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**HOW RACE, GENDER, AND BODY POSITIONING IMPACT PERCEPTIONS AND
INTERACTIONS WITH THOSE IN POWER**

By

Adele Weaver

B.S. University of Lynchburg, 2020

M.A. University of Maine, 2022

A THESIS

Submitted in Partial Fulfillment of the

Requirements for the Degree of

Master of Arts

(in Psychology)

The Graduate School

The University of Maine

August 2022

Advisory Committee:

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HOW RACE, GENDER, AND BODY POSITIONING IMPACT PERCEPTIONS AND INTERACTIONS WITH THOSE IN POWER

By Adele Weaver

Thesis Advisor: Dr. Mollie Ruben

An Abstract of the Thesis Presented
in Partial Fulfillment of the Requirements for the Degree
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August 2022

How might the typical white perceiver behave while interviewing with a Black manager who puts her hands on her hips when she speaks? Would they act uncomfortable and anxious, leaning away from her? Would they engage with her and smile more? Lastly, would they react differently if the manager was a white man or a Black man? Even though it is known that Black people in expansive positions are perceived more negatively than white people in expansive positions, there has yet to be an observation of white people's nonverbal behavior in interactions with Black and white individuals in different body positions (Karmali, 2019). White undergraduates from the University of Maine completed a recorded Zoom mock interview with a supposed interviewer (target) whose Zoom photograph differed by race (Black vs. white), gender (male vs. female), and body positioning (expansive vs. restrictive). Participants' impressions of the interviewer and attitudes toward race via the Modern Racism Scale (McConahay, 1986) were collected, and I coded participant's nonverbal immediacy behavior during the interview. I first hypothesized that participants would show less nonverbal immediacy and positivity toward Black men in restrictive positions, white women in restrictive positions, and white men in expansive positions than all other groups. I also hypothesized that participants would rate white

interviewers more positively overall, but among Black interviewers, participants would rate Black women the least positively and participants who interviewed with white interviewers would act more positively overall, but among Black interviewers, those who interviewed with Black men in expansive positions would act the least positively than all other Black interviewers. Lastly, I hypothesized that more negative racial attitudes, as evidenced by participants' scores on the Modern Racism Scale (McConahay, 1986), would be negatively correlated with their nonverbal immediacy behavior, global positivity, and their positive ratings of the Black interviewer. This research expands our understanding of how to effectively tailor DEI initiatives that foster positive attitudes toward Black people in power.

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HOW RACE, GENDER, AND BODY POSITIONING IMPACT PERCEPTIONS AND INTERACTIONS WITH THOSE IN POWER

How might the typical white perceiver behave while interviewing with a Black hiring manager who puts her hands on her hips when she speaks? Would they act uncomfortable and anxious, leaning away from her? Would they engage with her and smile more, wishing to compensate for the mistreatment that Black people have experienced? Lastly, would they react differently if the manager was a white man or a Black man? One could derive several impressions based on salient and accessible cues like body positioning (expansive vs. restrictive). For example, that a company leader who is taking up more physical space (i.e., more expansive body positioning than restrictive body positioning) while interviewing a prospective employee has confidence, or that they are powerful and competent because they speak with their chin raised (Karmali, 2019; Witkower et al., 2020). However, it is unclear if these impressions differ if the one displaying expansive behavior is a Black person vs. a white person. In addition to understanding how these body positions are perceived, it is also important to observe how they may impact an interaction partner's behavior toward that person. Therefore, the purpose of the present research is to observe how social category memberships, i.e., race (white vs. Black) and gender (female vs. male), interact with body positioning (expansive vs. restrictive) to create global perceptions of a person in power and alter an interactant's nonverbal behavior with that person.

Despite the wealth of research on interracial interactions, there have not been ample studies assessing the impact of body positioning and race on the interaction partner's behavior (Amodio, 2009; Andersen, 1985; Devine et al., 2002; Toosi et al., 2012). However, there has been an attempt to assess participants' written responses to photographed confederates instructed

to pose expansively or in a restrictive position (referred to as “targets”) that varied by race (Black vs. white). Karmali (2019) explored race and body positioning’s impact on the selection of a partner in a social task and global perceptions of that partner. Expansive body positions in this study were defined as those that take up more physical space, while restrictive positions take up less space, and the latter is synonymous with the term “restrictive” used in the present study. They found that Black targets in expansive positions were evaluated as more aggressive and picked less often to be a partner in a social task than white targets in the same positions. In addition, white targets in constrictive positions were picked less often to be partners in the social task than white targets in expansive positions, while there was no difference in the selection of a partner for Black targets by positioning (but overall selected less as noted above). However, there was no observation of the white perceiver’s actual behavior in an interaction with the targets in an expansive position. Therefore, the purpose of the current proposed study is to fill an important gap in the literature by extending what is known about impressions that vary by race and body positioning by adding gender and actual interactants’ behavior toward these targets.

Intersectionality of Race and Gender

When entering social interactions, individuals may have certain expectations about what will happen, and when those expectations are violated, it may result in a sense of arousal (Burgoon, 1993). For example, one study showed that an ambiguous shove was perceived as more aggressive when displayed by a Black person than a white person, supporting the fact that behavior is perceived differently depending on the race of the person displaying the behavior (Duncan, 1976). This differential perception may be magnified when the person being perceived is in a leadership position. The predetermined social script for being a leader differs by race and gender (Eagly, 1987; Eagly & Karau, 2002). For example, white people are regarded as more

effective leaders than Black people (Rosette et al., 2008). Yet, when white women display dominance, they are evaluated more negatively than their male counterparts (Livingston et al., 2012; Brescoll & Uhlmann, 2008). This has been referred to as the “agency penalty” and is also ascribed to Black men who display dominant behaviors, such as appearing assertive, angry, or competitive (Brescoll & Uhlmann, 2008; Eagly & Karau, 2002; Karmali, 2019; Livingston & Pierce, 2009; Okimoto & Brescoll, 2010; Rudman & Glick, 2001). Black women are not merely the additive categories of two marginalized groups (i.e. “Black” and “women”), but may occupy a unique space. Past literature suggests that they may not suffer the agency penalty to the degree that Black men and white women do (Brescoll et al., 2010; Hodson et al., 2002; Livingston et al., 2012). Livingston and colleagues (2012) found that white women were penalized for expressing dominance, while Black women were not. In the same study, it was found that Black men were penalized for expressing dominance, and white men were not. That being said, there is a possibility that, although Black women are not penalized for dominant behavior, they may be penalized more than any other group for making competence-related mistakes, since there are high expectations for Black women in leadership positions and are afforded less grace for “slipping up” (Livingston et al., 2012).

