{M1} \rightarrow$	3.34*** (.17)	3.00 , 3.69	$i_Y \rightarrow$	5.34*** (.37)	4.62 , 6.07
		$R^2 = .03$ $F(5, 354) = 2.01, p > .05$			$R^2 = .05$ $F(6, 353) = 2.96, p < .01$	

Unstandardized OLS Regression Coefficients with Confidence Intervals (Standard Errors in Parentheses)

Note: *$p < .05$, **$p < .01$, ***$p < .001$. Skin tone and job type are mean centered.

Table 13

Relationship between Hair Type and Selection Ratings through Perceived Racial Identity Strength, Moderated by Job Type

	Perceived Racial Identity Strength (M_1)			Selection Ratings (Y)		
		Coeff.	95% CI		Coeff.	95% CI
Hair Type (X)	$a_1 \rightarrow$	.11 (.06)	-.01 , .24	$c'_1 \rightarrow$	.03 (.09)	-.16 , .21
Perceived Racial ID Strength (M_1)				$b_1 \rightarrow$	.12 (.08)	-.03 , .27
Job Type (W)	$a_2 \rightarrow$	-.04 (.07)	-.17 , .08	$c'_2 \rightarrow$	-.17 (.10)	-.36 , .02
X x W	$a_3 \rightarrow$	.06 (.13)	-.20 , .32	$c'_3 \rightarrow$	.23 (.19)	-.14 , -.61
Positive Affect (U_1)	$a_4 \rightarrow$	.12** (.04)	.04 , .20	$b_2 \rightarrow$	.10 (.07)	-.03 , .23
Negative Affect (U_2)	$a_5 \rightarrow$	.01 (.05)	-.09 , .12	$b_3 \rightarrow$	-.09 (.08)	-.23 , .06
Constant	$i_{M1} \rightarrow$	3.31*** (.17)	3.00 , 3.69	$i_Y \rightarrow$	5.29*** (.36)	4.58 , 6.01
		$R^2 = .04$ $F(5, 354) = 2.50$, $p > .05$			$R^2 = .04$ $F(6, 353) = 2.47$, $p < .05$	

Unstandardized OLS Regression Coefficients with Confidence Intervals (Standard Errors in Parentheses)

Note: *$p < .05$, **$p < .01$, ***$p < .001$. Skin tone and job type are mean centered.

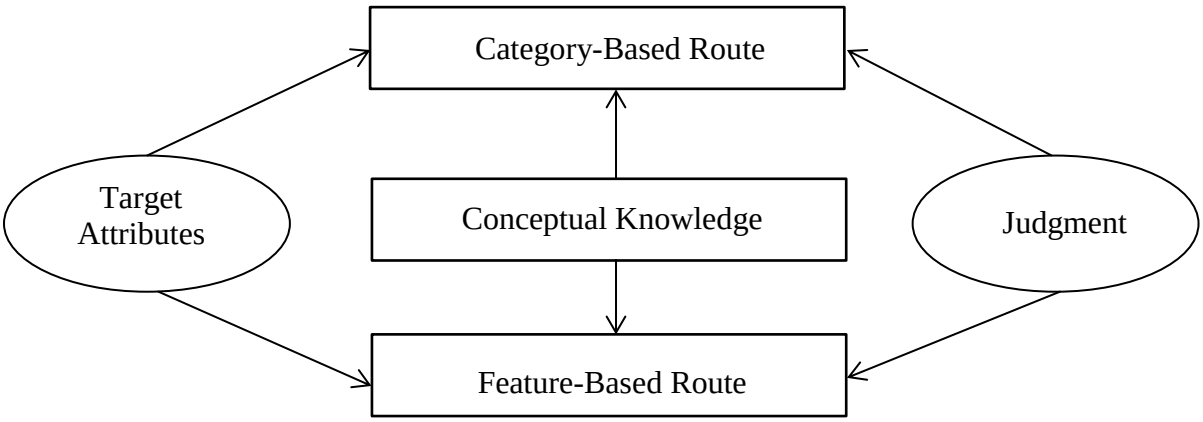


Figure 1. Maddox (2004) rudimentary model of racial phenotypicality bias.

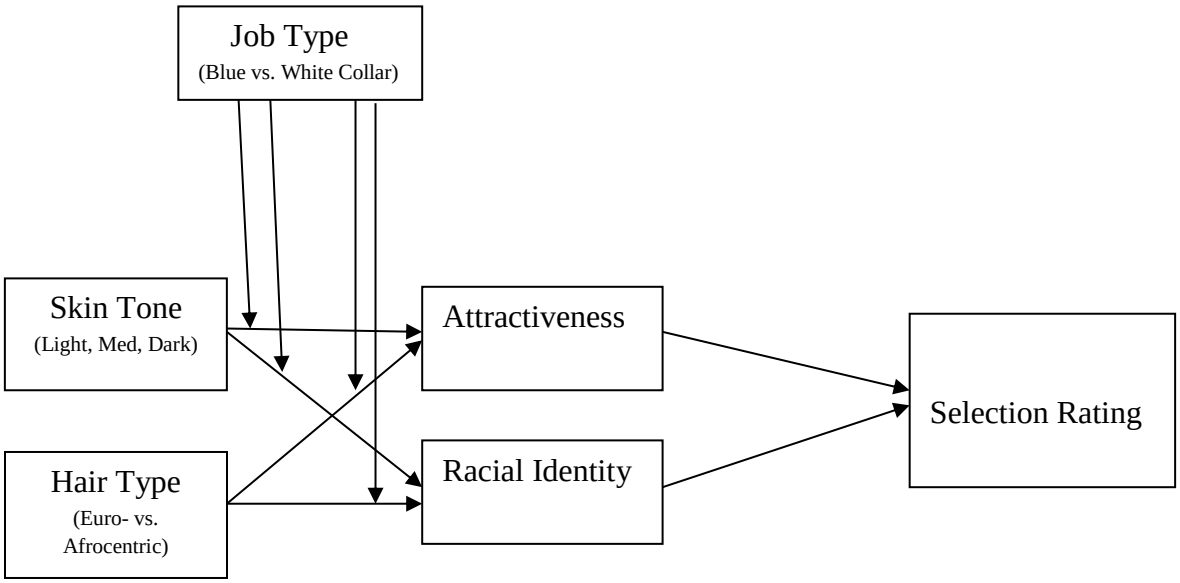


Figure 2. Hypothesized Model of Colorism Bias on Selection Ratings (*Note*: this model is for illustrative purposes only.)

