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CEOs Don't Wear Afros: Exploring the Justification-Suppression of Prejudice Against Black Women in the Workplace

Bukun F. Adegbembo, *The University of Western Ontario*

Supervisor: Esses, Victoria, *The University of Western Ontario*

A thesis submitted in partial fulfillment of the requirements for the Master of Science degree in Psychology

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Abstract

There have been numerous cases where Black women have been disparaged for wearing their natural hair or Afrocentric hairstyles in the workplace. While some have argued that such mistreatment was due to racism, others have stated that it was a case of not adhering to a professional dress code. In line with the justification-suppression model of prejudice, this research investigated whether prejudice against Black women in the workplace is expressed when they wear Afrocentric hairstyles as this allows the bias to be justified under the guise of normative standards of professionalism. Our pilot and main study showed that the Black target woman with Afrocentric hairstyles was generally rated less favorably than the Black target woman with socially conforming hairstyles, but more favorably than the White target woman with non-socially conforming hairstyles. Therefore, the findings do not provide support for the application of the justification-suppression model of prejudice against Black women with Afrocentric hairstyles in the workplace.

Keywords

justification-suppression of prejudice, aversive racism, beauty standards, social norms, Afrocentrism, professionalism, Afrocentric, prejudice, Black women, hairstyles, beauty

Summary for Lay Audience

On a number of occasions, Black women have stated that they were told to change their hairstyles or were fired from their jobs when they wore their hair in an Afro, in braids, in twists or in locs (all Afrocentric hairstyles). When recounting their stories, these women and their supporters said that racism was to blame. On the other hand, their employers stated that it simply was a matter of enforcing the dress code of the given job. We conducted two studies to test whether Black women who wear Afrocentric hairstyles are viewed negatively due to racial bias, which is then excused by claiming that it is because their Afrocentric hairstyles do not follow the dress code of the workplace. In both studies, we showed participants pictures of Black and White women with different hairstyles. We predicted that the Black woman with Afrocentric hairstyles would be rated less positively than the Black woman with hairstyles that are seen as normal, everyday hairstyles. We also predicted that the Black woman with Afrocentric hairstyles would be rated less positively than the White woman with non-traditional hairstyles. In both studies, we found that the Black woman with Afrocentric hairstyles was in fact generally rated less positively than the Black woman with normal, everyday hairstyles. However, we also found that the Black woman with Afrocentric hairstyles was rated more positively than the White woman with non-traditional hairstyles. Thus, the results did not support the suggestion that Black women who wear Afrocentric hairstyles are treated negatively in the workplace due to racial bias alone.

Acknowledgments

I would like to thank Dr. Victoria Esses, Dr. Paul Tremblay and Dr. Don Saklofske for the advice, supervision and guidance they provided. I would also like to acknowledge the help I received from my colleagues, family and friends with rating faces and hairstyles; the help was greatly appreciated. I also appreciate the assistance that was provided by my RA's. Last, but certainly not least, Mr. Dominic Jr. Tor Akaa II Avishigh, thank you for everything.

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1 Chapter One: Introduction and Literature Review

The consequences and effects of racism and white supremacy are not always blatant and obvious. Many times, aspects that are deeply embedded within our society that have roots in racism and the privileging of Whiteness over Otherness are disguised as anything but (Crandall & Eshleman, 2003; Gaertner & Dovidio, 1986). Due to this hidden racism, we face instances where it is getting harder and harder to communicate to the larger society that certain issues, while not overt, are still racist. One such topic is the approach that society has to Black hair, more specifically Black women's hairstyles. As an example, there have been multiple cases where Black women have been ostracized for their hairstyle of choice in the workplace (Byrd & Tharps, 2002; Caldwell, 1991; Patton, 2006; Randle, 2015; Thompson, 2009). While some have defended an employer's choice to restrict Black women from wearing braids and locs to work as simply enforcing dress codes, it may be the case that this occurs because Black hair is racialized and othered (Greene, 2017; Thompson, 2009), especially given that Black women's hairstyles are constantly scrutinized regardless of context (Greene, 2017; Hofschire & Greenberg, 2002). This thesis aims to explore whether Black hairstyles, which have been ascribed with negative attributions and meanings, are rejected in and from the workplace due to racism and prejudice toward Black women based on their hairstyles.

To better understand how the policing of Black women's hairstyles can be steeped in racist notions of beauty, we begin by introducing what Western society has defined as beautiful hair. Following this, we introduce aversive racism and the justification-suppression model of prejudice to understand how beliefs and actions, rooted in racism, can be disguised as non-racial. We then briefly discuss the idea behind social norms of professionalism. This leads us to consider what role, if any, the justification-suppression of prejudice plays in how Black women's hairstyles are treated within the workplace.

1.1 Eurocentric Beauty Ideals

All women are subjected to unrealistic ideals of beauty and ways of presenting themselves (Nelson, 2013; Thompson, 2009). According to Hargro (2011), who

conducted a historical examination of how Black hair has been treated in advertising using seven advertisements on Black hair care, although each person has their own idea of what they consider beautiful, these ideas of beauty are informed by outside sources. The media, TV shows, magazines, celebrities and billboards are just some of the outside forces that communicate ideals of beauty (Ellis-Hervey, Doss, Davis, Nicks & Araiza, 2016; Hargro, 2011). In the United States and other Western countries, beauty in females is defined by “White, young, slim, tall and upper-class [women]” (Patton, 2006, p. 30). Thompson’s (2009) examination of Black hair and hair alteration techniques using social comparison theory explains that when it comes to hair all women are regulated by their hairstyle choices, hair color, hair texture and hair length (Thompson, 2009). Research on society’s beauty ideals related to hair, states that attractive women have long, wavy, blonde hair (Clayson & Maughan, 1986; Rich & Cash, 1993). While this research is dated, not much has changed. White women featured with long, flowing hair continue to be the hallmark of beauty, symbolizing status and grace (Robinson, 2011).

In an ethnographic study consisting of Black female interviewees ranging from the ages of 13 to 76, Banks (2000) found that Black women have been taught, both implicitly and explicitly, that their hair, when left in its natural state, is shameful. For example, using Afrocentric and standpoint theory to investigate the treatment of Black hair in society, Patton (2006) concluded that Black women rarely see images of their natural selves reflected in the media, communicating to Black women that their natural aesthetic is not “the vision and standard of beauty” (p. 39). According to Bruner’s (2007) phenomenological research consisting of 12 African American female interviewees , Black women are less attractive, less intellectual, less respectful and are respected less, the more their features deviate from those of White women. Black women, along with their bodies and their beauty, are constantly being negated by society at large as they do not fit the European mold of beauty (Banks, 2000). Specifically, Black hair holds “social, class, sexual, and cultural implications” (Thompson, 2009, p. 851). Based on a focus group study consisting of 31 African American female participants, Awad (2015) writes that while Beauty in the US is marked by “‘fair’ white skin, blue eyes, and straight, long, blond hair” (p. 541), the African aesthetic is labelled as “ugly, undesirable, and less

feminine” (p. 541). To reiterate, though all women are presented with the same beauty ideal, the pressure is more detrimental to Black women because their own hair texture is specifically marked as unwanted and ugly.

Hair ideals for women are used not only to signal beauty but femininity as well. Banks (2000) notes that femininity is linked to both long hair and White women. To exude femininity, women’s hair should not look like men’s hair to be considered what Synott (1987) called ‘conventionally attractive’. The benefits of being perceived as attractive cannot be dismissed. Attractive women have been found to be less lonely, more likely to marry richer men, and are hired and promoted more frequently than women who do not follow ‘conventional’ forms of beauty (Garner-Moyer, 2011; Marlowe, Schneider & Nelson, 1996; Talamas, Mavor & Perrett, 2016; Weitz, 2001; Wong & Penner, 2016).

Johnson, Godsil, MacFarlane, Tropp and Goff (2017) conducted a study on the perceptions of straight versus natural hair on Black women using an Implicit Association Test (IAT) to analyze implicit bias and an online study to analyze explicit bias. In the IAT, participants were presented with various faces of women of different races and were made to complete the task of pairing the images with either positive or negative words. In the online survey, participants were presented with pictures of a Black woman with straight or natural hairstyles and asked to respond to the given prompt on a Likert scale. 4,163 male and female participants across the United States completed the study which found that White female participants were implicitly as well as explicitly biased against Black women with their natural hair, rating it as “less beautiful, less sexy/attractive, and less professional” (p. 6). When asked about the general public’s opinion on Afrocentric hairstyles, White female participants reported that the American public views the Afro as significantly less beautiful, sexy/attractive than did Black female participants (Johnson et al., 2017). Looking specifically at implicit bias, while all participants were implicitly biased against Afrocentric hairstyles, the bias was greater among White participants (Johnson et al., 2017). Rudman and McLean (2016), who also conducted an aesthetic IAT of 208 African Americans, as well as Woolford, Woolford-Hunt, Sami, Blake, and Williams (2016), who conducted a mixed-methods survey of 36 adolescent African American girls, found that all participants, regardless of their race, had an implicit and

explicit bias against natural hair on Black women compared to straight hair on Black women.

1.2 Institutionalized Policing of Black Hair

Black hair not being part of the definition of what is considered beautiful goes beyond a preference and has real life consequences. There are multiple documented incidents of Black women with natural hairstyles being reprimanded at work. This has occurred in a variety of work industries and professional settings, from hotels (Caldwell, 1991; Patton, 2006) to cafeterias (Wilson & Russell, 1996). In 2007 in West Virginia, a Black woman who worked at a prison was fired for having her hair in braids – it was apparently too inappropriate (Randle, 2015; Thompson, 2009). When Black women don Afrocentric hairstyles (braids, locs, twists, Afros and hairstyles that use their natural hair) in the workplace, their competence and character are called into question (Rosette & Dumas, 2007). Time and time again, Black women are explicitly told “to cut off, cover, or alter their naturally textured hair” as though their hair keeps them from performing the work they are otherwise qualified to do (Greene, 2017, p. 990). In the case of *Rogers v. American Airlines*, it was ruled that workplaces could restrict employees from wearing their hair in braids (Thompson, 2009). Courts have defended companies who discriminate against Black women with natural hair with the defense that hair is a mutable characteristic (Greene, 2011). What this means is that they understand hairstyles to not exclusively belong to specific races and racial identities. By seeing hair this way, the discrimination against Black women with Afrocentric hairstyles can be dismissed as not having racial undertones. Unfortunately, this stance fails to consider the historical and cultural meanings behind Afrocentric hairstyles.

Outside of the corporate world, Hofschire and Greenberg’s (2002) research on 382 9th and 10th graders notes that African American students have been ostracized for having cornrows (hair braided down on the scalp) at school as it is a hairstyle that has been stereotyped as gang related. In 2014, the United States army uniform regulations banned “two-strand twists, locks, braids, and Afros” (Greene, 2017, p. 1019), referring to locs as “unkempt and matted” (Abraham, 2018).

When institutions uphold potentially racist ideologies and justify them based on factors other than racism, it becomes harder to prove that they are racist, leading racism to become institutionalized or systemic. Pérez Huber and Solorzano (2015) define systemic racism as institutionalized “formal or informal structural mechanisms, such as policies and processes that systematically subordinate, marginalize, and exclude non-dominant groups” (p. 303). The institutionalized rejection of natural and culturally acceptable Black hairstyles is so pervasive that it is not confined to the United States. Barnett (2016) gives the example of policewomen in Jamaica being barred from wearing certain natural hairstyles such as locs and twists.

1.2.1 Institutionalized and Societal Pressures to Alter Hair

Due to the institutionalized rejection of Afrocentric hairstyles, Black women feel pressured to alter and wear their hair in more seemingly acceptable styles. Hair alteration practices are performative in that individuals may choose certain hairstyles to intentionally follow society’s rules of beauty (Butler, 1995). For African Americans, hair performance is not just to follow the rules of society but may be a “way for the marginalized to attempt to become centered in a world of beauty that tends not to value African American forms of beauty” (Patton, 2006, p. 36).

According to various qualitative works, hair that has been relaxed, worn in weaves or cropped is seen as more professional than an Afro (which is seen as militant), braids (which are seen as ghetto) (Brown, 2018), locs, twists and other natural hairstyles that are labelled as ‘radical’ in the workplace (Abdullah, 1998; Badillo, 2001; Rock & Stilson, 2009; Rosado, 2003; Thompson, 2009). As a participant noted from Awad et al.’s (2015) study, “it’s not professional to be Black” (p. 551). Bellinger’s (2007) focus group study of 15 African American women and three non-Black women of color found that African American women chemically straightened their hair for employment reasons. Similarly, African American women were shown to conform to the Western beauty ideal as it supposedly helped their likelihood of success (Awad et al., 2015). In Bellinger’s (2007) study, participants recognized that not all hiring managers were “racially sensitive” and may not be aware of the various hairstyles that are common and regarded as the norm

among Black people (p. 70). Therefore, to not stand in their own way of a potential promotion, African American women style their hair in a ‘neat’ manner (Awad et al., 2015; Bellinger, 2007; Thompson, 2009). Such thinking can also be influenced by family members who inform Black women that their hair can become a problem in the corporate world (Padgett, 2007). Related to the employment benefits of having non-Afrocentric hairstyles, African American women have been said to straighten their hair because it became “the preferred texture to signal middle class status” (Rooks, 1996, p. 75).

Styling and maintaining their hair is a greater social burden on Black women than is it for White women (Johnson et al., 2017). In Johnson et al.’s (2017) study on Afrocentric hairstyles and professionalism, one in five Black women expressed that they felt pressure to wear straight hair at work; this was twice as many White women who reported the same. Similarly, Black women were more likely to choose a straight hairstyle as the style they would wear in a professional setting (Johnson et al., 2017). Opie and Phillips (2015) conducted three studies on the perceptions of professionalism of Black women with Eurocentric versus Afrocentric hairstyles. Their first study was an online survey consisting of 200 female and male participants of different races. Their second study was also an online study which consisted of 510 female and male participants who identified as Black or White. Their third online study consisted of 291 Black and White, female and male participants. Opie and Phillips (2015) reported that Black women with “Afrocentric hairstyles were rated as less professional and less likely to succeed in corporate America” than Black women with Eurocentric hairstyles (p. 5). When they compared the perceptions of Black and White women with straight hair, there was no difference in ratings (Opie & Phillips, 2015). Opie and Phillips (2015) also found that Black participants rated the Afrocentric hairstyles as less professional than White participants did. Taken together, these findings mirror the idea that both Black women and the general public do not hold Afrocentric hairstyles in high regard when it comes to wearing them in the workplace. This may also illustrate the notion that Black women are aware of how others perceive them when they wear Afrocentric hairstyles and may perhaps reveal an internal acceptance that Afrocentric hairstyles are not professional. Interestingly, Chatelain and Smith (2018) found mixed results in their quantitative study of 40 African

American women as to whether African American women felt discriminated against in the workplace because of their hair choices.

To explain how Afrocentric hairstyles have become associated with stereotypes that do not coincide with ideals of professionalism, Bellinger (2007) points to the politicization of the Afro that occurred during the 1960s. During this period, wearing one's hair in its natural state was a rejection of White beauty standards (Thompson, 2009; White, 2005). This was known as the 'Black is Beautiful' movement (Thompson, 2009). As a result, the Afro became a signifier of political involvement, and this view continues today. Although Black men and women donned Afros and embraced the African aesthetic to counter White supremacy and White beauty standards, this began to fade during the 1970s and 1980s (Gillespie, 2013). It soon became obvious that in order to get and hold a job, African Americans were expected to conform to American beauty ideals (Byrd & Tharps, 2002). As a result, African Americans stayed away from any aesthetic that seemed suggestive of a political stance as having a job was often deemed more important than making a political statement (Byrd & Tharps, 2002). Patton (2006) writes that Black women returned to wearing wigs, weave and straightening their natural hair due to "social and institutional pressures to assimilate to White beauty standards" (p. 41). Just as it did during the 1960s, the Afro to this day continues to evoke negative responses and is categorized as other – it is seen as "extreme, too unusual, not businesslike, inconsistent with a conservative image, unprofessional, inappropriate with business attire, too 'Black' (e.g. too militant), unclean" (Caldwell, 1991, pg. 384-385).

Examples such as these show that natural and traditional Black hairstyles are believed to be unsuitable for the work setting (Thompson, 2009). Robinson (2011) expands on this to note that this stigmatization of Black hair extends beyond White society. Various "[B]lack institutions discourage the 'natural' look, believing it's best to prepare African Americans to blend into a majority-White corporate environment" (Robinson, 2006, p. 9).

1.3 Justifying Racism and Prejudice through Social Norms

1.3.1 Aversive Racism

The notion that Black women with Afrocentric hairstyles continue to be discriminated against both on a personal and institutional level while the larger society does not equate it to racism can be examined through aversive racism as well as the justification and suppression of prejudice. Since overt racism is now frowned upon, Whites would like to feel as though they are not racist and some even believe that there is no more racism (Sue, 2010). Although individuals claim to not be racist, many people still hold racial biases and express them through aversive racism. Aversive racism, a term coined by Gaertner and Dovidio (1986), refers to the idea that racism has been modernized to reflect a type of prejudice whereby White individuals “sympathize with victims of past injustice, support the principle of racial equality, and regard themselves as nonprejudiced, while simultaneously possessing negative feelings and beliefs about Blacks, which may be unconscious” (Gaertner & Dovidio, 2005, pg. 618).

What this means is that individuals can engage in covert racism while asserting a non-racist motivation, due to living in an egalitarian society that encourages equality. An egalitarian value system includes but is not limited to liberalism, holding a non-prejudiced self-image and being politically correct, causing White Americans to strive not to say or engage in prejudicial acts (Crandall & Eshleman, 2003). This can be illustrated by the stereotype of a racist being someone who is “uneducated, hostile, violent, Southern, coarse, and common”, which allows the average racist to cover up and distance themselves from this image in order to position themselves as non-racist (Feagin & Vera, 1995 p. 423).

1.3.2 The Justification-Suppression Model of Prejudice

Following the idea of aversive racism, Crandall and Eshleman (2003) introduced the justification-suppression model of prejudice which suggests that individuals who engage in prejudicial behaviors stemming from prejudicial beliefs look for non-racialized explanations to ‘justify’ that their actions are based on something other than prejudice

(see Allport, 1954; Jost & Banaji, 1994). As individuals want to maintain a non-prejudiced self-image, they will often attempt to ‘suppress’ their prejudice; however, by using justifications, they are able to express these prejudices while maintaining a non-prejudiced self-image (Crandall & Eshleman, 2003). Crandall and Eshleman (2003) define justification as “any psychological or social process that can serve as an opportunity to express genuine prejudice without suffering external or internal sanction” (p. 425). Once prejudice can be disguised as socially acceptable, prejudice can be expressed (Crandall & Eshleman, 2003). Within the justification-suppression model, the more prejudiced an act or thought, the greater the need to justify it will be (Crandall & Eshleman, 2003).

If a prejudiced act is nuanced and cannot be pinpointed as obviously discriminatory, it allows for its continued enactment, and acts based on racial discrimination become more widespread as it becomes harder to prove that they are based on racism (Crandall & Eshleman, 2003; McConahay, Hardee & Batts, 1981). When prejudice can be justified as not being based on an individual’s race, aversive racists feel more comfortable in expressing their prejudice while retaining a positive self-image (Gaertner & Dovidio, 2005).

1.3.3 Workplace Dress Codes and Professionalism

The oft used reason for barring Black women from wearing Afrocentric hairstyles in the workplace has been that such hairstyles do not follow the company’s dress codes and that such hairstyles are not professional. For example, in *EEOC v. Catastrophe Management Solutions* (2016), the employer withdrew a job offer to a Black woman because they felt that the candidate’s locs were excessive and unacceptable, falling outside their definition of a business and professional image (Wich, 2016). The question then becomes whether Afrocentric hairstyles are derogated due to prejudice against Blacks, which is then justified by claiming workplace dress codes.

Within all societies, there are established norms regarding physical appearance (Barth & Wagner, 2017). While the term ‘physical appearance’, seems to only concern that which can be seen, it goes further to communicate an individual’s inner attitudes and character

(Barth & Wagner, 2017). In other words, though physical appearance concerns how a person looks, it is believed to also provide insight into a person's character. As the aesthetic in any given society reflects agreed upon social norms (Langlois et al., 2000) those who refuse to follow these norms are subjected to backlash (Barth & Wagner, 2017). For example, people from unfamiliar or non-mainstream cultures, religions or with atypical physical features regularly elicit negative affective reactions in others (Crandall & Eshleman, 2003).

The backlash non-socially conforming individuals face can be experienced in both how they are seen as people and how they are subsequently treated; this is especially rampant within the workplace as one's appearance is often used to determine if one belongs (Barth & Wagner, 2017). Companies have a certain 'image' they want to exude and in order to be hired and to be successful there, employees must uphold an appearance that coincides with the company's image (Barth & Falcoz, 2007). One can argue, then, that individuals who do not comply with a company's image are rejected on the grounds of not adhering to the company's standards, rather than being rejected due to racial discrimination (Barth & Wagner, 2017).

The importance of looking the part is not confined to specific companies. Rather, it illustrates Western society's general idea of professionalism. Conforming to society's definition of professionalism indicates to others that one can do the job at hand (Roberts, 2005). Thus, individuals expend energy, time and money into creating a professional image to exude "intelligence, confidence, initiative, trustworthiness, gracefulness, and seriousness" (Roberts, 2005, p. 687). The idea that looking professional is linked to personal characteristics has been corroborated with research. Bowman and Lavater (1992) found that 75% of their participants felt that well-dressed employees were more intelligent, hardworking and socially acceptable than more casually dressed individuals. The professional dress code is concerned not only with one's clothing but with one's hair as well (Gordon, 2013). Black women with natural hairstyles, Black men with locs, individuals with grey hair, men with long hair and "anyone with non-traditional hair colors/hairstyles are looked upon with suspicion" in corporate America (Gordon, 2013, p. 2).

As one can see, discrimination based on physical appearance can easily be written off or explained away as a regular practice of a society upholding their social norms of professionalism with no basis in racism. Companies that discriminate against natural Black hairstyles liken it to a Mohawk or hair dyed unnatural colors (Dossou, 2013; Padgett, 2007). However, as previously discussed, Black women's hairstyle choices are constantly regulated in a variety of contexts that do not rely on an individual being professional (Caldwell, 1991; Hofschire & Greenberg, 2002; Greene, 2017; Patton, 2006; Randle, 2015; Thompson, 2009; Wilson & Russell, 1996) and are also associated with very negative stereotypes that go beyond not looking professional (Awad et al., 2015; Banks, 2000; Patton, 2006). Thus, discrimination against Black women based on their hairstyles may indeed be based on prejudice which is then justified by claiming to appeal to social norms of professionalism.

1.4 Current Research

The literature and research conducted to date has focused on racialized and negative stereotypes associated with Afrocentric hairstyles per se as the cause of the discrimination that Black women with Afrocentric hairstyles face in the workplace. We sought to extend this perspective by applying the justification-suppression model of prejudice and suggesting that Afrocentric hairstyles may be used as a justification for expressing prejudice and discrimination against Black women who have these hairstyles. Therefore, our research question was as follows: Based on the justification-suppression model of prejudice, do individuals justify their prejudice against Black women with Afrocentric hairstyles in the workplace based on their hairstyles not being professional? To investigate this question, participants were asked to make various judgements of Black and White target stimuli with different hairstyles, in both a pilot study and main study. In both cases, the context for the judgements was a job hiring situation. We had the same main hypotheses for both studies. We hypothesized that the Black target with Afrocentric hairstyles would be judged more negatively than the Black target with socially conforming hairstyles, particularly on measures related to fit with the workplace (Hypothesis 1). We also hypothesized that the Black target with Afrocentric hairstyles would be judged more negatively than the White target with non-socially conforming

hairstyles, particularly on measures related to fit with the workplace (Hypothesis 2). These hypotheses were based on the idea that prejudice against Afrocentric hairstyles on Black targets would be expressed in the context of the workplace where it would be easy to justify as being based on workplace needs (rather than prejudice). We did not expect differences to be evident between White and Black targets with socially conforming hairstyles where prejudice would be more difficult to justify. In other words, we expected that prejudice would be most likely expressed when Black targets had Afrocentric hairstyles, which could then be used to justify negative ratings based on fit with the workplace. In both studies, we also included individual difference variables (Big Five in the pilot study; individual differences related to prejudice in the main study) to determine whether effects would be moderated by these variables.

2 Chapter Two: Pilot Study

In order to study how Black women with Afrocentric hairstyles are judged when compared to Black women with socially conforming hairstyles and White women with non-socially conforming hairstyles, we conducted two studies. The first study was a pilot study designed to determine whether the stimuli and measures were appropriate for testing on a bigger sample, and to begin to test the hypotheses. Materials were first administered to a smaller sample for our pilot study and using the results, the study materials were adjusted before being administered to a larger sample for the main study.

2.1 Methodology

The study was advertised on a university's social research database as a study on understanding how people make judgements about a person using only the face in a headshot picture. Participants were compensated with one course credit for participation. Participants began the study by reading the letter of information and then providing their consent online if they wished to participate. After completing the dependent measures and individual difference measures, students were provided with a debriefing letter.

Although we were testing how participants judged the targets based on their hairstyles, we wanted to explore how each woman would be rated as an individual. For this reason, rather than asking participants explicitly about the hairstyle the target was wearing, we posed each dependent measure as being about the individual in the picture. We also wanted to enhance the notion of each target being judged within the setting of a job. To make sure that participants were thinking about the target stimuli related to a job and to make sure they were all thinking about the same job title, we had participants imagine a scenario where they were being asked for their opinion on the next VP of Customer Relations for a telecommunications company (the full scenario can be found in Appendix A). By doing this, we created a context in which participants were being asked for their opinion on a hiring decision related to a high position at a successful company. Due to this, we were able to analyze the perceived fit of each target within a workplace setting.