These negative evaluations of marginalized leaders are supported by the role incongruity theory, which posits that when stereotypes about a social group do not align with qualities believed to be required for success in certain roles, prejudice results (Eagly & Karau, 2002). Black men are rewarded when they look and behave in a submissive fashion (Livingston & Pearce, 2009). For example, Livingston and Pearce (2009) found that Black CEOs benefitted from having a “baby face” such that they owned more prestigious corporations and earned a higher-median salary than more mature-faced Black CEOs. This pattern did not emerge for white

CEOs (Livingston & Pearce, 2009). “Babyfacedness” is one of many so-called “disarming techniques” that attenuates the perceived aggressiveness of Black people and creates more positive impressions by non-Black perceivers (Kang & Chasteen, 2009; Livingston & Pearce, 2009).

Nonverbal Behavior in Interracial Interactions

Intergroup contact. Researchers have employed the labels “in-group” and “out-group” to make sense of intergroup conflict (Tajfel & Turner, 1979; Turner et al., 1979). The awareness of such social categories is a powerful determinant of interaction outcomes, and it usually results in favorability toward one’s own social group (Fu et al., 2012; Tajfel et al., 1971; Yamagishi & Kiyonari, 1999). For example, in a study by Balliet and colleagues (2018), Republicans and Democrats expressed in-group favoritism by cooperating with their in-group partners in a prisoner’s dilemma task, but less so with their outgroup partners.

In the present study, social categories are determined by race (Black and white). Interracial interactions inherently produce negative feelings, which lead to nonverbal behaviors that tend to reflect more anxiety, avoidance, or discomfort (Toosi et al., 2012; Amodio, 2009). In a meta-analysis by Toosi and colleagues, it was found that across 108 studies that examined ingroup vs. outgroup behaviors, same-race dyads (i.e., ingroups) exhibited more friendly and warmer nonverbal behavior, whereas interracial dyads (i.e., outgroups) generally exhibited less friendly and colder nonverbal behavior (2012). For Black and white participants, discomfort toward the outgroup member may stem from different sources. Black people’s discomfort with a white conversational partner likely stems from a fear of being discriminated against, while white people’s discomfort with a Black conversational partner likely stems from a fear of appearing prejudiced (Bergsieker et al., 2010; Devine et al., 2002; Devine et al., 1996, Goff et al., 2008).

One other potential source of discomfort for white conversation partners is anti-Black attitudes, which are cognitive/affective conceptualizations that non-Black individuals have of Black individuals that are negative. Anti-Black attitudes can result in less friendly behavior toward Black people. For example, Willard and colleagues (2015) found that when an individual was high in anti-Black attitudes, they exhibited less friendly nonverbal behavior toward Black people. Less friendly behavior was evidenced by less smiling, fewer affirmative head nods, a “distracted” demeanor, and less expressivity when speaking with a Black versus white partner (Willard et al., 2015). Regardless of its source, discomfort is magnified in intergroup contact and it manifests in several ways.

Observing an interactant’s nonverbal behavior is a more robust way to assess an individual’s levels of discomfort and ease in an interaction than obtaining their reactions via self-report questionnaires, because nonverbal behavior is thought to be less under the volitional control of the expresser (Ambady & Rosenthal, 1998; Babad et al., 1989). Past studies have identified some of the specific nonverbal cues related to discomfort and anxiety in interracial interactions (Dovidio et al., 2002; Richeson & Shelton, 2003; Trawalter & Richeson, 2008; Willard et al., 2015). For example, some avoidance behaviors were related to a greater level of anxiety in interracial interactions, such as a lack of eye contact, positioning of one’s body away from their interaction partner, a greater frequency of blinking, and more physical distance between partners (Andersen, 1985; Dovidio et al., 2002; Fazio et al., 1995; Willard et al., 2015). Although Willard and colleagues (2015) already found differential behavior toward Black and white people, there was no power dynamic introduced in this study, such that the Black person in the interaction had more power. In addition, interracial interactions have yet to be systematically observed in a computer-mediated context, which is important to observe since stereotypes and

status differentials persist regardless of whether it's an in-person or computer interaction (Weisband et al., 1995). Computer-mediated communication has also become more widespread, considering the COVID-19 pandemic.

Compensatory behavior. One trend in the literature is to examine differences in nonverbal behaviors between same race and interracial interactions that is not necessarily negatively valenced but more ambiguous in terms of meaning (e.g., more smiling in interracial interactions than same race interactions) but that may still reflect prejudice in a compensatory fashion (Bergsieker et al., 2010; Kuntsman et al., 2016; Mendes & Koslov, 2013). For example, Mendes and Koslov found that white people in interracial interactions smiled more frequently and longer than their Black interaction partners and white people in same-race interactions (2013). Bergsieker and colleagues (2010) found similar effects, but only among white people who were engaged in the interaction. In the same study, white people who were less engaged showed fewer positive behaviors toward their other-race interaction partner. However, it may be more likely that bias will still reveal itself through negative, avoidant, or standoffish cues despite efforts to conceal prejudice (Babad et al., 1989; Willard et al., 2015). In addition, efforts to act in an overly friendly manner toward Black people are fragile, such that they diminish when the white perceiver's resources are exhausted (Mendes & Koslov, 2013). For example, job interviews are inherently stressful and can heavily tax a person's cognitive resources, thus making it more difficult to display compensatory behavior (Gilbert & Hixon, 1991; Mendes & Koslov, 2013). That being said, according to the role incongruity theory, it might be the case that this compensatory behavior only occurs when a Black person is displaying behavior that is counter-stereotypical, in other words, taking up less space (Eagly & Karau, 2002; Livingston & Pearce, 2009).

