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Intersectional Stereotypes of Race, Gender, and Facial Structure and Evaluative Judgments of Leadership Ability and Workplace Fit

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INTERSECTIONAL STEREOTYPES OF RACE, GENDER, AND FACIAL STRUCTURE AND EVALUATIVE JUDGMENTS OF LEADERSHIP ABILITY AND WORKPLACE FIT

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ABSTRACT

Though the labor market is highly competitive and diverse, minority groups only hold 26.7%, of board positions, in companies on the *Fortune* 500 list (Alliance for Board Diversity Census, 2013). When tasked with hiring managers whom are presented with equivalent job qualifications, evaluators may rely on their subjective impressions in making an employment decision. The evaluator's subjective impressions may be informed by stereotypes of the groups to which applicants belong. The current study tests how stereotypes pertaining to race, gender, and facial structure inform evaluator judgments of managerial applicants' leadership ability and workplace fit. Leadership ability and workplace fit are assessed through ratings of the applicants perceived likeability, competence, and hireability. Participants also suggest the applicants starting salary. Data was collected on MTurk. Participants evaluated 8 pictures that vary in race (Black, White), gender (man, woman), and facial structure (baby face-ness, mature face-ness). I hypothesized that affects of stereotype content on evaluator judgments become more nuanced as multiple group memberships are highlighted.

CHAPTER ONE

INTRODUCTION

Though the labor market is highly diverse and competitive, there is a dearth of diversity in upper management and leadership positions. In 2012, White men held 73.3% of board positions on the *Fortune* 500 list while White women (13.4%), minority men (10.1%), and minority women (3.2%) held drastically less (Alliance for Board Diversity Census, 2013). One reason this disparity may persist is due to biases in hiring decisions. If job candidates are equally qualified, evaluators could rely on subjective impressions when making employment decisions. When considering applicants' fit for the position available, biased decision making can occur if group stereotypes are applied during impression formation (Bendick, Jackson, & Romero, 1997; Bertrand & Mullainathan, 2004; Riach & Rich, 2002).

Past research has explored the influence of gender, race, and facial structure stereotypes on workplace expectations and trait evaluations (Eagly & Karau, 2002; Rudman, 1998; Rudman, Moss-Racusin, Phelan, & Nauts, 2012; Berry & Zebrowitz-McArthur, 1988). Rarely has research explored how multiple group memberships shape stereotype content, and how such content poses downstream influences on judgments of job applicants. The current research will address this gap in the literature by exploring the influence of intersectional stereotypes on evaluative judgments. Evaluators may utilize group stereotype content when assessing applicants' congruency with leadership prototypes. Prototypical leaders are viewed as having high intelligence and status,

assertiveness, confidence, and competitiveness (Rosette et al., 2008) and meta-analyses show that leadership stereotypes possess predominantly masculine traits (Koenig, Eagly, Mitchell, & Ristikari, 2011). Therefore, leadership can be considered a high power male-orientated position (Yoder, 2001). If stereotypes pertaining to applicants' group memberships are incongruent with the leadership prototype, then evaluators may be more likely to (inaccurately) infer a "lack of fit" of the applicant for leadership positions and assign lower evaluative ratings.

Facial Cues and Stereotype Activation

Stereotypes are cognitive shortcuts that allow people to allocate cognitive resources to mental tasks requiring their attention (Macrae, Milne, & Bodenhausen, 1994). Such schematic thinking can expedite the person perception processes (Uleman, Saribay & Gonzalez, 2008). Faces serve as perceptual cues that provide category-based knowledge that is activated more quickly than individuating information. For instance, faces can be categorized by gender (i.e., man/woman; Coutier, Mason, & Macrae, 2005), race (i.e., phenotype/skin color; Livingston & Brewer, 2002; Zebrowitz, Montepare, & Lee, 1993), and facial structure (i.e., baby-faceness/mature-faceness; Zebrowitz & Montepare, 2005; Zebrowitz et al., 1993). This category-based knowledge may then guide impression formation and resulting judgments (Macrae & Bodenhausen, 2000). The current study will use faces to manipulate job applicants multiple group memberships.

People believe they can infer valuable social information and create trait impressions, from facial cues, with confidence and accuracy. Research shows that people infer character traits with even brief exposure (100 *ms*) to facial cues (Porter, England, Juodis, Brink, & Wilson,

2008). Suggesting perceiver confidence in their abilities, correlations between trait impressions of faces made under time constraints and those impressions made in the absence of constraints tend to remain stable over time (Willis & Todorov, 2006). Although trait impressions informed by facial cues remain stable, perceivers' reliance on these subjective impressions may be misleading, generating inaccurate judgments and biased evaluations. Therefore, though perceivers may feel confident in their abilities to judge a target's capabilities, their judgments can be indirectly influenced by cues of the target's race, gender, and facial structure. Further, when considering that faces can convey stereotype content for multiple group identities simultaneously, trait impressions become complex.

Group Stereotype Content & the Prototypical Leader

Stereotypes have three components: descriptive stereotypes are beliefs people maintain that distinguish a group, prescriptive stereotypes are beliefs people hold about the way a group should behave, and proscriptive stereotypes are beliefs about the way groups should not behave (Burgess & Borgida, 1999; Rudman et al., 2012a). Research shows that people prescribe baby-faces (i.e., large and round eyes, round cheeks, small jaw, and a large head to body ratio) as being more innocent, trustworthy, naïve, submissive, weak, warm, and honest, while mature-faces (i.e., angular forehead, small eyes, pronounced nose, defined cheeks, angular jaw, and small head to body ratio) as being stronger, more competent, and intelligent (Berry & Brownlow, 1982; Zebrowitz, 1997; Berry & McArthur, 1985). As a result, mature-faced adults are more congruent with the leadership prototype than baby-faced adults, and baby-faced leaders may

have to overcome barriers of assumed naiveté and ineffectiveness to be perceived as competent leaders.

The stereotype content model (SCM; Fiske et al., 2002) argues that group stereotypes fall along two dimensions: warmth and competence. The dimension of warmth helps people gauge group members' intentions in any given situation and is characterized by traits such as tolerance, trustworthiness, sincerity, and being good natured. The dimension of competence, on the other hand, through trait evaluations of independence, intelligence, competitiveness, and confidence informs how capable group members are at pursuing their intentions. Leaders, due to their high-status are seen prototypically as having higher competencies and portraying less warmth (Cuddy, Fiske & Glick, 2008). Therefore, stereotype content can serve as an indicator of a groups' perceived status and social standing within society. Stereotypes of women and Blacks, which posit lower status, can lead evaluators to perceive incongruence with leadership posts.

When categorized by gender, people describe women as having more warmth and less competency, while men are perceived more competent and less warm (Fiske et al, 2002; Cuddy et al., 2008). Women, prescribed with communal traits and behaviors, such as warmth, nurturance, kindness, and supportiveness may be considered less capable of expressing the assertiveness and competitiveness necessary to lead, in business settings. Men contrastingly, prescribed with agentic traits, such as aggressiveness, assertiveness, dominance, and independence more directly benefit from expectations prescribed in their stereotypes (Glick & Fiske, 1997; Eagly & Karau, 2002; Rudman et al., 2012a; Rudman et al., 2012b). Thus, leadership prototypes are more aligned with prescriptive stereotypes of men, making it easier to

access leadership positions than the stereotypes prescribed for women, which create barriers in the leadership path (Schein, 2002; Eagly & Karau, 2002).

Race also affects leadership expectations. As racial groups, people describe Whites with attributes such as high status, privilege, and intelligence, while Blacks are described as uneducated, unintelligent, and unrefined (Ghavami & Peplau, 2012). The descriptive stereotypes of Blacks seem diametrically opposed to the prototype of leadership. In fact, Rosette, Leonardelli, and Phillips (2008) found that "whiteness" is perceived to be a proto-typical attribute of business leaders. People perceive White leaders to be more effective and more qualified, for leadership positions, than racial minorities (Black, Asian, and Hispanic leaders). Individuals evaluate White leaders significantly more positively than similarly described minority leaders in domains such as competitiveness, intelligence, and competence. Expectations of White individuals to have high status and high intelligence increases their appeal for leadership posts while stereotypes of Blacks make being considered a leader difficult.

Though each group stereotype creates trait expectations, people belong to multiple groups. A person is never solely White or simply a man, but gender and race stereotypes have tended to focus on content knowledge through singular identities. Gender stereotypes change when taking into consideration the intersection of racial identities. Stereotypes of minority women contain more unique elements than general stereotypes of women, thus stereotype content is more nuanced when intersectional identities are considered. For instance, naiveté, sensitiveness, and emotionality are more associated with stereotypes of White women than Black women and people rate Black women as significantly less sensitive and educated than White

women (Ghavami & Peplau, 2012). Black women are also perceived significantly more masculine, than White women, described as aggressive, quick-tempered, dominant, and loud (Donovan, 2011). Consequently, being perceived to be more masculine, stereotypes pertaining to Black women are more aligned with the leadership prototype than stereotypes of White women.