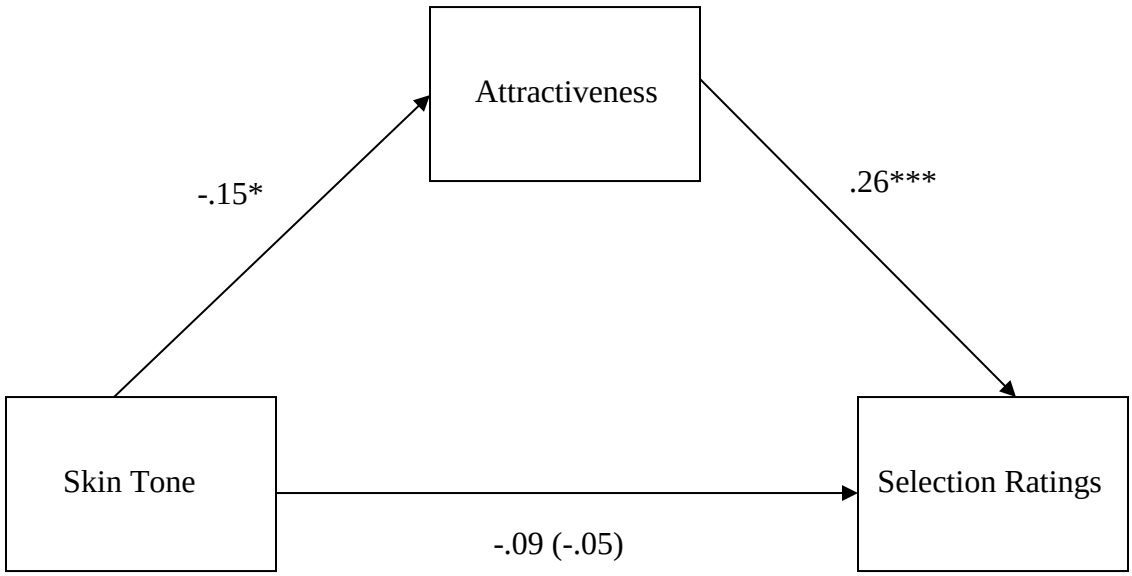


Figure 3. Hypothesis 4a Mediation Model

Note: *$p < .05$, **$p < .01$, ***$p < .001$. Unstandardized regression coefficients for the relationship between skin tone and selection ratings as mediated by attraction. The unstandardized regression coefficient between skin tone and selection ratings, controlling for attraction, is in parentheses.

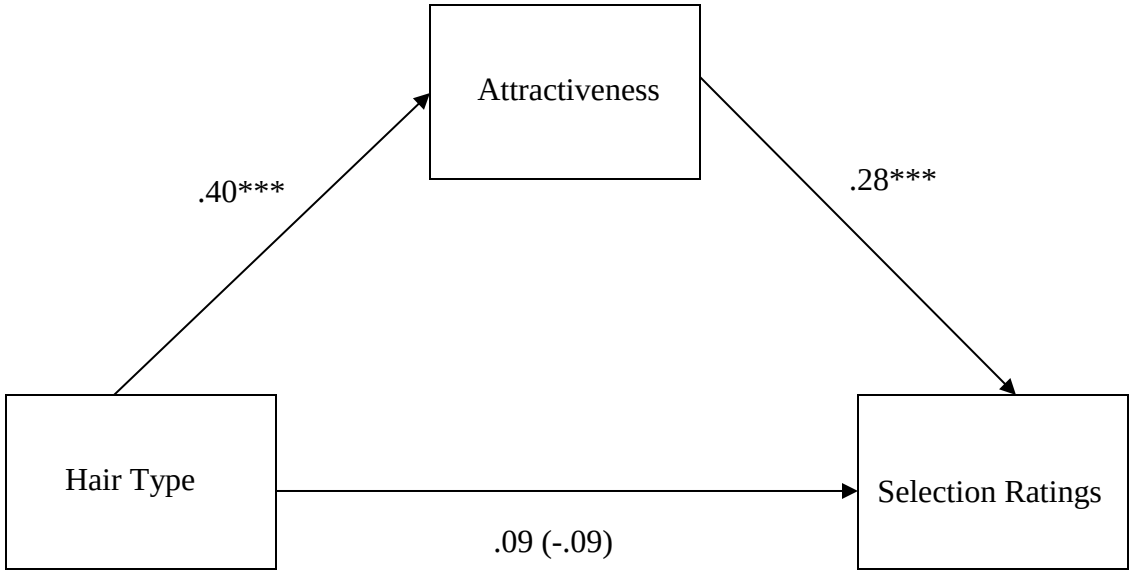


Figure 4. Hypothesis 4b Mediation Model

Note: *$p < .05$, **$p < .01$, ***$p < .001$. Unstandardized regression coefficients for the relationship between skin tone and selection ratings as mediated by attraction. The unstandardized regression coefficient between skin tone and selection ratings, controlling for attraction, is in parentheses.

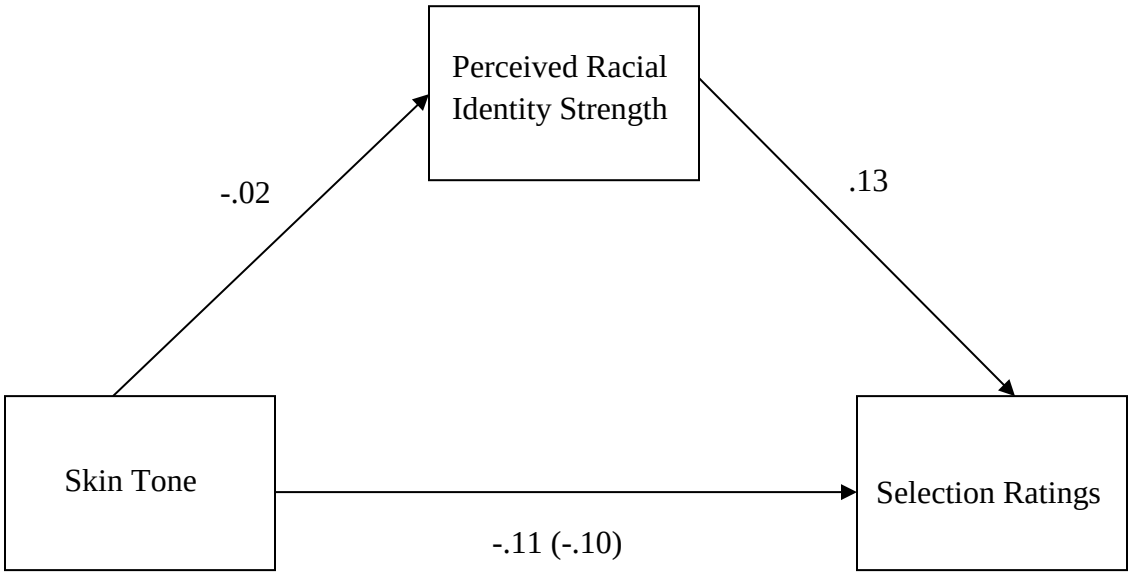


Figure 5. Hypothesis 5a Mediation Model

Note: *$p < .05$, **$p < .01$, ***$p < .001$. Unstandardized regression coefficients for the relationship between skin tone and selection ratings as mediated by perceived racial identity strength. The unstandardized regression coefficient between skin tone and selection ratings, controlling for racial identity strength, is in parentheses.