Another category of nonverbal behavior that is worth studying in interracial interactions is immediacy behavior, or behavior that decreases the psychological and physical distance between interactants (Mehrabian, 1969). Such behaviors include “approach” behaviors, as compared to “avoidance” behaviors, such as touching others, making more eye contact, leaning toward one’s partner, smiling, or more nodding (Anderson & Nimmo, 1979; Andersen, 1985; Jia et al., 2017; Turman, 2008). It is helpful to frame nonverbal behavior in interracial interactions using immediacy behavior because “approach” behaviors typically are associated with liking, and “avoidance” behaviors are associated with more negative attitudes. Few studies, however, have specifically focused on immediacy behaviors in interracial interactions; especially whether they naturally occur more in same-race interactions versus interracial interactions (Kawakami et al., 2007).

Expansive and Restrictive Behavior

Body positioning is used by perceivers to infer dominance and rank, and in turn, used to communicate social status (Hall et al., 2005; Witkower et al., 2020; Burgoon & Dunbar, 2006). Those who hold themselves with their arms away from body and chin up are afforded more popularity and competence, characteristics typically ascribed to a leader (Hall et al., 2005; Witkower et al., 2020). These behaviors are considered expansive and take up more physical space (Bailey et al., 2020). Restrictive behaviors¹, on the other hand, take up less physical space. A few examples include slouching, slumped shoulders, or arm crossing (Bailey et al., 2020; Karmali, 2019). Arm crossing is associated with interpersonal submissiveness (Fetterman et al., 2015).

¹ Restrictive behaviors have also been referred to as “constrictive” or “contracted” behaviors (Bailey et al., 2020; Karmali, 2019)

Race and body positioning. Previous literature has demonstrated biases in terms of the meaning of nonverbal behaviors when displayed by Black vs. white people. For example, some behavior expressed by Black people may be perceived as more aggressive than if that same behavior is expressed by their white counterparts. In one study by Karmali (2019), Black targets were perceived as larger (and more aggressive), despite their dimensions being identical to white targets. Therefore, it is reasonable to assume that the same behavior that white men are rewarded for may not yield the same benefits for the Black people that display them, and it is reasonable to assume that expansive behavior would be misconstrued as aggressive if it were being exhibited by a Black person (Brescoll & Uhlmann, 2008).

The role of body positioning. There is a distinction in the literature between body positioning influencing the displayer (i.e., embodied cognition) and body positioning influencing an interactant partner or perceiver, of which this study addresses the latter. Body positioning has the power not only to influence the perceiver's perceptions, but also to alter their behavior and performance (Karmali, 2019; Logel et al., 2009). For example, Logel and colleagues found that when men behaved in a dominant and sexist way toward women engineers, the women performed poorly on an engineering test as compared to women who interacted with nonsexist men (2009). In another study, de Lemus and colleagues (2012) found that women adopted a more submissive pose when they were interacting with a man displaying dominant behavior, specifically when the man was smiling and when gender was salient. The aforementioned studies suggest that body positioning has real effects on interaction partners, especially during intergroup interactions and when a power dynamic is present (de Lemus et al., 2012; Logel et al., 2009). However, what would the perceiver's nonverbal behavior convey when the power dynamic does not reflect the stereotypical hierarchy? In other words, how would a white person

behave when they are interacting with a non-white person who exhibits expansive behavior and is in a position of power and does this vary by gender of the target?

The Present Study

In order to observe how race, gender, and body positioning interact to form perceptions of a target and alter perceiver behavior in interactions, several mock interviews were conducted where perceivers participated as an applicant in a Zoom interview with an interviewer whose thumbnail photograph varied by race (white vs. Black), gender (male vs. female), and body positioning (restrictive vs. expansive). Participants completed several measures of their perceptions of the interviewer immediately after the interview and actual behavior during the interview was recorded and later coded for immediacy behavior and overall positivity. The hypotheses were driven by two theories, 1) role incongruity theory, which posits that behavior exhibited by marginalized groups that was unexpected yields more negative reactions (Eagly & Karau, 2002) and 2) the agency penalty, which posits that certain groups suffer penalization when they display agentic or dominant behavior (Brescoll & Uhlmann, 2008; Eagly & Karau, 2002; Karmali, 2019; Livingston & Pierce, 2009; Okimoto & Brescoll, 2010; Rudman & Glick, 2001).

Hypotheses

Participants' immediacy behavior. Immediacy behavior is defined in this study as any behavior that decreases the psychological distance between the participant and interviewer, as this study was conducted over a teleconferencing platform so physical distance could not be explored. Immediacy behaviors in the present study included smiling, eye contact with the interviewer, movement toward the interviewer, and shoulder orientation toward the interviewer.

Hypothesis 1. There would be a three-way interaction between race, gender, and body positioning on participants' immediacy behavior. Participants would exhibit greater immediacy behavior toward Black men in restrictive positions, white women in restrictive positions, and white men in expansive positions since these groups would be more likely to be rewarded for such behavior according to Role Congruity Theory (Eagly & Karau, 2002; Livingston & Pearce, 2009). Therefore, participants would display less immediacy toward Black women, regardless of body positioning, Black men in expansive positions, white women in expansive positions, and white men in restrictive positions.

Coder-rated positivity of the participant and participant-rated positivity of the interviewer. Positivity impressions would be obtained through the participants' behavior and through the participants' ratings of the interviewer.

Hypothesis 2. There would be a two-way interaction of race and gender on positive impressions of the interviewer. Participants would rate white interviewers more positively overall, but among Black interviewers, participants would rate Black women the least positively because they may be punished more heavily for making a mistake (i.e. having to leave the mock interview due to an emergency) compared to Black men (Brescoll et al., 2010; Livingston et al., 2012).