Correspondingly, stereotype content of racial groups most often reflects stereotypes held about men, within a racial group, than women belonging to the same group (Ghavami & Peplau, 2012). Stereotypes of Blacks such as laziness, low intelligence, and violence (Phelan & Rudman, 2010) are more convergent on stereotypes of Black men than Black women. Similarly, stereotypes of Whites, such as high status and high intelligence are more convergent on stereotypes of White men than White women (Ghavami & Peplau, 2012). General stereotypes of women tend to prescribe behaviors pertaining to White women and racial stereotypes tend to prescribe behaviors towards men within the group.

Therefore, Black men, and White women are more proscribed towards behaviors pertaining to leadership than Black women and White men, which obstructs successful displays of such behavior. Considering these nuances, Black women may experience affordances in leadership positions similar to those given to White men. However, it is important to note that though both White men and Black women may be considered dominant, aggressive, and assertive (Donovan, 2011), White men are perceived as higher status than Black women making their leadership behaviors highly congruent with images of proto-typical leadership.

Social Status and Evaluative Judgements

Stereotype content serves to maintain the status quo in which dominant high-status groups control power over subordinate groups (Sidanius and Pratto, 1999; Sidanius, Pratto, van Laar, & Levin, 2004; Pratto, Sidanius, & Levin, 2006). Social dominance theory (SDT) argues that prescriptive and proscriptive group stereotypes (Glick & Fiske, 1996; Cuddy et al., 2008; Rudman et al., 2012a; Rudman et al., 2012b) provide insight into intergroup competitions for power and resources (Sidanius & Pratto, 1999). The power and status hierarchies most found in modern society are age-based systems in which older individuals hold power and resources over younger adults; patriarchal systems in which men hold disproportionate power over women; and, arbitrary based systems (i.e., socially constructed groups, such as ethnic/racial groups) in which some races hold power and resources over others. In American society, power and resources are possessed predominately by older White males. The stereotyping of women as warm but incompetent and of Blacks as violent and unintelligent can be seen as a way solidify their lower status and maintain White males as the prototypical leader (Eagly & Karau, 2002).

The status incongruity hypothesis (SIH) argues that when group members are perceived as usurping their position in the status hierarchy (by behaving counter-stereotypically), they are penalized (Rudman et al., 2012a; Rudman et al., 2012b). These penalties are characterized as social and economic backlash (Rudman et al., 2012a; Rudman et al., 2012b; Phelan & Rudman, 2010; Rudman, 1998). Research has exposed backlash effects on women, atypical men (Rudman, 1998; Rudman & Glick, 1999), racial minorities (Phelan & Rudman, 2010; Rudman & Fairchild,

2004), and could be argued to extend to baby-faced and mature-faced adults (Berry & Zebrowitz-McArthur, 1988; Gorn, Jiang, & Johar, 2008).

Backlash in the form of a "dominance penalty" arises when groups, other than White males, portray agentic qualities and engage in high status behaviors. If minority group members, such as Blacks and White women, receive penalties for dominant behaviors (such as leadership behaviors), the status hierarchy is maintained (Rudman, et al. 2012a; Rudman et al., 2012b). People penalize Blacks for counter-stereotypical behaviors, academic achievement has been found to decrease the popularity of Black students, while increasing the popularity of White students (Fryer & Torelli, 2010; study 1, Phelan & Rudman, 2010). Penalties have also been examined for White women, as White women are penalized for portraying agentic behaviors, like those of White men, in leadership positions (Rudman, et al. 2012a; Rudman et al., 2012b). Blacks, by excelling in academics, and White women, by excelling in leadership positions, are opposing prescriptive stereotypes that solidify their social status below White men, and I expect they will be penalized accordingly, in the current study.

Discrimination through an Intersectional Lens

The propensity for subordinate group members to receive backlash can vary and suggests that the dominance penalty may occur as a function of intersectional stereotype content. The subordinate male target hypothesis (SMTH), argues that males with minority status are more targeted by the dominant group (i.e., White males), than minority women, because they serve as prototypes of the subordinate group stereotypes. The SMTH offered in SDT, emerges as intersectional theory from the notion of the arbitrary-set hierarchies (Pratto, Sidanius, Levin,

2006). Researchers argue that men are more likely to compete for power and resources and therefore are more likely to be penalized than women. Less attention is given to women in the SMTH as they are view as non-prototypical and less threatening. For instance, when people grant Black women levity while penalizing Black men for displaying dominance (Livingston et al., 2012; Hall et al., 2012), differential treatment and discrimination can be due to Black men's prototypical representation of Black stereotypes.

Individuals possessing multiple subordinate group identities, such as Black women, could experience "intersectional invisibility" compared to White women whom serve as the proto-example of stereotypes pertaining to women and Black men whom serve as the proto-example of Black stereotypes (Purdie-Vaughns & Eibach, 2008). Therefore, people are more likely to penalize White women and Black men for conveying dominance in leadership positions, than Black women and White men whom experience less penalties for agentic behaviors (Livingston, Rosette, & Washington, 2012; Hall, Phillips, Rudman & Glick, unpublished manuscript). However, invisible minority women are argued to experience both disadvantages and advantages because of their non-prototypical subordinate status. For instance, as advantageous as avoiding penalties for dominance may be, Black women receive less mentorship opportunities (Bova, 2000; Turner, 2002), fewer promotion opportunities (Turner 2002; Combs, 2003), and less financial compensation (Stewart & McDermott, 2004) than prototypical subordinate group members.

Opposing the SMTH and "intersectional invisibility", the intersectional theory of "double jeopardy" speculates that minority women are more targeted than minority men (Cole, 2009;

Berdahl & Moore, 2006; Gonzalez, Blanton, & Williams, 2002; Almquist, 1975). Researchers argue that due to their possession of multiple subordinate identities, groups, such as Black women, are more likely to experience cumulative discrimination posed by both racism and sexism. Because Black men and White women only possess one subordinate identity, they are less likely to experience the extent of discrimination that Black women have to overcome. Throughout all intersectional theories, White men are posited to experience the least discrimination due to the power of their high status.

Intersectionality research has provided mixed support for differential discrimination posed by racial group membership. Even more complicating, research by Livingston and Pearce (2009) highlights the potential of facial structure to moderate perceptions of group members based on stereotype content. The researchers argue that cues from the baby-facial structure of some Black males engage as disarming mechanisms, mitigating expectations of hyper-aggressiveness and threat anticipated in prescriptive stereotypes. Labeled as the "teddy bear" effect, baby-faced Black males have accrued more high-status positions (as CEOs) than mature-faced Black males. But, the disarming mechanisms of baby-faceness, affording access to higher status positions, does pose adverse consequences, as people perceive baby-faced Black men to be less competent than their mature-faced counterparts (Livingston & Pearce, 2009). Research has yet to determine whether stereotypes based on facial structure moderate judgements of workplace ability and fit. The current research will consider if there are certain benefits available to individuals in leadership positions depending on the composite expectations of their group

membership and facial structure (i.e., their intersectional identity); specifically, membership in certain groups may dampen stereotype expectations of other identities.

In sum, facial cues can activate categorical thinking styles, thereby activating stereotypes. Faces possess cues to gender, race, and facial structure. The knowledge of prescriptive stereotype content pertaining to these categories can contribute to their application in impression formation and evaluative judgments. The SCM, posits that traits associated with groups can be understood through the distinct dimensions of warmth and competence. Using these dimensions, stereotypes provides expectancies through which group members' propensity to control power, resources, and social intentions can be understood. Prototypes of leadership place high value on traits relating to competence, agency, and high status. When group members stereotyped with submissive traits portray agency in leadership positions, they can face backlash, in the form of dominance penalties, for behaving counter-stereotypically. Applying stereotypes to evaluative judgments becomes more complex when targets' intersectional identities are considered. The current research will explore intersectional identities and the effects of multiple group stereotype contents on perceiver judgments of leadership ability and workplace fit, across multiple groups (Whites and Blacks). By presenting participants with job candidates of equal qualifications and images of the candidates' faces, participants are likely to rely on their subjective impressions when making evaluative judgments.

The Current Research

Due to the influence of stereotype content on participants' evaluative judgments, my predictions are conceptualized in terms of intersectional theories and the congruence with the

leadership prototype, status, and facial structure. Effective leaders are prototypically older White males, whom are expected to be highly competent and competitive (Rosette et al., 2008; Eagly & Karau, 2002; Rudman et al., 2012a). In the current study, by forcing participants to evaluate potential leaders already considered to have similar job qualifications (i.e., competencies) participants should rely on subjective knowledge of stereotypes to inform their evaluative judgments. Intersectional theories such as the SMTH (Pratto, Sidanius, Levin, 2006), the "double jeopardy" hypothesis (Berdahl & Moore, 2006), and the "intersectional invisibility" hypothesis (Purdie-Vaughns & Eibach, 2008), provide competing predictions of evaluator judgments. I will first consider these intersectional hypotheses (table 1, appendix C shows predictions for each hypothesis).

The *subordinate-male target hypothesis* suggests that White men, as the dominant group in society, will be rated significantly higher on dependent measures than all other groups. Contrastingly, Black men will be most penalized by evaluators for portraying leadership being rated significantly lower than all other groups. As less attention is given to women in the SMTH, I predict that Black women and White women will be rated significantly more favorably than Black men. I have no prediction based on this hypothesis for differences in ratings of White women and Black women.