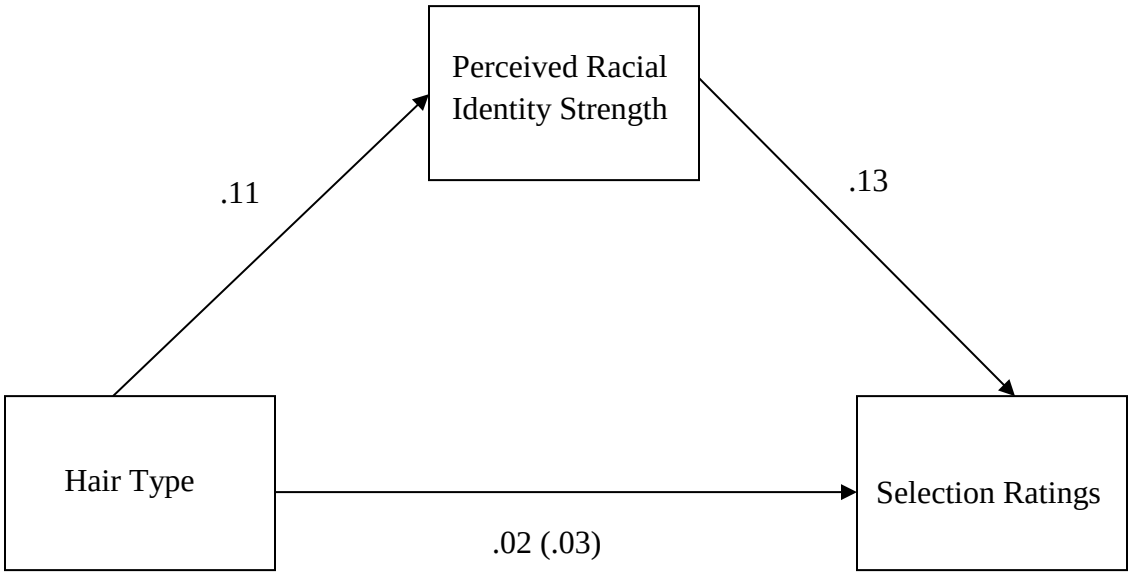


Figure 6. Hypothesis 5b Mediation Model
Note: *$p < .05$, **$p < .01$, ***$p < .001$. Unstandardized regression coefficients for the relationship between hair type and selection ratings as mediated by racial identity strength. The unstandardized regression coefficient between hair type and selection ratings, controlling for perceived racial identity strength, is in parentheses.

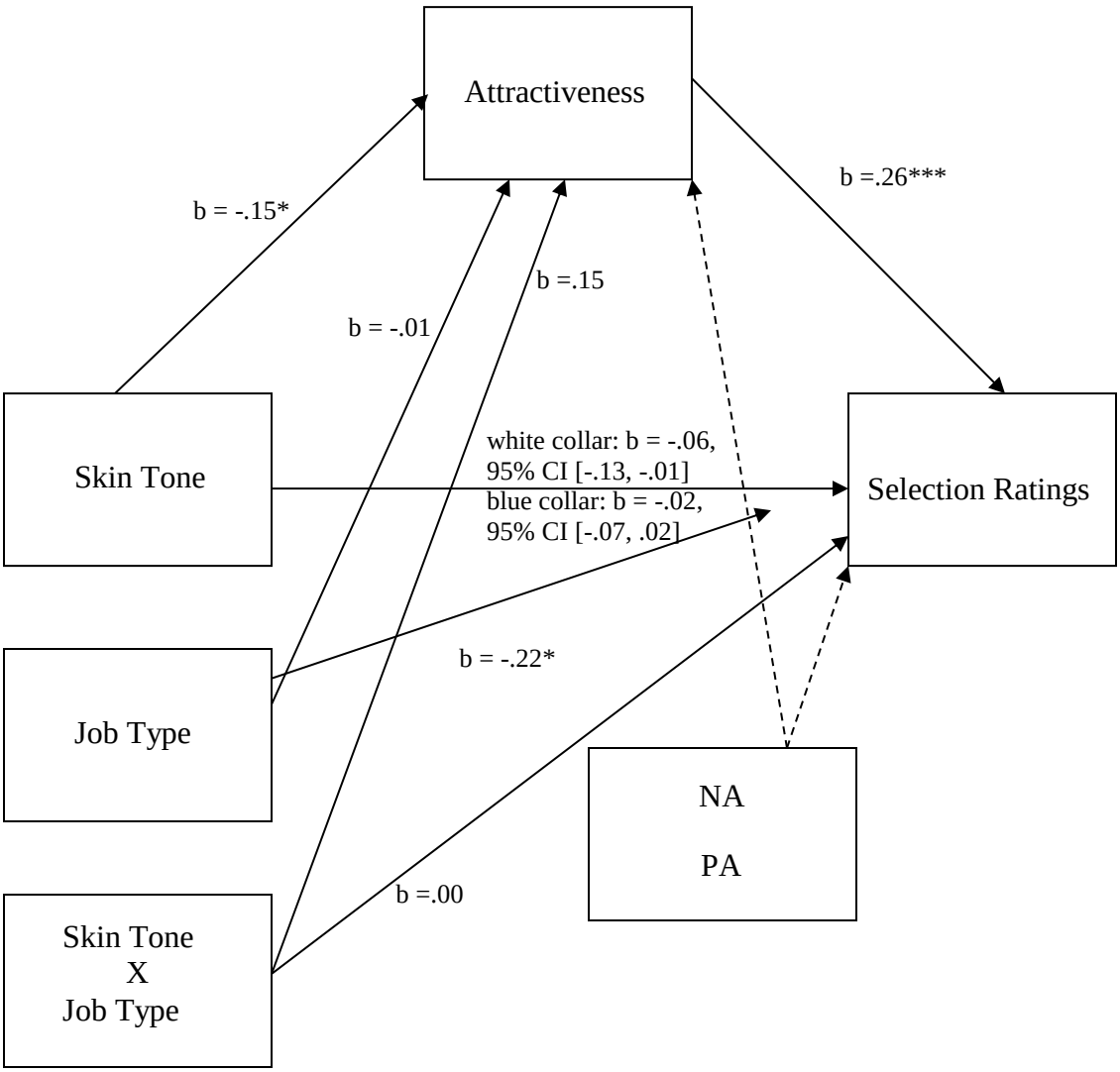


Figure 7. Hypothesis 6a Moderated Mediation Model

Note: *p < .05, **p < .01, ***p < .001. Conditional indirect effect of X on Y at values of the moderator (+/- 1 SD of the mean) are presented with 95% confidence intervals for significance, as PROCESS uses a bias-corrected bootstrapping method of significance testing for these effects. The index of moderated mediation statistic (not shown above) did not yield evidence of a statistically significant moderated mediation (b = .04, 95% CI [-.03 , .12]).