Hypothesis 2a. There would be a three-way interaction between race, gender, and body positioning on coder-rated impressions of participants' positivity during the interview. Participants who interviewed with white interviewers would act more positively overall, but among Black interviewers, those who interviewed with Black men in expansive positions would act the least positively than all other Black interviewers.

Anti-black attitudes. *Hypothesis 3.* More negative racial attitudes, as evidenced by participants' scores on the Modern Racism Scale (McConahay, 1986), would be negatively correlated with their nonverbal immediacy behavior, global positivity, and their positive ratings of the Black interviewer.

METHOD

Participants

Undergraduates at the University of Maine ($N = 216$) were recruited to participate in this study via the online platform Sona Systems. Participants who were non-white ($n = 19$), who suspected that the mock interview/interviewer was not real ($n = 24$), and who had technical issues during the Zoom call such as faulty internet connection ($n = 10$) were excluded, leaving a total sample of $N = 163$. The sample was composed of all white-identifying participants who were majority men (55.8%), followed by women (39.9%) and gender nonconforming individuals (4.3%). Participants were on average 19.22 years of age ($SD = 1.92$) and received one credit of compensation for their participation in this study. The researchers in this study were white-identifying individuals.

Stimuli Creation

Target thumbnail photographs. The thumbnail photographs of the targets were accessed from Generated Photos and rated as average in terms of attractiveness on a scale of 0 – *Not at all* to 10 – *Extremely* attractive ($M = 6.14$, $SD = .53$) and matched on perceived age ($M = 35.71$, $SD = 5.47$) by research assistants. In addition, the photos were run through the software FaceReader in order to detect significant differences in affect, of which none of the selected photographs significantly differed and all displayed over 90% of the emotion “Happy” as they were all smiling photographs. These photographs were then photoshopped onto the bodies of one male and one female, who displayed the same positions at the same camera angle on a plain, light-colored background. Coders reliably rated the bodies as either passive ($\alpha = .759$) or dominant/powerful ($\alpha = .926/\alpha = .857$), to which the passively-rated bodies were used for the restrictive condition and the dominant/powerful bodies were used for the expansive condition.

The photograph editing process yielded 16 photographs; two Black males in a restrictive position, two Black males in an expansive position, two white males in a restrictive position, two white males in an expansive position, two Black females in a restrictive position, two Black females in an expansive position, two white females in a restrictive position, and two white females in an expansive position (See Figure 1).

Figure 1.

Thumbnail Photographs in Each Condition





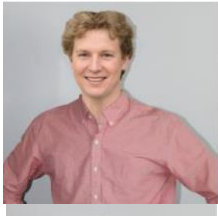





Men	Expansive	Restrictive
Black	 	 
White	 	 
Women	Expansive	Restrictive
Black		

Figure 1 Continued.

White



Audio Recordings. In order to standardize the verbal content and voice of the interviewers who appear on screen in a thumbnail photograph, a trained white female actor was audio recorded while reading from a script using inflection and tone as instructed by the primary experimenter (See Appendix A for the script used by the experimenter and interviewer). This recording was then tuned down several decibels and used as the male interviewer's voice to ensure identical inflection, accent, tempo, intensity and other acoustic properties.

Participants

Participants received an email reminding them of their participation around 24 hours before their session. They were told in consent documents and descriptions of the study that they would participate in a mock interview with a real industry professional but that their performance would not be evaluated in any way. Before the participant joined the Zoom call, an experimenter joined a password-protected Zoom call (they will be referred to as the “experimenter”) as well as a second experimenter who acted as the interviewer (and will be referred to as the “interviewer”). The interviewer, while on the Zoom call before the participant arrived, turned off their camera and changed their profile picture to one of the randomly assigned 16 thumbnail photographs of the interviewer. The interviewer changed their name to “Jordan Smith”, a purposefully androgenous and non-race stereotypic name. The experimenter put the interviewer into the “waiting room”, to be readmitted into the call later and turned off their own camera.

The participant joined and the experimenter instructed them to adjust their settings so that they were in Speaker Mode, had turned off Self-View, were properly framed by the camera, were well-lit, and were only able to see the interviewer when they joined. When the participant was properly set up and had filled out the informed consent, the experimenter started recording the Zoom call and admitted the interviewer in from the waiting room. Participants were able to see the interviewer’s thumbnail photograph. The interviewer used a second device (cell phone or laptop) in order to play the recordings that correspond to the respective gender of the interviewer's thumbnail to be used in that session. The interviewer left the appropriate amount of time for the participant to respond fully to the questions (see Appendix A for a partial script). They abruptly had to leave because of an “emergency”.

The experimenter then apologized to the participant, and then sent them a Qualtrics link over the Zoom chat to a post-interview survey. Once the participant was done with the survey,

they were debriefed by the experimenter. The experimenter asked, “Did you notice anything strange about the experiment?” and recorded their response. This question was designed to gauge the suspicion of the participant about the authenticity of the experiment.

Measures

Participant-rated impressions of the interviewer. Participants were asked to complete several items related to their perceptions of the interviewer on a scale from 0 – (*Not at all*) to 10 – (*Extremely*) including how angry, rude, competent, warm, likeable, and aggressive the interviewer appeared. They also indicated on a scale of 0 – (*Not at all*) to 10 – (*Extremely*) how satisfied they would be with the interviewer as their boss.

Anti-Black attitudes. In addition, the survey included the Modern Racism Scale (MRS), which is correlated with other measures and constructs aligned with anti-Black attitudes, such as negative attitudes of Black Lives Matter and the belief that inequality does not exist in the United States (McConahay, 1986; Miller et al., 2021). The MRS contained several statements pertaining to the rights and respect afforded to Black people in the United States and beliefs about whether or not it is deserved. One example item is “Black people are getting too demanding in their push for equal rights” (see Appendix B for all survey items). Responses to these statements anchor from 1 (*Strongly disagree*) to 5 (*Strongly agree*). A higher score on the scale indicates a greater level of anti-Black attitudes. Language in the scale was adapted to reflect person-centered language (e.g. “Blacks” will be changed to “Black people”). With the present sample, the MRS was internally reliable ($\alpha = .80$).