The *intersectional invisibility hypothesis* argues, that due to possessing multiple non-prototypical identities, Black women will be rendered invisible, thereby facing significantly less penalties than White women and Black men. Black men and White women will be rated as significantly less favorable, on dependent measures, than Black women and White men, due to

their possession of a prototypical identity. I predict that while Black women will be rated more favorably on likeability, competency, and hireability, than Black men and White women. However, as intersectional invisibility posits both advantages and disadvantages for group members having multiple non-prototypical identities, Black women will be disadvantaged with a significantly lower starting salary than all other groups.

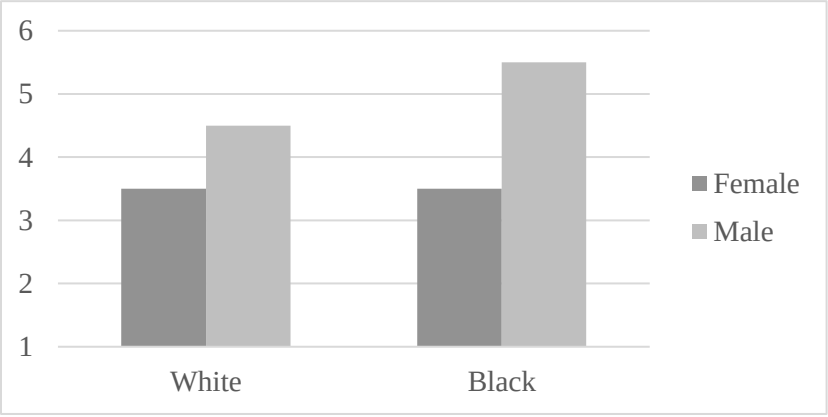
The *double jeopardy hypothesis* suggests that because Black women possess multiple subordinate identities, they will be seen as significantly less favorable than Black men, White women, and White men. As White men do not possess any subordinate identities, they will be viewed as significantly more favorable than all other groups. Therefore, White men will be significantly more compensated and rated significantly more competent, likeable, and hirable than all other groups. The possession of one subordinate identity by Black men and White women suggests that they will be rated more favorably on dependent measures than Black women. This approach provides no prediction for differences in rating among White women and Black men.

The *teddy-bear effect hypothesis* considers the contributions of facial structure on evaluator judgments of applicants' race and gender (Livingston & Pearce, 2009). The "teddy bear" effect suggests that baby-faceness will serve as a disarming mechanism for Black men only. Further, research has shown that baby-faceness hinders White men's success in leadership due to perceptions of enhanced warmth and submissiveness (Rule & Ambady, 2008, Zebrowitz & Montepare, 2005). Though not directly tested in their study, Livingston and Pearce also argue that baby-faceness will have no effect on women in leadership positions. I hypothesize that baby-

faceness may have a detrimental influence on women success in attaining leadership. As White women are already obliged to overcome prescribed warmth in agentic leadership roles, babyfaceness, reaffirms warmth and submissiveness and may hinder their efforts. Black women, though prescribed with less warmth than White women, may experience less levity if portrayed with baby-faced features. Rather than benefiting from affordances available due to their prescriptive stereotypes, when Black women possess baby-faced features, they may be seen as too weak and naïve to lead effectively. The implications of the "teddy-bear" effect on individual dependent measures should be discussed further.

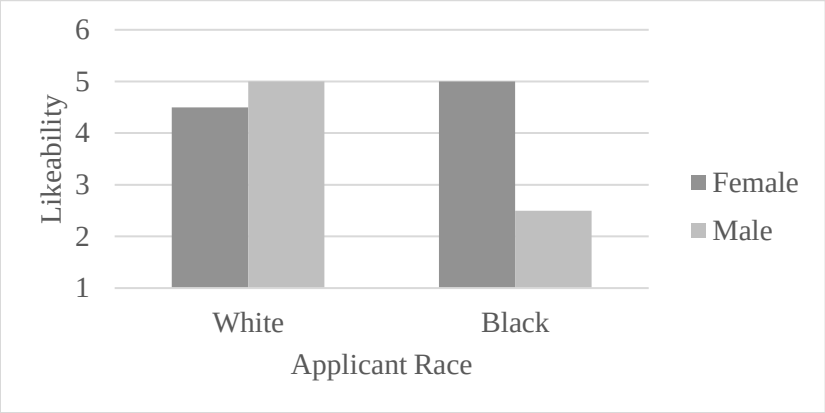
Likeability. I expect a three-way interaction in ratings of likeability. For baby-face individuals, I expect that Black men will be evaluated significantly more likeable than Black women. I anticipate a similar pattern for White men and women, but smaller in magnitude (see figure 1). Further, baby-face Black men should be evaluated more likeable than baby-face White men. Baby-face Black women and baby-face White women should receive similar ratings, but be evaluated less positively than baby-face men.

Figure 1. Expected likeability ratings of baby-face applicants



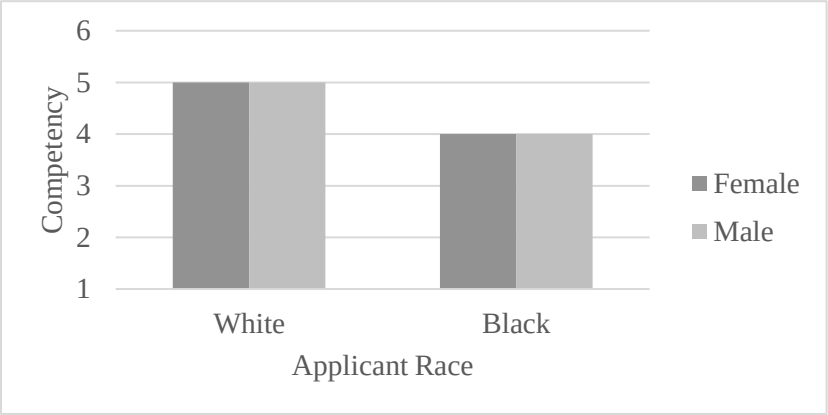
For mature-face individuals, I expect that Black women will be evaluated significantly more positively than Black men. I anticipate the opposite pattern for Whites such that White men will be evaluated significantly more positively than White women, but the magnitude of the difference between genders will be smaller (see figure 2).

Figure 2. Expected likeability ratings of mature-face applicants



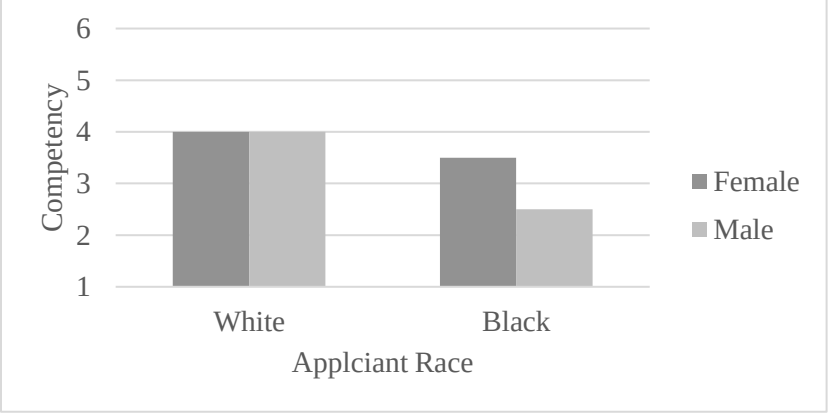
Competency. For baby-face individuals, I expect that Black women will be rated significantly more competent than Black men. I do not expect any significant differences in competency between White men and White women. Further, I expect that White men and women will be significantly more competent than Black men and Black women (see Figure 3).

Figure 3. Expected competency ratings of baby-face applicants



For mature-faced individuals, I expect that Black men and women will not significantly differ on ratings of competency. I also do not expect White men or women to differ on ratings of competency. However, I do expect that White men and women will be rated significantly more competent than Black men and Black women (see figure 4).

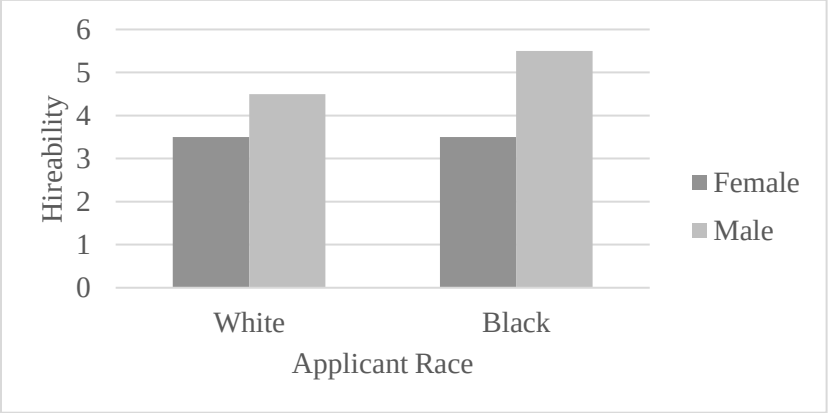
Figure 4. Expected competency ratings of mature-face applicants



Hireability. I expect a three-way interaction in ratings of hireability. For baby-face individuals, I expect that Black men will be evaluated significantly more hirable than Black

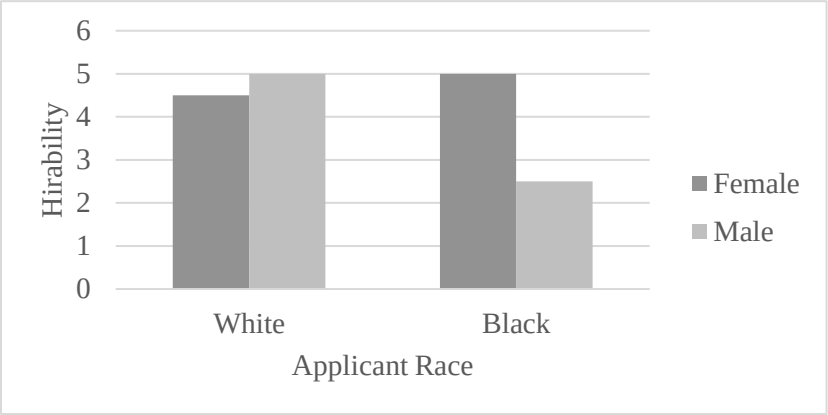
women. I anticipate a similar pattern for White men and women, but smaller in magnitude (see figure 5). Further, baby-face Black men should be evaluated more hirable than baby-face White men. Baby-face Black women and baby-face White women should receive similar ratings, but will be evaluated as less hirable than baby-face men.