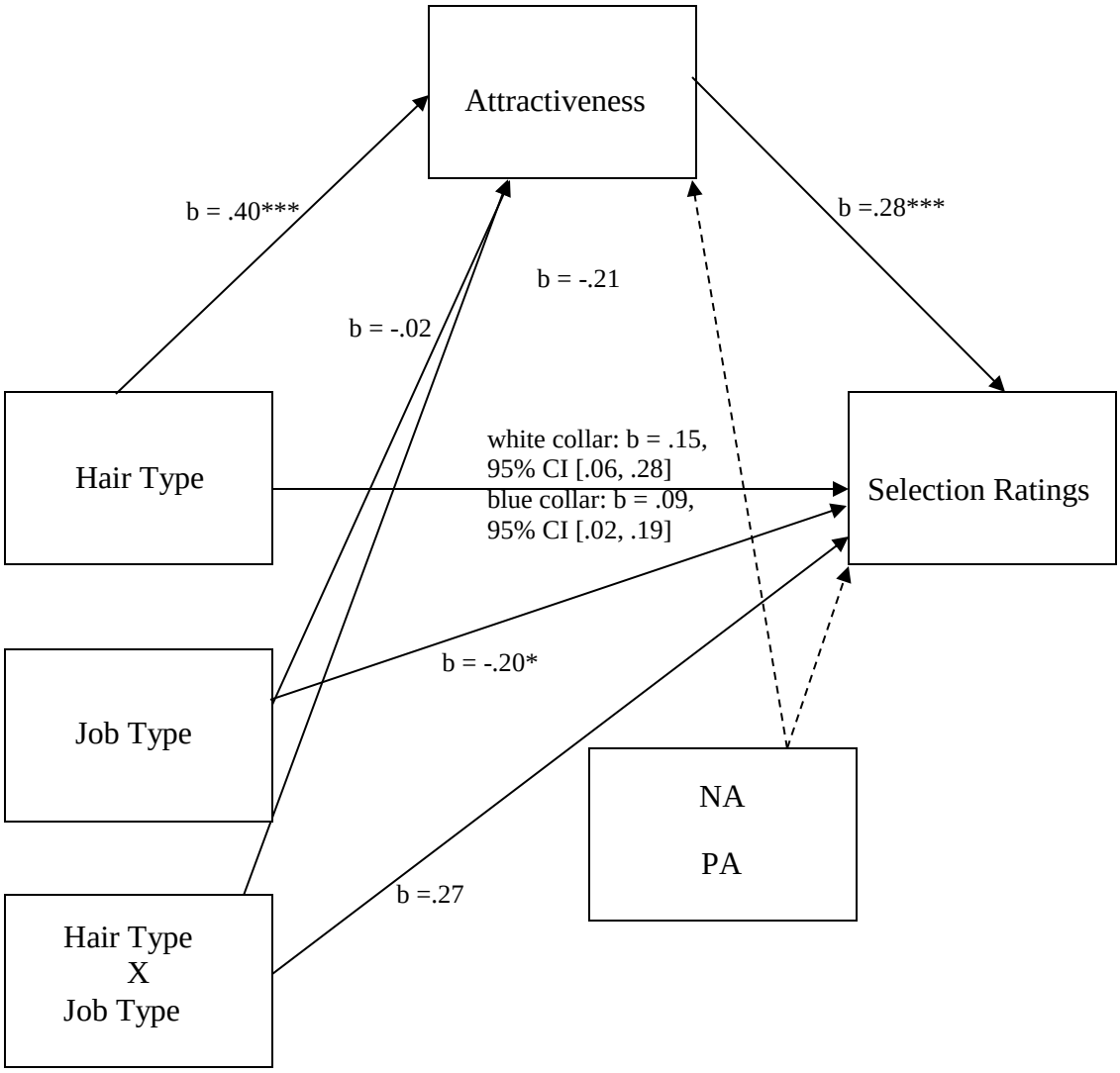


Figure 8. Hypothesis 6b Moderated Mediation Model

Note: *p < .05, **p < .01, ***p < .001. Conditional indirect effect of X on Y at values of the moderator (+/- 1 SD of the mean) are presented with 95% confidence intervals for significance (CI which includes zero indicates non-significant result), as PROCESS uses a bias-corrected bootstrapping method of significance testing for these effects. The index of moderated mediation statistic (not shown above) did not yield evidence of a statistically significant moderated mediation (b = -.06, 95% CI [-.20 , .06]).