Editing and Coding of Participants’ Interviews

After each Zoom call ended, the primary experimenter received an email with a link to the recording of the session. The recordings were uploaded onto a password-protected Dropbox

account and then were accessed by two trained video editors. From the entire interaction, three clips were extracted. The first clip was right after the interviewer joined the Zoom call, the second was right after the interviewer asked “what are your greatest strengths and skills?”, and the third was right after the interviewer said “I’m so sorry but I have to go” (See Appendix A for partial script). All clips were 30 seconds in length. The two clips where the interviewer joined the call and then had to leave were excluded from analyses, since those clips were specifically obstructed in Speaker Mode, so the participant was not in view the entire 30 seconds. The clip where the interviewer asked about the participants’ greatest strength was retained and used for analyses. The videos were edited using the “Trim” feature on the video editing software automatically installed in Microsoft devices. The sound was taken out of the videos using the video editing software VideoProc, in addition to cropping out the participant’s name from the bottom.

Five trained coders, blind to condition, watched participants’ videos *without* sound and rated the following behaviors. Before rating the behaviors, the primary experimenter played a few example videos to the coders to provide them with a mental distribution of how often the behaviors of interest typically occur in videos. For a full list of codes, see Appendix C.

Coder-rated nonverbal behavior. Participants’ behavior during the mock interview was observed including degree of eye contact ($\alpha = .61$), movement toward the interviewer ($\alpha = .62$), and shoulder orientation toward the interviewer ($\alpha = .69$), and smiling ($\alpha = .61$) on a scale from 1 (*Not at all often*) to 10 (*Extremely often*) (Anderson & Nimmo, 1979; Andersen, 1985; Jia et al., 2017; Mehrabian, 1969; Turman, 2008).

Coder-rated impressions. Coders rated the following impressions during the interview on a scale from 1 (*Not at all*) to 10 (*Extremely*): positivity ($\alpha = .82$), animation ($\alpha = .82$),

expressivity ($\alpha = .82$), hireability ($\alpha = .82$), effort ($\alpha = .73$), engagement ($\alpha = .73$), friendliness ($\alpha = .82$), irritation ($\alpha = .67$), anxiety ($\alpha = .62$), fidgeting ($\alpha = .62$), sadness ($\alpha = .59$), liking of the interviewer ($\alpha = .78$), and rapport with the interviewer ($\alpha = .80$).

Analyses

Composite Creation

Participant-rated impressions of the interviewer. A Principal Component Analysis with a Varimax rotation revealed that several impression ratings (except rudeness) of the interviewer (warmth, competence, reverse-scored anger, reverse-scored aggression, likeability) loaded onto the same factor, based on Eigenvalues greater than one. A composite was created using these factors ($\alpha = .75$).

Coder-rated overall positivity/effort impression and anxiety/fidgeting. A Principal Component Analysis with a Varimax rotation revealed that, of the coder-rated impressions of participants, positivity, animation, expressivity, hireability, effort, engagement, friendliness, reverse-scored irritation, reverse-scored sadness, liking of the interviewer, and rapport with the interviewer loaded onto the same factor based on Eigenvalues greater than one. All factors included in the composite achieved a threshold value of .7. These 11 impression ratings were aggregated into a coder-rated positivity/effort composite ($\alpha = .97$).

In the same factor analysis above, it was revealed that the impressions anxiety and fidgeting loaded onto the same factor, passing a threshold value of .7. An anxious/fidgeting composite was created using these two impressions ($r(138) = .38, p < .001$), ($\alpha = .49$).

Thumbnail Photo Analyses

Within each of the eight conditions, there were two different thumbnail photographs used to ensure that the effect was not solely an effect of the target person in the photograph and

generalized across race, gender, or body positioning (See Figure 1). Several independent samples *t*-tests were conducted to ensure participant ratings and behavior (eye contact, shoulder orientation, movement toward interviewer, single-item coder-rated positivity, coder-rated positivity/effort, and participant-rated positive impressions of the interviewer) did not differ significantly between the 2 photographs within a given condition. Six independent samples *t*-tests were run across the 8 conditions (48 total independent samples *t*-tests). Bonferroni corrections were used to account for multiple comparisons, lowering the significance level to $p < .001$. This corrected one previously significant correlation (at the $p < .05$ level) between the two interviewers within any condition.

Analyses

In order to test Hypotheses 1, that race, gender, and body positioning would impact coder-rated immediacy behavior and Hypothesis 2, that there would be a two-way interaction of race and gender on participant-rated positive impressions of the interviewer, factorial analysis of variances (ANOVAs) were conducted with interviewer race (white vs. Black), gender (male vs. female), and body positioning (expansive vs. restrictive) entered as between-subjects variables. Coder-rated participant positivity/effort, immediacy, and participant-rated positivity served as dependent variables.

Hypothesis 3 was tested with a correlation between the Modern Racism Scale (MRS; McConahay, 1986) and coder-rated immediacy, coder-rated positivity/effort, and participant-rated positivity of the interviewer.

RESULTS

For a full table of descriptives and correlations, see Table 1. To examine whether there was support for Hypothesis 1, three 2 (interviewer race: Black vs. white) X 2 (interviewer gender: man vs. woman) X 2 (interviewer body position: expansive vs. restrictive) factorial ANOVAs were conducted to determine the between-subjects interviewer effects on participants' eye contact, smiling, movement toward the interviewer, and shoulder orientation toward the interviewer. Since the immediacy composite variable (consisting of eye contact, smiling, movement toward and shoulder orientation toward the interviewer) did not achieve an acceptable level of internal consistency ($\alpha = .36$), all immediacy variables of interest were analyzed as single dependent variables in separate ANOVAs.