Figure 5. Expected hireabilty ratings of baby-face applicants



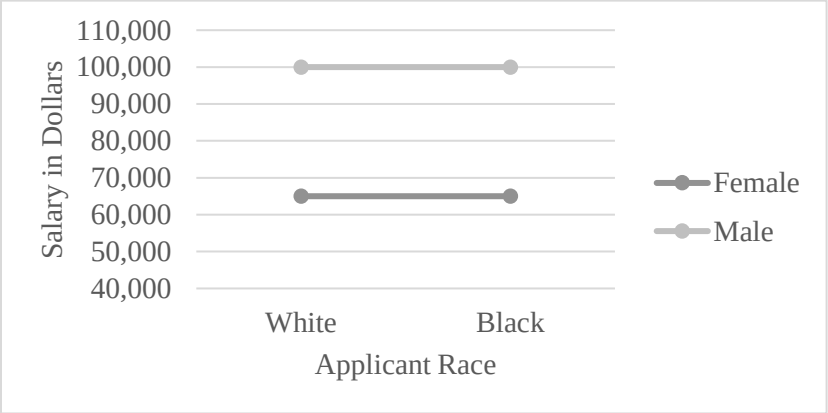
For mature-face individuals, I expect that Black women will be evaluated as significantly more hirable than Black men. I anticipate the opposite pattern for Whites such that White men will be evaluated as significantly more hirable than White women, but the magnitude of the difference between genders will be smaller (see figure 6).

Figure 6. Expected hireability ratings of mature-face applicants



Starting Salary. For baby-face individuals, I expect baby-face men to receive higher starting salaries than baby-face women. I do not expect any significant differences in the compensation of baby-face men between races. I also do not expect any significant differences in the compensation of baby-face women across races (see figure 7).

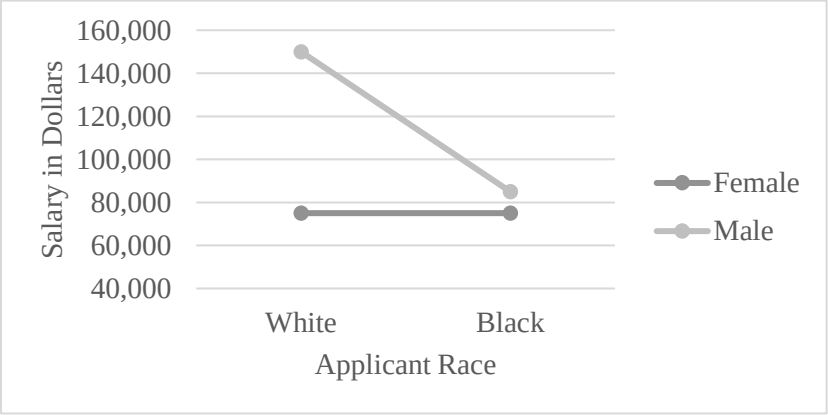
Figure 7. Expected starting salary of baby-face applicants



For mature-face individuals, I expect White men to be significantly more rewarded than Black men. I also expect White men to be more compensated than White women and Black

women. I expect marginal differences in starting salary for Black men and Black women. I do not expect and significant differences in the compensation of White women and Black women (see figure 8).

Figure 8. Expected starting salary of mature-face applicants



CHAPTER TWO

METHOD

Participants

A prospective power analysis, for a within-subjects ANOVA with 8 repeated-measures, was conducted in G*Power (Faul, Erdfelder, Buchner, & Lang, 2009), to determine a sufficient sample size using an alpha of 0.05, a power of 0.80, and a small effect size (f = .22). Based on these assumptions, the desired sample size was at least 274 participants. I recruited 349 participants, through Amazon.com's Mechanical Turk Prime (MTurkPrime). Most participants were White (n = 268), 34 participants identified as Black/African-American, 13 more than one race, 10 East Asian, 10 South Asian, 3 Native American/ Alaskan Native, and 3 reported their ethnicity was not listed. There was almost an even split of males (n = 184) and females (n = 164), with one participant preferring not to answer. They were compensated $1.00 for their participation. The participant pool was explicitly restricted to citizens residing within the United States whom were over 18 years of age. Participants were required to be fluent in English and participation all ethnicities and racial backgrounds were included.

Design

Participants received a 2 (race: White, Black) x 2 (gender: men, women) x 2 (facial structure: mature, baby) within-subjects design. I manipulated the race, gender and facial-

structure of the applicant targets presented to participants. The dependent measures were ratings of hireability, competence, liking, and expected starting salary.

Procedure

Participants were informed that they would be rating a number of faces on physical appearance and personality traits. Participants were instructed to imagine that they were employed in a human resources department at BAC Marketing firm charged with evaluation of candidates for a managerial position. Participants were presented individual headshots of the applicants. Passing the first stage of evaluations due to their job qualifications, participants were asked to provide secondary evaluations of each applicant. Following Livingston and Pearce (2009), participants were informed that research has shown that humans are adept at making intuitive judgments of others based solely on facial appearance. Participants were then presented with 8 photographs, one-by-one, in random order (see appendix B for counterbalancing of experimental conditions). Participants rated each applicant photograph on hireability, competence, liking, and provided an expected starting salary. Upon completion of applicant ratings, participants completed manipulation checks and follow up questions. Lastly, participants answered demographics measures and debriefing questions.

Materials

Facial Stimuli. With a preference for human variability rather than computer morphing, I chose to utilize the Chicago Face Database for selection of faces to be used in the current study (CFD; Ma, Correll, & Wittenbrink; 2015). A subset of 8 faces acquired from the CFD will be

utilized as target stimuli (Appendix A). The subset of faces is comprised of 4 men and 4 women. The faces vary racially such that 4 targets are presented of White and Black background. Half of the stimuli are presented with mature or baby facial features.

Using ratings and coded data found in the database, faces were assessed for baby-faceness on a 7-point scale (1 = *low baby-faceness* to 7 = *high baby-faceness*) with coders asked to consider persons pictured "with respect to other people of same race and gender". Of the 597 target photographs rated on the dimension of baby-faceness in the CFD (*M= 2.69, SD=0.59),* the subset selected as mature-faced targets were rated low on baby-faceness (*range* =1.57-1.96) and the subset selected as baby-faced targets were rated higher on baby-faceness (*range = 2.98-3.28*). None of faces in the CFD were considered extremely baby-faced, the highest achieved baby-face rating in the CFD was 4.37. In order to present faces similarly on other parameters, such as attractiveness and age, the full range of baby-faceness was restricted.

Facial stimuli were also assessed for attractiveness and age. Coders rated targets for their attractiveness in respect "to others of same race and gender." Photographs were evaluated on a 7-point scale (1 = *low attractiveness* to 7 = *high attractiveness; M = 3.15, SD = 0.73*). It was attempted to select a subset as similar as possible on attractiveness (range, 3.04-3.86). Coders also estimated the "approximated age" of the face (in years; *M = 26.88, SD = 6.84).* Ma and colleagues (2015) found baby-faceness to be significantly correlated with age ($r = -.30$, $p \leq .01$) such that the higher the target was rated as baby-faced, the more likely the target was to be rated younger. As such, the baby-faced targets are perceived to be younger (*range= 23.88-27.93*) than the mature-faced targets (*range=28.76-33.62*). The faces are presented similarly, with all

persons wearing a heather grey t-shirt. All faces display neutral facial expressions, with men shown to have clean shaven faces and closely cut hair, and women shown with their hair styled back in ponytails.

Candidate Evaluation Scenario. Adapting from Rudman et al. (2012), participants were presented with the following prompt: "Imagine you are an employee in the human resources department at BAC Marketing and are tasked with hiring a candidate for an upper level manager position. Managerial duties of the open position include the formulation and execution of marketing strategies; management of a team of eight experienced marketers; the coordination of market analyses and the identification of consumer needs; and the introduction of new products and services to strengthen the firm's position in the market. The current candidates have completed the first round of evaluations and have qualified for secondary evaluations. You are tasked with providing the secondary evaluations. Please provide your impressions of each candidate."