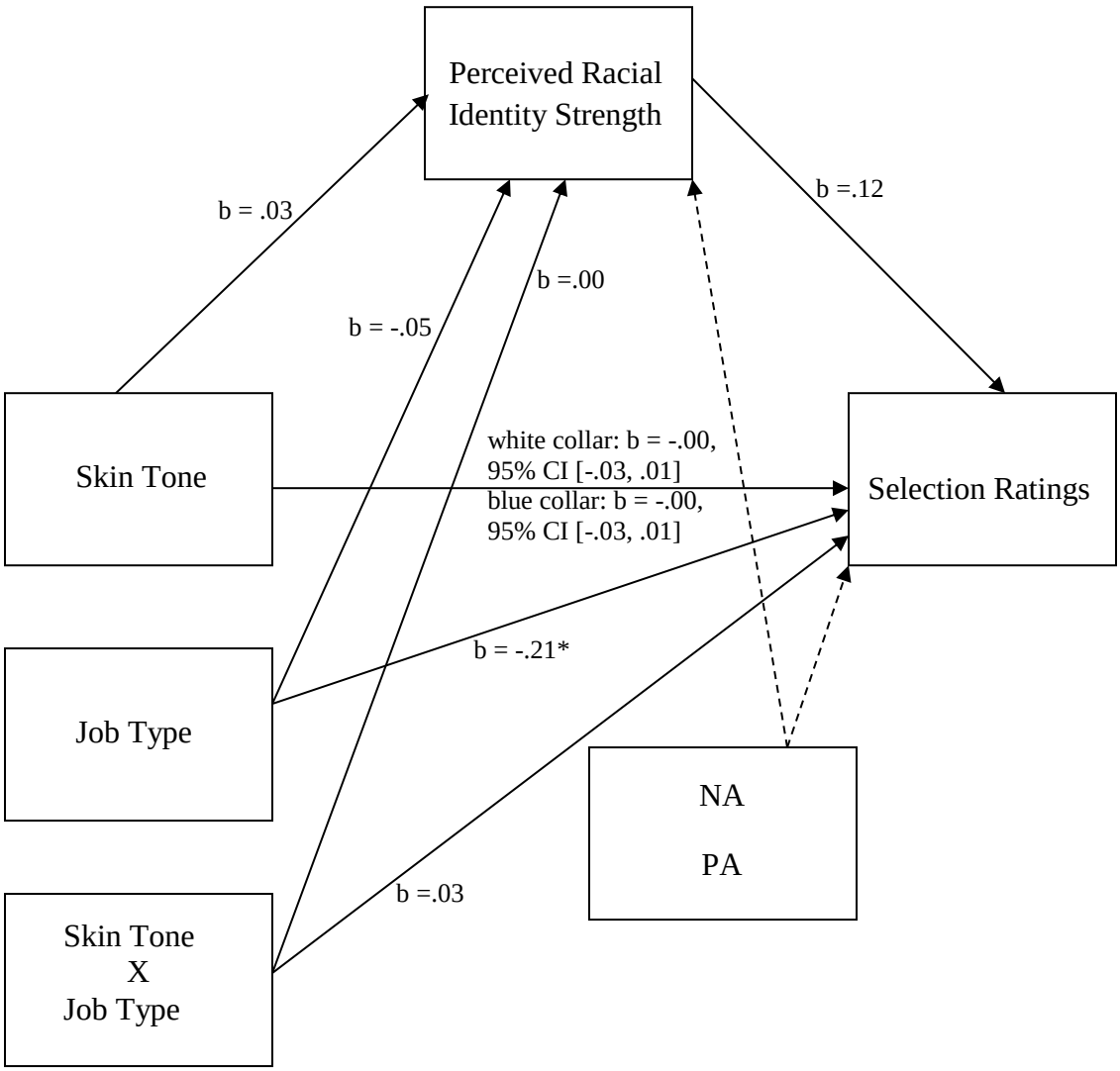


Figure 9. Hypothesis 7a Moderated Mediation Model

Note: *p < .05, **p < .01, ***p < .001. Conditional indirect effect (*c'*) of X on Y at values of the moderator (+/- 1 SD of the mean) are presented with 95% confidence intervals for significance (CI which includes zero indicates non-significant result), as PROCESS uses a bias-corrected bootstrapping method of significance testing for these effects. The index of moderated mediation statistic (not shown above) did not yield evidence of a statistically significant moderated mediation (b = -.00, 95% CI [-.02 , .03]).

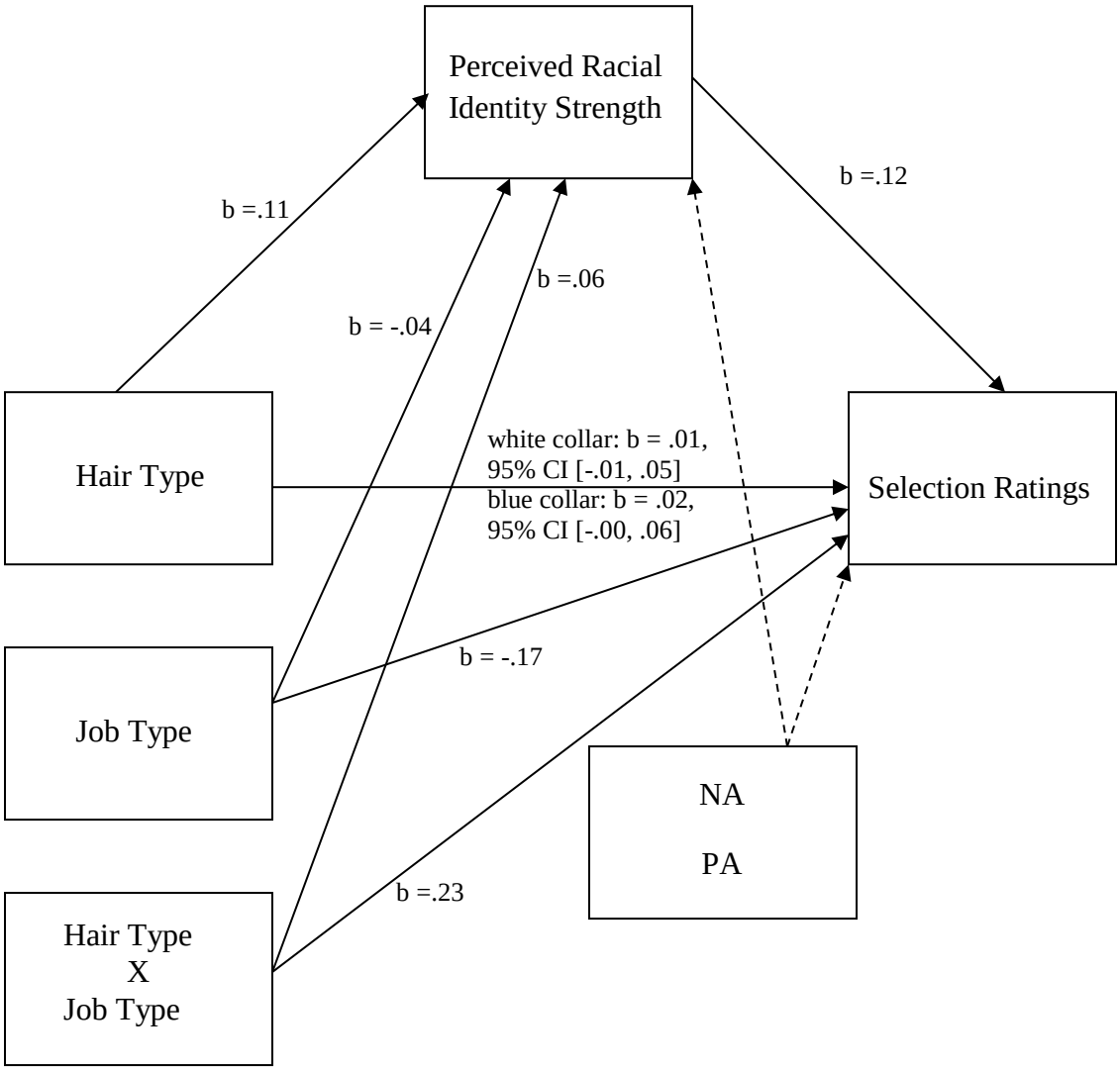


Figure 10. Hypothesis 7b Moderated Mediation Model

Note: *p < .05, **p < .01, ***p < .001. Conditional indirect effect (*c'*) of X on Y at values of the moderator (+/- 1 SD of the mean) are presented with 95% confidence intervals for significance (CI which includes zero indicates non-significant result), as PROCESS uses a bias-corrected bootstrapping method of significance testing for these effects. The index of moderated mediation statistic (not shown above) did not yield evidence of a statistically significant moderated mediation (b = .01, 95% CI [-.02 , .06]).