2.1.1 Participants

Participants for the pilot study were students from a Canadian university who were enrolled in eligible Psychology courses and recruited through the university's study database, SONA. Eligible Psychology courses were courses for which participants could receive course credit for their participation. A total of 118 participants completed the survey. However, 6 participants were removed due to technical issues with the survey and 2 responses were removed due to missing data, leaving a total of 110 participants. For this sample (28 males, 82 females), ages ranged from 17 to 22 with 89.2 % of participants being between the ages of 17 and 19. 56 participants selected White as their race with the second highest race (30 participants) being Chinese.

2.1.2 Target Stimuli

In order to assess people's judgements of Black and White women with different hairstyles, participants were presented with headshot pictures of women, both Black and White, with a variety of hairstyles. These served as the target stimuli. The headshots of the women were divided into four conditions, each with three different hairstyles per condition: Black target with socially conforming hairstyles, Black target with Afrocentric hairstyles, White target with socially conforming hairstyles, and White target with non-socially conforming hairstyles. We used the same face for all six hairstyles on the Black target stimuli and the same face for all six hairstyles on the White target stimuli. In addition, the socially conforming hairstyles that we used on the Black target were the same ones used on the White target. The target stimuli used in the pilot study can be found in Appendix B.

A variety of phone applications and websites were used to create the target stimuli. These apps and websites allowed us to either upload a picture or select one from the provided models and virtually 'try on' different hairstyles. The two faces used for the final Black and White target were from the Celebrity Hairstyle Salon app (Modiface, 2013) (please note that at the time of this writing, the app is no longer available). We created a large sample of hairstyles that fit various Western ideals of beauty for the socially conforming category. These were hairstyles that were long, straight, wavy, blonde or brunette. For the

Afrocentric hairstyles, we wanted to focus on styles that prior studies had utilized as stimuli and the hairstyles that Black women had reported being fired for and thus, we looked for various styles, lengths and colors of braids, locs, Afros and twists. We also conducted a Google search for Afrocentric hairstyles as many of these were not available in hairstyle changing apps or looked too phony. Once a hairstyle was selected, it was then adjusted on the model's head using Inkscape and Photoshop, which are both graphic-design software. The non-socially conforming hairstyles were based on descriptions opposite to Western beauty ideals. Therefore, we looked for short styles, hair dyed unnatural colors and fashion forward styles that were not conservative.

Once a large sample of stimuli was created, they were presented to a convenience sample for objective ratings. Raters were told to focus on the hairstyles and the following dimensions were measured: alternative versus conservative, non-typical versus typical, uncommon versus common, unique versus mainstream, and infrequent versus frequent. We also had the raters agree or disagree with whether they considered the selected Afrocentric hairstyles as ethnic, historically and culturally Black, and whether they fit Western standards of beauty. We did not refer to these styles as Afrocentric when we presented them to the convenience sample. Once the stimuli were rated, hairstyles that did not have a consensus, or close to a consensus, on the measurement variable were removed from the pool. After this process, we decided on the three pictures to use for each of the four conditions based on the ratings from the convenience sample. The final hairstyles we used were from the following sources: Modiface (2013) was used for all hairstyles in the socially conforming and non-socially conforming category; Perfect Corp. (2014) was used to color the asymmetrical bob in the non-socially conforming category green; the Afro was from Rogers (2013); the twists were from Brown (2018); and the locs were from Taaz (n.d.) (please note at the time of writing this, the website is no longer available).

2.1.2.1 Questions Regarding the Target Stimuli

Based on prior studies, when Black women with Afrocentric hairstyles are judged as unprofessional, such negative perceptions may extend to their personal and social

character. In order to assess whether the hairstyles influenced these judgments, questions were developed relating to the intrapersonal (e.g. This individual looks untrustworthy), interpersonal (e.g. I would describe this individual as friendly) and professional (e.g. This individual looks professional) character of each target. Each category had three questions, leading to a total of nine questions (see Appendix A for the full set of questions). Participants were asked to indicate how much they agreed or disagreed with each of the given statements on a 7-point Likert scale of *strongly disagree* (1) to *strongly agree* (7).

2.1.2.2 Big Five Personality Scale Used to Test Moderation

The Big Five Personality Scale was also included in this pilot to determine whether effects of race and hairstyle would be moderated by participants' personality. A short version of the Big Five Personality Scale by Lang, John, Lüdtke, Schupp and Wagner (2011) was utilized. The Big Five Personality Scale is a measure developed by Costa and McCrae (1995) that includes five overarching personality dimensions (openness to experience, conscientiousness, extraversion, agreeableness and neuroticism). Measured on a 7-point Likert scale of *strongly disagree* (1) to *strongly agree* (7), participants were prompted to indicate how much they saw themselves as each of the given statements. Overall mean scores and standard deviations for each personality dimension were as follows: openness to experience ($M = 5.27$; $SD = 1.21$); conscientiousness ($M = 4.95$; $SD = 0.98$); extraversion ($M = 4.54$; $SD = 1.35$); agreeableness ($M = 5.24$; $SD = 1.04$) and neuroticism ($M = 4.38$; $SD = 1.33$). Three of the dimensions were found to have good reliability: openness to experience (3 items; $\alpha = .77$), extraversion (3 items; $\alpha = .86$), and neuroticism (3 items; $\alpha = .81$). Reliability was lower for conscientiousness (3 items; $\alpha = .54$) and agreeableness (3 items; $\alpha = .52$). The items for each dimension can be found in Appendix A.

2.2 Results

2.2.1 Exploratory Factor Analysis

Nine questions were asked about each target, with each question belonging to one of three dimensions. Questions were created to assess participants' judgements of the target's intrapersonal character, interpersonal character and professionalism (shown in

Table 1). Because the items in the survey used questions created specifically for this study, we conducted an exploratory factor analysis (EFA) of responses to test the factor loadings of each item. Before analysis, negatively worded items were reverse scored.

Table 1. *Three dimensions created for the study dependent measures*

Intrapersonal Dimension

This individual put in effort and time to look this way (Effort and Time)
 I believe that this individual looks like she is trying to make a political statement*
 (Less Political)
 This individual looks untrustworthy* (Trustworthy)

Interpersonal Dimension

I would not want to approach someone who looks like this* (Approach)
 I would describe this individual as friendly (Friendly)
 This individual cares about making a good first impression (Impression)

Professionalism Dimension

This individual looks professional (Professional)
 It would be inappropriate for a VP to look like this* (VP)
 This individual would not be appropriate as the face of the company* (Face of Company)

Note. *Negatively worded items that were reverse scored for analysis

In order to ensure that factor analysis was appropriate for these data, we ran a preliminary analysis on the data to confirm normality using skewness < 3 and kurtosis < 8 as cutoffs as per Kline (2011). Following this, we tested overall significance of all the correlations within the correlation matrix using Bartlett’s test of sphericity, which was significant, $\chi^2(5778) = 13262, p < .001$. Sampling adequacy was tested using the Kaiser-Meyer-Olkin (KMO) measure. The overall KMO showed a weak relation between the variables (KMO = 0.105). Although Bartlett’s test of sphericity was significant, we declined to run a factor analysis on the raw data due to the overall KMO, as a KMO less than 0.6 indicates that a factor analysis may not yield workable results (Hooper, 2012).

Because the data had a KMO less than 0.6, we decided to run another preliminary test, this time using aggregated scores for each hairstyle category. To do this, the raw mean scores for each survey item were aggregated across hair type and race. For example, for the Black target, there were two hairstyle categories, socially conforming hairstyles and Afrocentric hairstyles, with three hairstyles in each. Therefore, the mean score ratings of the three socially conforming hairstyles on the Black target were aggregated for each of the nine survey items and this process was repeated for the mean score ratings of the three Afrocentric hairstyles on the Black target. The Black target therefore had two scores for each survey question: one score for the socially conforming hairstyle category and another for the Afrocentric hairstyle category. This was repeated for the White target, with one score for the socially conforming hairstyle category and another for the non-socially conforming hairstyles.

Once this was done, another preliminary test was conducted to see if we could conduct factor analysis using aggregated scores rather than raw scores. Once again, Bartlett's test of sphericity was significant, $\chi^2(630) = 3252, p < .001$. Overall KMO showed a high relationship between the variables (KMO = .803), indicating that we could now proceed with an EFA. In conducting our EFA, principal axis extraction was used due to a non-normal distribution and a small sample size. Because there was an assumption that the factors were correlated, an Oblimin rotation was used, with eigenvalues greater than 1 used to determine the number of factors. Based on Stevens' (1992) recommendation, factor loadings below .4 were hidden, which resulted in five factors. We conducted an EFA (see Appendix C) to see whether the three dimensions (intrapersonal, interpersonal and professional) would produce the same factor structure regardless of the race of the target and the type of hair she had. This was done to test whether we would be able to aggregate scores for each of the three dimensions for the main analyses. However, since there was no consistency in our items loading onto the same factor, we were unable to conduct the main analyses using the three dimensions. We therefore conducted the rest of our analysis with each of the items of the three dimensions as nine separate dependent variable measures, aggregated by hairstyle category by target race condition.

2.2.2 Effects of Race and Hairstyle on Perceptions of Targets

Because the EFA did not show conclusive evidence of items loading onto the intrapersonal, interpersonal and professionalism dimensions, we analyzed each item separately for the main analyses, but aggregated these scores across target race for each hairstyle category. Table 2 displays the means and standard deviations for each dependent variable. Once again, negatively worded items were reverse scored.

Table 2. Ratings for hairstyle categories by race for each dependent variable – pilot study (1-7 scale)

	Socially Conforming Hairstyles on the Black Target (SB)		Socially Conforming Hairstyles on the White Target (SW)		Afrocentric Hairstyles on the Black Target (AB)		Non-Socially Conforming Hairstyles on the White Target (NW)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Professional	5.89	.92	5.50	1.00	4.75	1.13	2.71	1.06
Effort and Time	6.10	.80	5.69	.87	5.53	.83	5.68	1.02
Less Political*	4.46	1.57	4.74	1.60	4.55	1.33	4.11	1.51
Approach*	6.02	.90	5.27	1.33	5.85	.96	4.60	1.50
VP*	6.01	.97	5.74	1.18	5.22	1.26	3.13	1.39
Trustworthy*	5.49	1.26	4.94	1.23	5.46	1.06	4.45	1.33
Face of Company*	6.03	1.02	5.60	1.03	5.17	1.19	3.09	1.34
Friendly	5.66	.90	4.22	1.32	5.64	.87	4.01	1.21
Impression	6.01	.76	5.43	.89	5.23	.97	3.97	1.27

Note. *Negatively worded items that were reverse scored for analysis.

We conducted 2-by-2 within-subjects ANOVAs to examine how the target’s race and hairstyle choice influenced perceptions of the target. We also conducted 2-by-2 within-subjects ANCOVAs to test whether participants’ personality moderated effects of the targets’ race and hairstyle, using each of the five dimensions of the Big Five. Both our ANOVAs and ANCOVAs were conducted with target race as one factor, with Black and White targets, and hairstyle category as the second factor, with socially conforming

hairstyles and non-socially conforming/Afrocentric hairstyles. All the degrees of freedom that are reported used the Greenhouse-Geisser adjustment. Using the regression coefficients provided from the ANCOVAs, we then plotted and further examined significant three-way interactions at the level of one standard deviation above and below the mean on the continuous Big Five dimensions. One standard deviation above the mean is described as a high level of the given Big Five dimension, and one standard deviation below the mean is described as a low level of the given Big Five dimension. Although we report significant results at $p \leq .05$, we recognize that we conducted many tests and therefore differences at $p \leq .01$ should be taken most seriously in interpreting the findings. The results of these analyses are discussed below for each of the nine dependent variables.

2.2.2.1 Professional

A 2-by-2 within-subjects ANOVA that tested the interaction of target stimuli's race and hairstyle category on how professional the target looked demonstrated a statistically significant interaction, $F(1,109) = 167.41, p < .001, \eta_p^2 = 0.606$. Simple main effects analyses using paired samples t-tests indicated that the Black target with socially conforming hairstyles was rated as significantly more professional looking than the Black target with Afrocentric hairstyles, $t(109) = 11.32, p < .001, d = 1.08$, supporting our first hypothesis. However, the Black target with Afrocentric hairstyles was rated as significantly more professional looking than the White target with non-socially conforming hairstyles, $t(109) = 17.51, p < .001, d = 1.67$, which did not support our second hypothesis.

Our results also revealed that the White target with socially conforming hairstyles was rated as significantly more professional looking than the White target with non-socially conforming hairstyles, $t(109) = 21.54, p < .001, d = 2.05$. However, the Black target with socially conforming hairstyles was rated as significantly more professional looking than the White target with socially conforming hairstyles, $t(109) = 6.08, p < .001, d = 0.58$.

2.2.2.1.1 Moderated Effects of Race and Hairstyle on 'Professional' Ratings

A set of 2-by-2 ANCOVAs was conducted to test whether there was a significant interaction between hairstyle category, target race and each of the five personality dimensions on the ratings of the targets' professionalism. Results indicated that there was a significant three-way interaction only for conscientiousness, $F(1, 108) = 6.92, p = .010, \eta_p^2 = 0.060$. Calculated values (plotted in Figure 1) for a high and low level of conscientiousness using regression coefficients to test conscientiousness as a moderator variable revealed that for the Black target, socially conforming hairstyles resulted in higher ratings of professionalism than Afrocentric hairstyles at both a high ($M_{SB} = 5.94; M_{AB} = 4.79$) and low ($M_{SB} = 5.84; M_{AB} = 4.71$) level of conscientiousness, meaning that our first hypothesis was supported at both levels of conscientiousness. For our second hypothesis, the Black target with Afrocentric hairstyles was rated higher in professionalism than the White target with non-socially conforming hairstyles at both a high ($M_{AB} = 4.79; M_{NW} = 2.50$) and low ($M_{AB} = 4.71; M_{NW} = 2.90$) level of conscientiousness, meaning our second hypothesis was not supported at both levels of conscientiousness. As these predicted values show, a high level of conscientiousness, compared to a low level of conscientiousness, was associated with a higher rating of professionalism for the Black target with Afrocentric hairstyles.

Calculated values showed that for the White target with non-socially conforming hairstyles, a high level of conscientiousness ($M = 2.50$) resulted in a lower rating of professionalism than a low level of conscientiousness ($M = 2.90$). For all other conditions, a high level of conscientiousness resulted in higher ratings of professionalism than a low level of conscientiousness.

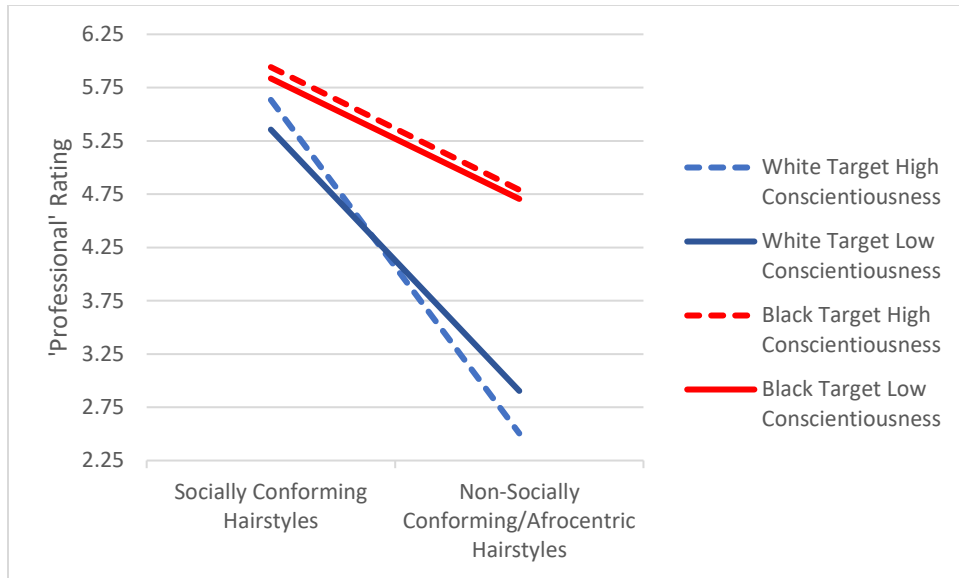


Figure 1. Conscientiousness as a moderator of effects of race and hairstyle on ‘professional’ ratings

2.2.2.2 Effort and Time

A 2-by-2 within-subjects ANOVA revealed a statistically significant interaction between target race and hairstyle category on the perceived effort and time the target stimuli put into their looks, $F(1, 109) = 25.67, p < .001, \eta_p^2 = 0.191$. Simple main effects analysis using paired samples t-tests revealed that the Black target with socially conforming hairstyles was as rated putting in significantly more effort and time than the Black target with Afrocentric hairstyles, $t(109) = 7.39, p < .001, d = 0.71$, supporting our first hypothesis. The difference between the Black target with Afrocentric hairstyles compared to the White target with non-socially conforming hairstyles was non-significant, $t(109) = -1.72, p = .089, d = .17$, which did not support our second hypothesis.

Results also indicated that the difference between the White target with socially conforming hairstyles compared to the White target with non-socially conforming hairstyles was non-significant, $t(109) = .08, p = .939, d = .01$. However, the Black target with socially conforming hairstyles was rated as putting significantly more effort and time into her looks than the White target with socially conforming hairstyles, $t(109) = 6.58, p < .001, d = 0.63$.

2.2.2.2.1 Moderated Effects of Race and Hairstyle on ‘Effort and Time’ Ratings

When each personality dimension was added independently to the analysis to test for a significant three-way interaction in a 2-by-2 ANCOVA, none of the three-way interactions were significant.

2.2.2.3 Less Political

When participants were asked to report on whether they felt that the target stimuli were trying to make a political statement, there was a statistically significant interaction between target race and hairstyle category, $F(1, 109) = 14.53, p < .001, \eta_p^2 = 0.118$. The difference between the Black target with socially conforming hairstyles compared to the Black target with Afrocentric hairstyles was non-significant, $t(109) = -.77, p = .444, d = .07$, which did not support our first hypothesis. Participants rated the Black target with Afrocentric hairstyles as making significantly less of a political statement than the White target with non-socially conforming hairstyles, $t(109) = 2.61, p = .010, d = 0.25$, which did not support our second hypothesis.

Additionally, the White target was rated as making significantly less of a political statement when she had socially conforming hairstyles than when she had non-socially conforming hairstyles, $t(109) = 2.79, p = .006, d = 0.27$. Results also indicated that the Black target with socially conforming hairstyles was rated as making significantly less of a political statement than the White target with socially conforming hairstyles, $t(109) = 3.09, p = .003, d = 0.29$.

2.2.2.3.1 Moderated Effects of Race and Hairstyle on ‘Political’ Ratings

When each personality dimension was added independently to the analysis to test for a significant three-way interaction in a 2-by-2 ANCOVA, none of the three-way interactions were significant.

2.2.2.4 Approach

A 2-by-2 within-subjects ANOVA revealed that the interaction of target race and hairstyle category on wanting to approach the targets was statistically significant, $F(1, 109) = 13.52, p < .001, \eta_p^2 = 0.110$. Testing for simple main effects, we found that participants wanted to approach the Black target with socially conforming hairstyles significantly more than the Black target with Afrocentric hairstyles, $t(109) = 2.54, p = .012, d = 0.25$, which supported our first hypothesis. Participants reported wanting to approach the Black target with Afrocentric hairstyles significantly more than they did the White target with non-socially conforming hairstyles, $t(109) = 10.37, p < .001, d = 0.99$, which did not support our second hypothesis.

The White target with socially conforming hairstyles was also rated significantly higher on approach than the White target with non-socially conforming hairstyles, $t(109) = 4.78, p < .001, d = 0.45$. In addition, the Black target was rated significantly higher on approach than the White target when they both had socially conforming hairstyles, $t(109) = 6.95, p < .001, d = 0.66$.

2.2.2.4.1 Moderated Effects of Race and Hairstyle on ‘Approach’ Ratings

2-by-2 ANCOVAs were conducted to test whether there was a significant interaction between hairstyle category, target race and each of the five personality dimensions. Results indicated that there was a significant three-way interaction only for conscientiousness, $F(1, 108) = 12.91, p < .001, \eta_p^2 = 0.107$. Calculated values (plotted in Figure 2) for high and low levels of conscientiousness using regression coefficients to test conscientiousness as a moderator variable revealed that for the Black target, socially conforming hairstyles were rated higher on approach than Afrocentric hairstyles at both a high ($M_{SB} = 6.11; M_{AB} = 6.05$) and low ($M_{SB} = 5.92; M_{AB} = 5.66$) level of conscientiousness, meaning that our first hypothesis was supported at both levels of conscientiousness. For our second hypothesis, the Black target with Afrocentric hairstyles was rated higher on approach than the White target with non-socially conforming hairstyles at both a high ($M_{AB} = 6.05; M_{NW} = 4.55$) and low ($M_{AB} = 5.66; M_{NW} = 4.63$)

level of conscientiousness, meaning our second hypothesis was not supported at both levels of conscientiousness. As these predicted values show, a high level of conscientiousness, compared to a low level of conscientiousness, was associated with a higher rating of approach of the Black target with Afrocentric hairstyles.

Calculated values showed that for the White target with non-socially conforming hairstyles, a high level of conscientiousness ($M = 4.55$) resulted in a lower rating of approach compared to a low level of conscientiousness ($M = 4.63$). For all other conditions, a high level of conscientiousness resulted in higher ratings of approach than a low level of conscientiousness.

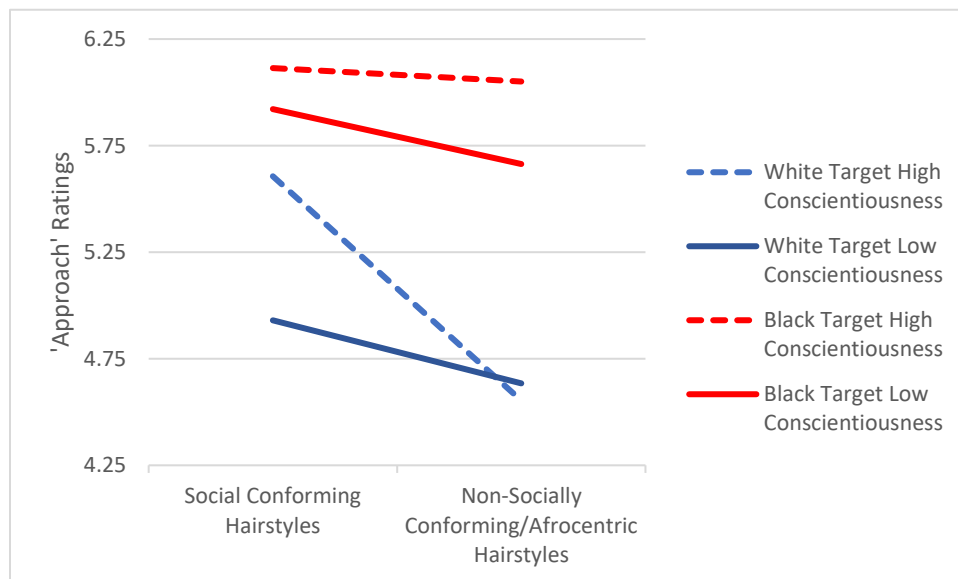


Figure 2. Conscientiousness as a moderator of effects of race and hairstyles on ‘approach’ ratings

2.2.2.5 VP

An ANOVA to test the interaction of target race and hairstyle category on whether the target looked appropriate as a VP was statistically significant, $F(1, 109) = 131.63, p < .001, \eta_p^2 = 0.547$. Simple main effects analyses via paired samples t-tests showed that the Black target with socially conforming hairstyles was rated significantly more appropriate as a VP than the Black target with Afrocentric hairstyles, $t(109) = 7.76, p < .001, d = 0.75$, supporting our first hypothesis. Participants also reported that the Black target with

Afrocentric hairstyles was significantly more appropriate as a VP than the White target with non-socially conforming hairstyles, $t(109) = 15.53, p < .001, d = 1.47$, not supporting our second hypothesis.

It was also the case that the White target with socially conforming hairstyles was rated significantly more appropriate as a VP than the White target with non-socially conforming hairstyles, $t(109) = 17.11, p < .001, d = 1.63$. However, we found that participants rated the Black target with socially conforming hairstyles as significantly more appropriate as a VP than the White target with socially conforming hairstyles, $t(109) = 3.31, p < .001, d = 0.32$.

2.2.2.5.1 Moderated Effects of Race and Hairstyle on 'VP' Ratings

2-by-2 ANCOVAs were conducted to test whether there was a significant interaction between hairstyle category, target race and each of the five personality dimensions. Results indicated that there were significant three-way interactions for conscientiousness and agreeableness.

2.2.2.5.1.1 *Conscientiousness*

A 2-by-2 within-subjects ANCOVA revealed a significant three-way interaction between hairstyle category, target race, and conscientiousness, $F(1, 108) = 5.04, p = .027, \eta_p^2 = 0.045$ on ratings of whether the target stimuli looked appropriate as a VP. Calculated values (plotted in Figure 3) for high and low levels of conscientiousness using regression coefficients to test conscientiousness as a moderator variable revealed that for the Black target, socially conforming hairstyles were rated more appropriate for a VP than Afrocentric hairstyles at both a high ($M_{SB} = 6.18; M_{AB} = 5.33$) and low ($M_{SB} = 5.83; M_{AB} = 5.11$) level of conscientiousness, meaning that our first hypothesis was supported at both levels. For our second hypothesis, the Black target with Afrocentric hairstyles was rated more appropriate as a VP than the White target with non-socially conforming hairstyles at both a high ($M_{AB} = 5.33; M_{NW} = 2.96$) and low ($M_{AB} = 5.11; M_{NW} = 3.29$) level of conscientiousness, meaning our second hypothesis was not supported at both levels of conscientiousness. As these predicted values show, a high level of

conscientiousness, compared to a low level of conscientiousness, was associated with a higher rating of appropriateness as a VP for the Black target with Afrocentric hairstyles.

Calculated values showed that for the White target with non-socially conforming hairstyles, a high level of conscientiousness ($M = 2.96$) resulted in a lower rating of appropriateness as a VP compared to a low level of conscientiousness ($M = 3.29$). For all other conditions, a high level of conscientiousness resulted in higher ratings of appropriateness as a VP than a low level of conscientiousness.