Hireability Ratings. Adopted from Rudman et al. (2012), participants rated applicants on three items scaled from 1 (*not at all*) to 6 (*very much*). The three items ("How likely is it that the applicant will be promoted?", "Would you choose to interview the applicant?", and "Would you personally promote the applicant?" were averaged together to evaluate applicant hireability. The three items showed acceptable reliability ratings (Cronbach's $\alpha = .93$).

Competence Ratings. Adopted from Rudman et al. (2012) participants answered two items on scales ranging from 1 (*not at all*) to 6 (*very much*). The two items, "Did the applicant

strike you as competent?" and "How likely is it that the applicant has the necessary skills for the job?", were averaged together to evaluate applicant competence. The items showed acceptable reliability ratings (Cronbach's $\alpha = .90$).

Liking ratings. Also adopted from Rudman et al. (2012), participants responded to three items on scales ranging from 1 (*not at all*) to 6 (*very much*). "How much did you like the applicant?", "Is this person someone you want to get to know better?", and "Would the applicant be popular with colleagues?" The items were be averaged together to assess applicant liking. The three items showed acceptable reliability ratings (Cronbach's $\alpha = .92$).

Starting Salary. Lastly, participants provided a recommended starting salary for each applicant. Participants were provided with data from the Bureau of Labor Statistics (2014) which noted that marketing managers' annual wages range from $65,000-$175,000. Participants were instructed to provide a salary for the candidate within that range.

Manipulation Checks. To gauge the success of the race, gender, and facial structure experimental manipulations, participants were asked three items. They were asked to "Pick one race which best describes the applicant" and were instructed to select either or "White" and "Black". Next, participants were asked to "Pick which gender best describes the applicant" with the options "man" and "woman". Lastly, participants were asked to "Pick which facial structure most applies to the applicant presented" and with the options "baby-face" or "mature-face".

Demographics and Suspicion Checks. Participants answered demographic items to gather information about characteristics of the sample population. Participants were asked to

answer items pertaining to their sex, age, race, ethnicity, income, education, political views, and total household income.

To gauge suspicions of study hypotheses, participants will be asked “What was your overall impression of the study?”, “A lot of people in psychology experiments are suspicious that we’re hiding something from them or that we are looking at something other than what we said we were looking at. Were you suspicious at all? If yes please explain”, and “If you had to guess, what would you say this study was trying to figure out? What was our hypothesis?”

Debriefing. All participants received a debriefing handout and were thanked for their participation. (See appendix D).

CHAPTER THREE

RESULTS

Manipulation and Reliability Checks

I started by testing the effectiveness of my manipulation of applicant race and gender. I created a filter variable excluding participants who erroneously answered applicant race and gender characteristics items. Of 349 participants 8 participants were subsequently excluded. Reliability analyses on dependent measures indicated high item reliability. I collapsed across measure items creating composite dependent variables for further analyses.

Dependent Measures

To test my hypotheses, I conducted a repeated-measures ANOVA with target gender (man, woman), target race (Black, White) and target facial structure (mature-face, baby-face) as within-subject factors for each dependent variable.

Liking. Figure 9 shows the means for liking. There was a main effect of target race on participant liking of the applicants, $F(1,340) = 7.32$, $p = .007$, $\eta_p^2 = .02$. Countering hypotheses set forth for all three theories (e.g., SMTH, double jeopardy, intersectional invisibility), pairwise comparisons revealed that participants perceived Blacks ($M = 4.12$, $SE = 0.04$) as more likeable than Whites ($M = 4.02$, $SE = 0.04$). Analyses also revealed a main effect of target facial structure

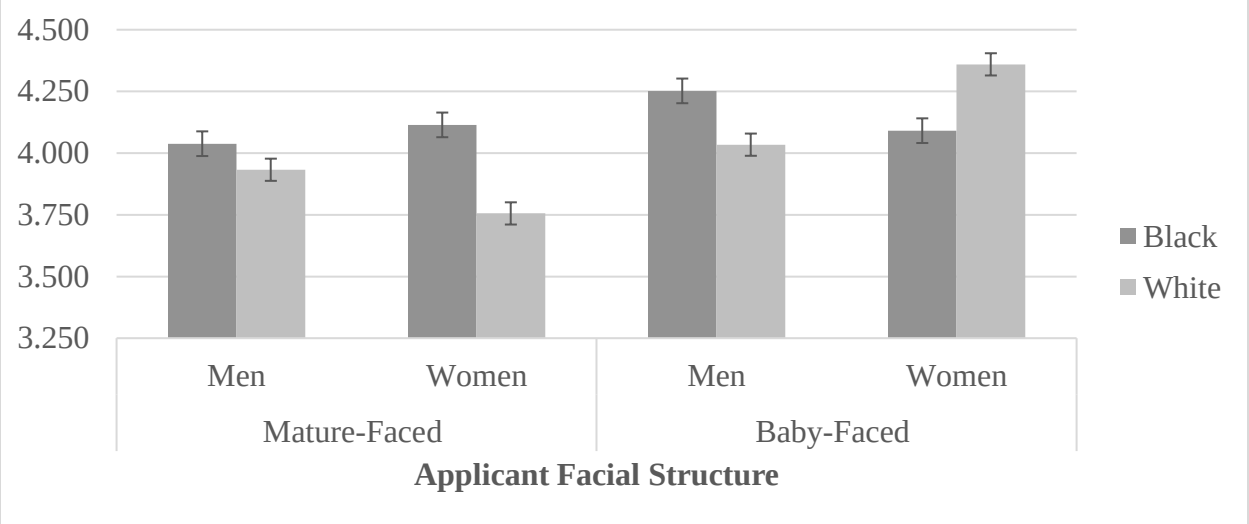
on participant liking of the applicants $F(1,340) = 47.67$, $p < .001$, $\eta_p^2 = .12$. In line with past general literature on facial structure, but challenging the facial structure hypotheses highlighted in the teddy bear effect, pairwise comparisons revealed that participants perceived baby-faced applicants ($M = 4.18$, $SE = .04$) to be more likeable than mature-faced applicants ($M = 3.96$, $SE = .04$) across all groups. There was no main effect of gender $F(1,340) = .24$, $p = .62$, $\eta_p^2 = .001$.

As predicted, there was a significant race x gender x facial structure interaction effect on participant liking of the applicants $F(1, 340) = 42.92$, $p < .001$, $\eta_p^2 = .11$. The interaction only partially matched the predicted pattern based on the teddy bear effect. There was a 2-way gender x facial structure interaction $F(1, 340) = 5.40$, $p = .02$, $\eta_p^2 = .02$., such that baby-faced women ($M = 4.23$, $SE = .04$) were significantly more likeable than baby-faced men ($M = 1.43$, $SE = .04$). There was a marginal 2-way race x gender interaction of participants' liking of the targets $F(1, 340) = 3.34$, $p = .07$, $\eta_p^2 = .01$. Contrary to all hypotheses, pairwise comparisons indicated that Black men ($M = 4.15$, $SE = 0.05$) were perceived as marginally more likeable than White men ($M = 3.99$, $SE = 0.05$; $p = .003$). For women, there was no difference in liking based on race. In line with past research on perceptions of facial structures, there was a significant race x facial structure interaction on participant liking of the applicants, $F(1, 340) = 19.80$, $p < .001$, $\eta_p^2 = .06$. The findings were such that mature-faced Blacks ($M = 4.08$, $SE = 0.05$) were perceived as more likeable than mature-faced Whites ($M = 3.85$, $SE = 0.05$; $p < 001$). For babyfaces, there was no difference in liking between Black and White applicants.

Further these interactions were qualified by race. Baby-faced Black men were perceived as more likeable than baby-faced White men ($p = .02$,) and baby-faced Black women ($p = .002$).

However contrary to hypotheses, baby-faced White women were more liked than baby-faced Black women (p <.001), baby-faced White men (p <.001), and mature-faced White women (p <.001). Further, mature-faced Black women were more liked than mature-faced White women (p <.001). Also, baby-faced White men were marginally more liked than mature-faced White men (p =.09). Mature-faced White men were more liked than mature-faced White women (p =.007). There were no significant differences between mature-faced White and Black men (p =.11).

Figure 9. Participant liking ratings of mature-faced and baby-faced applicants indicating a significant race x gender x facial structure interaction.