Table 1

Descriptive Statistics and Correlations Between Coder-Rated Participant Nonverbal Immediacy, Positivity/Effort, Anxiety/Fidgeting, and Participant-Rated Positivity

	M	SD	α	1.	2.	3.	4.	5.	6.	7.	8.
1. Eye Contact	4.24	1.31	.61	–							
2. Shoulders Toward	9.32	1.09	.69	.02	–						
3. Smiling	2.31	1.49	.61	.36*	-.27*	–					
4. Movement Toward	2.95	.79	.62	-.08	-.27*	.14	–				
5. Coder-Rated Positivity/Effort	5.72	1.18	.97	.36*	-.02	.65*	.24*	–			
6. Coder-Rated Positivity (Single Item)	4.69	1.42	–	.33*	-.05	.70*	.28*	.93*	–		
7. Participant-Rated Positivity	7.73	1.30	.75	-.03	.16 [†]	-.09	.04	-.03	-.06	–	
8. Modern Racism Scale (MRS)	11.18	4.18	.80	.05	.02	-.08	-.08	-.02	-.07	-.17*	–
9. Coder-Rated Anxiety/Fidgeting	3.62	1.17	.49	.03	-.18*	-.07	.32*	-.10	-.04	-.18*	-.1

Note. * $p < .05$, [†] $p < .10$. These values reflect participants who interviewed with a Black interviewer and participants who interviewed with a white interviewer.

Eye contact. There were two small, albeit significant main effects of race and body positioning on eye contact. Participants made more eye contact with Black interviewers ($M = 4.48$, $SD = 1.28$) than white interviewers ($M = 4.02$, $SD = 1.30$), $F(1, 132) = 4.26$, $p = .041$, $\eta_p^2 = .03$. Participants also made more eye contact with those in expansive positions ($M = 4.47$, $SD = .15$) than interviewers in restrictive positions ($M = 4.02$, $SD = .16$), $F(1, 132) = 4.05$, $p = .046$, $\eta_p^2 = .03$. There were no other significant main effects or interactions (see Table 3).

Smiling. There was no significant effect of interviewer race, gender, and body positioning on the degree to which the participant smiled (all p 's > .119) (see Table 3).

Movement toward interviewer. There was a significant two-way interaction of race and gender on movement toward the interviewer, $F(1, 132) = 5.75$, $p = .018$, $\eta_p^2 = .04$. We ran two sets of pairwise comparisons in order to examine the behavior of participants who interviewed with white males, white females, Black females, and Black males. Participants moved significantly more toward the white male interviewers ($M = 3.16$, $SD = .94$, $d = .50$) and the Black female interviewers ($M = 3.08$, $SD = .88$, $d = .41$) than the white female interviewers ($M = 2.74$, $SD = .71$). Participants who interviewed with Black males did not differ from any other group in regards to movement toward the camera (all p 's > .112) (see Table 3).

Shoulder orientation. There were no significant main effects or interactions of interviewer race, gender, or body positioning on shoulder orientation (all p 's > .157, all η_p^2 's < .02) (see Table 3).

To test Hypothesis 2, a 2 (interviewer race: Black vs. white) X 2 (interviewer gender: man vs. woman) factorial ANOVA was conducted. There were no significant main effects or interactions of interviewer race or gender on participants' positivity ratings of the interviewer (all p 's > .581, all η_p^2 's < .002) (see Table 3).

To examine whether there was support for Hypothesis 2a (that race, gender, and body positioning impact coder-rated impressions of participants' positivity during the interview), a 2 (interviewer race: Black vs. white) X 2 (interviewer gender: man vs. woman) X 2 (interviewer body position: expansive vs. restrictive) factorial ANOVA was conducted. None of the independent variables, including interviewer race, gender, and body positioning had any effect on coder ratings of participant positivity/effort (all p 's > .13, η_p^2 's < .008) (see Table 3).

Another factorial ANOVA was run to determine the effect of interviewer race, gender, and body positioning on participant's positivity using the single item coder-rated impression. Again, there were no significant main effects or interactions of interviewer race, gender, or body positioning on coder-rated positivity (all p 's > .616, all η_p^2 's < .015) (see Table 3). Lastly, a factorial ANOVA was conducted to assess all independent variables' effects on coder-rated impressions of participant anxiety/fidgeting using a composite variable. It was found that there was a three way interaction between race, gender, and body positioning, such that participants exhibited greater perceived anxiety/fidgeting when talking to a Black woman in a restrictive position ($M = 3.93$, $SD = .29$) than a white woman in a restrictive position ($M = 3.22$, $SD = .24$), $F(1, 132) = 4.06$, $p = .046$, $\eta_p^2 = .03$, $d = 1.03$ (See Table 3).

Before testing Hypothesis 3, a factorial ANOVA was conducted to see if Modern Racism Score (MRS) differed by condition (interviewer race, interviewer gender, and interviewer body position). A main effect of interviewer race was found, such that participants who spoke to white interviewers ($M = 11.97$, $SD = 4.67$) had a higher MRS score than those who spoke to Black interviewers ($M = 10.34$, $SD = 3.76$), [$F(1, 147) = 7.61$, $p = .006$, $\eta_p^2 = .038$]. To test Hypothesis 3, a series of correlations were run between participants' scores on the MRS and coder ratings of participants' nonverbal immediacy behavior, coder ratings of participants' positivity, and

participant-rated positivity toward the interviewer. Anti-Black bias may be “brought out” when a person is interacting with a Black individual as opposed to when they are interacting with a white individual since anti-Black attitudes may be more available and salient when interacting with a Black person. For this reason, correlations were conducted only among participants who spoke with a Black interviewer. There was a marginally significant association between MRS of the participant and coder-rated positivity using the single-item measure, ($r(63) = -.22, p = .086$), specifically, higher scores on the MRS were related to lower coder-rated perceptions of participants’ positivity. In addition, among those who interviewed with Black interviewers, there was a marginally significant correlation between participants’ shoulder orientation and their score on the MRS, such that more shoulders toward the interviewer was associated with higher scores on the MRS, $r(63) = .23, p = .063$ (See Table 2).

Table 2.