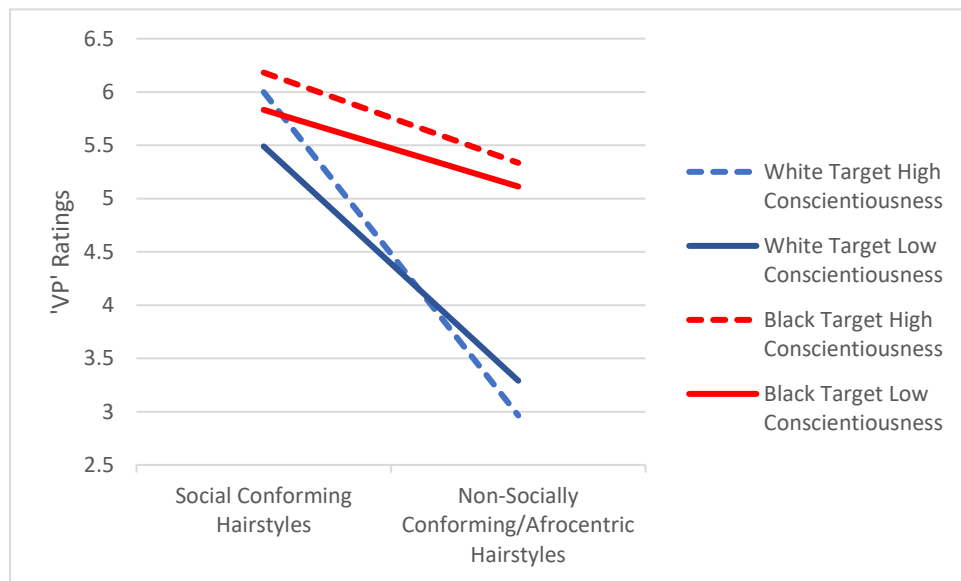


Figure 3. Conscientiousness as a moderator of effects of race and hairstyles on ‘VP’ ratings

2.2.2.5.1.2 Agreeableness

A 2-by-2 within-subjects ANCOVA revealed a significant three-way interaction between hairstyle category, target race, and agreeableness, $F(1, 108) = 5.54, p = .020, \eta_p^2 = 0.049$ on ratings of whether the target stimuli looked appropriate as a VP. Calculated values (plotted in Figure 4) for high and low levels of agreeableness using regression coefficients to test agreeableness as a moderator variable revealed that for the Black target, socially conforming hairstyles were rated as more appropriate for a VP than Afrocentric hairstyles at both the high ($M_{SB} = 6.17; M_{AB} = 5.49$) and low ($M_{SB} = 5.84; M_{AB} = 4.96$) level of agreeableness, meaning that our first hypothesis was supported at

both levels of agreeableness. For our second hypothesis, the Black target with Afrocentric hairstyles was rated as more appropriate for a VP than the White target with non-socially conforming hairstyles at both a high ($M_{AB} = 5.49$; $M_{NW} = 3.12$) and low ($M_{AB} = 4.96$; $M_{NW} = 3.13$) level of agreeableness, meaning our second hypothesis was not supported at both levels of agreeableness. As these predicted values show, a high level of agreeableness, compared to a low level of agreeableness, was associated with a higher rating of appropriateness as a VP for the Black target with Afrocentric hairstyles.

The predicted values revealed that there was no evident difference between the White target with non-socially conforming hairstyles at a low level of agreeableness and the White target with non-socially conforming hairstyles at a high level of agreeableness ($M_{High\ Agreeableness} = 3.12$; $M_{Low\ Agreeableness} = 3.13$)

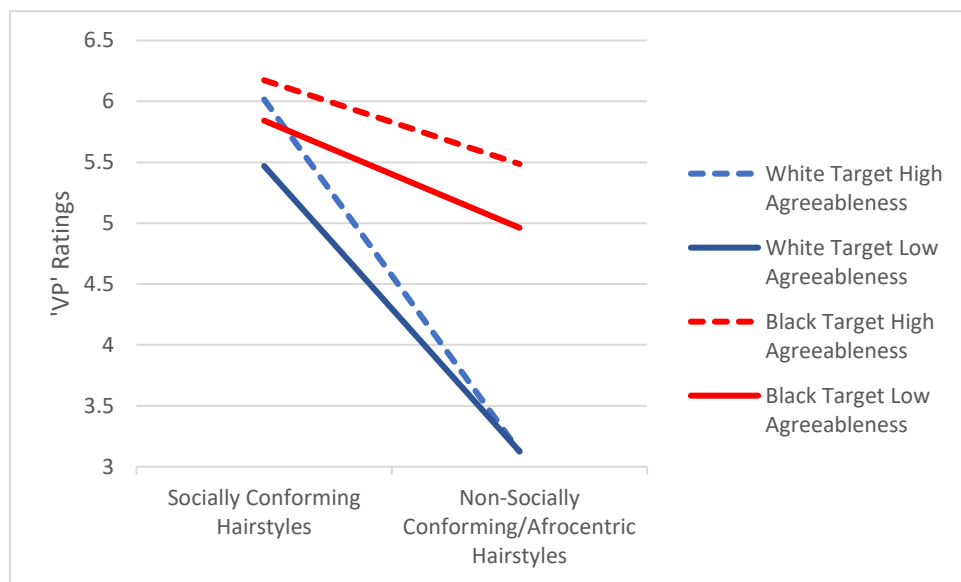


Figure 4. Agreeableness as a moderator of effects of race and hairstyles on ‘VP’ ratings

2.2.2.6 Trustworthy

The interaction of target race and hairstyle category on ratings of trustworthiness was significant, $F(1, 109) = 11.09$, $p = .001$, $\eta_p^2 = 0.092$. Simple main effects analysis revealed that when we compared the Black target with socially conforming hairstyles to the Black target with Afrocentric hairstyles, the difference was non-significant, $t(109) = .03$, $p = .747$, $d = .03$, which did not support our first hypothesis. However, the Black

target with Afrocentric hairstyles was perceived as significantly more trustworthy than the White target with non-socially conforming hairstyles, $t(109) = 7.51, p < .001, d = 0.72$, which also did not support our second hypothesis.

We also found that the White target with socially conforming hairstyles was rated as significantly more trustworthy than the White target with non-socially conforming hairstyles, $t(109) = 3.98, p < .001, d = 0.38$. The Black target with socially conforming hairstyles was found to be significantly more trustworthy than the White target with socially conforming hairstyles, $t(109) = 4.88, p < .001, d = 0.47$.

2.2.2.6.1 Moderated Effects of Race and Hairstyle on 'Trustworthy' Ratings

2-by-2 ANCOVAs were conducted to test whether there was a significant interaction between hairstyle category, target race and each of the five personality dimensions on how trustworthy the target was perceived to be. Results indicated that there was a significant three-way interaction only for extraversion, $F(1, 108) = 4.67, p = .033, \eta_p^2 = 0.041$. Calculated values (plotted in Figure 5) for high and low levels of extraversion using regression coefficients to test extraversion as a moderator variable revealed that the Black target with socially conforming hairstyles was rated as more trustworthy than the Black target with Afrocentric hairstyles at a high level of extraversion ($M_{SB} = 5.51; M_{AB} = 5.47$). At a low level of extraversion, there was no difference evident between the two conditions ($M_{SB} = 5.46; M_{AB} = 5.45$), meaning that our first hypothesis was supported at high but not low extraversion. For our second hypothesis, the Black target with Afrocentric hairstyles was rated as more trustworthy than the White target with non-socially conforming hairstyles at both a high ($M_{AB} = 5.47; M_{NW} = 4.70$) and low ($M_{AB} = 5.45; M_{NW} = 4.20$) level of extraversion, meaning our second hypothesis was not supported at both levels of extraversion. As these values show, there is no difference evident between high and low levels of extraversion for Black target with Afrocentric hairstyles.

Calculated values showed that for the White target with socially conforming hairstyles, a high level of extraversion ($M = 4.91$) resulted in a lower rating of trustworthiness

compared to a low level of extraversion ($M = 4.96$). For all other conditions, a high level of extraversion resulted in higher ratings of trustworthiness than a low level of extraversion.

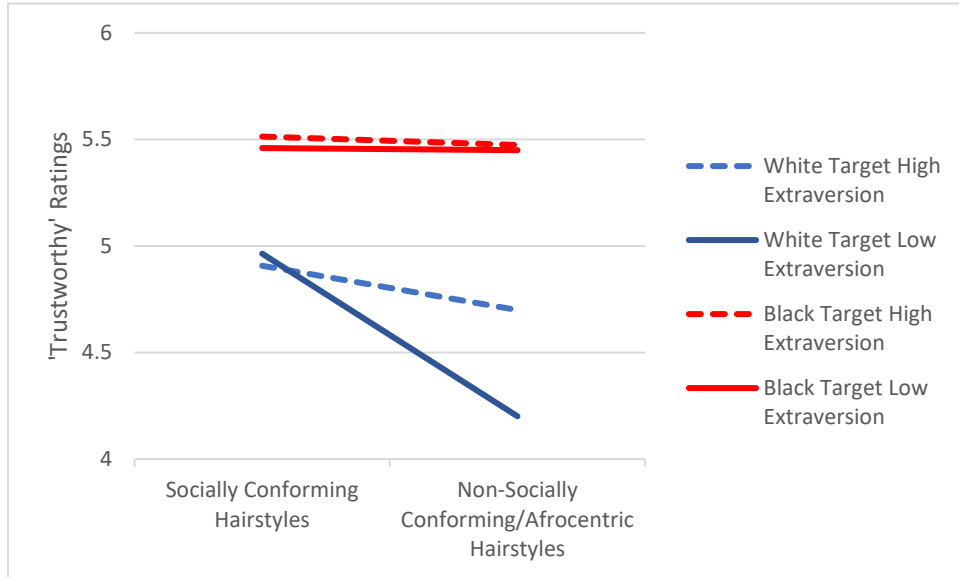


Figure 5. Extraversion as a moderator of effects of race and hairstyles on ‘trustworthy’ ratings

2.2.2.7 Face of Company

The interaction of target race and hairstyle category on whether the target stimuli were perceived as appropriate as the face of the company was statistically significant, $F(1, 109) = 146.62, p < .001, \eta_p^2 = 0.574$. Paired samples t-tests conducted to analyze simple main effects indicated that the Black target with socially conforming hairstyles was rated as significantly more appropriate as the face of the company than the Black target with Afrocentric hairstyles, $t(109) = 8.92, p < .001, d = 0.85$, which supported our first hypothesis. The Black target with Afrocentric hairstyles was rated as significantly more appropriate as the face of the company than the White target with non-socially conforming hairstyles, $t(109) = 15.63, p < .001, d = 1.49$, which did not support our second hypothesis.

Additionally, the White target with socially conforming hairstyles was rated significantly more appropriate as the face of the company than the White target with non-socially

conforming hairstyles, $t(109) = 18.41, p < .001, d = 1.75$. However, the Black target with socially conforming hairstyles was rated significantly more appropriate as the face of the company than the White target with socially conforming hairstyles, $t(109) = 5.40, p < .001, d = 0.52$.

2.2.2.7.1 Moderated Effects of Race and Hairstyle on ‘Face of Company’ Ratings

2-by-2 ANCOVAs conducted to test whether there was a significant interaction between hairstyle category, target race and each of the five personality dimensions showed that there was a significant three-way interaction only for agreeableness, $F(1, 108) = 15.92, p < .001, \eta_p^2 = 0.128$. Calculated values (plotted in Figure 6) for high and low levels of agreeableness using regression coefficients to test agreeableness as a moderator variable revealed that for the Black target, socially conforming hairstyles were rated as more appropriate as the face of the company than Afrocentric hairstyles at both high ($M_{SB} = 6.18; M_{AB} = 5.39$) and low ($M_{SB} = 5.87; M_{AB} = 4.95$) level of agreeableness, meaning that our first hypothesis was supported at both levels of agreeableness. For our second hypothesis, the Black target with Afrocentric hairstyles was rated higher on appropriateness as the face of the company than the White target with non-socially conforming hairstyles at both a high ($M_{AB} = 5.39; M_{NW} = 2.97$) and low ($M_{AB} = 4.95; M_{NW} = 3.21$) level of agreeableness, meaning our second hypothesis was not supported at both levels of agreeableness. As these predicted values show, a high level of agreeableness, compared to a low level of agreeableness, was associated with a higher rating of appropriateness as the face of the company for the Black target with Afrocentric hairstyles.

Calculated values showed that for the White target with non-socially conforming hairstyles, a high level of agreeableness ($M = 2.97$) resulted in a lower rating of appropriateness as the face of the company compared to a low level of agreeableness ($M = 3.21$). For all other conditions, a high level of agreeableness resulted in higher ratings of appropriateness as the face of the company than a low level of agreeableness.

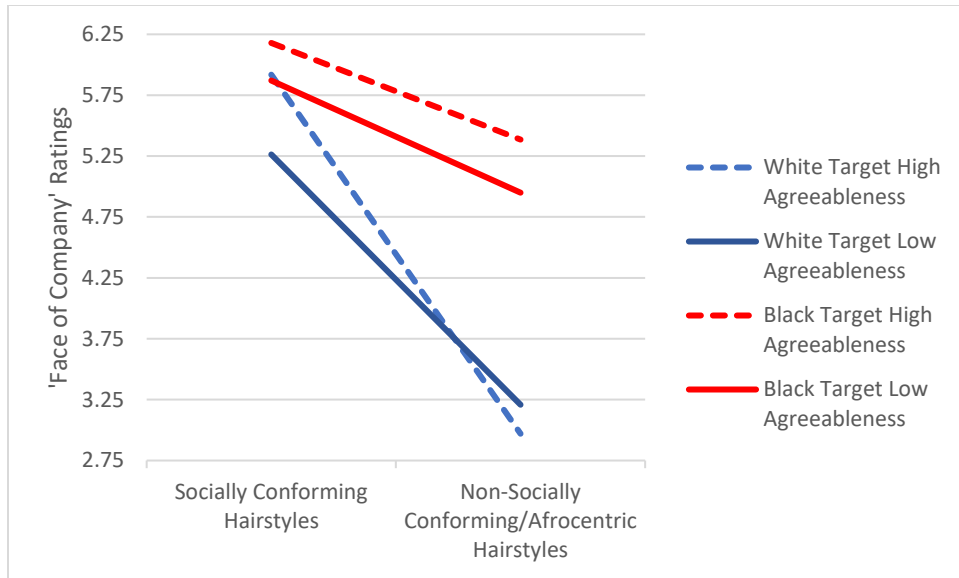


Figure 6. Agreeableness as a moderator of effects of race and hairstyles on ‘face of company’ ratings

2.2.2.8 Friendly

2-by-2 within-subjects ANOVA revealed that the interaction of target race and hairstyle category on ratings of the targets’ friendliness was non-significant, $F(1, 109) = 2.01, p = .159, \eta_p^2 = 0.018$. Results indicated a significant main effect of race, $F(1, 109) = 173.79, p < .001, \eta_p^2 = 0.615$, with the Black target rated as significantly more friendly than the White target, but a non-significant main effect of hairstyle $F(1, 109) = 3.73, p = .056, \eta_p^2 = 0.033$. Due to a non-significant interaction effect, we did not test for simple main effects.

2.2.2.8.1 Moderated Effects of Race and Hairstyle on ‘Friendly’ Ratings

Although the ANOVA interaction was non-significant, we conducted 2-by-2 within-subjects ANCOVAs to test whether there would be a significant interaction between hairstyle category, target race and each of the five personality dimensions. Results indicated that there was a significant three-way interaction only for conscientiousness, $F(1, 108) = 8.69, p = .004, \eta_p^2 = 0.074$. Calculated values (plotted in Figure 7) for high and low levels of conscientiousness using regression coefficients to test

conscientiousness as a moderator variable revealed that a high level of conscientiousness was associated with the Black target with socially conforming hairstyles ($M = 5.61$) being rated as less friendly than the Black target with Afrocentric hairstyles ($M = 5.70$). A low level of conscientiousness was related to the Black target with socially conforming hairstyles ($M = 5.72$) being rated friendlier than the Black target with Afrocentric hairstyles ($M = 5.57$). This means that our first hypothesis was supported at a low level of conscientiousness, but not at a high level of conscientiousness. For our second hypothesis, the Black target with Afrocentric hairstyles was rated higher in friendliness than the White target with non-socially conforming hairstyles at both a high ($M_{AB} = 5.70$; $M_{NW} = 3.94$) and low ($M_{AB} = 5.57$; $M_{NW} = 4.08$) level of conscientiousness, meaning our second hypothesis was not supported at both levels of conscientiousness. As these predicted values show, a high level of conscientiousness, compared to a low level of conscientiousness, was associated with a higher rating of friendliness of the Black target with Afrocentric hairstyles.

Calculated values showed that for the White target with non-socially conforming hairstyles, a high level of conscientiousness ($M = 3.94$) resulted in a lower rating of friendliness compared to a low level of conscientiousness ($M = 4.08$). For the Black target with socially conforming hairstyles, a low level of conscientiousness ($M = 5.72$) resulted in a higher level of friendliness compared to a high level of conscientiousness ($M = 5.61$).

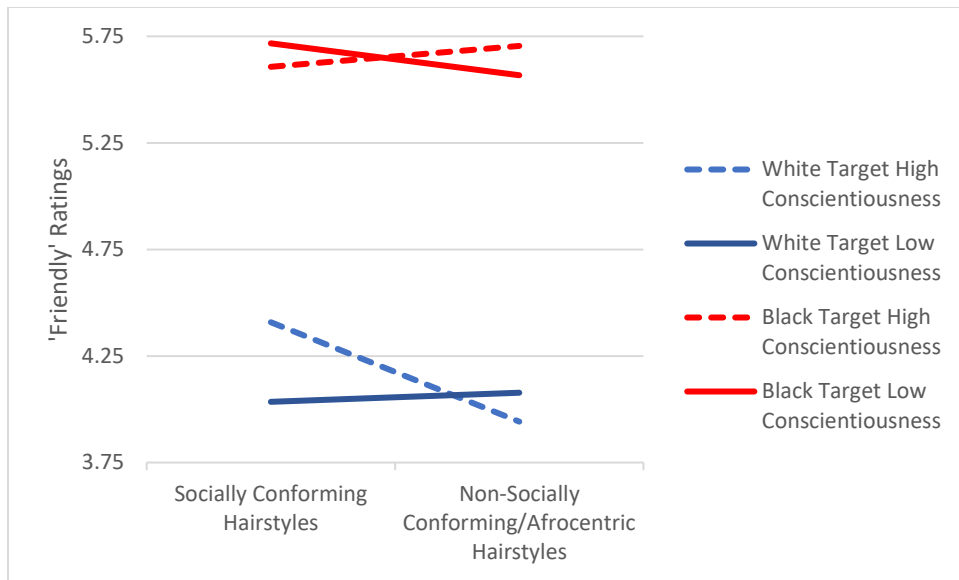


Figure 7. Conscientiousness as a moderator of effects of race and hairstyles on ‘friendly’ ratings

2.2.2.9 Impression

The interaction effect of target race and hairstyle category was statistically significant when participants assessed whether the target stimuli seemed to care about making a good first impression, $F(1, 109) = 28.71, p < .001, \eta_p^2 = 0.208$. Participants reported that the Black target with socially conforming hairstyles cared significantly more about making a good first impression than the Black target with Afrocentric hairstyles, $t(109) = 9.67, p < .001, d = 0.92$, which supported our first hypothesis. The Black target with Afrocentric hairstyles was also rated significantly higher in caring about making a good first impression than the White target with non-socially conforming hairstyles, $t(109) = 11.05, p < .001, d = 1.05$, which did not support our second hypothesis.

In addition, participants indicated that the White target with socially conforming hairstyles cared significantly more about making a good first impression than the White target with non-socially conforming hairstyles, $t(109) = 10.69, p < .001, d = 1.02$. However, the Black target with socially conforming hairstyles was rated significantly higher in caring about making a good first impression than the White target with socially conforming hairstyles, $t(109) = 8.22, p < .001, d = 0.78$.

2.2.2.9.1 Moderated Effects of Race and Hairstyle on 'Impression' Ratings

2-by-2 ANCOVAs were conducted to test whether there was a significant interaction between hairstyle category, target race and each of the five personality dimensions. Results indicated that there was a significant three-way interaction only for conscientiousness, $F(1, 108) = 8.92, p = .003, \eta_p^2 = 0.076$. Calculated values (plotted in Figure 8) for high and low levels of conscientiousness using regression coefficients to test conscientiousness as a moderator variable revealed that for the Black target, socially conforming hairstyles were rated higher on caring about making a good first impression than Afrocentric hairstyles at both a high ($M_{SB} = 6.07; M_{AB} = 5.20$) and low ($M_{SB} = 5.96; M_{AB} = 5.24$) level of conscientiousness, meaning that our first hypothesis was supported at both levels of conscientiousness. For our second hypothesis, the Black target with Afrocentric hairstyles was rated higher in caring about making a good first impression than the White target with non-socially conforming hairstyles at both a high ($M_{AB} = 5.20; M_{NW} = 3.66$) and low ($M_{AB} = 5.24; M_{NW} = 4.28$) level of conscientiousness, meaning our second hypothesis was not supported at both levels. As these predicted values show, there was no difference evident between high and low extraversion for the Black target with Afrocentric hairstyles.

Calculated values showed that for the White target with non-socially conforming hairstyles, a high level of conscientiousness ($M = 3.66$) resulted in a lower rating of caring about making a good first impression than a low level of conscientiousness ($M = 4.28$).

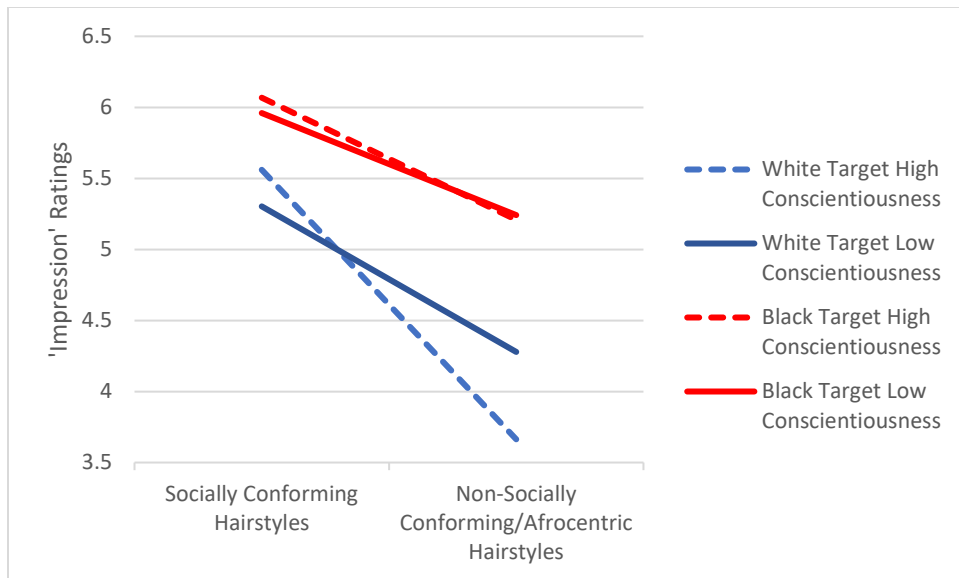


Figure 8. Conscientiousness as a moderator of effects of race and hairstyles on ‘impression’ ratings

2.3 Discussion

Overall, results from the pilot study indicate that one’s race and hairstyle can influence how one is judged by others. For most of the items in question, being a Black woman with hair that conformed to societal standards of beauty resulted in more positive judgements. This was in line with our first hypothesis that the Black target with Afrocentric hairstyles would be judged more negatively than the Black target with socially conforming hairstyles. Our second hypothesis, that the Black target with Afrocentric hairstyles would be judged more negatively than the White target with non-socially confirming hairstyles, was not supported on any measures.

2.3.1 Selection of Target Stimuli to Use in the Main Study

The finding that the Black target with socially conforming hairstyles was consistently rated higher than the White target with socially conforming hairstyles on most dependent measures, and the lack of support for our second hypothesis may be attributable to the apparent mood of the White target. In retrospect we realized that the White target may have appeared sterner than the Black target who appeared to be slightly smiling. To address this potential difference in apparent mood, we made the decision to use different

faces for both the Black and White stimuli for the main study. This was intended to reduce the possibility of differences in judgements being based on characteristics of the targets other than race. To select new faces, we conducted a Google search on face databases, reviewed previous studies that used women's faces, and checked stock images to find White and Black faces that were similar to each other in perceived mood, attractiveness and age. From this search, we chose four possible faces for consideration, two of a White female and two of a Black female. These were then rated by colleagues on attractiveness, mood, and age to ensure similarity of the targets from those external to the study. Based on these ratings, we decided on the face for the Black target stimulus, which was used in a research study by Strohminger et al., (2016) and uploaded to Open Science Framework (OSF) by Strohminger (2015). The face for the final White target stimulus was also found on OSF. It was uploaded by DeBruine and Jones (2015) from the research study by Wang, Hahn, Fisher, DeBruine and Jones (2014). These two faces were chosen as they were the two most similarly rated on attractiveness, mood, and perceived age; they can be found in Appendix D.

2.3.2 Selection of Hairstyles to Use in the Main Study

We collapsed the ratings of all nine dependent variables from the pilot study for each hairstyle and conducted paired samples t-tests to compare the mean ratings between the three hairstyles in each of the four conditions (Black target with socially conforming hairstyles, White target with socially conforming hairstyles, Black target with Afrocentric hairstyles and White target with non-socially conforming hairstyles). Based on these scores, we selected the two hairstyles within each category that did not differ significantly from each other to use in our final study. This was done to control for differences between hairstyles for each condition to be used in the main study. For conditions where all three hairstyles differed significantly, we selected the two hairstyles with the closest mean ratings. The final hairstyles we used for the main study can be found in Appendix D.