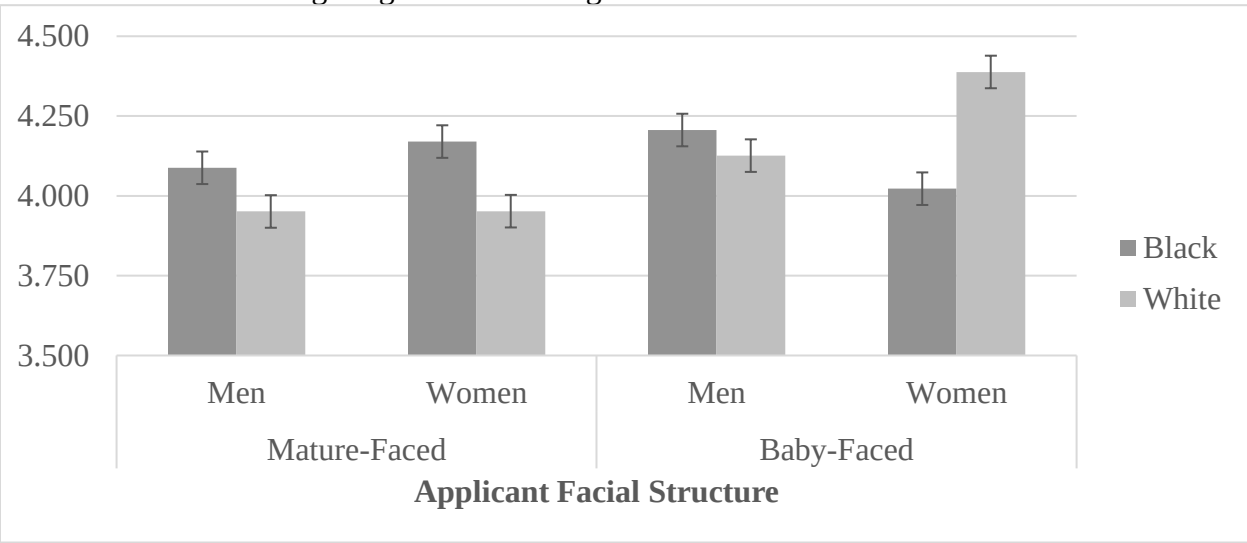


Hireability. Figure 10 shows the means for hireability. Contrary to the SMTH and double jeopardy, there were no main effects of race (F = .17) or gender (F=1.34) on hireability. There was an effect of target facial characteristics on participants perception of the applicants' hireability, $F(1, 340) = 17.01$, $p < .001$, η_p^2=.05. Countering past facial structure research, pairwise comparisons revealed that participants perceived baby-faced applicants (M = 4.19, SE = 0.04) as more hirable than mature-faced applicants (M = 4.04, SE =0.04).

There was a significant race x gender x facial structure interaction on applicant hireability, $F(1, 340) = 22.96$, $p < .001$, $\eta_p^2 = .06$. Follow up analyses displayed a target race x gender interaction, $F(1, 340) = 10.21$, $p = .002$, $\eta_p^2 = .03$. Again, contrary to the SMTH and double jeopardy, pairwise comparisons indicated that Black men ($M = 4.15$, $SE = 0.05$) were perceived as marginally more hirable than White men ($M = 4.04$, $SE = 0.05$, $p = .051$). For women, there was no difference in hireability based on race. A target race x facial structure interaction also appeared $F(1, 340) = 27.51$, $p < .001$, $\eta_p^2 = .08$. Departing from the SMTH and double jeopardy hypotheses, mature-faced Blacks ($M = 4.13$, $SE = 0.05$) were perceived as more hirable than mature-faced Whites ($M = 3.96$, $SE = 0.05$, $p = .001$) and baby-faced Whites ($M = 4.26$, $SE = 0.05$) were perceived as more hirable than baby-faced Blacks ($M = 4.13$, $SE = 0.05$, $p = .004$). Baby-faced Whites were perceived more hirable than mature-faced Whites ($p < .001$) and baby-faced Blacks ($p = .004$).

Further, these interactions were qualified by gender. Baby-faced Black men were perceived as more hirable than mature-faced Black men ($p = .04$) and baby-faced Black women ($p = .001$). Mature-faced Black women were deemed more hirable than mature-faced White women ($p = .001$) and baby-faced Black women ($p = .001$). Challenging past research on baby-faceness, baby-faced White women were more hirable than mature-faced White women ($p < .001$), baby-faced Black women, ($p < .001$), and baby-faced White men ($p < .001$). Also contradicting past literature baby-faced White men were deemed more hirable than mature-faced White men, ($p = .007$). Further, mature-faced Black men were marginally more hirable than mature-faced White men ($p = .06$).

Figure 10. Participant hireability ratings of mature-faced and baby-faced applicants indicating a significant race x gender x facial structure interaction.



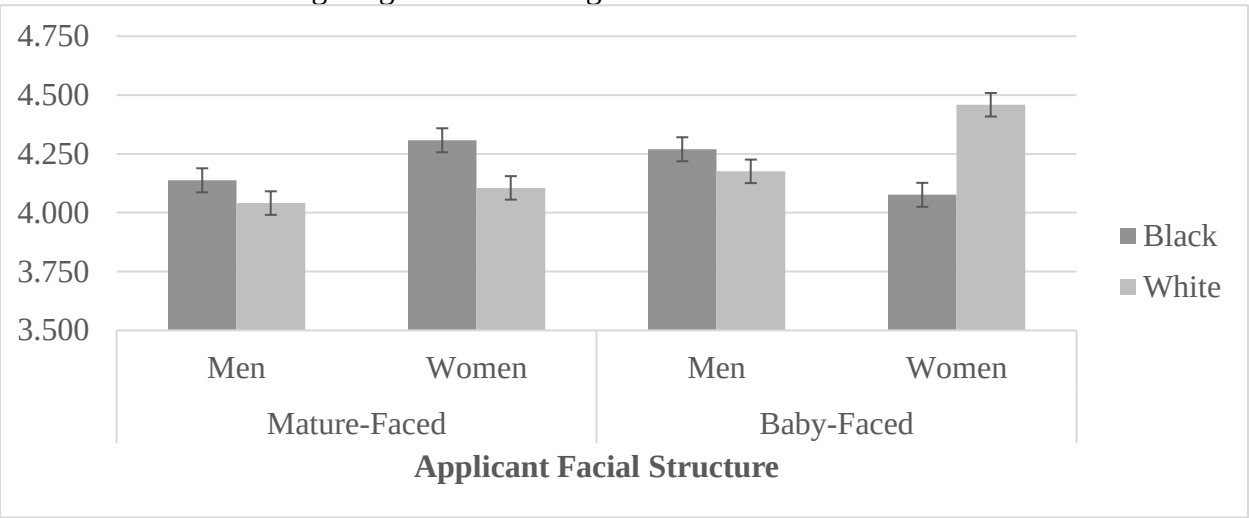
Competence. Figure 11 shows the means for competence. There was a main effect of gender on participants' perception of the applicants' competence, $F(1, 340) = 5.15$, $p = .02$, $\eta_p^2 = .02$. Countering past gender research, pairwise comparisons revealed that participants perceived women applicants ($M = 4.24$, $SE = 0.04$) as more competent than men applicants ($M = 4.16$, $SE = 0.04$). There was also a main effect of facial characteristics on participants perception of applicant competence, $F(1, 340) = 7.55$, $p = .006$, $\eta_p^2 = .02$. Countering babyface research, pairwise comparisons revealed that participants perceived baby-faced applicants ($M = 4.26$, $SE = 0.04$) as more competent than mature-faced applicants ($M = 4.15$, $SE = 0.04$).

There was a significant race x gender x facial structure interaction on perceived applicant competence, $F(1, 340) = 22.43$, $p < .001$, $\eta_p^2 = .06$. Follow-up analyses revealed a target race x gender interaction on perceptions of applicant competence $F(1, 340) = 9.53$, $p = .002$, $\eta_p^2 = .03$. Unlike past research on SMTH and double jeopardy, pairwise comparisons indicated that White women ($M = 4.28$, $SE = 0.05$) were considered more competent than Black women ($M = 4.19$, SE

=0.05, p =.04) and White men (M = 4.12, SE =0.05, p =.001). Further, Black men (M = 4.20, SE =0.05) were perceived as marginally more competent than White men (p =08). A 2-way target race x facial structure interaction also appeared, $F(1, 340) = 19.30$, $p < .001$, $\eta_p^2 = .05$. The findings were such that mature-faced Blacks (M =4.22, SE =0.05) were perceived as more competent than mature-faced Whites (M = 4.07, SE =0.05, p =.006). Baby-faced Whites (M = 4.32, SE =0.05) were deemed more competent than baby-faced Blacks (M = 4.17, SE =0.05, p = .003) and baby-faced Whites were perceived more competent than mature-faced Whites (p <.001).

These results were qualified by gender, such that baby-faced White women were more competent than baby-faced Black women (p <.001), baby-faced White men (p <.01), and mature-faced White women (p <.01). Baby-faced Black men were perceived as more competent than baby-faced Black women (p=.002) and mature-faced Black men (p =.03). Supporting the intersectional invisibility hypothesis, mature-faced Black women were more competent than mature-faced White women (p =.002), mature-faced Black men (p =.005), and baby-faced Black women (p <.001). However, baby-faced White men were perceived as more competent than mature-faced White men (p =.05) contradicting past facial structure literature.

Figure 11. Participant competence ratings of mature-faced and baby-faced applicants indicating a significant race x gender x facial structure interaction.