APPENDIX A

Pilot study make-up and lighting skin tone manipulations:

APPENDIX B

Pilot study digital skin tone manipulations:

APPENDIX C

Position Title: Marketing & Sales Analytics Specialist

Job Description:
The Marketing & Sales Analytics Specialist will have a key support role in the day-to-day responsibility for project related activities within the Critical Markets Services Center (CMSC). This role is critical for supporting the program delivery and implementation of our business program objectives across all CMSC business units. This is a great opportunity for an analyst to develop business acumen and enhance leadership and communication skills while enabling the global CMSC organization.

Minimum Requirements:
- Bachelor's degree in a related field
- 1+ year experience
- Thorough knowledge of automotive dealership marketing strategies and operations
- Automotive retail experience including dealership/retail facing assignments

Preferred Skills/Qualifications:
- Strong analytical skills with a high level of attention to detail
- Excellent written and oral communication skills
- Project management experience

Candidate Reference Number:

196583

Resume Objective:

Seeking a position in Marketing, Sales & Service

Highest Level of Education Completed:

Bachelor's Degree

Years of Relevant Experience:

3

Academic Major:

Marketing

Qualifications:

- 2 years experience in automotive industry
- Experience and skills in analytics
- Automotive retail experience
- Some experience in project management

Position Title: Manufacturing Tool & Die Specialist

Job Description:
The Manufacturing Tool & Die Specialist will have a key support role in the day-to-day responsibility for production related activities within the automotive manufacturing plant. This role is critical for supporting the automotive parts delivery and implementation of our manufacturing program objectives across all manufacturing production business units. This is a great opportunity for a tool and die specialist to develop manufacturing experience, and enhance leadership and communication skills while enabling our global manufacturing organization.

Minimum Requirements:
- High school diploma
- 1+ year experience
- Thorough knowledge of assembly plant manufacturing strategies and operations
- Automotive manufacturer experience including assembly line/tool and die cutting assignments

Preferred Skills/Qualifications:
- Strong manufacturing skills with a high level of attention to detail
- Excellent written and oral communication skills
- Production line management experience

Candidate Reference Number:

196583

Resume Objective:

Seeking an Assembly Line Position in a Manufacturing Plant

Highest Level of Education Completed:

High School Diploma

Years of Relevant Experience:

3

Academic Major:

N/A

Qualifications:

- 2 years experience in automotive industry
- Experience and skills in manufacturing/production
- Tool & die experience
- Some experience in project management

APPENDIX D

Job Selection Ratings

Adapted from Stevens, C. K., & Kristof, A. L. (1995). Making the right impression: A field study of applicant impression management during job interviews. *Journal of applied psychology, 80(5),* 587.

1 = strongly disagree
2 = moderately disagree
3 = slightly disagree
4 = neither agree or disagree
5 = slightly agree
6 = moderately agree
7 = strongly agree

This applicant is qualified for the job.
This applicant seems like a good candidate for this position.
I regard this applicant highly.
I would offer this applicant an interview.
I would offer this applicant the job.

APPENDIX E

Perceived Racial Identity Strength Adapted from MIBI-t (Scottham, K. M., Sellers, R. M., & Nguyên, H. X. (2008). A measure of racial identity in African American adolescents: the development of the Multidimensional Inventory of Black Identity--Teen. Cultural Diversity and Ethnic Minority Psychology, 14(4), 297.) *1 = strongly disagree* *2 = slightly disagree* *3 = neutral* *4 = slightly agree* *5 = strongly agree*
This person feels close to other Black people.
This person has a strong sense of belonging to other Black people.
If this person were to describe themselves to someone, one of the first things that they would say is "I'm Black."
This person is happy to be Black.
This person is proud to be Black.
This person feels good about Black people.
This person believes most people think that Blacks are as smart as people of other races.
This person believes that people think Blacks are as good as people from other races.
This person believes that people from other races think Blacks have made important contributions.
This person believes that it is important that Blacks go to White Schools so that they can learn how to act around Whites.
This person thinks it is important for Blacks not to act Black around White people
This person believes Blacks should act more like Whites to be successful in this society.
This person believes being an individual is more important than identifying oneself as Black.
This person believes Blacks should think of themselves as individuals, not as Blacks.
This person thinks that Black people should not consider race when deciding what movies to go see.
This person thinks that people of all minority groups should stick together and fight discrimination.
This person believes that there are other people who experience discrimination similar to Blacks.
This person thinks Blacks should spend less time focusing on how they differ from other minority groups and more time focusing on how they are similar to people from other

minority groups.
This person thinks Black parents should surround their children with Black art and Black books.
This person believes that whenever possible, Blacks should buy from Black businesses.
This person believes Blacks should support Black entertainment by going to Black movies and watching Black TV shows.

APPENDIX F

Attractiveness Ratings

Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. Journal of advertising, 39-52.

Respondents will be asked to rate the following polar dimensions on a 7-point sliding Likert scale.

Unattractive……Attractive
Not Classy……Classy
Ugly……Beautiful
Plain……Elegant
Not Sexy……Sexy

APPENDIX G

Manipulation Check
The applicant pictured was: **Black* **White*
What color was the applicant's jacket? *Blue Grey Black*

APPENDIX H

MEIM-R

Phinney, J. S., & Ong, A. D. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. Journal of Counseling Psychology, 54(3), 271.

1 = strongly disagree
2 = moderately disagree
3 = slightly disagree
4 = neither agree or disagree
5 = slightly agree
6 = moderately agree
7 = strongly agree

I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.
I have a strong sense of belonging to my own ethnic group.
I understand pretty well what my ethnic group membership means to me.
I have often done things that will help me understand my ethnic background better.
I have often talked to other people in order to learn more about my ethnic group.
I feel a strong attachment towards my own ethnic group.