The pilot study included a non-socially conforming hairstyles category for the White target and an Afrocentric hairstyles category for the Black target, with the latter also

expected to be non-socially conforming. To allow a full comparison of hairstyle categories in the main study without assuming that Afrocentric hairstyles on Black targets are non-socially conforming, we used a fully crossed design in the main study, with six conditions: the White and Black target with socially conforming hairstyles, the White and Black target with non-socially conforming hairstyles, and the White and Black target with Afrocentric hairstyles. This meant two new conditions were added: the Black target with non-socially conforming hairstyles and the White target with Afrocentric hairstyles. We anticipated that this fully crossed design would help us to interpret the predicted interaction between target race and hairstyle category.

2.3.3 Selection of Dependent Variables and Moderators to Use in the Main Study

We kept the same format of having participants rate headshot pictures of women, one Black and one White with various hairstyles. In order to reduce any other confounding variables, we decided to enhance the similarity between the White and Black targets by putting the two target stimuli in similar makeup (using Perfect Corp., 2014) and in matching suits (the suits were found using a Google search and were put onto the targets using Inkscape).

As demonstrated by the EFA in the pilot study, the questions meant to tap into the dimensions of intrapersonal, interpersonal and professionalism did not neatly load onto these factors. We therefore decided to only use the three questions that were created for the professionalism dimension as these were more central to the main hypotheses. To assess perceived intrapersonal and interpersonal characteristics, we used Cuddy et al.'s (2009) Warmth and Competence Scale. This allowed us to understand how each target was perceived in terms of their warmth (interpersonal) and their competence (intrapersonal) on a reliable and standardized scale.

The dimensions of warmth and competence are fundamental to intergroup perceptions and reflect perceptions of targets' characteristics that relate to intent (positive or negative) and capability to carry out one's intent, with warmth reflecting intent and competence reflecting capability (Cuddy et al., 2009). Warmth and competence are distinct

dimensions, meaning that a group can be perceived as high in one dimension but low in the other. The four possible warmth and competence combinations are high warmth, high competence; high warmth, low competence; low warmth, low competence and low warmth, high competence.

According to Fiske, Cuddy, Glick and Xu (2002), each combination of level of warmth and competence rating is associated with an emotional reaction. For those rated high in both warmth and competence, for example in-group members and allies, the associated emotional reaction is one of admiration where group members are perceived as high status and non-threatening (Fiske et al., 2002). For high warmth, low competence, social groups such as the elderly or disabled people face “paternalistic prejudice” with the associated emotional reaction being one of pity or sympathy (Fiske et al., 2002, p. 896). Those rated low in both warmth and competence, such as poor folks or welfare recipients, are associated with “contemptuous prejudice” which “[encompasses] anger, contempt, disgust, hate, and resentment” (Fiske et al., 2002, p. 896). Lastly, low warmth, high competence is associated with “envious prejudice” and the emotional reaction towards these groups, for example rich people, is one of envy or jealousy (Fiske et al., 2002, p. 896).

Based on findings from the pilot study, we had some evidence that personality moderated the responses participants provided. However, in many cases, moderation was not evident. Therefore, we replaced the Big Five Personality Scale with variables that were more relevant to the nature of the study, using scales known to be related to prejudice.

3 Chapter Three: Main Study

The main study was conducted to once again analyze how Black women with Afrocentric hairstyles are judged in the workplace, comparing these judgements to those that Black women with socially conforming hairstyles and White women with non-socially conforming hairstyles receive. Our main study was designed using the results from the pilot study as a guide. Changes made between the pilot study and main study included changing the target stimuli, adding two new hairstyle categories, changing the moderator variables, and revising the dependent variable measures. In addition, whereas the pilot study was administered to students attending a Canadian university, the main study was administered to adults across the United States of America. This change of context may result in more evidence of prejudice and discrimination in the main study as students in university (versus general population) and Canadians (versus Americans) may express less biased attitudes toward Blacks (Gismondi, 2017; Kuppens & Spears, 2014; Meusen, de Vroome & Hooghe, 2013; Simpson, 2019).

Although we added two new conditions to be able to more clearly determine whether the negative treatment that Black women with Afrocentric hairstyles receive in the workplace is due to their Afrocentric hair, and its use as a justification for the expression of prejudice, our main hypotheses remained the same. Our first hypothesis was that the Black target with Afrocentric hairstyles would be judged more negatively than the Black target with socially conforming hairstyles, particularly on the measures of professionalism and competence, which are more relevant to the workplace. Our second hypothesis was that the Black target with Afrocentric hairstyles would be judged more negatively than the White target with non-socially conforming hairstyles, particularly on the measures of professionalism and competence. We added a third hypothesis to the main study, which was that these effects would be moderated by individual differences in prejudice-related variables, such that individuals higher in prejudice would be especially likely to denigrate the Black target with Afrocentric hairstyles.

3.1 Methodology

We advertised the main study as a study interested in understanding how people make judgements about a person using only the face in a headshot picture. Participants took an average of 13.4 minutes to complete the study and were compensated \$0.50 upon completion. Prior to starting, participants were presented with a letter of information about the study as well as a consent form to obtain their electronic consent to participate, and they were presented with a debriefing form upon completion.

3.1.1 Participants

The main study was administered via Qualtrics and posted on TurkPrime, a platform that recruits participants from Amazon MTurk to participate in social and market research. Amazon MTurk is also a platform that recruits participants for studies, in addition to administering surveys. The main study was made visible to participants who were approved for 50% to 100% of all surveys on Amazon MTurk, had completed 100 to 1,000,000 other surveys, and who were in the United States.

A total of 603 participants completed the study. After removing 6 participants who selected ‘no’ to participate in the study and therefore provided no responses, the final sample included 597 participants. For each analysis we conducted, missing data were analyzed listwise. Of the 528 participants who provided information on their gender, 47% were male and 52% were female. These participants ranged in age from 18 to 81 years old ($M = 39$, $SD = 12.38$). Of the 499 participants who indicated what racial group they belonged to, 354 were White, and the second highest proportion of participants were Black (62 participants).

3.1.2 Study Design

As in the pilot study, the main study involved a hiring context for a professional position (see Appendix E). As mentioned earlier, we added two new conditions to the main study and doing so made the study longer. The overall study design now included six conditions involving a 2 (target race – Black versus White) X 3 (hairstyle – socially conforming, Afrocentric and non-socially conforming) design. In order to keep the

completion time as low as possible, participants were only shown one of the two hairstyles within each condition. That is, we randomly displayed one of the two hairstyles from each of the six conditions to each participant so that a single participant saw a total of six pictures. During analyses, the two hairstyles belonging to each hairstyle category were aggregated by race to create an overall mean score for each condition of hairstyle category by target race combination.

3.1.3 Dependent Measures

As mentioned, we retained the professionalism items from the pilot study for the main study, and added Cuddy et al.'s (2009) Warmth and Competence Scale. For the 3 questions about professionalism that were created for this research, participants were asked to indicate how much they agreed or disagreed with each of the given statements on a 7-point Likert scale of *strongly disagree (1) to strongly agree (7)*. For the Warmth and Competence Scale, participants were asked to indicate how much they agreed or disagreed with each of eight items on a 5-point Likert scale of *not at all (1) to a great deal (5)*. Appendix E shows the eight items that correspond to each dimension.

3.1.4 Individual Differences Scales Used to Test Moderation

Response rates to questionnaires have been shown to be negatively related to the length of questionnaires (Edwards, Roberts, Sandercock, & Frost, 2004). Therefore, because we were adding various scales to test for moderation, we decided to use the shortest validated scales we could find for each of the measures which we were interested in. Each scale was added to test for three-way interactions between the individual differences variables, race, and hairstyle category. We changed the moderator variables from the Big-Five Personality Scale used in the pilot study to scales that measure a form of prejudice. The full items in each of the scales can be found in Appendix E.

3.1.4.1 Social Dominance Orientation Scale

Social dominance theory suggests that one's disposition towards inequality (or one's social dominance orientation - SDO) and societal institutions work to create or recreate social inequality (Pratto, Sidanius, Stallworth, & Malle, 1994). SDO has been used to

predict prejudice against a variety of disadvantaged social groups as well as support for social policies that uphold social inequality (Ho et al., 2015). Broadly, SDO measures support for group dominance (usually overt in nature) and opposition to equality (expressed in a more subtle manner), with high SDO predicting more support for group dominance and greater opposition to equality (Ho et al., 2015).

We used the very short SDO₇ scale by Ho et al., (2015). This is an 8-item scale with both pro-trait items and con-trait items (which were reverse scored), intended to tap into intergroup dominance (items 1-4) and anti-egalitarianism (items 5-8). SDO was rated on a 7-point Likert scale of *strongly oppose (1)* to *strongly favor (7)* and had high reliability ($\alpha = .87$).

3.1.4.2 Right Wing Authoritarian Scale

Right-Wing Authoritarianism (RWA) is the support of authority, religion and traditional morals and values over the support of individual autonomy (Altemeyer, 1981). Thus, the RWA scale measures an individual's preference for societal control through these authoritative figures as well as his or her obedience to and respect for such authority (Altemeyer, 1981). RWA strongly predicts general prejudice, as well as one's inclination to favor social hierarchy and inequality (Duckitt & Sibley, 2010; Ekehammar, Akrami, Gylje, & Zakrisson, 2004; Whitley & Lee, 2000). Regarding social norms, individuals who score high in RWA have been shown to be in support of social conformity and are likely to want to limit diversity in society, while individuals who are low in RWA value autonomy and see social norms as constraining (Feldman, 2003).

To assess RWA, we used Bizumic and Duckitt's (2018) Very Short Authoritarianism (VSA) 6-item scale which contains pro-trait and con-trait items (reverse scored). Participants responded to these items on a 9-point Likert scale of *very strongly disagree (-4)* to *very strongly agree (4)*. Participants in our study scored fairly neutral in RWA ($M = -.66$, $SD = 1.79$). RWA had high reliability ($\alpha = .80$).

3.1.4.3 Symbolic Racism Scale

The main tenet behind Symbolic Racism is that Whites no longer engage in overt, or so called “old-fashioned” racism. Instead, due to becoming more liberal, Whites now engage in a new type of racism, called Symbolic Racism, in which “negative feelings toward Blacks as a group and some conservative nonracial values have become politically dominant” (Sears & Henry, 2003 , p. 259). Symbolic Racism is said to “[stem] from some combination of anti-Black affect and traditional values (most notably individualism)” (Sears & Henry, 2003 , p. 260). Overall, Symbolic Racism scales measure four overarching themes, including: “Blacks no longer face much prejudice or discrimination, [...] Blacks’ failure to progress results from their unwillingness to work hard enough, [...] Blacks are demanding too much too fast, and [...] Blacks have gotten more than they deserve (Sears & Henry, 2003, p. 260). Higher Symbolic Racism scores indicate more anti-Black affect.

In order to assess Symbolic Racism in our study, we used the Symbolic Racism scale from Kuppens and Spears’ (2014) study. The Symbolic Racism scale was rated on a 5-point Likert scale from *strongly disagree* (1) to *strongly agree* (5). Kuppens and Spears’ (2014) Symbolic Racism scale is a 4-item scale that measures how strongly individuals feel that discrimination does not exist, as well as how much they believe Blacks could achieve as much as others if they worked harder. Pro-trait and con-trait items (which were reverse scored) revealed a mean score of 3.08 ($SD = 1.24$) and analysis showed that the scale had high reliability ($\alpha = .82$).

3.1.4.4 Internal Attributions for Inequality Scale

Attribution theory looks at how individuals explain the behaviors and actions of others, where actions and behaviors can be said to be caused by external and/or internal forces (see Heider, 1958; Weiner, 1974, 1986). We can understand internal attributions in relation to the social position of disadvantaged people by looking at meritocracy. Meritocracy, a reigning view in America, essentially states that individuals are rewarded based on hard work, meaning that success is based largely on one’s work ethic (Kluegel & Smith, 1986), which in turn “[promotes] the belief that anyone can get ahead if they

work hard enough and are talented enough” (McCoy & Major, 2007, p. 341). This belief system consequently allows disadvantaged individuals to be blamed for their own demise due to lack of effort, rather than due to systems that produce and reproduce social inequality (McCoy & Major, 2007). Individuals who strongly endorse meritocracy prefer high-status social groups over low-status groups and blame low-status groups for their low-status position (McCoy & Major, 2007).

Thus, the Internal Attributions for Inequality scale from Kuppens and Spears’ (2014) study was included to measure how strongly individuals attribute the inequality that Blacks face to internal causes (not working hard, choosing low-paying jobs etc.), with higher scores indicating higher internal attributions given for social inequality. Items were presented as reasons to the prompt “Why do you think it is that in America today Blacks tend to have worse jobs and lower income than Whites do?” Response options ranged from *not at all important (1)* to *extremely important (5)*. All items were pro-trait in that they were posited as internal factors and so there were no reverse scored items. Scores for Internal Attributions for Inequality were low ($M = 1.87$, $SD = 1.04$) and analysis showed that the scale had high reliability ($\alpha = .87$).

3.2 Results

The four items for warmth were aggregated for one overall warmth rating, and the four items for competence were aggregated for one overall competence rating while the three items retained from the pilot study (‘Professional’, ‘VP’ and ‘Face of Company’) were analyzed individually, as in the pilot study. These ratings are shown in Table 3.

Table 3. Ratings for hairstyle categories by race for each dependent variable – main study (Warmth and Competence: 1-5 scale; Professional, VP, Face of Company: 1-7 scale)

	Socially Conforming Hairstyles on the Black Target (SB)		Socially Conforming Hairstyles on the White Target (SW)		Non-Socially Conforming Hairstyles on the Black Target (NB)		Non-Socially Conforming Hairstyles on the White Target (NB)		Afrocentric Hairstyles on the Black Target (AB)		Afrocentric Hairstyles on the White Target (AW)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Warmth	2.90	.93	3.07	.93	2.63	.97	2.79	1.45	2.90	.94	2.87	.93
Competence	3.29	.87	3.63	.79	2.86	.97	3.01	.96	3.32	1.43	3.14	.90
Professional	5.15	1.41	5.72	1.08	2.97	1.75	3.17	1.78	4.85	1.55	3.79	1.76
VP*	4.66	1.81	4.99	1.85	3.00	1.84	2.95	1.78	4.42	1.81	3.50	1.79
Face of Company*	4.60	1.78	4.85	1.82	2.94	1.80	3.00	1.73	4.37	1.82	3.52	1.78
<i>N</i>	540		543		543		544		544		545	

Note. *Negatively worded items that were reverse scored for analysis.

3.2.1 Effects of Race and Hairstyle on Perceptions of Target

We conducted 2-by-3 within-subjects ANOVAs to examine how the targets' race and hairstyle influenced perceptions. We also conducted 2-by-3 within-subjects ANCOVAs to determine whether individual differences in prejudice (as assessed by SDO, RWA, Symbolic Racism and Internal Attributions for Inequality) moderated the effects of race and hairstyle. Both our ANOVAs and ANCOVAs were conducted with target race as one factor, with Black and White targets, and hairstyle category as the second factor, with socially conforming hairstyles, non-socially conforming hairstyles and Afrocentric hairstyles. All the degrees of freedom that are reported used the Greenhouse-Geisser adjustment. Using the regression coefficients provided from the ANCOVAs, we then plotted and further examined significant three-way interactions at the level of one standard deviation above and below the mean on the continuous prejudice measures. One

standard deviation above the mean is described as a high level of the given prejudice measure, and one standard deviation below the mean is described as a low level of the given prejudice measure. Although we report significant results at $p \leq .05$, we recognize that we conducted many tests and therefore differences at $p \leq .01$ should be taken most seriously in interpreting the findings. The results of these analyses are discussed below for each of the five dependent variables.

3.2.1.1 Warmth

A 2-by-3 within-subjects ANOVA revealed a statistically significant interaction of target race and hairstyle category on targets' warmth rating, $F(2, 946) = 8.73, p < .001, \eta_p^2 = 0.016$. Post-hoc analysis using a paired samples t-test revealed no significant difference between the Black target with socially conforming hairstyles and the Black target with Afrocentric hairstyles, $t(535) = -0.57, p = .571, d = 0.03$, meaning that our first hypothesis was not supported. We also conducted a separate paired samples t-test to test our second hypothesis, comparing the White target with non-socially conforming hairstyles and the Black target with Afrocentric hairstyles. Our results indicated that the Black target with Afrocentric hairstyles was rated significantly higher in warmth than the White target with non-socially conforming hairstyles, $t(537) = 2.22, p = .027, d = 0.10$, meaning that our second hypothesis was not supported.

For the Black target, non-socially conforming hairstyles were rated significantly lower in warmth than socially conforming hairstyles, $t(535) = -8.13, p < .001, d = 0.03$ and Afrocentric hairstyles, $t(535) = -8.96, p < .001, d = 0.38$. For the White target, socially conforming hairstyles were rated significantly higher in warmth than non-socially conforming hairstyles, $t(535) = 4.76, p < .001, d = 0.21$ and Afrocentric hairstyles, $t(535) = 5.30, p < .001, d = 0.24$. The difference between Afrocentric hairstyles compared to non-socially conforming hairstyles on the White target was non-significant, $t(535) = 1.42, p = .155, d = 0.06$. Our analysis also revealed that the Black target was rated significantly lower in warmth than the White target when they both had socially conforming hairstyles, $t(535) = -4.99, p < .001, d = 0.22$ and non-socially conforming hairstyles, $t(535) = -2.53, p = .012, d = 0.11$. The difference between the Black target compared to the White target

when both had Afrocentric hairstyles was non-significant, $t(535) = 1.40, p = .163, d = 0.06$.

3.2.1.1.1 Moderated Effects of Race and Hairstyle on 'Warmth' Ratings

2-by-3 within-subjects ANCOVAs were conducted to test whether there was a significant interaction between hairstyle category, target race, and each moderator variable on ratings of warmth. When each moderator was independently added to the analysis, there was a significant three-way interaction for SDO, RWA and Internal Attributions for Inequality.

3.2.1.1.1.1 SDO

There was a significant three-way interaction between hairstyle category, target race, and SDO on ratings of warmth, $F(2, 943) = 7.73, p = .001, \eta_p^2 = 0.014$. We calculated values (plotted in Figure 9) for a high and low level of SDO using regression coefficients to examine this interaction further. Our third hypothesis was that hypothesis 1 and 2 would be especially evident for those high in prejudice, in this case, those high in SDO. However, at both high and low levels of SDO, the predicted difference between the Black target with socially conforming hairstyles and the Black target with Afrocentric hairstyles was not supported as the difference between the two conditions was small (high SDO - $M_{SB} = 2.78, M_{AB} = 2.81$; low SDO - $M_{SB} = 3.01, M_{AB} = 3.00$). In addition, at both high and low levels of SDO, the difference between the Black target with Afrocentric hairstyles and the White target with non-socially conforming hairstyles was in the opposite direction to what we predicted, with the White target with non-socially conforming hairstyles rated as less warm than the Black target with Afrocentric hairstyles (high SDO - $M_{NW} = 2.65, M_{AB} = 2.81$; low SDO - $M_{NW} = 2.91, M_{AB} = 3.00$). Thus, there was no support for hypothesis 3.

While not predicted, our results indicated that the White target with socially conforming hairstyles was rated warmer than the Black target with socially conforming hairstyles at a high level of SDO ($M_{SW} = 3.10; M_{SB} = 2.78$); at low SDO, there was a negligible difference between the two conditions ($M_{SW} = 3.05; M_{SB} = 3.01$). For Afrocentric

hairstyles, the Black target was rated warmer than the White target at a high level of SDO ($M_{AB} = 3.00$; $M_{AW} = 2.93$); at low SDO, there was no difference evident between the two conditions ($M_{AB} = 2.81$; $M_{AW} = 2.80$).

These predicted values also showed that a high level of SDO, compared to a low level of SDO, was associated with a lower rating of warmth for the Black target with Afrocentric hairstyles ($M_{High\ SDO} = 2.81$; $M_{Low\ SDO} = 3.00$). For the White target with socially conforming hairstyles, a high level of SDO, compared to a low level of SDO, was related to a higher rating of warmth ($M_{High\ SDO} = 3.10$; $M_{Low\ SDO} = 3.05$).

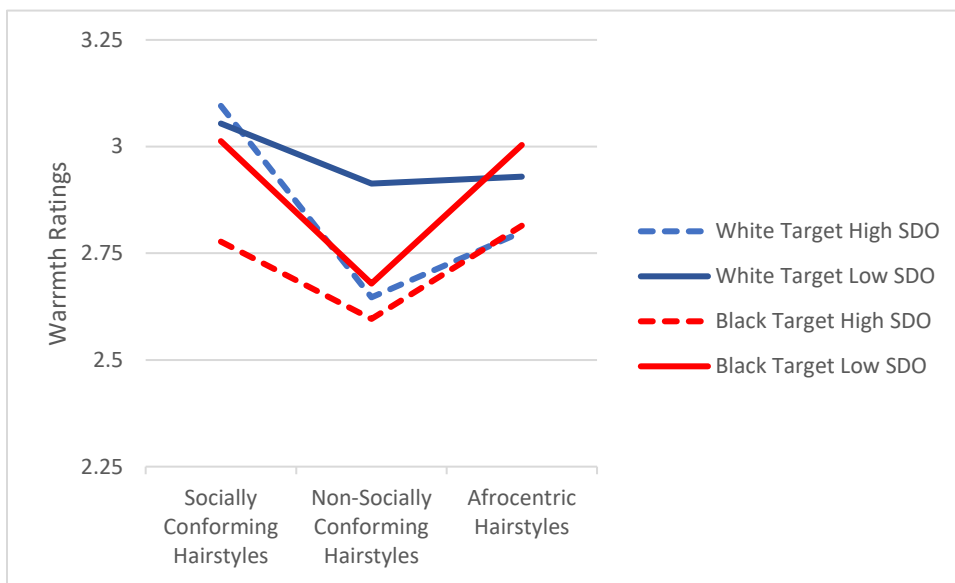


Figure 9. SDO as a moderator of effects of race and hairstyles on warmth ratings

3.2.1.1.1.2 RWA

A 2-by-3 within-subjects ANCOVA revealed a significant three-way interaction between hairstyle category, target race, and RWA, $F(2, 934) = 3.52$, $p = .036$, $\eta_p^2 = 0.007$ on ratings of warmth. We calculated values (plotted in Figure 10) for a high and low level of RWA using regression coefficients to examine this interaction further. Our third hypothesis was that hypothesis 1 and 2 would be especially evident for those high in prejudice, in this case, those high in RWA. The predicted difference between the Black target with socially conforming hairstyles and the Black target with Afrocentric hairstyles

was not supported at a high level of RWA as the difference between the two conditions was small ($M_{SB} = 2.87$; $M_{AB} = 2.83$). At a low level of RWA, the difference was in the opposite direction, with the Black target with socially conforming hairstyle rated as less warm than the Black target with Afrocentric hairstyles ($M_{SB} = 2.92$; $M_{AB} = 3.00$). In addition, at both high and low levels of RWA, the difference between the Black target with Afrocentric hairstyles and the White target with non-socially conforming hairstyles was in the opposite direction to what we predicted, with the White target with non-socially conforming hairstyles rated as less warm than the Black target with Afrocentric hairstyles (high RWA - $M_{NW} = 2.68$, $M_{AB} = 2.83$; low RWA - $M_{NW} = 2.88$, $M_{AB} = 3.00$). Thus, there was no support for hypothesis 3.

While not predicted, our results indicated that the White target with socially conforming hairstyles was rated warmer than the Black target with socially conforming hairstyles at a high level of RWA ($M_{SW} = 3.20$; $M_{SB} = 2.87$); at low RWA, there was no difference evident between the two conditions ($M_{SW} = 2.94$; $M_{SB} = 2.92$).

These predicted values also showed that a high level of RWA, compared to a low level of RWA, was associated with a lower rating of warmth for the Black target with Afrocentric hairstyles ($M_{High\ RWA} = 2.83$; $M_{Low\ RWA} = 3.00$). For the White target with socially conforming hairstyle, a high level of RWA, compared to a low level of RWA, was related to a higher rating of warmth ($M_{High\ RWA} = 3.20$; $M_{Low\ RWA} = 2.94$).

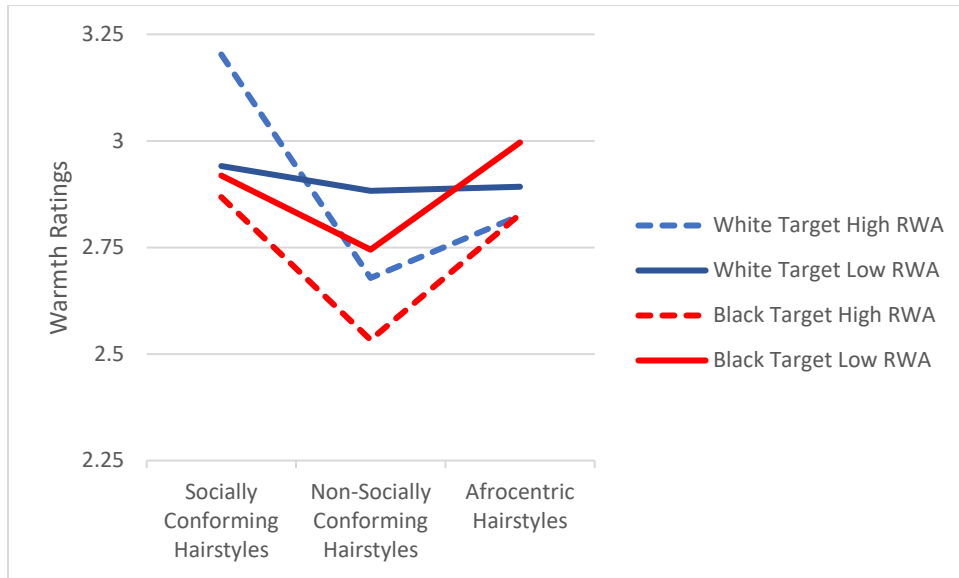


Figure 10. RWA as a moderator of effects of race and hairstyles on warmth ratings

3.2.1.1.1.3 Internal Attributions for Inequality

A 2-by-3 within-subjects ANCOVA revealed a significant three-way interaction between hairstyle category, target race, and Internal Attributions for Inequality, $F(2, 933) = 7.10$, $p = .001$, $\eta_p^2 = 0.013$ on ratings of warmth. We calculated values (plotted in Figure 11) for a high and low level of Internal Attributions for Inequality using regression coefficients to examine this interaction further. Our third hypothesis was that hypothesis 1 and 2 would be especially evident for those high in prejudice, in this case, those high in Internal Attributions for Inequality. The predicted difference between the Black target with socially conforming hairstyles and the Black target with Afrocentric hairstyles was not supported at a high level of Internal Attributions for Inequality as the difference between the two conditions was small ($M_{SB} = 3.01$; $M_{AB} = 2.99$). At a low level of Internal Attributions for Inequality, the difference was in the opposite direction, with the Black target with socially conforming hairstyles rated as less warm than the Black target with Afrocentric hairstyles ($M_{SB} = 2.78$; $M_{AB} = 2.84$). In addition, at both high and low levels of Internal Attributions for Inequality, the difference between the Black target with Afrocentric hairstyles and the White target with non-socially conforming hairstyles was in the opposite direction to what we predicted, with the White target with non-socially conforming hairstyles rated as less warm than the Black target with Afrocentric hairstyles

(high Internal Attributions for Inequality - $M_{NW} = 2.87$, $M_{AB} = 2.99$; low Internal Attributions for Inequality - $M_{NW} = 2.70$, $M_{AB} = 2.84$). Thus, there was no support for hypothesis 3.