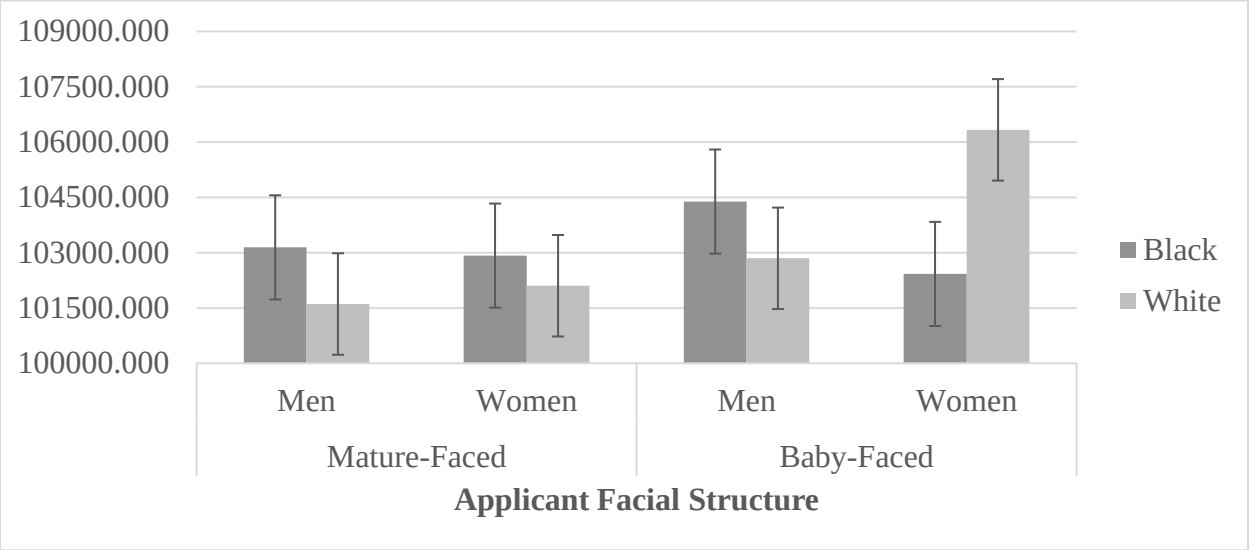


Starting Salary. Figure 12 shows the means for salary. There was an effect of target facial characteristics on participants' assignment of starting salaries, $F(1, 340) = 9.32$, $p = .002$, $\eta_p^2 = .03$. Countering predictions based on facial structure research, pairwise comparisons revealed that participants rewarded baby-faced applicants (M = \$103,996.26, SE =\$1351.71) with higher starting salaries than mature-faced applicants (M = \$102,443.61, SE =\$1332.52). Analyses did not show any effects of race, $F(1, 340) = 0.00$, $p = .98$, $\eta_p^2 = 0.0$, or gender, $F(1, 340) = 0.75$, $p = .39$, $\eta_p^2 = .01$.

There was a significant race x gender x facial structure interaction on applicants starting salary, $F(1, 340) = 7.37$, $p = .01$, $\eta_p^2 = .02$. Follow-up analyses showed a target race x gender interaction on applicant starting salaries $F(1, 340) = 10.15$, $p = .002$, $\eta_p^2 = .03$. Countering gender and intersectional invisibility theories, pairwise comparisons indicated that White women (M = \$104,216.6, SE =\$1372.25) were more compensated than Black women (M = \$102,671.42, SE =\$1426.62, p = .02), and White men (M = \$102,227.10, SE =1377.48, p = .01). Black men (M = \$103,764.60, SE =\$1,403.24) were marginally more rewarded than White men (p= .07), and

Black Women (p=.10), contradicting the SMTH. A target race x facial structure interaction also appeared $F(1, 340) = 5.98$, $p = .02$, $\eta_p^2 = .02$. Baby-faced Whites (M = \$104,588.39, SE =\$1393.62) were more compensated than mature-faced Blacks (M = \$103,031.89, SE =\$1405.29) and mature-faced Whites (M = \$101,855.33, SE =\$1358.10, $p < .001$). Results were qualified by gender, baby-faced White women were more compensated than baby-faced Black women (p <.001), baby-faced White men (p <.001) and mature-faced White women (p <.001), countering predictions based on past research. Baby-faced Black men were more rewarded than baby-faced Black women (p =.02).

Figure 12. Participant salary compensation of mature-faced and baby-faced applicants indicating a significant race x gender x facial structure interaction.



CHAPTER FOUR

DISCUSSION

The present research tested the idea that people utilize stereotypes in evaluating candidates presented with equivalent qualifications. I further considered the intersectionality of race, gender, and facial structure when examining perceptions of leadership ability and workplace fit. My study displayed results inconsistent with past literature on general patterns of gender and racial workplace expectations and disconfirmed many of my hypotheses. I attempted to replicate well-established literature in which participant evaluations, based on race and gender stereotypes, allot higher ratings to Whites and men in workplace settings. These patterns were not found. In fact, the expected findings seem to be flipped completely.

This study did not find patterns supporting any of the exploratory hypotheses. The SMTH, intersectional invisibility, and double jeopardy hypotheses were disconfirmed. These theories consider stereotypes of race and gender and how their intersections result in social hierarchies. All the proposed hierarchies were flipped with Blacks being liked more than Whites, women being more competent than men, and White women being more highly compensated in starting salary than all other groups. Further disconfirming hypotheses, mature-faced Black men were rated more likeable, more hirable, and more competent than mature-faced White men. These results are largely inconsistent with past findings (Eagly & Karau, 2002; Rudman et al., 2012a; Rudman et al., 2012b). Some potential explanations will be discussed later in this text.

While the results are largely inconsistent, there was one exception. The study provided insight in one area of intersectionality of which researchers have not fully studied. The current work demonstrated the nuances that facial structure, specifically baby-faceness, contributes when considering race and gender. One of the foundational literatures from which this paper stems (Livingston & Pearce, 2009) considers facial structure factors, baby-faceness versus mature-faceness, for only Black men and collapsed across facial structure when considering the challenges of Black men with White men and women. The current study fleshes out facial structure further than its predecessors by considering facial structure characteristics for White women, Black women, and White men as well. In considering facial structure, on all dependent measures, baby-faced applicants received more favorable ratings than their mature-faced counterparts. Baby-faced applicants were more liked, hirable, competent, and compensated than mature-faced applicants.

Livingston and Pearce (2009) considered baby-faceness as a disarming mechanism, naming it the "teddy-bear effect", for Black men. One interpretation of the findings in this study is that baby-faceness can serve as a disarming mechanism for all groups, not solely Black men. Specifically, applicants with baby-faces might be perceived as more likeable and competent, be more hired and achieve higher paying jobs. While the pattern arose as expected giving baby-faced Black men levity over mature-faced Black men, baby-faced White women fared much better than other groups. This finding is inconsistent with past facial structure literature in which mature-faced individuals are considered more competent and intelligent than baby-faced individuals whom are considered weak and submissive (Berry & Brownlow, 1982). Further research is necessary to examine baby-faceness across race and gender.

Considerations, Limitations, and Future Research

Why the flipped and disconfirming findings? One explanation is that the participants whom took place in the study could glean partial intentions of the study. Though no participants could parse the complete purpose, the deception used was minimal. With the straightforward self-report methodology used, there is potential that participants felt pressured to answer in socially desirable unbiased ways rather than with their honest opinions. Individuals often engage in socially desirable behaviors when they are concerned with looking like good members of society. Such motivations have been found in self-reports of religious attendance (Presser & Stinson, 1998), ethical decision making (Chung & Monroe, 2003), and voting behaviors (Silver, Anderson, & Abramson, 1986).

The American social and political climate in which the current research was conducted was tumultuous and strained. Unintentionally, data collection for the study took place directly after the 2017 elections of President Donald J. Trump. Biases against minorities, sexist comments about women, and questions about the future of social movements were prevalent in the news and social media. In such an environment, participants might have already been evaluating their personally held beliefs in relation to the larger societal context. Social desirability concerns could have arisen from psychological mechanisms of self-deception and impression management (Zerbe & Paulhus, 1987). Participants could have engaged in self-deception because displaying biased evaluations could threaten their positive beliefs about their self. Secondly, participants may have felt threats to their self-esteem if others view them negatively for displaying biases. As such, participants could have overcorrected their evaluations to appear more egalitarian than they actually are. It could be argued that if participants were truly

egalitarian, all applicants would have received equivalent ratings. Instead, minority applicants were rated more favorably than majority group applicants with similar skills. With the current research being focused on biases held about applicants' race, gender, and facial structure, participants may have felt heightened concerns about how they view *their* biases or how they their biases are viewed *by others*.

Another limitation stems from the type of leadership position I used in the evaluation prompt. Past literature on facial structures have preferred methodologies considering CEOs as participant targets (Gorn, Jiang, & Johar, 2008; Livingston & Pearce, 2009), while many of the gender and racial researchers have used managers as participant targets (Eagly & Karau, 2002; Rudman et al., 2012a). I instructed participants to evaluate applicants for an upper-level management position. I then provided information about the duties of the position as a means of showing the responsibilities and competencies necessary. Perhaps there is a power differential in how participants perceive upper-level managerial candidates and how participants have conceived of CEO leadership in past literature.

One last limitation is that I used real faces for target stimuli rather than morphing the same photograph (using different race and gender characteristics) into each facial structure. I used faces pre-tested for similar ratings of facial structure, attractiveness, and age from the Chicago Face Database (2015) with a hope of increasing the ecological validity of the study and because Livingston and Pearce (2009) provided photographs of real CEOs of which participants made subsequent evaluations. Though morphing faces adds internal validity, in real world interviews an applicant will not be overtly mature-faced or baby-faced simultaneously. However, for the sake of intersectionality research, I consider my use of real people, as target stimuli, a

drawback. Future research should consider limiting other distinguishing facial features to make a more controlled experimental setting.