Correlations Between Coder-Rated Participant Nonverbal Immediacy, Positivity/Effort, Anxiety/Fidgeting, and Participant-Rated Positivity For Black Interviewers (Top Right Triangle) and White Interviewers (Bottom Left Triangle)

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Eye Contact	–	.25*	.09	.52*	.47*	.07	-.04	-.03	.34*
2. Shoulders Toward	-.03	–	-.14	.07	-.01	.08	.23 [†]	-.13	.04
3. Movement Toward	.001	-.34*	–	.02	.04	.18	-.11	.28*	-.07
4. Coder-Rated Positivity/Effort	.25*	-.06	.37*	–	.90*	.04	-.12	-.28*	.49*
5. Coder-Rated Positivity (Single Item)	.13	-.08	.44*	.95*	–	-.03	-.22 [†]	-.12	.56*
6. Participant-Rated Positivity	-.03	.16 [†]	.20 [†]	-.07	-.08	–	-.07	-.05	-.04
7. Modern Racism Scale (MRS)	.19	-.11	-.05	.06	.03	-.21 [†]	–	-.13	-.11
8. Coder-Rated Anxiety/Fidgeting	.08	-.22 [†]	.36*	.03	.03	-.31*	.04	–	-.11
9. Smiling	.30*	.04	.31*	.77*	.82*	-.15	.00	-.05	–

Note. *p < .05, [†]p < .10

Table 3.

Model Statistics: Coder-Rated Participant Nonverbal Immediacy, Positivity/Effort and Participant-Rated Positivity

	df _{between}	df _{within}	<i>F</i>	<i>p</i>	η_p^2
Eye Contact					
Interviewer Race	1	132	4.26	.041	.031
Interviewer Gender	1	132	2.28	.133	.017
Interviewer Body Position	1	132	4.05	.046	.030
Race*Body Position	1	132	.003	.959	.000
Race*Gender	1	132	1.12	.293	.008
Gender*Body Position	1	132	.07	.795	.001
Race*Gender*Body Position	1	132	.09	.771	.001
Shoulders Toward Interviewer					
Interviewer Race	1	132	.301	.584	.002
Interviewer Gender	1	132	2.03	.157	.015
Interviewer Body Position	1	132	.198	.657	.001
Race*Body Position	1	132	.041	.841	.000
Race*Gender	1	132	.189	.665	.001
Gender*Body Position	1	132	.017	.898	.000
Race*Gender*Body Position	1	132	.008	.931	.000

Table 3 Continued.

Smiling

Interviewer Race	1	132	2.46	.119	.018
Interviewer Gender	1	132	.57	.454	.004
Interviewer Body Position	1	132	1.21	.273	.009
Race*Body Position	1	132	.03	.475	.004
Race*Gender	1	132	.57	.452	.004
Gender*Body Position	1	132	.51	.475	.004
Race*Gender*Body Position	1	132	.18	.673	.001

**Participant-Rated
Positivity**

Interviewer Race	1	151	.771	.381	.005
Interviewer Gender	1	151	.088	.767	.001
Race*Gender	1	151	.357	.551	.002

**Coder-Rated
Positivity/Effort
(Composite)**

Interviewer Race	1	132	.814	.369	.006
Interviewer Gender	1	132	.895	.346	.007
Interviewer Body Position	1	132	1.03	.313	.008
Race*Body Position	1	132	.086	.769	.001
Race*Gender	1	132	.837	.362	.006
Gender*Body Position	1	132	.003	.954	.000

Table 3 Continued.

Race*Gender*Body Position	1	132	.160	.690	.001
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**Coder-Rated
Positivity (Single
Item)**

Interviewer Race	1	132	.166	.685	.001
Interviewer Gender	1	132	.539	.464	.004
Interviewer Body Position	1	132	.781	.379	.006
Race*Body Position	1	132	.252	.616	.002
Race*Gender	1	132	1.986	.161	.015
Gender*Body Position	1	132	.050	.823	.000
Race*Gender*Body Position	1	132	.007	.933	.000

**Coder-Rated
Anxiety/Fidgeting**

Interviewer Race	1	132	.273	.602	.002
Interviewer Gender	1	132	.415	.521	.003
Interviewer Body Position	1	132	1.01	.317	.008
Race*Body Position	1	132	.394	.531	.003
Race*Gender	1	132	.161	.689	.001
Gender*Body Position	1	132	1.02	.314	.008
Race*Gender*Body Position	1	132	4.06	.046	.030

The effect of participant gender. Since there are known gender differences in the literature in the expression of nonverbal behaviors (women tend to express more immediacy behaviors than men), participant gender was included on all models above to assess its interaction with interviewer race, gender, and body positioning (Sanders, 1989). Since there were not enough gender nonconforming individuals to compare with other genders ($N = 7$), these individuals were excluded from the present analyses. Consistent with past literature, there was a main effect of participant gender on eye contact [$F(1, 117) = 9.52, p = .003, \eta_p^2 = .07$] and global positivity [$F(1, 117) = 20.66, p < .001, \eta_p^2 = .15$], such that women ($M = 4.69, SD = .17$) made more eye contact with the interviewer than men ($M = 3.99, SD = .15$), and women ($M = 5.37, SD = .18$) were more globally positive than men ($M = 4.26, SD = .16$).

There was also a significant interaction between interviewer gender, interviewer body positioning, and participant gender on eye contact such that female participants who interviewed with female interviewers made more eye contact with those who were in expansive positions ($M = 5.11, SD = .30$) than those who were in restrictive positions ($M = 4.13, SD = .31$), [$F(1, 117) = 10.29, p = .011, \eta_p^2 = .054$].

In terms of participant smiling, there was a main effect of participant gender such that women ($M = 3.07, SD = .19$) smiled more than men ($M = 1.79, SD = .17$), [$F(1, 117) = 25.49, p < .001, \eta_p^2 = .18$]. Interviewer race and interviewer body position interacted with participant gender such that, among white expansive interviewers, women ($M = 3.12, SD = 2.18$) smiled more than men ($M = 1.52, SD = .62$), [$F(1, 117) = 10.59, p = .022, \eta_p^2 = .044$]. In addition, among Black restrictive interviewers, women ($M = 3.59, SD = 1.91$) smiled more than men ($M = 1.66, SD = .78$).