While not predicted, our results indicated that the White target with socially conforming hairstyles was rated warmer than the Black target with socially conforming hairstyles at a high level of Internal Attributions for Inequality ($M_{SW} = 3.35$; $M_{SB} = 3.01$); at low Internal Attributions for Inequality, there was no difference evident between the two conditions ($M_{SW} = 2.80$; $M_{SB} = 2.78$). For Afrocentric hairstyles, the White target was rated higher in warmth than the Black target at a high level of Internal Attributions for Inequality ($M_{AW} = 3.04$; $M_{AB} = 2.99$) but rated lower in warmth at low Internal Attributions for Inequality ($M_{AW} = 2.70$; $M_{AB} = 2.84$).

The predicted values also showed that a high level of Internal Attributions for Inequality, compared to a low level of Internal Attributions for Inequality, was associated with a higher rating of warmth for the Black target with Afrocentric hairstyles ($M_{High\ Internal} = 2.99$; $M_{Low\ Internal} = 2.84$). In fact, a high level of Internal Attributions for Inequality, compared to a low level of Internal Attributions for Inequality, was related to a higher rating of warmth for all conditions. For the Black target, all hairstyles were associated with a higher rating of warmth at a high level of Internal Attributions for Inequality ($M_{SB} = 3.01$; $M_{NB} = 2.79$; $M_{AB} = 2.99$) than at a low level of Internal Attributions for Inequality ($M_{SB} = 2.78$; $M_{NB} = 2.49$; $M_{AB} = 2.84$). For the White target, all hairstyles were associated with a higher rating of warmth at a high level of Internal Attributions for Inequality ($M_{SW} = 3.35$; $M_{NW} = 2.87$; $M_{AW} = 3.04$) than at a low level of Internal Attributions for Inequality ($M_{SW} = 2.80$; $M_{NW} = 2.70$; $M_{AW} = 2.70$).

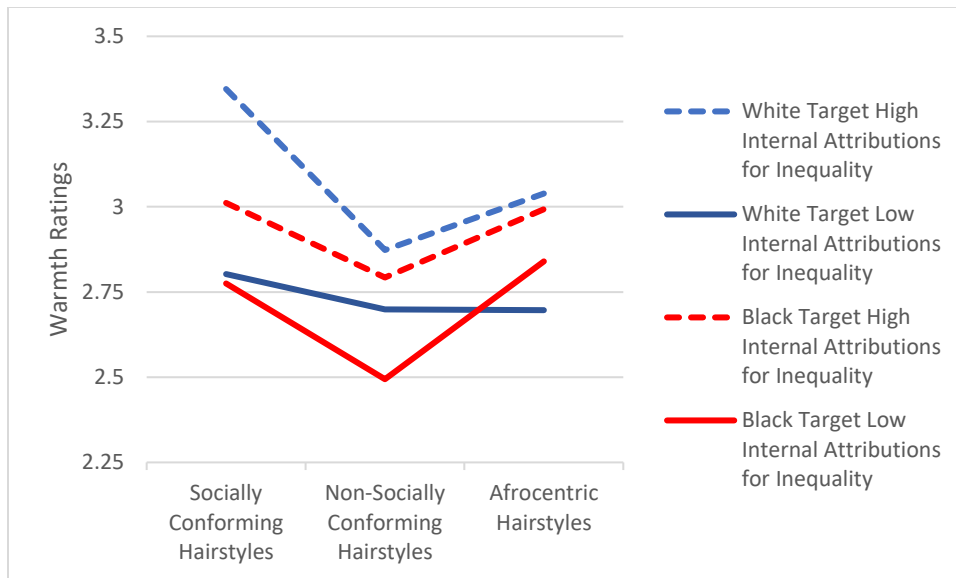


Figure 11. Internal attributions for inequality as a moderator of effects of race and hairstyles on warmth ratings

3.2.1.2 Competence

A 2-by-3 within-subjects ANOVA revealed a statistically significant interaction of target race and hairstyle category on targets' competence rating, $F(1, 798) = 40.78, p < .001, \eta_p^2 = 0.071$. A paired samples t-test revealed no significant difference between the Black target with socially conforming hairstyles and the Black target with Afrocentric hairstyles, $t(535) = -0.67, p = .502, d = 0.03$, thus not supporting our first hypothesis. A separate paired samples t-test to test our second hypothesis indicated that the Black target with Afrocentric hairstyles was rated significantly higher in competence than the White target with non-socially conforming hairstyles, $t(537) = 5.31, p < .001, d = 0.23$, not supporting our second hypothesis.

For the Black target, non-socially conforming hairstyles were rated significantly lower in competence than socially conforming hairstyles, $t(535) = -12.85, p < .001, d = .55$ and Afrocentric hairstyles, $t(535) = -7.66, p < .001, d = 0.33$. For the White target, socially conforming hairstyles were rated significantly higher in competence than non-socially conforming hairstyles, $t(535) = 15.47, p < .001, d = 0.67$ and Afrocentric hairstyles, $t(535) = 13.62, p < .001, d = 0.59$, and Afrocentric hairstyles were rated significantly

higher in competence than non-socially conforming hairstyles, $t(535) = 3.86, p < .001, d = 0.17$. Our analysis also revealed that the Black target was rated significantly lower in competence than the White target when they both had socially conforming hairstyles, $t(535) = -9.89, p < .001, d = 0.42$ and non-socially conforming hairstyles, $t(535) = -5.26, p < .001, d = 0.21$. When both targets had Afrocentric hairstyles, the Black target was rated significantly higher in competence than the White target, $t(535) = 3.13, p = .002, d = 0.14$.

3.2.1.2.1 Moderated Effects of Race and Hairstyle on 'Competence' Ratings

2-by-3 within-subjects ANCOVAs were conducted to test whether there was a significant interaction between hairstyle category, target race, and each moderator variable on ratings of competence. When each moderator variable was independently added to the analysis, there was a significant three-way interaction for SDO and Internal Attributions for Inequality.

3.2.1.2.1.1 SDO

There was a significant three-way interaction between hairstyle category, target race, and SDO, $F(1, 788) = 4.37, p = .022, \eta_p^2 = 0.008$ on ratings of competence. We calculated values (plotted in Figure 12) for a high and low level of SDO using regression coefficients to examine this interaction further. Our third hypothesis was that hypothesis 1 and 2 would be especially evident for those high in prejudice, in this case, those high in SDO. The predicted difference between the Black target with socially conforming hairstyles and the Black target with Afrocentric hairstyles was not supported at a high level of SDO as the difference between the two conditions was small ($M_{SB} = 3.09; M_{AB} = 3.05$). At a low level of SDO, the difference was in the opposite direction, with the Black target with socially conforming hairstyle rated as less competent than the Black target with Afrocentric hairstyles ($M_{SB} = 3.47; M_{AB} = 3.59$). In addition, at both high and low levels of SDO, the difference between the Black target with Afrocentric hairstyles and the White target with non-socially conforming hairstyles was in the opposite direction to what we predicted, with the White target with non-socially conforming hairstyles rated as

less competent than the Black target with Afrocentric hairstyles (high SDO - $M_{NW} = 2.85$; $M_{AB} = 3.05$; low SDO - $M_{NW} = 3.16$; $M_{AB} = 3.59$). Thus, there was no support for hypothesis 3.

While we did not find support for our third hypothesis, these predicted values showed that a high level of SDO, compared to a low level of SDO, was associated with a lower rating of competence for the Black target with Afrocentric hairstyles ($M_{High\ SDO} = 3.05$; $M_{Low\ SDO} = 3.59$).

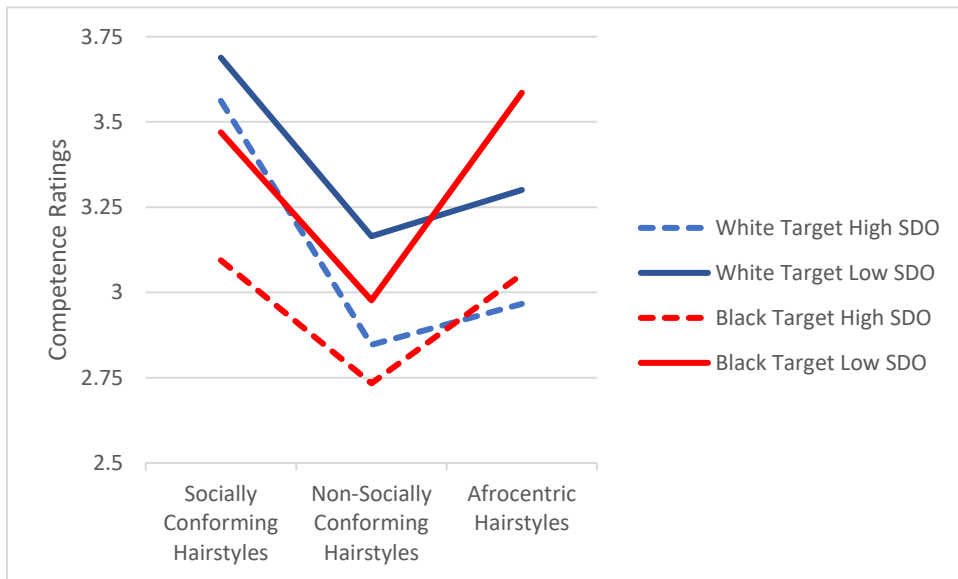


Figure 12. SDO as a moderator of effects of race and hairstyles on competence ratings

3.2.1.2.1.2 Internal Attributions for Inequality

A 2-by-3 within-subjects ANCOVA revealed a significant three-way interaction between hairstyle category, target race, and Internal Attributions for Inequality, $F(1, 782) = 4.59, p = .019, \eta_p^2 = 0.009$ on ratings of competence. We calculated values (plotted in Figure 13) for a high and low level of Internal Attributions for Inequality using regression coefficients to examine this interaction further. Our third hypothesis was that hypothesis 1 and 2 would be especially evident for those high in prejudice, in this case, those high in Internal Attributions for Inequality. The predicted difference between the Black target with socially conforming hairstyles and the Black target with Afrocentric hairstyles was supported at a high level of Internal Attributions for Inequality, with the Black target with

socially conforming hairstyles rated as more competent than the Black target with Afrocentric hairstyles ($M_{SB} = 3.27$; $M_{AB} = 3.17$). At a low level of Internal Attributions for Inequality, the difference was in the opposite direction, with the Black target with socially conforming hairstyles rated as less competent than the Black target with Afrocentric hairstyles ($M_{SB} = 3.29$; $M_{AB} = 3.48$). In addition, at both high and low levels of Internal Attributions for Inequality, the difference between the Black target with Afrocentric hairstyles and the White target with non-socially conforming hairstyles was in the opposite direction to what we predicted, with the White target with non-socially conforming hairstyles rated as less competent than the Black target with Afrocentric hairstyles (high Internal Attributions for Inequality - $M_{NW} = 3.07$; $M_{AB} = 3.17$; low Internal Attributions for Inequality - $M_{NW} = 2.95$; $M_{AB} = 3.48$). While the predicted difference between the Black target with Afrocentric hairstyles and the Black target with socially conforming hairstyles was supported at a high level of Internal Attributions for Inequality, suggesting moderation in the predicted direction, the predicted difference was not supported at a low level of Internal Attributions for Inequality. The predicted difference between the Black target with Afrocentric hairstyles and the White target with non-socially conforming hairstyles was not supported at both levels of Internal Attributions for Inequality. Thus, our third hypothesis, that predicted effects would be especially evident at high levels of Internal Attributions for Inequality, received partial support.

While not predicted, our results indicated that the Black target with Afrocentric hairstyles was rated as more competent than the White target with Afrocentric hairstyles at a low level of Internal Attributions for Inequality ($M_{AB} = 3.48$; $M_{AW} = 3.10$); at high Internal Attributions for Inequality, there was no difference evident between the two conditions ($M_{AB} = 3.17$; $M_{AW} = 3.17$).

The predicted values also showed that a high level of Internal Attributions for Inequality, compared to a low level of Internal Attributions for Inequality, was associated with a lower rating of competence for the Black target with Afrocentric hairstyles ($M_{\text{High Internal}} = 3.17$; $M_{\text{Low Internal}} = 3.48$). For the White target, all hairstyles were associated with a higher rating of competence at a high level of Internal Attributions for Inequality ($M_{SW} = 3.72$;

$M_{NW} = 3.07$; $M_{AW} = 3.17$) than at a low level of Internal Attributions for Inequality ($M_{SW} = 3.52$; $M_{NW} = 2.95$; $M_{AW} = 3.10$). In addition, a high level of Internal Attributions for Inequality, compared to a low level of Internal Attributions for Inequality, was associated with a higher rating of competence for the Black target with non-socially conforming hairstyles ($M_{High\ Internal} = 2.91$; $M_{Low\ Internal} = 2.81$).

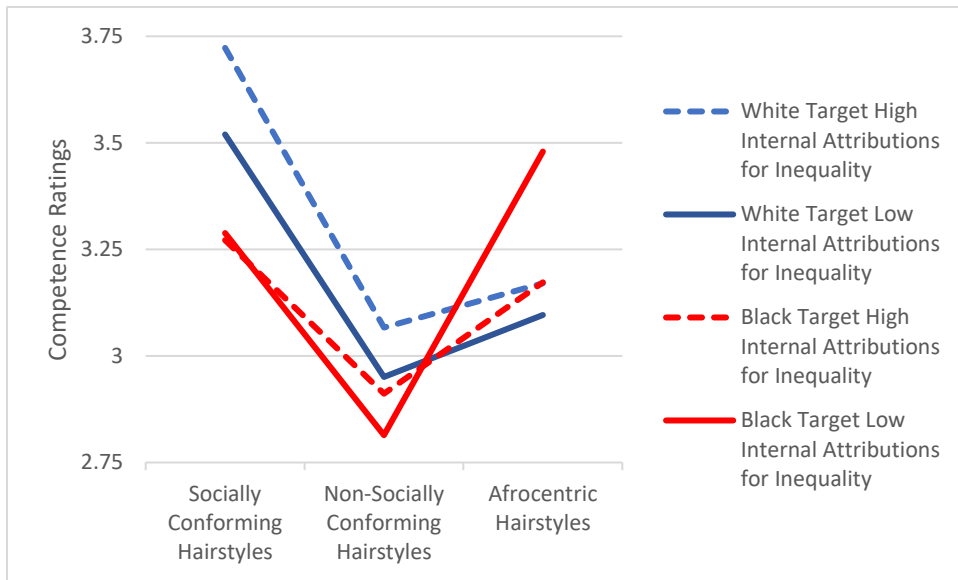


Figure 13. Internal attributions for inequality as a moderator of effects of race and hairstyles on competence ratings

3.2.1.3 Professional

A 2-by-3 within-subjects ANOVA revealed a statistically significant interaction of target race and hairstyle category on how professional the target looked, $F(2, 998) = 189.51$, $p < .001$, $\eta_p^2 = 0.262$. A paired samples t-test to analyze simple main effects revealed that the Black target with socially conforming hairstyles was rated as significantly more professional looking than the Black target with Afrocentric hairstyles, $t(535) = 4.46$, $p < .001$, $d = 0.20$, supporting our first hypothesis. A separate paired samples t-test revealed that the Black target with Afrocentric hairstyles was rated as significantly more professional looking than the White target with non-socially conforming hairstyles, $t(537) = 20.70$, $p < .001$, $d = 0.89$, providing no support for our second hypothesis.

For the Black target, non-socially conforming hairstyles were rated significantly less professional looking than socially conforming hairstyles, $t(535) = -26.72, p < .001, d = 1.16$ and Afrocentric hairstyles, $t(535) = -23.39, p < .001, d = 1.01$. For the White target, socially conforming hairstyles were rated significantly more professional looking than non-socially conforming hairstyles, $t(535) = 28.83, p < .001, d = 1.24$ and Afrocentric hairstyles, $t(535) = 23.09, p < .001, d = 0.99$, and Afrocentric hairstyles were rated more professional looking than non-socially conforming hairstyles, $t(535) = 8.57, p < .001, d = 0.37$. Results indicated that the Black target was rated significantly less professional looking than the White target when they both had socially conforming hairstyles, $t(535) = -9.82, p < .001, d = 0.42$ and non-socially conforming hairstyles, $t(535) = -3.53, p < .001, d = 0.16$. When both targets had Afrocentric hairstyles, the Black target was rated significantly more professional looking than the White target, $t(535) = 13.79, p < .001, d = 0.59$.

3.2.1.3.1 Moderated Effects of Race and Hairstyle on 'Professional' Ratings

2-by-3 within-subjects ANCOVAs were conducted to test whether there was a significant interaction between hairstyle category, target race, and each moderator variable on ratings of how professional the target stimuli looked. Analyses revealed that there was a significant three-way interaction between hairstyle category, target race, and SDO, RWA, Symbolic Racism and Internal Attributions for Inequality.

3.2.1.3.1.1 SDO

There was a significant three-way interaction between hairstyle category, target race, and SDO, $F(2, 991) = 6.22, p = .003, \eta_p^2 = 0.012$ on how professional the target stimuli looked. We calculated values (plotted in Figure 14) for a high and low level of SDO using regression coefficients to examine this interaction further. Our third hypothesis was that hypothesis 1 and 2 would be especially evident for those high in prejudice, in this case, those high in SDO. At both high and low levels of SDO, the predicted difference between the Black target with socially conforming hairstyles and the Black target with Afrocentric hairstyles was supported, with the Black target with socially conforming

hairstyles rated as more professional looking than the Black target with Afrocentric hairstyles (high SDO - $M_{SB} = 4.75$; $M_{AB} = 4.50$; low SDO - $M_{SB} = 5.55$; $M_{AB} = 5.22$). In addition, at both high and low levels of SDO, the difference between the Black target with Afrocentric hairstyles and the White target with non-socially conforming hairstyles was in the opposite direction to what we predicted, with the White target with non-socially conforming hairstyles rated as less professional looking than the Black target with Afrocentric hairstyles (high SDO - $M_{NW} = 3.22$; $M_{AB} = 4.50$; low SDO - $M_{NW} = 3.09$; $M_{AB} = 5.22$). While the predicted difference between the Black target with Afrocentric hairstyles and the Black target with socially conforming hairstyles was supported at both levels of SDO, the predicted difference between the Black target with Afrocentric hairstyles and the White target with non-socially conforming hairstyles was not supported at both levels of SDO. Thus, our third hypothesis, that predicted effects would be especially evident at high levels of SDO, was not supported.

While we did not find support for our third hypothesis, these predicted values showed that a high level of SDO, was associated with the Black target with Afrocentric hairstyles being rated as less professional looking compared to a low level of SDO ($M_{High\ SDO} = 4.50$; $M_{Low\ SDO} = 5.22$). These predicted values also showed that a high level of SDO was associated with the White target with non-socially conforming hairstyles being rated as more professional looking compared to a low level of SDO ($M_{High\ SDO} = 3.22$; $M_{Low\ SDO} = 3.09$). A high level of SDO was also associated with the Black target with non-socially conforming hairstyles being rated more professional looking than the Black target with non-socially conforming hairstyles at a low level of SDO ($M_{High\ SDO} = 3.06$; $M_{Low\ SDO} = 2.87$).

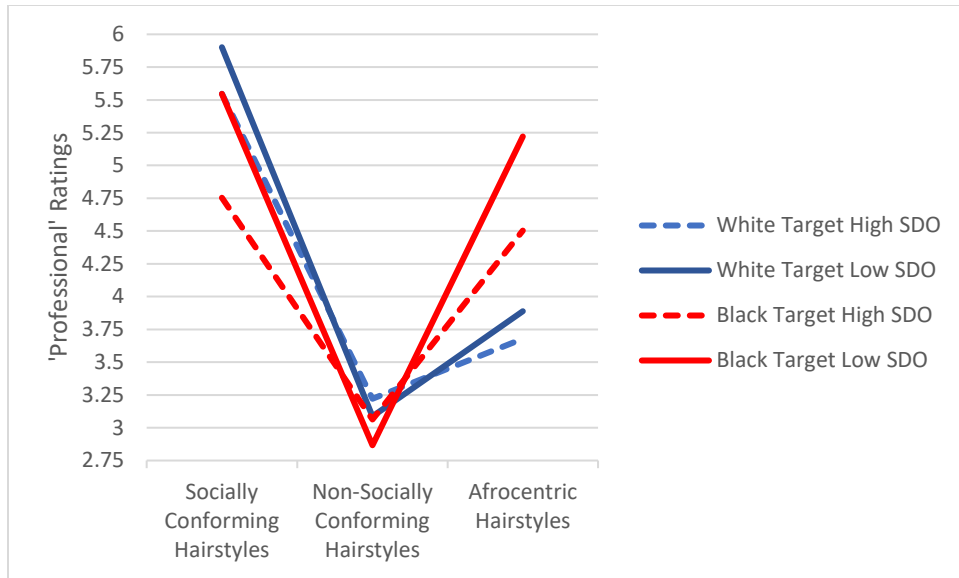


Figure 14. SDO as a moderator of effects of race and hairstyles on ‘professional’ ratings

3.2.1.3.1.2 RWA

A 2-by-3 within-subjects ANCOVA revealed a significant three-way interaction between hairstyle category, target race, and RWA, $F(2, 985) = 4.13, p = .019, \eta_p^2 = 0.008$ on how professional the target stimuli looked. We calculated values (plotted in Figure 15) for a high and low level of RWA using regression coefficients to examine this interaction further. Our third hypothesis was that hypothesis 1 and 2 would be especially evident for those high in prejudice, in this case, those high in RWA. At both high and low levels of RWA, the predicted difference between the Black target with socially conforming hairstyles and the Black target with Afrocentric hairstyles was supported, with the Black target with socially conforming hairstyles rated as more professional looking than the Black target with Afrocentric hairstyles (high RWA - $M_{SB} = 4.93; M_{AB} = 4.51$; low RWA - $M_{SB} = 5.37; M_{AB} = 5.22$). In addition, at both high and low levels of RWA, the difference between the Black target with Afrocentric hairstyles and the White target with non-socially conforming hairstyles was in the opposite direction to what we predicted, with the White target with non-socially conforming hairstyles rated as less professional looking than the Black target with Afrocentric hairstyles (high RWA - $M_{NW} = 2.96; M_{AB} = 4.51$; low RWA - $M_{NW} = 3.35; M_{AB} = 5.22$). While the predicted difference between the Black target with Afrocentric hairstyles and the Black target with socially conforming

hairstyles was supported at both levels of RWA, the predicted difference between the Black target with Afrocentric hairstyles and the White target with non-socially conforming hairstyles was not supported at both levels of RWA. Thus, our third hypothesis, that predicted effects would be especially evident at high levels of RWA, was not supported.

While we did not find support for our third hypothesis, these predicted values showed that a high level of RWA, compared to a low level of RWA, was associated with the Black target with Afrocentric hairstyles being rated less professional looking ($M_{\text{High RWA}} = 4.51$; $M_{\text{Low RWA}} = 5.22$). These predicted values also showed no evidence of a difference between the White target with socially conforming hairstyles at a high level of RWA and the White target with socially conforming hairstyles at a low level of RWA ($M_{\text{High RWA}} = 5.71$; $M_{\text{Low RWA}} = 5.72$).