APPENDIX I

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. Journal of personality and social psychology, 54(6), 1063.

The PANAS

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent [INSERT APPROPRIATE TIME INSTRUCTIONS HERE]. Use the following scale to record your answers.

1	2	3	4	5
very slightly or not at all	a little	moderately	quite a bit	extremely

_____ interested	_____ irritable
_____ distressed	_____ alert
_____ excited	_____ ashamed
_____ upset	_____ inspired
_____ strong	_____ nervous
_____ guilty	_____ determined
_____ scared	_____ attentive
_____ hostile	_____ jittery
_____ enthusiastic	_____ active
_____ proud	_____ afraid

APPENDIX J

Social Desirability

SDS-17; Stober, 2001; validated and updated version of the commonly used Maslow Crowne, 1960 measure) Stöber, J. (2001). The Social Desirability Scale-17 (SDS-17): Convergent validity, discriminant validity, and relationship with age. *European Journal Of Psychological Assessment*, *17*(3), 222-232.

Below you will find a list of statements. Please read each statement carefully and decide if it describes you or not. If it describes you, check the word "true"; if not, check the word "false".

I sometimes litter.
I always admit my mistakes openly and face the potential negative consequences.
In traffic I am always polite and considerate of others.
I have tried illegal drugs (for example, marijuana, cocaine, etc.). This was missing, so I added it.
I always accept others' opinions, even when they don't agree with my own.
I take out my bad moods on others now and then.
There has been an occasion when I took advantage of someone else.
In conversations I always listen attentively and let others finish their sentences.
I never hesitate to help someone in case of emergency.
When I have made a promise, I keep it – no ifs, ands, or buts.
I occasionally speak badly of others behind their backs.
I would never live off other people.
I always stay friendly and courteous with other people, even when I am stressed out.
During arguments I always stay objective and matter-of-fact.
There has been at least one occasion when I failed to return an item that I borrowed.
I always eat a healthy diet.
Sometimes I only help because I expect something in return.

APPENDIX K

Insufficient Effort Responding (IER)

Abbreviated scale from Huang, J. L., Bowling, N. A., Liu, M., & Li, Y. (2014). Detecting insufficient effort responding with an infrequency scale: evaluating validity and participant reactions. Journal of Business and Psychology, 1-13.

1 = strongly disagree
2 = moderately disagree
3 = slightly disagree
4 = neither agree or disagree
5 = slightly agree
6 = moderately agree
7 = strongly agree

I have never used a computer.
I can run two miles in two minutes.
I eat cement occasionally.

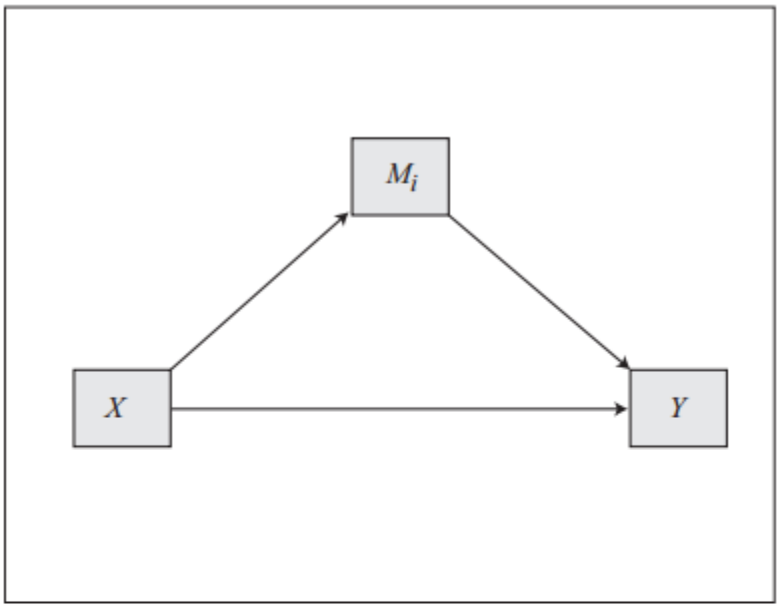
APPENDIX L

Sex	1-male 2-female
Ethnic heritage you most closely identify with (choose one):	1 - Asian, Asian American, or Pacific Islander 2 - Black, African, or African American 3 - Hispanic or Hispanic American 4 - Middle Eastern, Arab, or Arab American 5 - Native American or Alaskan Native 6 - White, European, or European American
Age	18-80+ dropdown menu
What is your highest level of education?	1 – Less than 7th grade 2 – Junior high/middle school (9th grade) 3 – Partial high school (10th or 11th grade) 4 – High school graduate 5 – Partial college 6 – College graduate 7 – Graduate degree
How long have you worked for your company?	Less than a year- 40+ years (dropdown menu representing each number of years between 1 and 39)
How long have you worked in your profession?	Less than a year- 40+ years (dropdown menu representing each number of years between 1 and 39)
Which of the following best describes the industry of your job? (as categorized by Bureau of Labor Statistics, 2015)	*1* - Management *2* - Business & Financial Operations *3* - Computer & Mathematical *4* - Architecture & Engineering *5* - Life, Physical, & Social Science *6* - Community & Social Services *7* - Legal *8* - Educational, Training, & Library *9* - Arts, Design, Entertainment, Sports & Media *10* - Healthcare Practitioners & Technical *11* - Healthcare Support *12* - Protective Service *13* - Food Preparation & Serving *14* - Building & Grounds Cleaning & Maintenance *15* - Personal Care & Services *16* - Sales & Related *17* - Office & Administrator Support *18* - Farming, Fishing, & Forestry *19* - Construction & Extraction