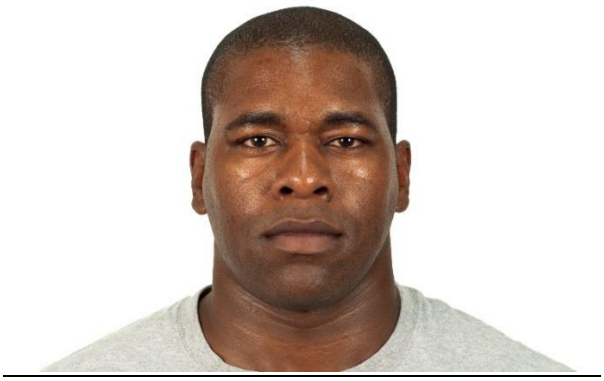
The present study suggests a need for further investigation into the intersectionality of gender, facial structure, and race. The current study did find minor support for the “teddy-bear effect”, however this support extended to more applicants than was proposed by study hypotheses and by past literature. While there were significant findings present in the current work, these findings were mostly inconsistent with previous research and the proposed hypotheses. Future research should refine methodologies by using morphed stimuli and adding another layer of deception to decrease social desirable self-reports. Lastly, more research is needed to explore the mitigating factors that baby-faceness might provide, in upper level leadership positions, to persons beyond those with minority identities.

APPENDIX A

TARGET STIMULI

Baby-Faced Men

Mature-Faced Men



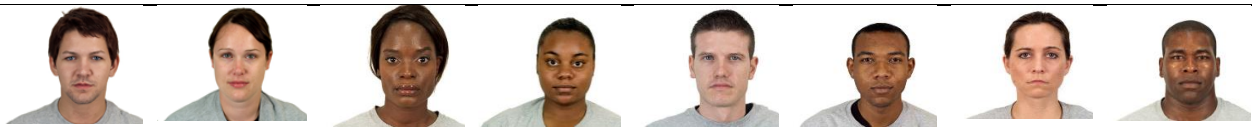
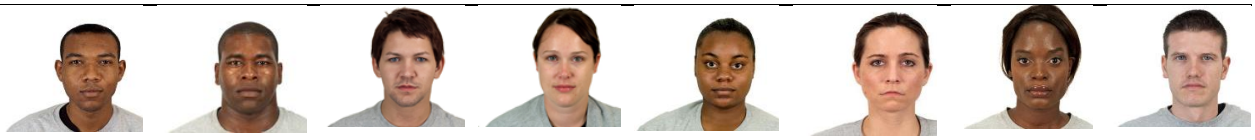
Baby-Face Women

Mature-Faced Women

APPENDIX B

COUNTERBALINCING OF EXPERIMENTAL CONDITIONS

Table 2. Counterbalancing of experimental conditions.

1.	
2.	
3.	
4.	
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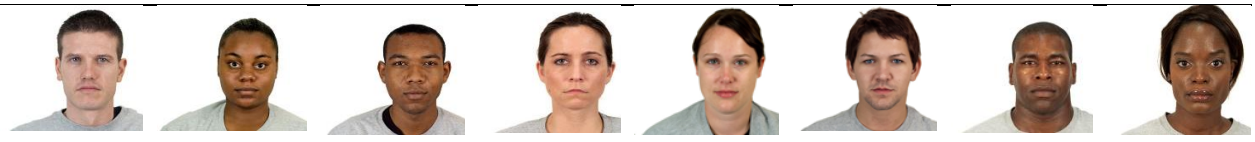
8.	

APPENDIX C

TABLE OF EXPERIMENTAL HYPOTHESES

Table 1. Predictions for backlash based on SMTH, intersectional invisibility, double jeopardy, and the teddy-bear effect. With the exception of the teddy-bear effect, intersectional hypotheses display predictions collapsing across facial structure conditions.

Measures		SMTH	Intersectional Invisibility	Double Jeopardy	Teddy Bear Effect
Likeability	High	WM			BFBM
	↕		WM	WM	MFWM=MFBW
	Low	BW=WW	BW	WW=BM	BFWM=MFWW
		BM	BM = WW	BW	BFBW=BFWW
					MFBM
Competency	High	WM			MFWM=MFWW
	↕		WM	WM	MFBM=BFWW=MFBW=BFWM
	Low	BW=WW	BW	WW=BM	BFBW
		BM	BM = WW	BW	BFBM
Hireability	High				BFBM
	↕	WM	WM	WM	MFWM=MFBW
	Low	BW=WW	BW	WW=BM	BFWM=MFWW
		BM	BM = WW	BW	BFBW=BFWW
					MFBM

Measures		SMTH	Intersectional Invisibility	Double Jeopardy	Teddy Bear Effect
Starting Salary	High				MFWM
	↕	WM	WM	WM	BFWM=BFBM
	Low	BW=WW	BM=WW	BM=WW	MFBM
		BM	BW	BW	MFBW=MFWW
					BFWW=BFBW

Note: All predictions assume White men (WM) to be the prototypical leader and rankings of White women (WW), Black men (BM), and Black women (BW) are relative to the high standing of White men. BF=baby-face, MF=mature-face, (=) shows equivalent ratings.

APPENDIX D

CONSENT FORM

Consent to Participate in Research Project

Title: Business Management **Researcher**: Avery Waklatsi

Introduction: You are being asked to take part in a research study conducted by Avery Waklatsi under the supervision of R.K. Mallett, Ph.D. in the Department of Psychology at Loyola University of Chicago. Please read this form carefully and email with any questions you may have before deciding whether to participate in the study.

Purpose: You are invited to participate in research investigating how you might imagine evaluating marketing managers. The purpose of the study is to examine how people imagine engaging with managers that they might encounter in everyday life. Please know that you will not be informed of the full scope or hypotheses of the present study until after your participation.

Procedures: Participants will read a short scenario that describes a marketing firm looking to hire new managers and then will predict how they would rate potential candidates. All participants will be asked questions about the candidates and questions about themselves.

Risks and Benefits: There are minimal risks that do not exceed a level that you may encounter during your normal daily activities. There are no direct benefits to you participation, however if you have not participated in a psychological study before, this is a good opportunity to experience how psychological research is conducted.

Time Commitment: The experiment will take about 20 minutes to complete.

Compensation: You will receive $0.30 for completion of this experiment. The researcher will award an additional $0.45 bonus for attentive and complete responses.

Confidentiality: Your individual privacy will be maintained in all published and written data from the study. Your name will not be connected to the information you provide, nor will your individual responses be identified in any research reports describing the study. All information obtained during the study will remain confidential.

Voluntary Participation: Your participation is voluntary. You may withhold information that you do not wish to disclose, and you do not have to answer any questions that you do not wish to answer. You may choose not to serve as a participant or withdraw from this study at any time without penalty. Given that your data are not linked to identifying information, individual data cannot be identified in the database, and will not be able to be removed after data has been collected.

This study has been approved by the Loyola Institutional Review Board for the Protection of Human Subjects. If you have questions about your rights as a research participant, you may contact the Loyola University Office of Research Services at (773) 508-2689. If you have any questions about the study, please contact Avery Waklatsi (email: awaklatsi@luc.edu) or Dr. Mallett (phone: 773.508.3028 email: rmallett@luc.edu).

Participant Statement: I have read the explanation provided to me and I understand that by clicking the link below, I am verifying that I am at least 18 years of age and that I voluntarily agree to participate in this study.

APPENDIX E

DEBRIEFING

Debriefing

The present research examines factors that affect evaluations of job candidates. Although candidates' qualifications are considered during the process, research has found that evaluators' subjective impressions also affect evaluations. This is problematic because those subjective impressions can be informed by stereotypes of groups to which a candidate belongs. The use of stereotypes during the evaluation process biases evaluations of a candidate's leadership skills and workplace fit, contributing to employment discrimination.

In the current study, we present participants with candidates from different social groups. We systematically vary the gender, race, and facial structure of the candidates. To test our hypotheses, participants were asked to provide perceptions of 8 presented candidates' competency, likeability, hirability, and expected starting salary. Studies show that evaluators show preference for majority group members over minorities, and men over women (Rosette, Leonardelli, & Phillips, 2008). Research has not yet determined whether having multiple stigmatized identities (e.g., being a Black woman) affects biased responding. Some theories suggest that minority men will be more discriminated against than minority women, and majority group members; others suggest both advantages and disadvantages for minority women; while other theories predict minority women to experience more discrimination than other social groups primarily.

A secondary aim is to explore how facial structure, baby-faces versus mature-faces, further affects impressions of group members. Facial structure may serve to disarm stereotype expectancies for some group members while solidifying stereotypes for others. For instance, baby-faced Black men achieve higher status leadership positions than mature-faced Black men (Livingston & Pearce, 2009) and mature-faced White men achieve higher leadership status than baby-faced White men (Zebrowitz & Montepare, 2008).

If you would like to learn more about the research that inspired the present studies, please contact Dr. Robyn Mallett, rmallett@luc.edu. You may also wish to read the following articles:

Livingston, R. W., & Pearce, N. A. (2009). The teddy-bear effect does having a baby face benefit black chief executive officers?. *Psychological Science*, *20*(10), 1229-1236.

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VITA

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