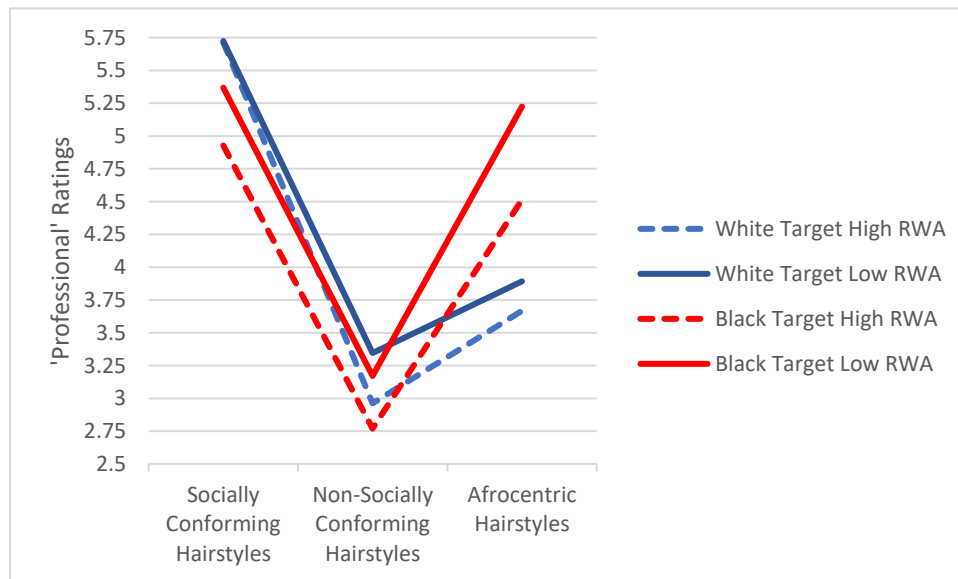


Figure 15. RWA as a moderator of effects of race and hairstyles on ‘professional’ ratings

3.2.1.3.1.3 Symbolic Racism

There was a significant three-way interaction between hairstyle category, target race, and Symbolic Racism, $F(2, 982) = 4.60, p = .012, \eta_p^2 = 0.009$ on how professional the target stimuli looked. We calculated values (plotted in Figure 16) for a high and low level of Symbol Racism using regression coefficients to examine this interaction further. Our

third hypothesis was that hypothesis 1 and 2 would be especially evident for those high in prejudice, in this case, those high in Symbolic Racism. At both high and low levels of Symbolic Racism, the predicted difference between the Black target with socially conforming hairstyles and the Black target with Afrocentric hairstyles was supported, with the Black target with socially conforming hairstyles rated as more professional looking than the Black target with Afrocentric hairstyles (high Symbolic Racism - $M_{SB} = 4.83$; $M_{AB} = 4.47$; low Symbolic Racism - $M_{SB} = 5.47$; $M_{AB} = 5.27$). In addition, at both high and low levels of Symbolic Racism, the difference between the Black target with Afrocentric hairstyles and the White target with non-socially conforming hairstyles was in the opposite direction to what we predicted, with the White target with non-socially conforming hairstyles rated as less professional looking than the Black target with Afrocentric hairstyles (high Symbolic Racism - $M_{NW} = 2.96$; $M_{AB} = 4.47$; low Symbolic Racism - $M_{NW} = 3.35$; $M_{AB} = 5.27$). While the predicted difference between the Black target with Afrocentric hairstyles and the Black target with socially conforming hairstyles was supported at both levels of Symbolic Racism, the predicted difference between the Black target with Afrocentric hairstyles and the White target with non-socially conforming hairstyles was not supported at both levels of Symbolic Racism. Thus, our third hypothesis, that predicted effects would be especially evident at high levels of Symbolic Racism, was not supported.

While we did not find support for our third hypothesis, these predicted values showed that a high level of Symbolic Racism compared to a low level of Symbolic Racism, was associated the Black target with Afrocentric hairstyles being rated less professional looking ($M_{\text{High Symbolic}} = 4.47$; $M_{\text{Low Symbolic}} = 5.27$). These predicted values also showed that a high level of Symbolic Racism, was associated with all conditions being rated less professional, compared to a low level of Symbolic Racism.

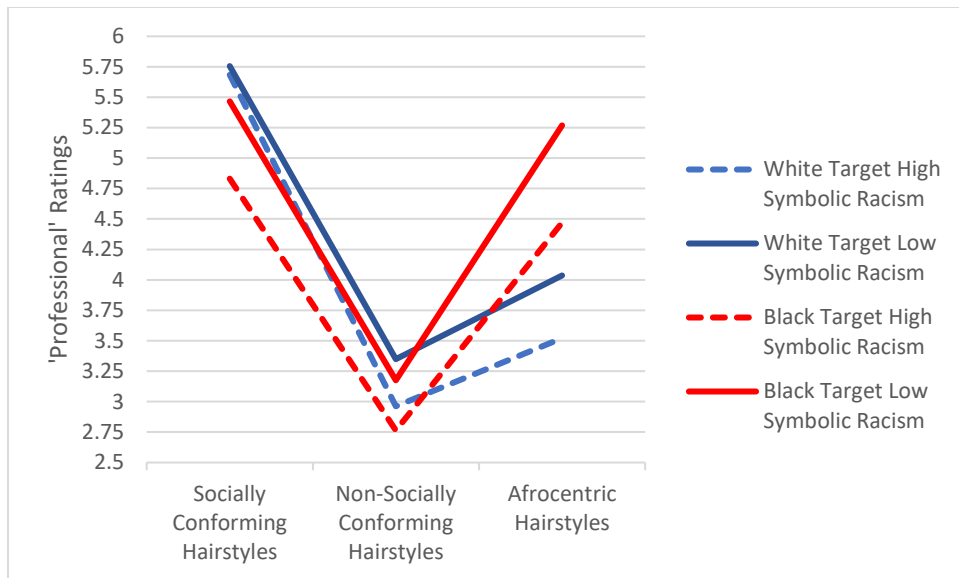


Figure 16. Symbolic racism as a moderator of effects of race and hairstyles on ‘professional’ ratings

3.2.1.3.1.4 *Internal Attributions for Inequality*

A 2-by-3 within-subjects ANCOVA revealed a significant three-way interaction between hairstyle category, target race, and Internal Attributions for Inequality, $F(2, 994) = 12.35, p < .001, \eta_p^2 = 0.023$ on how professional the target stimuli looked. We calculated values (plotted in Figure 17) for a high and low level of Internal Attributions for Inequality using regression coefficients to examine this interaction further. Our third hypothesis was that hypothesis 1 and 2 would be especially evident for those high in prejudice, in this case, those high in Internal Attributions for Inequality. At both high and low levels of Internal Attributions for Inequality, the predicted difference between the Black target with socially conforming hairstyles and the Black target with Afrocentric hairstyles was supported, with the Black target with socially conforming hairstyles rated as more professional looking than the Black target with Afrocentric hairstyles (high Internal Attributions for Inequality - $M_{SB} = 5.01; M_{AB} = 4.73$; low Internal Attributions for Inequality - $M_{SB} = 5.30; M_{AB} = 5.01$). In addition, at both high and low levels of Internal Attributions for Inequality, the difference between the Black target with Afrocentric hairstyles and the White target with non-socially conforming hairstyles was in the opposite direction to what we predicted, with the White target with non-socially

conforming hairstyles rated as less professional looking than the Black target with Afrocentric hairstyles (high Internal Attributions for Inequality - $M_{NW} = 3.61$; $M_{AB} = 4.73$; low Internal Attributions for Inequality - $M_{NW} = 2.71$; $M_{AB} = 5.01$). While the predicted difference between the Black target with Afrocentric hairstyles and the Black target with socially conforming hairstyles was supported at both levels of Internal Attributions for Inequality, the predicted difference between the Black target with Afrocentric hairstyles and the White target with non-socially conforming hairstyles was not supported at both levels of Internal Attributions for Inequality. Thus, our third hypothesis, that predicted effects would be especially evident at high levels of Internal Attributions for Inequality, was not supported.

While we did not find support for our third hypothesis, these predicted values showed that a high level of Internal Attributions for Inequality compared to a low level of Internal Attributions for Inequality, was associated with Black target with Afrocentric hairstyles being rated less professional looking ($M_{High\ Internal} = 4.73$; $M_{Low\ Internal} = 5.01$). These predicted also values showed that a high level of Internal Attributions for Inequality, compared to a low level of Internal Attributions for Inequality, was associated with the White target with non-socially conforming hairstyles being rated as more professional looking ($M_{High\ Internal} = 3.61$; $M_{Low\ Internal} = 2.71$), the Black target with non-socially conforming hairstyles ($M_{High\ Internal} = 3.40$; $M_{Low\ Internal} = 2.56$) and the White target with Afrocentric hairstyles ($M_{High\ Internal} = 4.08$; $M_{Low\ Internal} = 3.49$).

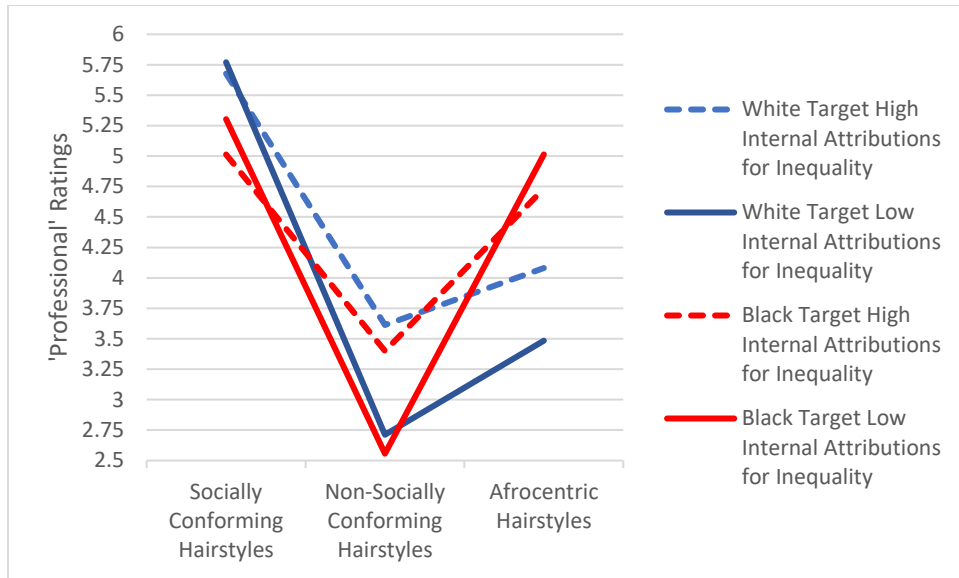


Figure 17. Internal attributions for inequality as a moderator of effects of race and hairstyles on ‘professional’ ratings

3.2.1.4 VP

A 2-by-3 within-subjects ANOVA indicated that there was a statistically significant interaction of target race and hairstyle category on whether the target looked appropriate as a VP, $F(2, 1055) = 59.57, p < .001, \eta_p^2 = 0.100$. A paired samples t-tests indicated that the Black target with socially conforming hairstyles was rated significantly more appropriate for the VP position than the Black target with Afrocentric hairstyles, $t(535) = 16.49, p < .001, d = 0.72$, providing support for our first hypothesis. Testing the second hypothesis with a separate paired samples t-test, we found that the Black target with Afrocentric hairstyles was rated significantly more appropriate as a VP than the White target with non-socially conforming hairstyles, $t(537) = 16.03, p < .001, d = 0.88$, providing no support for our second hypothesis.

For the Black target, non-socially conforming hairstyles were rated significantly less appropriate for the VP than socially conforming hairstyles, $t(535) = -3.19, p = .002, d = 0.14$ and Afrocentric hairstyles, $t(535) = -15.29, p < .001, d = 0.66$. For the White target, socially conforming hairstyles were rated significantly more appropriate for a VP than non-socially conforming hairstyles, $t(535) = 14.30, p < .001, d = 0.62$ and Afrocentric

hairstyles, $t(535) = 18.51, p < .001, d = 0.80$, and Afrocentric hairstyles were rated significantly more appropriate for a VP than non-socially conforming hairstyles, $t(535) = 6.94, p < .001, d = 0.30$. Our analysis also revealed that the Black target was rated significantly lower than the White target on appropriateness for a VP when they both had socially conforming hairstyles, $t(535) = -3.51, p < .001, d = 0.15$, and significantly higher than the White target on appropriateness for a VP when they both had Afrocentric hairstyles, $t(535) = 10.84, p < .001, d = 0.47$. The difference between the Black compared to the White target was non-significant when both had non-socially conforming hairstyles, $t(535) = 0.64, p = .525, d = 0.02$.

3.2.1.4.1 Moderated Effects of Race and Hairstyle on ‘VP’ Ratings

2-by-3 within-subjects ANCOVAs were conducted to test whether there was a significant interaction between hairstyle category, target race, and each variable being tested as a moderator on whether the target stimuli looked appropriate as a VP. When each moderator variable was independently added to the analysis, there was a significant three-way interaction only for Internal Attributions for Inequality, $F(2, 1037) = 5.41, p = .005, \eta_p^2 = 0.010$. We calculated values (plotted in Figure 18) for a high and low level of Internal Attributions for Inequality using regression coefficients to examine this interaction further. Our third hypothesis was that hypothesis 1 and 2 would be especially evident for those high in prejudice, in this case, those high in Internal Attributions for Inequality. At both high and low levels of Internal Attributions for Inequality, the predicted difference between the Black target with socially conforming hairstyles and the Black target with Afrocentric hairstyles was supported, with the Black target with socially conforming hairstyles rated as more appropriate as a VP than the Black target with Afrocentric hairstyles (high Internal Attributions for Inequality - $M_{SB} = 3.90; M_{AB} = 3.68$; low Internal Attributions for Inequality - $M_{SB} = 5.46; M_{AB} = 5.19$). In addition, at both high and low levels of Internal Attributions for Inequality, the difference between the Black target with Afrocentric hairstyles and the White target with non-socially conforming hairstyles was in the opposite direction to what we predicted, with the White target with non-socially conforming hairstyles rated as less appropriate as a VP than the

Black target with Afrocentric hairstyles (high Internal Attributions for Inequality - $M_{NW} = 2.70$; $M_{AB} = 3.68$; low Internal Attributions for Inequality - $M_{NW} = 3.19$; $M_{AB} = 5.19$). While the predicted difference between the Black target with Afrocentric hairstyles and the Black target with socially conforming hairstyles was supported at both levels of Internal Attributions for Inequality, the predicted difference between the Black target with Afrocentric hairstyles and the White target with non-socially conforming hairstyles was not supported at both levels of Internal Attributions for Inequality. Thus, our third hypothesis, that predicted effects would be especially evident at high levels of Internal Attributions for Inequality, was not supported.

While not predicted, our results indicated that the Black target with non-socially conforming hairstyles was rated more appropriate as a VP than the White target with non-socially conforming hairstyles at a low level of Internal Attributions for Inequality ($M_{NB} = 3.24$; $M_{NW} = 3.19$); at high Internal Attributions for Inequality, there was a negligible difference between the two conditions ($M_{NB} = 2.73$; $M_{NW} = 2.70$).

These predicted values also showed that a high level of Internal Attributions for Inequality, compared to a low level of Internal Attributions for Inequality, was associated with a lower rating of appropriateness as a VP for the Black target with Afrocentric hairstyles ($M_{High\ Internal} = 3.68$; $M_{Low\ Internal} = 5.19$).

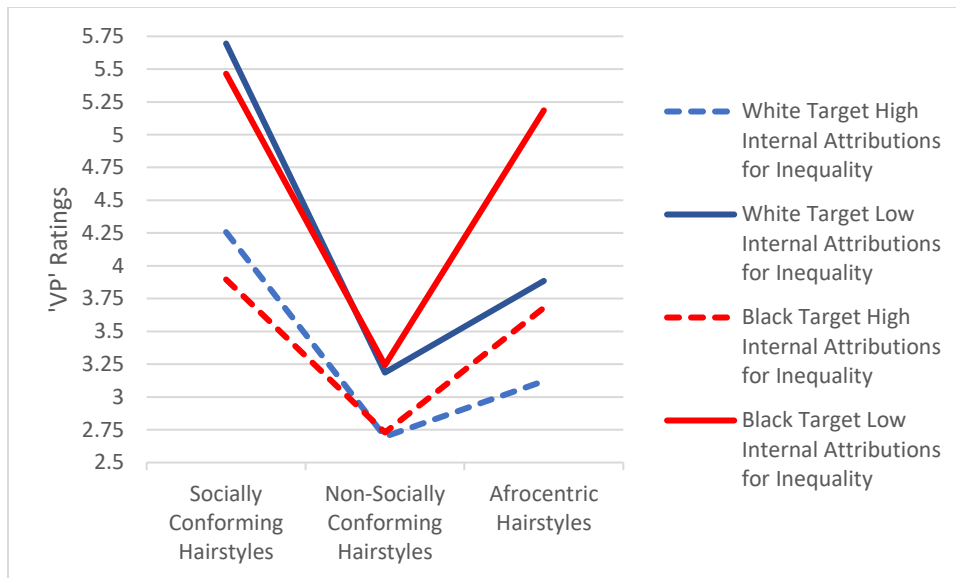


Figure 18. Internal attributions for inequality as a moderator of effects of race and hairstyles on ‘VP’ ratings

3.2.1.5 Face of Company

The interaction of target race and hairstyle category on whether the target looked appropriate as the face of the company was statistically significant, $F(2, 1060) = 52.19, p < .001, \eta_p^2 = 0.089$. A paired samples t-test revealed that the Black target with socially conforming hairstyles was rated significantly more appropriate as the face of the company than the Black target with Afrocentric hairstyles, $t(535) = 17.11, p < .001, d = 0.74$, providing support for our first hypothesis. A separate paired samples t-test to test our second hypothesis indicated that the Black target with Afrocentric hairstyles was rated significantly more appropriate as the face of the company than the White target with non-socially conforming hairstyles, $t(537) = 15.56, p < .001, d = 0.67$, providing no support for our second hypothesis.

For the Black target, non-socially conforming hairstyles were perceived to be significantly less appropriate for the face of the company than socially conforming hairstyles, $t(535) = -3.03, p = .003, d = 0.13$ and Afrocentric hairstyles, $t(535) = -15.35, p < .001, d = 0.66$. For the White target, socially conforming hairstyles were rated significantly more appropriate for the face of the company than non-socially conforming

hairstyles, $t(535) = 13.29, p < .001, d = 0.16$ and Afrocentric hairstyles, $t(535) = 18.11, p < .001, d = 0.78$, and Afrocentric hairstyles were rated significantly more appropriate for the face of the company than non-socially conforming hairstyles, $t(535) = 6.31, p < .001, d = 0.27$. Our analysis also revealed that the Black target was rated significantly less appropriate as the face of the company than the White target when they both had socially conforming hairstyles, $t(535) = -2.80, p = .005, d = 0.12$, and significantly more appropriate as the face of the company when they both had Afrocentric hairstyles, $t(535) = 10.29, p < .001, d = 0.44$. The difference between the Black target compared to the White target was non-significant when both had non-socially conforming hairstyles, $t(535) = -0.70, p = .487, d = 0.03$.

3.2.1.5.1 Moderated Effects of Race and Hairstyle on ‘Face of Company’ Ratings

2-by-3 within-subjects ANCOVAs were conducted to test whether there was a significant interaction between hairstyle category, target race, and each moderator variable on ratings of ‘Face of Company’. When each moderator was independently added to the analysis, results revealed that there was a significant three-way interaction between hairstyle category, target race, and SDO, RWA and Internal Attributions for Inequality.

3.2.1.5.1.1 SDO

There was a significant three-way interaction between hairstyle category, target race, and SDO, $F(2, 1057) = 5.51, p = .004, \eta_p^2 = 0.010$ on appropriateness as the face of the company. We calculated values (plotted in Figure 19) for a high and low level of SDO using regression coefficients to examine this interaction further. Our third hypothesis was that hypothesis 1 and 2 would be especially evident for those high in prejudice, in this case, those high in SDO. At both high and low levels of SDO, the predicted difference between the Black target with socially conforming hairstyles and the Black target with Afrocentric hairstyles was supported, with the Black target with socially conforming hairstyles rated as more appropriate as the face of the company than the Black target with Afrocentric hairstyles (high SDO - $M_{SB} = 4.03; M_{AB} = 3.88$; low SDO - $M_{SB} = 5.20; M_{AB} = 4.87$). In addition, at both high and low levels of SDO, the difference between the

Black target with Afrocentric hairstyles and the White target with non-socially conforming hairstyles was in the opposite direction to what we predicted, with the White target with non-socially conforming hairstyles rated as less appropriate as the face of the company than the Black target with Afrocentric hairstyles (high SDO - $M_{NW} = 2.78$; $M_{AB} = 3.88$; low SDO - $M_{NW} = 3.18$; $M_{AB} = 4.87$). While the predicted difference between the Black target with Afrocentric hairstyles and the Black target with socially conforming hairstyles was supported at both levels of SDO, the predicted difference between the Black target with Afrocentric hairstyles and the White target with non-socially conforming hairstyles was not supported at both levels of SDO. Thus, our third hypothesis, that the predicted effects would be especially evident at high levels of SDO, was not supported.

While not predicted, it is of interest to note that at a low level of SDO, the Black target with non-socially conforming hairstyles was rated as less appropriate as the face of the company than the White target with non-socially conforming hairstyles ($M_{NB} = 3.07$; $M_{NW} = 3.18$); at a high level of SDO, there was no difference evident between the two conditions ($M_{NB} = 2.80$, $M_{NW} = 2.78$).

The predicted values also showed that a high level of SDO, compared to a low level of SDO, was associated with a lower rating of appropriateness as the face of the company for the Black target with Afrocentric hairstyles ($M_{High\ SDO} = 3.88$; $M_{Low\ SDO} = 4.87$).

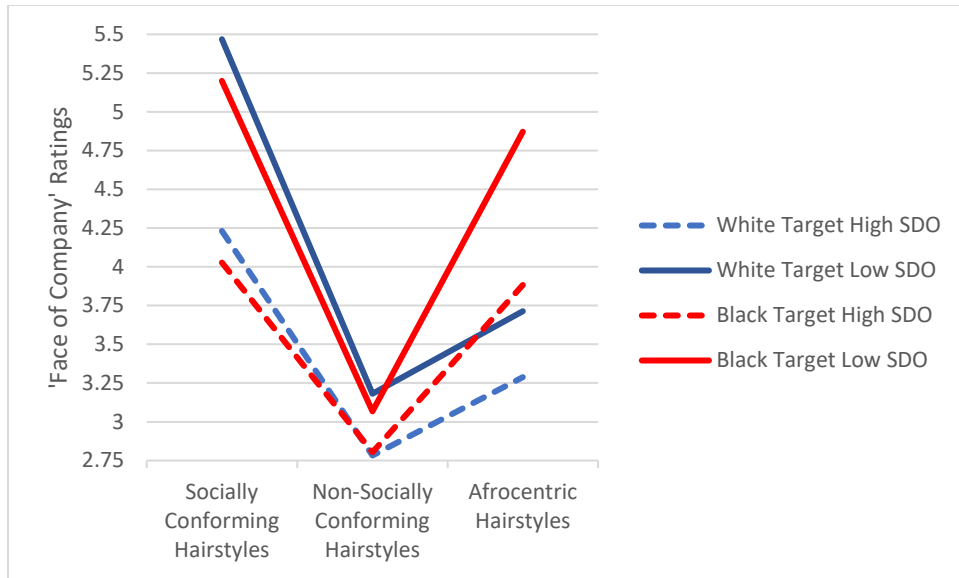


Figure 19. SDO as a moderator of effects of race and hairstyles on ‘face of company’ ratings

3.2.1.5.1.2 RWA

A 2-by-3 within-subjects ANCOVA revealed a significant three-way interaction between hairstyle category, target race, and RWA, $F(2, 1048) = 4.84, p = .008, \eta_p^2 = 0.009$ on appropriateness as the face of the company. We calculated values (plotted in Figure 20) for a high and low level of RWA using regression coefficients to examine this interaction further. Our third hypothesis was that hypothesis 1 and 2 would be especially evident for those high in prejudice, in this case, those high in RWA. At both high and low levels of RWA, the predicted difference between the Black target with socially conforming hairstyles and the Black target with Afrocentric hairstyles was supported, with the Black target with socially conforming hairstyles rated as more appropriate as the face of the company than the Black target with Afrocentric hairstyles (high RWA - $M_{SB} = 4.15; M_{AB} = 3.92$; low RWA - $M_{SB} = 5.07; M_{AB} = 4.84$). In addition, at both high and low levels of RWA, the difference between the Black target with Afrocentric hairstyles and the White target with non-socially conforming hairstyles was in the opposite direction to what we predicted, with the White target with non-socially conforming hairstyles rated as less appropriate as the face of the company than the Black target with Afrocentric hairstyles (high RWA - $M_{NW} = 2.68; M_{AB} = 3.92$; low RWA - $M_{NW} = 3.28; M_{AB} = 4.84$). While the

predicted difference between the Black target with Afrocentric hairstyles and the Black target with socially conforming hairstyles was supported at both levels of RWA, the predicted difference between the Black target with Afrocentric hairstyles and the White target with non-socially conforming hairstyles was not supported at both levels of RWA. Thus, our third hypothesis, that predicted effects would be especially evident at high levels of RWA, was not supported.

While not predicted, it is of interest to note that the Black target with non-socially conforming hairstyles was rated less appropriate as the face of the company than the White target with non-socially conforming hairstyles at a low level of RWA ($M_{NB} = 3.13$; $M_{NW} = 3.28$) but rated more appropriate as the face of the company at a high level of RWA ($M_{NB} = 2.75$; $M_{NW} = 2.68$).

These predicted values also showed that a high level of RWA, compared to a low level of RWA, was associated with a lower rating of appropriateness as the face of the company for the Black target with Afrocentric hairstyles ($M_{High\ RWA} = 3.92$; $M_{Low\ RWA} = 4.84$).