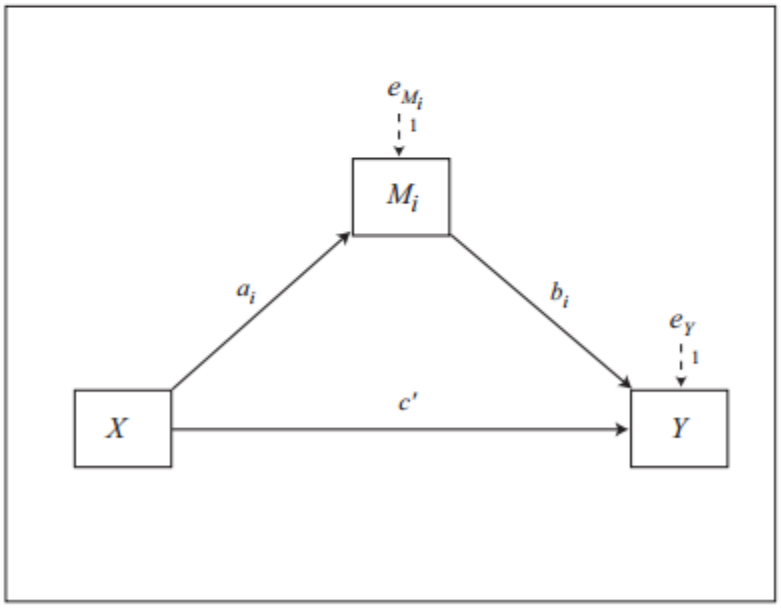
	20 - Installation, Maintenance, & Repair *21* - Production *22* - Transportation & Material Moving *23* - Military Specific Occupations
What is your current household income?	1- Less than $20k per year 2- $20k-$35k per year 3- $36k-$50k per year 4- $51k-$70k per year 5- $71k-$85k per year 6- $86k-$100k per year 7- Over $100k per year

Appendix M

Conceptual Diagram



Statistical Diagram



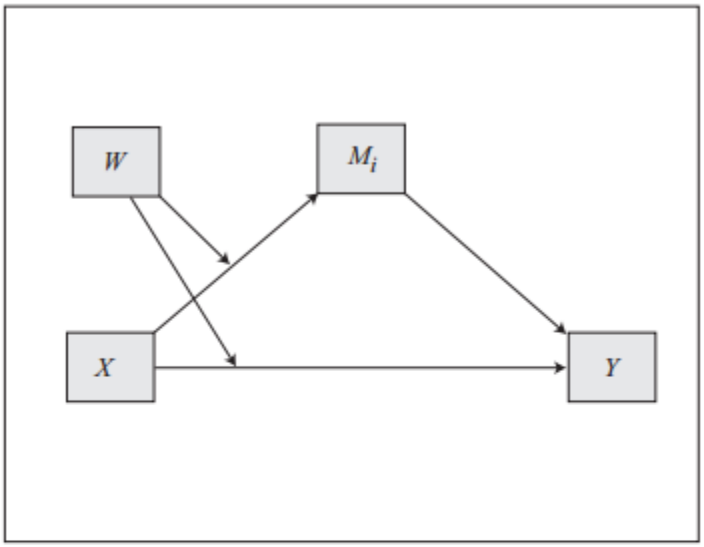
Indirect effect of X on Y through $M_i = a_i\, b_i$

Direct effect of X on $Y = c'$

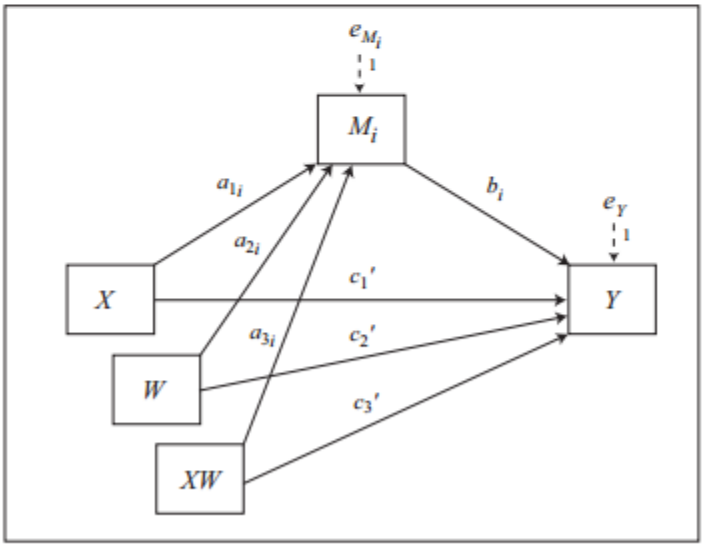
Appendix N

Model 8

Conceptual Diagram



Statistical Diagram



Conditional indirect effect of X on Y through $M_i = (a_{1i} + a_{3i}W)b_i$

Conditional direct effect of X on $Y = c_1' + c_3'W$

Note: Model 8 allows up to 10 mediators operating in parallel.

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ABSTRACT

COLORISM BIAS IN HIRING DECISIONS: DISENTANGLING THE EFFECTS OF HAIR TYPE AND SKIN TONE

by

NIAMBI MAIA CHILDRESS POWELL

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Advisor: Dr. Alyssa McGonagle

Major: Industrial/Organizational Psychology

Degree: Doctor of Philosophy

Studies on colorism bias are prevalent, but there exists a gap in the literature regarding how this construct operates within organizational contexts (Marira & Mitra, 2013). The current research explores colorism bias in organizational hiring decisions, considering both hair type and skin tone as physical markers which influence the enactment of colorism biases; as well as investigating the mediating effect of racial identity strength and attractiveness of the applicant, and moderating effects of job type. In a quasi-experimental design, participants viewed a Black female job applicant being considered for either a blue or white collar job, with varying degrees of Afrocentricity of skin tone and hair type. Conditional analyses suggest that the relationship between both skin tone and hair type with selection decisions is fully mediated by the perceived attractiveness of Black women applicants; but perceived racial identity strength of the applicant and job type were not significant. A discussion of theoretical and practical implications of the findings, and thoughts on future directions of colorism theory, are addressed.

Keywords: colorism bias, hiring decisions, discrimination

AUTOBIOGRAPHICAL STATEMENT

Niambi Maia Childress Powell received her Bachelor of Arts in Communications from Oakland University in 2007. She later pursued post-baccalaureate training in psychology at Wayne State University (WSU), during which time she also gained I/O research experience as an undergraduate research assistant in the university's graduate school of psychology under Dr. Sebastiano Fisicaro. She entered WSU's doctoral program in Industrial/Organizational Psychology in 2011, working under Dr. Alyssa McGonagle. During her time in graduate school, Niambi focused her research in the areas of Occupational Health Psychology, namely workplace safety and violence climates, and workplace incivility. As a Graduate Teaching Assistant for both undergraduate and graduate level psychology and organizational behavior courses at Wayne State University, she also fostered her love of teaching (and met the love of her life- whom she later married). In 2014, Niambi accepted an internship in Ford Motor Company's Workforce Planning & Analytics group, and also received her Master's Degree in I/O Psychology from WSU. Following the Ford internship, she accepted another internship on Ford's US Recruiting Assessments team while working on her doctoral research. Accepting a full time position as an Assessments Specialist at Ford in 2016, she loves her career in applied I/O work. Niambi currently resides in Detroit, MI with her husband Marcus and their daughter Destiny, where she likes to spend her spare time traveling, writing, and giving back to the community that made her who she is today.