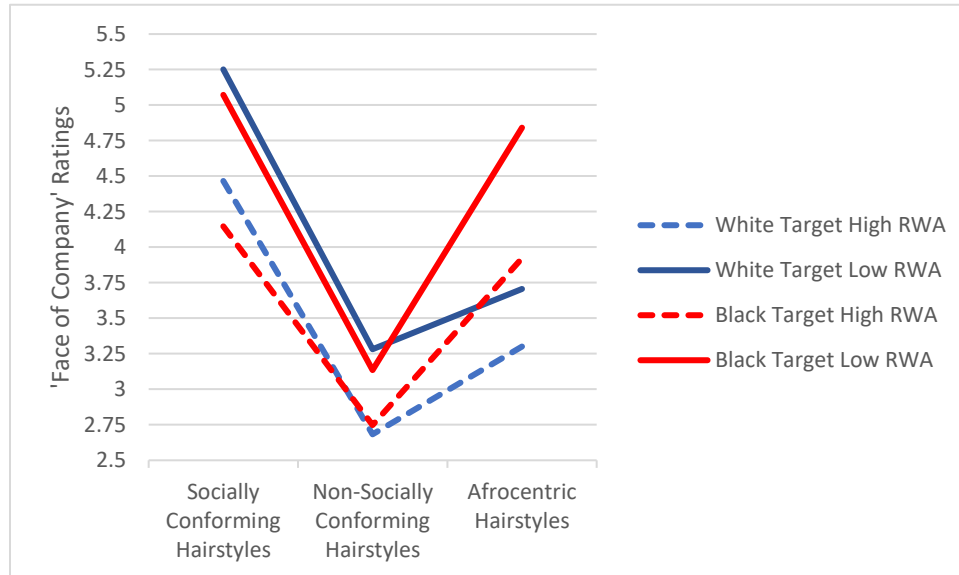


Figure 20. RWA as a moderator of effects of race and hairstyles on ‘face of company’ ratings

3.2.1.5.1.3 *Internal Attributions for Inequality*

A 2-by-3 within-subjects ANCOVA revealed a significant three-way interaction between hairstyle category, target race, and Internal Attributions for Inequality, $F(2, 1045) = 7.52, p = .001, \eta_p^2 = 0.014$. on appropriateness as the face of the company. We calculated values (plotted in Figure 21) for a high and low level of Internal Attributions for Inequality using regression coefficients to examine this interaction further. Our third hypothesis was that hypothesis 1 and 2 would be especially evident for those high in prejudice, in this case, those high in Internal Attributions for Inequality. At both high and low levels of Internal Attributions for Inequality, the predicted difference between the Black target with socially conforming hairstyles and the Black target with Afrocentric hairstyles was supported, with the Black target with socially conforming hairstyles rated as more appropriate as the face of the company than the Black target with Afrocentric hairstyles (high Internal Attributions for Inequality - $M_{SB} = 3.90; M_{AB} = 3.72$; low Internal Attributions for Inequality - $M_{SB} = 5.33; M_{AB} = 5.04$). In addition, at both high and low levels of Internal Attributions for Inequality, the difference between the Black target with Afrocentric hairstyles and the White target with non-socially conforming hairstyles was in the opposite direction to what we predicted, with the White target with non-socially conforming hairstyles rated as less appropriate as the face of the company than the Black target with Afrocentric hairstyles (high Internal Attributions for Inequality - $M_{NW} = 2.75; M_{AB} = 3.72$; low Internal Attributions for Inequality - $M_{NW} = 3.21; M_{AB} = 5.04$). While the predicted difference between the Black target with Afrocentric hairstyles and the Black target with socially conforming hairstyles was supported at both levels of Internal Attributions for Inequality, the predicted difference between the Black target with Afrocentric hairstyles and the White target with non-socially conforming hairstyles was not supported at both levels of Internal Attributions for Inequality. Thus, our third hypothesis, that predicted effects would be especially evident at high levels of Internal Attributions for Inequality, was not supported.

While not predicted, our results indicated that the White target with non-socially conforming hairstyles was rated more appropriate as the face of the company than the Black target with non-socially conforming hairstyles at a high level of Internal

Attributions for Inequality ($M_{NW} = 2.75$; $M_{NB} = 2.69$); at low Internal Attributions for Inequality, there was no difference evident between the two conditions ($M_{NW} = 3.21$; $M_{NB} = 3.20$).

These predicted values also showed that a high level of Internal Attributions for Inequality, compared to a low level of Internal Attributions for Inequality, was associated with a lower rating of appropriateness as the face of the company for the Black target with Afrocentric hairstyles ($M_{High\ Internal} = 3.72$; $M_{Low\ Internal} = 5.04$).

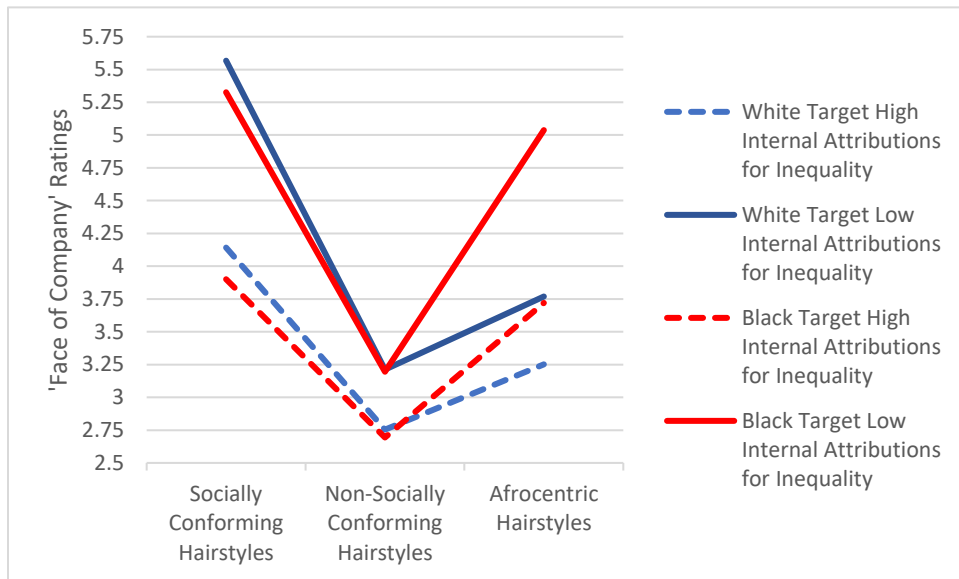


Figure 21. Internal attributions for inequality as a moderator of effects of race and hairstyles on ‘face of company’ ratings

3.3 Discussion

Overall results from the main study indicate that one’s race and hairstyle can influence how one is judged by others. For our first hypothesis, the Black target with socially conforming hairstyles was only rated significantly higher than the Black target with Afrocentric hairstyles for the measures of ‘Professional’, ‘VP’ and ‘Face of Company’, all measures related to workplace fit. However, this effect was not evident on ratings of competence, which is also related to achievements in the workplace. The second hypothesis, that the Black target with Afrocentric hairstyles would be rated lower than the

White target with non-socially conforming hairstyles, was not confirmed on any measures. Our ANCOVA results revealed that for the most part, the predicted effects of hairstyle and race were not moderated by the prejudice variables as findings across the ANOVA and ANCOVA remained similar. In other words, our first hypothesis was supported at both levels of the prejudice-related variables on the measures of ‘Professional’, ‘VP’ and ‘Face of Company’ while our second hypothesis was not supported at either level of the prejudice-related variables for any measure. Therefore, our third hypothesis, that the predicted effects would be especially evident at high levels of prejudice, was not supported on any of the measures. However we did find that a high level of prejudice generally resulted in less favorable ratings of the Black target with Afrocentric hairstyles than a low level of prejudice. We discuss our findings in more detail below.

3.3.1 Effects of Race and Hairstyle on Perceptions of Targets

3.3.1.1 Warmth and Competence

Contrary to the first hypothesis, the difference between the Black target with Afrocentric hairstyles and the Black target with socially conforming hairstyles was non-significant for the measures of warmth and competence. This finding was not anticipated and is counterintuitive to what previous research would suggest. Past research found that braids are associated with criminality and gangs (Hofschire & Greenberg, 2002) and Black women with natural hair are seen as lacking morals (Hargro, 2011; Johnson & Bankhead, 2014). We therefore would expect that for the measures of warmth and competence, which measure one’s intent to cause harm and one’s ability to carrying out said harm, the Black target with Afrocentric hairstyles would be rated less positively than the Black target with socially conforming hairstyles. However, our results suggest that this is not the case.

Although we did not create cutoffs for what constituted low and high levels of warmth and competence, we can understand these ratings in a relative sense. According to Fiske et al. (2002), the associated emotional reaction for those rated high in both warmth and competence is one of admiration. Comparing the two conditions for the second

hypothesis, the Black target with Afrocentric hairstyles was rated significantly higher in both warmth and competence than the White target with non-socially conforming hairstyles. This suggests that more admiration would be expressed for the Black target with Afrocentric hairstyles than the White target with non-socially conforming hairstyles. Admiration for the Black target with Afrocentric hairstyle was unexpected. Based on the pilot study results, we had suggested that the White target with non-socially conforming hairstyles may have been rated lower because of her apparent mood and because the non-socially conforming hairstyles were too salient. While we adjusted the mood of the two targets in the main study, we did not change the very salient hairstyles in the non-socially conforming category. It is therefore possible that the non-socially conforming hairstyles were too salient to be rated more favorably than the Afrocentric hairstyles, even if participants would have been able to express their bias. This follows Barth and Wagner's (2017) work that states that the more one's physical appearance deviates from the norm, the more negativity one faces.

Looking at the differences between the Black and White targets when both had socially conforming and non-socially conforming hairstyles, it was interesting to find that the Black target was rated lower than the White target on both warmth and competence measures. This suggests a possible presence of prejudice against Black women that is freely expressed without a need for justification, considering that they had the same hairstyles. Interestingly, when both targets had Afrocentric hairstyles, the Black target was rated significantly higher on the competence measure; the difference for the warmth measure was non-significant.

3.3.1.2 Professional, VP and Face of Company

Unlike the warmth and competence measures, the Black target with socially conforming hairstyles was rated significantly more professional looking, more appropriate as a VP and more appropriate as the face of the company than the Black target with Afrocentric hairstyles. This supports past studies that have also reported that Afrocentric hairstyles are rated as less professional than straight hair (Johnson et al., 2017; Opie & Phillips, 2015) and therefore less appropriate in the workplace (Abdullah, 1998; Badillo, 2001;

Byrd & Tharps, 2002; Johnson et al., 2017; Opie & Phillips, 2015; Patton, 2006; Rock & Stilson, 2009; Rosado, 2003; Thompson, 2009). This also coincides with the Black women who have indicated being more likely to wear a straight hairstyle in a professional setting (Johnson et al., 2017) in order to secure employment as well as to be accepted and rewarded in the corporate world (Awad et al., 2015; Bellinger, 2007; Byrd & Tharps, 2002; Opie and Phillips, 2015; Padgett, 2007; Patton, 2006; Thompson, 2009). Therefore, there seems to be a consensus that when comparing Black women who wear straight hairstyles to Black women who wear Afrocentric hairstyles, the latter do not fit the Western norm of professionalism.

Mirroring the findings for the measures of warmth and competence, the Black target with Afrocentric hairstyles was rated as significantly more professional looking, more appropriate as a VP and more appropriate as the face of the company compared to the White target with non-socially conforming hairstyles. Although this finding did not confirm our hypothesis, we once again attribute this to the salience of the non-conforming hairstyles. While past research has stated that Afrocentric hairstyles do not conform to social standards of professionalism (see Byrd & Tharps, 2002), the hairstyles we used are more commonplace in society and in the workplace than the non-socially conforming styles we used. According to Barth and Wagner (2017), not following social norms can result in a backlash from society, with more deviation from social norms resulting in greater backlash, especially within the workplace. This shows that although both hairstyle categories can be said to violate normative workplace dress codes, the Black target with Afrocentric hairstyles was perceived to be less of a violation. Alternatively, taken together, the results for these measures may indicate a lack of bias against Afrocentric hairstyles in the United States today.

The White target was considered more professional looking, more appropriate as a VP and as the face of the company than the Black target when both had socially conforming hairstyles. When both targets had non-socially conforming hairstyles, the White target was considered more professional looking than the Black target; the difference between for the measures of appropriateness as a VP and as the face of the company was non-significant. This means that the possibility of a racial bias against Black women being

freely expressed was supported only for socially conforming hairstyles and on ratings of how professional the target looked when both White and Black women had non-socially conforming hairstyles. In addition to these findings, results indicated that the Black target with Afrocentric hairstyles was perceived as more professional looking, more appropriate as a VP and more appropriate as the face of the company compared to the White target with Afrocentric hairstyles. These findings may be attributable to the fact that Afrocentric hairstyles may be seen as more natural for Black women than White women and thus Black women with these hairstyles were perceived more favorably.

3.3.2 Moderated Effects of Race and Hairstyle on Perceptions of Target

3.3.2.1 SDO

SDO was measured in our study in order to test whether it moderated hypothesis 1 and 2, with the hypothesis that a high level of SDO would result in especially low ratings of the Black target with Afrocentric hairstyles (hypothesis 3). SDO measures preference for the production and reproduction of social inequality (Pratto, Sidanius, Stallworth, & Malle, 1994) and has been shown to predict generalized prejudice (Ho et al., 2015); thus, it follows that a high level of SDO should result in less positive ratings of the Black target with Afrocentric hairstyles as this falls in line with reproducing the inequality which prior research states that Black women with Afrocentric hairstyles face (see Byrd & Tharps, 2002).

There was a significant three-way interaction between target race, hairstyle category and SDO on ratings of targets' warmth, competence, how professional the target looked, and whether the target looked appropriate as the face of the company. However, in no case was hypothesis 3 supported. While our results showed that the Black target with Afrocentric hairstyles was perceived as less professional looking and less appropriate as the face of the company than the Black target with socially conforming hairstyles at both higher and lower levels of SDO, the difference in ratings between these two conditions was smaller among higher SDO individuals than among lower SDO individuals. For the rating of warmth, there was no difference evident between the Black target with

Afrocentric hairstyles and the Black target with socially conforming hairstyles at both a higher and lower level of SDO. For the rating of competence, the Black target with Afrocentric hairstyles was perceived to be more competent than the Black target with socially conforming hairstyles at a lower level of SDO; at a higher level, there was no difference evident between the two conditions. In addition, at both levels of SDO, the Black target with Afrocentric hairstyles was rated warmer, more competent, more professional looking and more appropriate as the face of the company in comparison to the White target with non-socially conforming hairstyles.

Taken together, these results show that SDO, a measure used to predict generalized prejudice and support for social inequality, does not consistently moderate perceptions of targets' race and hairstyle in the direction predicted in hypothesis 3. Indeed, a lower level of SDO, which reflects lower endorsement of social hierarchies, resulted in more discrepancies between the Black target with Afrocentric hairstyles and the Black target with socially conforming hairstyles, on how professional the target looked.

While not predicted, results indicated that the White target with socially conforming hairstyles was perceived as warmer than the Black target with socially conforming hairstyles at a high level of SDO; there was a negligible difference between these two conditions at a low level of SDO. Also, for the measure of warmth, the Black target with Afrocentric hairstyles was perceived as warmer than the White target with Afrocentric hairstyles at a high level of SDO; there was negligible difference between these two conditions at a low level of SDO. For the measure of whether the targets looked appropriate as the face of the company, the White target with non-socially conforming hairstyles was perceived as more appropriate as the face of the company than the Black target with non-socially conforming hairstyles at a low level of SDO; there was a negligible difference between these two conditions at a high level of SDO.

While these results point us to some evidence that SDO moderates effects of targets' race and hairstyles, the results do not reliably demonstrate that high SDO leads to more bias against Black women with Afrocentric hairstyles.

3.3.2.2 RWA

RWA was measured in our study in order to test whether it moderated hypothesis 1 and 2, with the hypothesis that a high level of RWA would result in particularly low ratings of the Black target with Afrocentric hairstyles (hypothesis 3). RWA measures generalized prejudice as well as one's preference for social control via a variety of authority figures (Altemeyer, 1981). When looking at the relationship between social conformity and RWA, individuals high in RWA are likely to support social conformity and to be against diversity and individual freedoms (Feldman, 2003). It therefore follows that the Black target with Afrocentric hairstyles, which prior research has described as not following social norms of beauty and social norms of professionalism (see Byrd & Tharps, 2002), would be rated less positively at a high level of RWA.

There was a significant three-way interaction between target race, hairstyle category and RWA on ratings of targets' warmth, how professional the target looked and whether the target looked appropriate as the face of the company. However, there was no conclusive support for our third hypothesis. Our results showed that the Black target with Afrocentric hairstyles was perceived as less professional looking and less appropriate as the face of the company than the Black target with socially conforming hairstyles at both higher and lower levels of RWA. In terms of how professional the target looked, the difference in ratings between the Black target with Afrocentric hairstyles and the Black target with socially conforming hairstyles was greater among higher RWA individuals than among lower RWA individuals. For the rating of appropriateness as the face of the company, there was no difference evident in ratings between the Black target with Afrocentric hairstyles and the Black target with socially conforming hairstyles among higher RWA individuals and among lower RWA individuals. For the rating of warmth, the Black target with Afrocentric hairstyles was rated warmer than the Black target with socially conforming hairstyles at a lower level of RWA; at a higher level, there was no difference evident between the two conditions. In addition, at both levels of RWA, the Black target with Afrocentric hairstyles was rated warmer, more professional looking and more appropriate as the face of the company in comparison to the White target with non-socially conforming hairstyles.

Taken together, these results show that RWA, a measure used to predict generalized prejudice as well as support for social control via authority, does not consistently moderate perceptions of targets' race and hairstyle in the direction predicted in hypothesis 3. A higher level of RWA, which reflects support for social conformity, only resulted in more discrepancies between the Black target with Afrocentric hairstyles and the Black target with socially conforming hairstyles for ratings of how professional the target looked. For ratings of appropriateness as the face of the company, the discrepancies between these two conditions did not differ.

While not predicted, results indicated that the White target with socially conforming hairstyles was rated warmer than the Black target with socially conforming hairstyles at a high level of RWA; at low RWA, there was a negligible difference between these two conditions. Also, the Black target with non-socially conforming hairstyles was perceived to be more appropriate as the face of the company than the White target with non-socially conforming hairstyles at a high level of RWA; at low RWA, the opposite was found, with the White target being rated as more appropriate as the face of the company compared to the Black target. While these results point us to some evidence that RWA moderates effects of targets' race and hairstyles, the results do not reliably demonstrate that high RWA leads to more bias against Black women with Afrocentric hairstyles.

3.3.2.3 Symbolic Racism

Symbolic Racism was measured in our study in order to test whether it moderated hypothesis 1 and 2, with the hypothesis that a high level of Symbolic Racism would result in particularly low ratings of the Black target with Afrocentric hairstyles (hypothesis 3). Symbolic Racism refers to the notion that Blacks are no longer discriminated against, do not work hard enough, are too demanding and have received more than they deserve (Sears & Henry, 2003). Thus, a high level of Symbolic Racism, in other words prejudice against Blacks, should result in less positive ratings of the Black target with Afrocentric hairstyles.

There was a significant three-way interaction between target race, hairstyle category and Symbolic Racism on ratings of how professional the target looked. However, there was

no conclusive support for our third hypothesis. Our results showed that the Black target with Afrocentric hairstyles was perceived as less professional looking at both higher and lower levels of Symbolic Racism and the difference in ratings between these two conditions was greater at a high level of Symbolic Racism than at a low level of Symbolic Racism. Additionally, at both levels of Symbolic Racism, the Black target with Afrocentric hairstyles was rated more professional looking in comparison to the White target with non-socially conforming hairstyles.

Taken together, these results show that Symbolic Racism, a measure of negative affect towards Black individuals, does not consistently moderate perceptions of targets' race and hairstyle in the direction predicted in hypothesis 3. While our third hypothesis was supported for differences between the Black target with Afrocentric hairstyles and the Black target with socially conforming hairstyles, it was not supported for differences between the Black target with Afrocentric hairstyles and the White target with non-socially conforming hairstyles.

3.3.2.4 Internal Attributions for Inequality

Internal Attributions for Inequality was measured in our study in order to test whether it moderated hypothesis 1 and 2, with the hypothesis that a high level of Internal Attributions for Inequality would result in especially low ratings of the Black target with Afrocentric hairstyles (hypothesis 3). Internal Attributions for Inequality in our study measured how much individuals attribute the social inequality that Blacks face to internal factors. Therefore, a high level of Internal Attributions for Inequality, which reflects attributing more internal factors to Black peoples' disadvantaged position, should result in less positive ratings of the Black target with Afrocentric hairstyles.

There was a significant three-way interaction between target race, hairstyle category and Internal Attributions for Inequality on ratings of targets' warmth, competence, how professional the target looked, whether the target looked appropriate as the face of the company, and whether the target looked appropriate as a VP. However, in no case was hypothesis 3 supported. Our results showed that the Black target with Afrocentric hairstyles was perceived as less professional looking, less appropriate as the face of the

company and less appropriate as a VP than the Black target with socially conforming hairstyles at both higher and lower levels of Internal Attributions for Inequality. For the rating of how professional the target looked, there was no difference evident in ratings between the Black target with Afrocentric hairstyles and the Black target with socially conforming hairstyles at higher levels of Internal Attributions for Inequality and lower levels of Internal Attributions for Inequality. In terms of appropriateness as the face of the company and appropriateness as a VP, the difference in ratings between the Black target with Afrocentric hairstyles and the Black target with socially conforming hairstyles was smaller at higher levels of Internal Attributions for Inequality than at lower levels of Internal Attributions for Inequality.

For the rating of warmth, the Black target with Afrocentric hairstyles was perceived to be warmer than the Black target with socially conforming hairstyles at a lower level of Internal Attributions for Inequality; at a higher level, there was no difference evident between the two conditions. For the rating of competence, the Black target with Afrocentric hairstyles was perceived to be more competent than the Black target with socially conforming hairstyles at a lower level of Internal Attributions for Inequality; at a higher level, the Black target with Afrocentric hairstyles was perceived to be less competent than the Black target with socially conforming hairstyles. In addition, at both levels of Internal Attributions for Inequality, the Black target with Afrocentric hairstyles was rated warmer, more competent, more professional looking, more appropriate as the face of the company and more appropriate as a VP in comparison to the White target with non-socially conforming hairstyles.

Taken together, these results show that Internal Attributions for Inequality, a measure used to assess how much individuals attribute the social inequality that Blacks face to internal factors, does not consistently moderate perceptions of targets' race and hairstyle in the direction predicted in hypothesis 3. Our third hypothesis was only supported for differences between the Black target with Afrocentric hairstyles and the Black target with socially conforming hairstyles on the measure of competence. Indeed, a lower level of Internal Attributions for Inequality, which reflects attributing less internal factors to social inequality, resulted in more discrepancies between the Black target with

Afrocentric hairstyles and the Black target with socially conforming hairstyles on ratings of appropriateness as the face of the company and as a VP.

While not predicted, results indicated that the White target with socially conforming hairstyles was rated warmer than the Black target with socially conforming hairstyles at a high level of Internal Attributions for Inequality; at low Internal Attributions for Inequality, there was a negligible difference between these two conditions. Also, for the measure of warmth, the White target with Afrocentric hairstyles was rated warmer than the Black target with Afrocentric hairstyles at a high level of Internal Attributions for Inequality; at low Internal Attributions for Inequality, the opposite was found, with the Black target being rated warmer than the White target. For the measure of competence, the Black target with Afrocentric hairstyles was rated more competent than the White target with Afrocentric hairstyles at a low level of Internal Attributions for Inequality; at high Internal Attributions for Inequality, there was a negligible difference between these two conditions. Results also indicated that the Black target with non-socially conforming hairstyles was rated more appropriate as a VP than the White target with non-socially conforming hairstyles at a low level of Internal Attributions for Inequality; at high Internal Attributions for Inequality, there was a negligible difference between these two conditions. For the measure of appropriateness as the face of the company, the White target with non-socially conforming hairstyles was perceived to be more appropriate as the face of the company than the Black target with non-socially conforming hairstyles at a high level of Internal Attributions for Inequality; at low Internal Attributions for Inequality, there was a negligible difference between these two conditions.

While these results point us to some evidence that Internal Attributions for Inequality moderates effects of targets' race and hairstyles, the results do not reliably demonstrate that high Internal Attributions for Inequality leads to more bias against Black women with Afrocentric hairstyles.

4 Chapter Four: General Discussion

4.1 Main Findings

The current research was conducted to examine the mechanism underlying the negative treatment of Black women with Afrocentric hairstyles in the workplace, with the possibility of the justification-suppression model of prejudice explaining this negative treatment. Before discussing how this model fits within our findings, we will briefly summarize the overall results of both the pilot and main study. We refer to the measures directly related to the targets' fit for the job as the Job Fit Measures (Professional, VP and Face of Company) while all other measures, which are general measures of the perceptions of targets, will be referred to as the Perception Measures.

Our first hypothesis was that the Black target with Afrocentric hairstyles would be rated less positively than the Black target with socially conforming hairstyles, particularly on the Job Fit Measures. Our results indicated that there was mixed support for this hypothesis in the pilot study, with the most support evident on the Job Fit Measures than the Perception Measures. For the main study, this hypothesis was confirmed only on the Job Fit Measures. These effects tended to occur at both higher and lower levels of the personality and prejudice moderators.

For our second hypothesis, we stated that the Black target with Afrocentric hairstyles would be rated less positively than the White target with non-socially conforming hairstyles, particularly on the Job Fit Measures. This hypothesis was not confirmed in the pilot study or main study. In general, the Black target with Afrocentric hairstyles was rated more positively than the White target with non-socially conforming hairstyles. Testing for moderation by personality and prejudice also did not provide support for this second hypothesis.

Our third hypothesis was that hypothesis 1 and 2 would be moderated by individual differences in prejudice-related variables, with individuals higher in prejudice particularly likely to express bias against the Black target with Afrocentric hairstyles. Overall, we did not find conclusive support for this third hypothesis. While our first hypothesis was

supported at both high and low levels for our prejudice-related variables on most measures, we did not find that high levels of prejudice resulted in more denigration of the Black target with Afrocentric hairstyles. Our second hypothesis was not supported at both high and low levels of our prejudice-related variables on all measures; therefore, we did not find that high levels of prejudice resulted in more denigration of the Black target with Afrocentric hairstyles.

Although we did not have a hypothesis about these conditions, we were able to test the difference in ratings between the Black and White target when both had socially conforming hairstyles. In the pilot study, we generally found that the Black target with socially conforming hairstyles was rated more positively than the White target with socially conforming hairstyles. The differences in the main study were also significant but unlike the pilot study, the Black target with socially conforming hairstyles was rated less positively than the White target with socially conforming hairstyles. These effects tended to occur at both higher and lower levels of the personality and prejudice moderators.

Due to the balanced design of the main study, we were also able to test the differences between the Black and White target when both had non-socially conforming hairstyles as well as when both had Afrocentric hairstyles. Results revealed that on many of the measures, the White target with non-socially conforming hairstyles was rated more positively than the Black target with non-socially conforming hairstyles. For Afrocentric hairstyles, the Black target was rated more positively than the White target on most measures. Once again, these effects tended to occur at both higher and lower levels of the prejudice moderators.

4.2 Justification-Suppression Model of Prejudice

The justification-suppression model of prejudice was the basis of our hypotheses about how Black women with Afrocentric hairstyles are treated in the workplace. Crandall and Eshleman's (2003) justification-suppression model of prejudice theorizes that individuals who hold prejudicial views but are unable to express such views must suppress them. In order for these individuals to express their prejudicial and true feelings, they look for

socially acceptable ways to justify their prejudice which in turn allows them to express such views (Crandall & Eshleman, 2003).

Opie and Phillips (2015) have suggested that the negative ratings of Afrocentric hairstyles on Black women may be because having an Afrocentric hairstyle makes one's race more salient, subsequently activating negative stereotypes about Black people (Maddox, 2014). We suggested that the negative treatment of Afrocentric hairstyles on Black women is related to bias against Black women that is already activated. Within our study, the question was whether claiming that Afrocentric hairstyles are unprofessional has less to do with professionalism and more to do with a justification for discrimination against Blacks in the workplace. In other words, we wanted to test the idea that the labelling of Afrocentric hairstyles as unprofessional is a means of justifying discrimination against Blacks. Thus, we hypothesized that in a workplace context, a Black target with Afrocentric hairstyles would be rated less favorably than both a Black target with socially conforming hairstyles and a White target with non-socially conforming hairstyles, particularly on Job Fit Measures. Finding support for these hypotheses would suggest a release of prejudice against Blacks when it could be attributed to the "unprofessional nature" of Afrocentric hairstyles.

For most measures in both the pilot and main studies, particularly on Job Fit Measures, the Black target with Afrocentric hairstyles was rated significantly less favorably than the Black target with socially conforming hairstyles. Hypothesis 2 was designed to isolate whether there was a bias against Afrocentric hairstyles on Blacks when it was being compared to non-socially conforming hairstyles on Whites, which can be clearly seen as not following formal and professional dress codes. In both the pilot study and main study, we failed to find support for this hypothesis as the Black target with Afrocentric hairstyles was rated more positively than the White target with non-socially conforming hairstyles on almost all measures. We suspect that this finding was due to the non-socially conforming hairstyles being particularly salient. Although both Afrocentric and non-socially conforming hairstyles are regarded as not following social norms, the non-socially conforming hairstyles that we used were more salient and uncommon than the Afrocentric hairstyles we used. This view is supported by the finding that the Black target

with Afrocentric hairstyles was rated more positively than the Black target with non-socially conforming hairstyles.

When we examined moderation by prejudice-related variables, we did not find additional support for the justification-suppression model of prejudice. For the Job Fit Measures, the Black target with Afrocentric hairstyles was rated less favorably than the Black target with socially conforming hairstyles at both high and low levels of prejudice-related variables. For all measures in the main study, the Black target with Afrocentric hairstyles was rated more favorably than the White target with non-socially conforming at both high and low levels of prejudice-related variables. In other words, there was no prejudice variable found to consistently moderate the effects and therefore, there was a lack of support in finding that individuals who suppress their prejudice against Black women in the workplace express and justify said prejudice when Black women wear Afrocentric hairstyles.

Although we were not able to definitively support the justification of prejudice against Blacks with Afrocentric hairstyles, we did find some additional evidence of prejudice against Black women.

The designs of our studies allowed us to make other comparisons between conditions beyond those that formed our main hypotheses. In the pilot study, the Black target with socially conforming hairstyles was consistently rated more positively than the White target with socially conforming hairstyles. A possible difference between the Black target and the White target that we used in the pilot study was their apparent mood. When we used more similar moods for the targets in the main study, we found that the White target with socially conforming hairstyles was consistently rated more positively than the Black target with socially conforming hairstyles on all measures. The main study also allowed us to make comparisons between non-socially conforming hairstyles and Afrocentric hairstyles on both target races. For non-socially conforming hairstyles, the White target was again generally rated more positively than the Black target.

Therefore, with the only difference for both socially and non-socially conforming hairstyles categories being the target's race, we can reason that racial prejudice may

explain the difference. In terms of the justification-suppression model of prejudice (Crandall & Eshleman, 2003), it seems that in these two conditions, prejudice was not suppressed but instead was freely expressed, irrespective of the justification available. That is, an Afrocentric hairstyle was not needed as a justification to express prejudice. However, for the Black and White targets with Afrocentric hairstyles, the Black target was rated more positively than the White target. This may be attributable to the Afrocentric hairstyles making race particularly salient (Maddox, 2014), so that participants bent over backwards to avoid appearing biased against the Black target and their biases were therefore suppressed (Crandall & Eshleman, 2003).

Taken together, these findings point to the possibility that individuals hold genuine negative feelings against Black women, evidenced by the less favorable ratings the Black target received compared to the White target when both had socially conforming hairstyles and non-socially conforming hairstyles. In certain conditions where their prejudice would be too obvious, participants are forced to suppress these feelings. This was shown when participants within our study rated the Black target with Afrocentric hairstyles more favorably than the White target with Afrocentric hairstyles.

4.3 Limitations and Future Directions

Due to some constraints in terms of money and time, our current study had some limitations. We decided on a within-subjects design in order to keep monetary costs as low as possible. A within-subjects design allowed us to maximize the number of participants in the main study. Using a between-participants design would have required more participants so that we could have enough participants in each condition (four conditions in the pilot study and six conditions in the main study). Because of the within-subjects design, we were also only able to show each participant a limited number of pictures. In the pilot study, each participant was presented with twelve pictures while in the main study each participant was presented with six pictures. This kept the study as short as possible so that it did not become monotonous and so that participants did not become fully aware of the purpose of the research. By using this design, one limitation was that we were unable to explore a large variety of hairstyles in each hairstyle category.

In order to assert more control over the stimuli, we chose to use only one target face per target race category. Therefore, another limitation was that we were unable to introduce a variety of faces for each target race. Having more hairstyles and more faces would have allowed us to better isolate the source of bias and differences in perceptions. However, being one of the first studies to experimentally investigate the effects of hairstyles and race, we felt it necessary to keep the design simple while working within feasibility constraints.

To further study how Black women with Afrocentric hairstyles are treated within the workplace, we suggest a study that would overcome the limitations of the current study. Because various studies have shown that Black women with Afrocentric hairstyles are judged more negatively than Black women with socially conforming, straight hairstyles within the general public, one must study this same phenomenon within those who have a say in who is welcomed into the workplace, hiring managers. A 2-by-3-by-3 between-subjects design that conceptually replicates the current study with a variety of faces within each target race and a variety of hairstyles within each hairstyle category administered to various hiring managers would provide data on whether our findings carry over to individuals who are in charge of making the decision on who to hire. This three-way design would include the two factors we used (target race by hairstyle category) with the addition of candidate profiles/résumés. For this factor, the levels would be a brief profile and résumé of an underqualified, satisfactorily qualified and an overqualified candidate. Additionally, at the end of the survey, participants would be asked “Will you hire this candidate?” to assess how their judgements impact their actions. Another issue from our current study that can be addressed in future studies would be to use less salient non-socially conforming hairstyles. While non-socially conforming hairstyles inherently require some salience, our results indicated that the non-socially conforming hairstyles used in our study may have been too salient within the given context. In order to control for the salience of the hairstyles, the proposed future study would use more nuanced hairstyles that simultaneously do not follow the Western ideals of beautiful hair.

Our proposal to study this topic further would also include exploring the effects of job type and class. This can be approached by conducting a qualitative study that allows us to ask hiring managers to elaborate further on their hiring decisions of Black women with Afrocentric hairstyles. Such a study design would allow us to gather more in-depth analysis of how the type of job (blue collar versus white collar) interacts with a candidate's race and hairstyle.

4.4 Conclusion

From AirFrance to Six Flags to FedEx, Black women have been discriminated against in terms of how they choose to style their hair at work (Dossou, 2013). As Dossou (2013) stated, wearing one's hair naturally is seen as a rejection of society's ideals of beauty. We add that wearing one's hair naturally may be seen as a rejection of society's ideals of professionalism, which Black women are subsequently punished for within the workplace. It has been argued that Black women who wear their natural hair or other Afrocentric hairstyles within the workplace are being punished in the same way that anyone who does not follow Western standards of professionalism are punished. We therefore set out to test whether Afrocentric hairstyles are used as a justification for the expression of discrimination against Black women in the workplace.

We found evidence that Black women with Afrocentric hairstyles are perceived more negatively than Black women with socially conforming hairstyles on measures related to workplace appearance. However, we did not find evidence that Black women with Afrocentric hairstyles are perceived more negatively than White women with non-socially conforming hairstyles. As a result, we are unable to definitively conclude that Black women with Afrocentric hairstyles are the targets of bias in the workplace because their hairstyle can be used as a justification for the expression of this bias. We also did not find support for our prediction that higher levels of prejudice would result in particularly lower ratings of the Black target with Afrocentric hairstyles.

Nonetheless, our results suggest that Afrocentric hairstyles are regarded as less professional than socially conforming hairstyles. While the justification-suppression model of prejudice was used to test whether a suppressed bias against Black women in

the workplace is justified with claims of Afrocentric hairstyles being unprofessional, our results point to a potential racialized bias against Black women overall that is freely expressed without any justification. This potential racialized bias against Black women was found at both higher and lower levels of prejudice-related variables. However, further research is needed to isolate when prejudice toward Black women will be suppressed and when it will be expressed in the workplace, particularly on the basis of appearance-related factors other than race per se and related factors such as presumed country of origin. For example, we would be interested in applying the justification-suppression model of prejudice to how Black women with non-Western accents are treated within the workplace, compared to Black women with Western accents. In this way, a more nuanced understanding of the factors influencing the treatment of Black women in the workplace would be achieved.

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Appendices

Appendix A: Pilot Study Questionnaire

Target Stimuli Prompt and Questions

TeleWorld is a fast-growing multi-billion-dollar company that had a net income of \$30 billion last year. Their current VP of Customer Relations is retiring, and the company is looking to hire a replacement. Imagine you are on the board of directors and you have asked to give your opinion on who to hire and the following task is given to you:

You will be presented a series of questions with statements underneath each picture. Please indicated how strongly you agree with or disagree with the statements.

1. This individual looks professional.
2. This individual put in effort and time to look this way.
3. I believe that this individual looks like she is trying to make a political statement.*
4. I would not want to approach someone who looks like this.*
5. It would be inappropriate for a VP to look like this *
6. This individual looks untrustworthy.*
7. This individual would not be appropriate as the face of the company.*
8. I would describe this individual as friendly.
9. This individual cares about making a good first impression.

* reverse scored

Strongly Disagree	Moderately Disagree	Slightly Disagree	Neither agree nor disagree	Slightly Agree	Moderately Agree	Strongly Agree
1	2	3	4	5	6	7

Big-5 Personality Questions

The following questions are intended to assess how you self-report your personality. Please indicate how strongly you agree or disagree with the following statements.

I see myself as someone who ...

- ... is original, comes up with new ideas (O)
- ... values artistic, aesthetic experiences (O)
- ... has an active imagination (O)
- ... does a thorough job (C)
- ... tends to be lazy * (C)
- ... does things efficiently (C)
- ... is talkative (E)
- ... is outgoing, sociable (E)
- ... is reserved * (E)
- ... is sometimes rude to others * (A)
- ... has a forgiving nature (A)
- ... is considerate and kind to almost everyone (A)
- ... worries a lot (N)
- ... gets nervous easily (N)
- ... remains calm in tense situations * (N)

* reverse scored

O – Openness to Experience; C – Conscientiousness; E – Extraversion; A – Agreeableness; N - Neuroticism

Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly Agree
1	2	3	4	5	6	7

Appendix B: Target Stimuli from Pilot Study

Socially Conforming Hairstyles on the Black Target (SB)



Socially Conforming Hairstyles on the White Target (SW)



Afrocentric Hairstyles on the Black Target (AB)



Non-Socially Conforming Hairstyles on the White Target (NW)



Appendix C: Factor Analysis Results

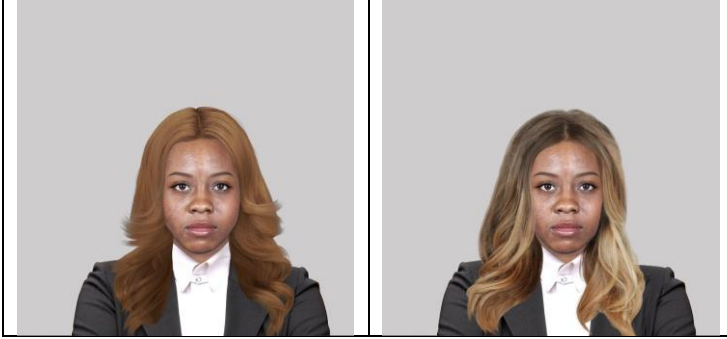
EFA Factor loadings of mean score ratings based on principal axis factoring with oblimin rotation

	Factors				
	1	2	3	4	5
SB-VP	0.838				
SB-Face of Company	0.812				
SW-VP	0.760				
SW-Face of Company	0.648				
SB-Approach	0.643				
AB-Approach	0.628				
SB-Trustworthy	0.589				
AB-Trustworthy	0.580				
AB-Face of Company	0.544				
AB-VP	0.538				
SB -Professional	0.451	0.424			
SW-Trustworthy	0.403				
SB-Friendly					
NW-Face of Company		0.850			
NW-Professional		0.808			
NW-VP		0.702			
NW-Trustworthy		0.687			
NW-Friendly		0.671			
NW-Approach		0.643			
NW-Impression		0.613	0.423		
NW-Political					
AB-Impression			0.772		
AB-Effort and Time			0.717		
SB-Effort and Time			0.662		
NW-Effort and Time			0.616		

SW-Effort and Time					0.584
SB-Impression					0.571
AB-Professional					0.434
AB- Friendly					0.411
SW- Friendly					0.712
SW- Impression					0.675
SW- Professional					0.520
SW-Approach	0.414				0.439
SB-Political					0.977
SW-Political					0.852
AB- Political					0.580
% of Variance	18.67	13.56	12.62	7.62	6.28
Initial Eigenvalues	11.07	3.41	2.02	1.70	1.12

Appendix D: Target Stimuli from Main Study

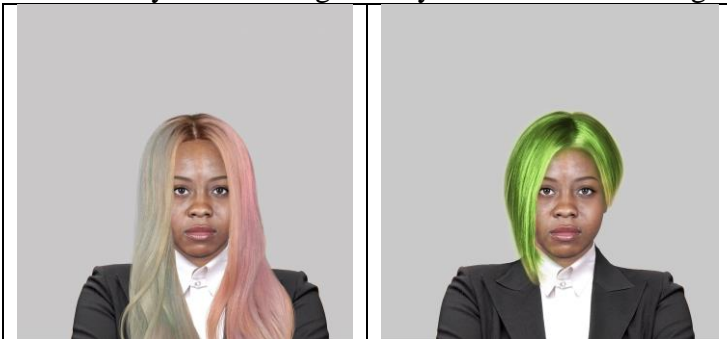
Socially Conforming Hairstyles on the Black Target (SB)



Socially Conforming Hairstyles on the White Target (SW)



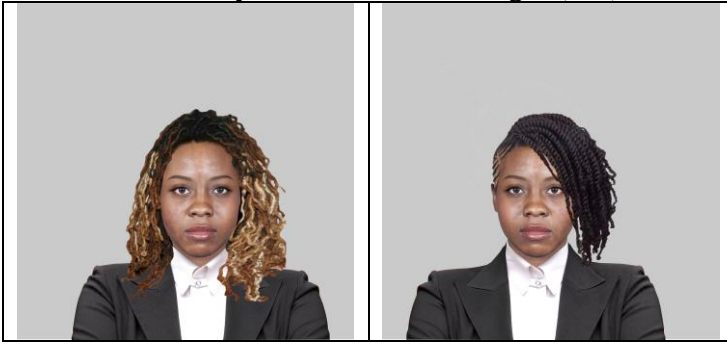
Non-socially Conforming Hairstyles on the Black Target (NB)



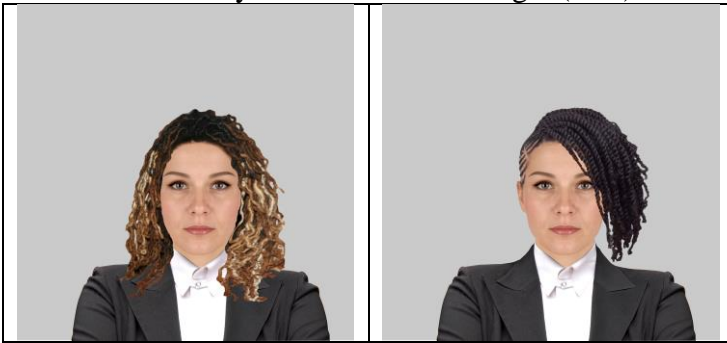
Non-socially Conforming Hairstyles on the White Target (NW)



Afrocentric Hairstyles on the Black Target (AB)



Afrocentric Hairstyles on the White Target (AW)



Appendix E: Main Study Questionnaire

Target Stimuli Prompt and Questions

TeleWorld is a fast-growing multi-billion-dollar company that had a net income of \$30 billion last year. Their current VP of Customer Relations is retiring, and the company is looking to hire a replacement. Imagine you are on the board of directors and you have been asked to give your opinion on who to hire. You are given pictures of some of the possible candidates, along with two sets of statements. Please indicate how strongly you agree with or disagree with the statements. Please be as truthful as possible.

Consider the individual pictured above. How much do you view this individual as each of these terms? Please be as truthful as possible.

Warm - W

Friendly - W

Good-natured - W

Sincere – W

Competent - C

Capable - C

Confident - C

Skillful - C

W – Warmth; C - Competence

Not at all	A little	Moderately	A lot	Extremely
1	2	3	4	5

1. This individual looks professional.
2. It would be inappropriate for a VP to look like this. *
3. This individual would not be appropriate as the face of the company. *

* reverse scored

Strongly Disagree	Moderately Disagree	Slightly Disagree	Neither agree nor disagree	Slightly Agree	Moderately Agree	Strongly Agree
1	2	3	4	5	6	7

Social Dominance Orientation Scale

For this section, show how much you favor or oppose each idea by selecting one of the options on the provided scale. Please remember that there are no right or wrong answers, and that your first responses are usually the most accurate.

1. An ideal society requires some groups to be on top and others to be on the bottom.
2. Some groups of people are simply inferior to other groups.
3. No one group should dominate in society. *
4. Groups at the bottom are just as deserving as groups at the top. *
5. It is unjust to try to make groups equal.
6. Group equality should not be our primary goal.
7. We should work to give all groups an equal chance to succeed. *
8. We should do what we can to equalize conditions for different groups. *

* reverse scored

Strongly oppose	Somewhat oppose	Slightly oppose	Neutral	Slightly favor	Somewhat favor	Strongly favor
1	2	3	4	5	6	7

Right-Wing Authoritarianism

Please indicate your reaction to each statement by selecting how much you agree or disagree with each statement. Please be as truthful as possible.

1. God’s laws about abortion, pornography and marriage must be strictly followed before it is too late.
2. It’s great that many young people today are prepared to defy authority. *
3. There is nothing wrong with premarital sexual intercourse. *
4. Our society does NOT need tougher government and stricter laws. *
5. The facts on crime and the recent public disorders show we have to crack down harder on troublemakers, if we are going preserve law and order.
6. What our country needs most is discipline, with everyone following our leaders in unity.

* reverse scored

Very strongly disagree	Strongly disagree	Somewhat disagree	Slightly disagree	Unsure or neutral	Slightly agree	Somewhat agree	Strongly agree	Very strongly agree
-4	-3	-2	-1	0	1	2	3	4

Symbolic Racism

For this section, please indicate how much you agree or disagree with the given statement. Please remember that there are no right or wrong answers, and that your first responses are usually the most accurate.

1. Irish, Italians, Jewish and many other minorities overcame prejudice and worked their way up. Black people should do the same without any special favors.
2. Generations of slavery and discrimination have created conditions that make it difficult for Black people to work their way out of the lower class. *
3. Over the past few years, Black people have gotten less than they deserve. *
4. It's really a matter of some people not trying hard enough; if Black people would only try harder they could be just as well off as White people.

*reverse scored

Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1	2	3	4	5

Internal Attributions for Inequality

Why do you think it is that in America today Black individuals tend to have worse jobs and lower income than White individuals do? Please rate how important you think each of the following contribute to why Black individuals tend to have worse jobs and lower income than White individuals.

Is it...

- ... Because White individuals have more in-born ability to learn?
- ... Because Black individuals just don't work as hard?
- ... Because Black individuals just choose low-paying jobs?

... Because God made people different from one another?

Not at all important	Slightly important	Moderately important	Very important	Extremely important
1	2	3	4	5

Appendix F: Study Approval Forms

Initial



Date: 27 June 2018

To: Prof. Vicki Esses

Study Title: Using Headshots to Judge First Impressions

Application Type: NMREB Initial Application

Review Type: Delegated

Meeting Date: July 6 2018

Date Approval Issued: 27/Jun/2018

REB Approval Expiry Date: 27/Jun/2019

Dear Prof. Vicki Esses

The Western University Non-Medical Research Ethics Board (NMREB) has reviewed and approved the WREM application form for the above mentioned study, as of the date noted above. NMREB approval for this study remains valid until the expiry date noted above, conditional to timely submission and acceptance of NMREB Continuing Ethics Review.

This research study is to be conducted by the investigator noted above. All other required institutional approvals must also be obtained prior to the conduct of the study.

Documents Approved:

Document Name	Document Type	Document Date	Document Version
Debriefing	Debriefing document	13/Mar/2018	
LOIC Main	Implied Consent/Assent	19/Jun/2018	Main/TurkPrime
LOIC Pilot Study	Implied Consent/Assent	19/Jun/2018	Pilot
Recruitment Script SONA	Recruitment Materials	19/Jun/2018	
Recruitment Script turkprime	Recruitment Materials	19/Jun/2018	
Using Headshot to Judge First Impressions	Online Survey	13/Mar/2018	

Documents Acknowledged:

Document Name	Document Type	Document Date	Document Version
Hairstyles	Supplementary Tables/Figures	04/Mar/2018	

No deviations from, or changes to the protocol should be initiated without prior written approval from the NMREB, except when necessary to eliminate immediate hazard(s) to study participants or when the change(s) involves only administrative or logistical aspects of the trial.

The Western University NMREB operates in compliance with the Tri-Council Policy Statement Ethical Conduct for Research Involving Humans (TCPS2), the Ontario Personal Health Information Protection Act (PHIPA, 2004), and the applicable laws and regulations of Ontario. Members of the NMREB who are named as Investigators in research studies do not participate in discussions related to, nor vote on such studies when they are presented to the REB. The NMREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000941.

Please do not hesitate to contact us if you have any questions.

Sincerely,

Kelly Patterson, Research Ethics Officer on behalf of Dr. Randal Graham, NMREB Chair

Note: This correspondence includes an electronic signature (validation and approval via an online system that is compliant with all regulations).

Amendment for Main Study following Pilot Study Results



Date: 19 February 2019

To: Prof. Vicki Esses

Study Title: Using Headshots to Judge First Impressions

Application Type: NMREB Amendment Form

Review Type: Delegated

Full Board Reporting Date: March 1 2019

Date Approval Issued: 19/Feb/2019

REB Approval Expiry Date: 27/Jun/2019

Dear Prof. Vicki Esses,

The Western University Non-Medical Research Ethics Board (NMREB) has reviewed and approved the WREM application form for the amendment, as of the date noted above.

Documents Approved:

Document Name	Document Type	Document Date	Document Version
LOIC new	Implied Consent/Assent	08/Feb/2019	Update
LOIC old	Implied Consent/Assent	08/Feb/2019	Edit
new survey flow	Online Survey	06/Feb/2019	Updated Survey Flow
new survey flow	Online Survey	08/Feb/2019	New Survey

REB members involved in the research project do not participate in the review, discussion or decision.

The Western University NMREB operates in compliance with the Tri-Council Policy Statement Ethical Conduct for Research Involving Humans (TCPS2), the Ontario Personal Health Information Protection Act (PHIPA, 2004), and the applicable laws and regulations of Ontario. Members of the NMREB who are named as Investigators in research studies do not participate in discussions related to, nor vote on such studies when they are presented to the REB. The NMREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000941.

Please do not hesitate to contact us if you have any questions.

Sincerely,

Kelly Patterson, Research Ethics Officer on behalf of Dr. Randal Graham, NMREB Chair

Note: This correspondence includes an electronic signature (validation and approval via an online system that is compliant with all regulations).

Curriculum Vitae

Name:	Bukun F. Adegbembo
Post-secondary Education and Degrees:	University of Western Ontario London, Ontario, Canada 2017-2019 MSc. Psychology; Collaborative Graduate Specialization in Migration and Ethnic Relations University of Prince Edward Island Charlottetown, Prince Edward Island, Canada 2011-2017 B.A. Psychology Honors (Major); Sociology (Minor)
Honours and Awards:	Western Graduate Research Scholarship (WGRS) 2017-2018, 2018-2019 Graduate Research Assistantship (GRA) 2017-2018, 2018-2019 Graduate Research Awards Fund 2018
Related Work Experience	Graduate Research Assistant University of Western Ontario 2017-2019 Writer/Researcher Canadian Breast Cancer Network 2018 Research and Social Media Manager City of London 2019
Publications, Presentations and Conferences:	Esses, V. and Carter, C. (2019). Beyond the big city: How small communities across Canada can attract and retain newcomers. Available at https://ppforum.ca/publications/beyond-the-big-city/ Canadian Breast Cancer Network. (2018). Economic Impact of Breast Cancer: An Update to the 2010 Economic Impact and Labour Force Re-Entry Report. <i>Canadian Breast Cancer Network</i> , 1-24.

Adegbembo, B.F., & MacQuarrie, C. (2017). The word nigger as racialized and non-racialized: A Foucauldian discourse analysis on the n-word in a Canadian society. *Journal of Undergraduate Ethnic Minority Psychology*, 3, 16-24.

Thesis Presentation. (2016). Annual Science Atlantic Undergraduate Psychology Conference. *Université de Moncton* 40th.

Guest Lecturer. (2015). Social Justice in Psychology. *University of Prince Edward Island*.