In addition to the single item coder-rated impression of participant positivity indicated above, it was found that there was a main effect of participant gender using the positivity/effort composite, $F(1, 117) = 14.27, p < .001, \eta_p^2 = .11$. Specifically, women ($M = 6.21, SD = .15$) were significantly more positive/effortful than men ($M = 5.42, SD = .14$). Lastly, in regards to the participants' ratings of the interviewer, there was a significant interaction of interviewer gender and participant gender. Among those who interviewed with males, female participants ($M = 7.99, SD = .26$) rated the interviewer more positively than males ($M = 7.55, SD = .22$), and among those who interviewed with females, male participants ($M = 8.05, SD = .20$) rated the interviewer significantly more positively than female participants ($M = 7.38, SD = .22$), $F(1, 132) = 6.15, p = .014, \eta_p^2 = .045$.

DISCUSSION

The purpose of the present study was to identify a constellation of participant's nonverbal behaviors and impression ratings that differ when they are speaking to a Black vs. white interviewer, and whether or not the gender and bodily expansiveness of the leader interacts with their race to elicit such behaviors. It was found that participants at a predominantly white institution (PWI) in the northeast United States made more eye contact with Black interviewers and expansive interviewers than white interviewers and restrictive interviewers, respectively. In addition, participants moved toward the interviewer significantly more when the interviewer was a white male or Black female than when they were white females. Participants also appeared more fidgety and anxious when speaking to Black female interviewers in a restrictive position as opposed to white female interviewers in restrictive positions. No significant differences were found in terms of participants' positivity ratings of the interviewer.

As supported by participants' movement toward white male and Black female interviewers, other literature suggests that Black women may not suffer the agency penalty to the degree that white women do (Livingston et al., 2012). That is, moving toward someone is inherently an "approach" behavior and may signal one's positive evaluations of another person, and participants decreasing the psychological and physical distance between themselves and the interviewer may be a function of those positive evaluations. However, it is difficult to tease apart exactly what a behavior is signaling. The act of moving toward the interviewer may also suggest that there was more distance between the interactants to begin with, categorizing it as an avoidance behavior. It was hypothesized that Black men would suffer an agency penalty (such that participants would put more physical distance between themselves and the Black male

interviewer), but Black male interviewers did not significantly differ from any other group in terms of movement toward the interviewer.

It is not surprising that participants made more eye contact with expansive leaders, as it is known that people make more eye contact with powerful agents, and an expansive position could have served as a communicative signal that the interviewer was more powerful (Hall et al., 2005). However, body positioning in of itself was not the sole purpose of the study, but rather how the variable interacted with racial identity of the interviewer. It is surprising, however, that participants made more eye contact with Black interviewers than white interviewers, since eye contact may be categorized as an “immediacy” or “approach” behavior and this would be less expected toward outgroup members, in this case Black people. Norton and colleagues (2006) found that white people made less eye contact with Black people and were less friendly when they wanted to avoid conversations about race. In the present study, we may not have observed this behavior from our participants because the conversation was not race-related. It may also be possible that white undergraduates do not have much exposure to Black people on the University of Maine’s campus, as under 2% of the student body identifies as Black/African American (Allen, 2021). Therefore, interacting with a Black person may be an unfamiliar situation for the participants in this study, making participants attend more to the Black interviewer than white interviewer (Weeden et al., 2019). Future research should examine how contact with Black people moderates eye contact during a similar procedure.

Theoretically, nonverbal behaviors should be unrelated to self-reported measures of racial bias (Dovidio et al., 2002). However, despite it being a more explicit measure of racial bias, the Modern Racism Scale had relationships, albeit small, with some behavioral variables when the participant was interviewing with a Black interviewer. For example, there was a marginal

association of shoulder orientation and scores on the MRS, such that a higher score on the MRS was related to more shoulder orientation toward the camera. This may also suggest that in this context when speaking with a Black interviewer, shoulder orientation may be a sign of dominance, and not a sign of immediacy. In line with the reasoning that higher MRS scores may predict less immediacy and potentially more dominance behaviors, it was found that MRS scores were marginally related to coder-rated global positivity, such that higher scores were related to less positivity.

The historical context of the study may also contribute to the pattern of results found with the MRS, particularly, the fact that the MRS was related to some nonverbal behavior, despite the fact that it was not expected. During the Trump presidency of 2016-2021, there was an upsurge in hate crimes against Black Americans. Particularly, in 2016, the counties that had a majority vote in favor of Trump by the largest margins saw the largest increases in reported hate crimes (Edwards & Rushin, 2018). In addition, Trump's indifferent response toward the egregious rallies held by right-wing extremists in Charlottesville, VA set the precedent that anti-Blackness would not be admonished by important authority figures (Keneally, 2018). Individuals who harbored anti-Black attitudes perhaps felt more comfortable and empowered to express their anti-Black attitudes in this context.

It was hypothesized that participants would rate the white interviewers more positively overall, but among Black interviewers, participants would rate Black women the least positively. However, this was not the case, as participants' positive impressions of the interviewer did not differ as a function of race or gender. It makes sense that we did not capture bias against Black interviewers in this explicit attitude measure, as it has sometimes been discovered in past research that white interactants ascribe more positive traits and evaluations to stigmatized

outgroups than their own non-marginalized ingroups (Blascovich et al., 2001). Harber (1998) even found that people gave more explicit positive evaluations to a Black person who wrote a poorly-written essay rather than a white person who wrote the same essay. In fact, when participant impressions of the interviewer were analyzed separately, it was found that participants rated the white interviewers as significantly more rude. Even though there were no other significant differences in terms of impression ratings, participants generally rated Black interviewers more positively than white interviewers. In addition, although it was not significant ($p = .119$), there might have been a small effect of smiling such that participants smiled more at Black interviewers than they did white interviewers ($\eta_p^2 = .018$). One potential explanation for these findings is that people may feel more comfortable sharing negative feedback about ingroup members as opposed to outgroup members (Otten, 2009). It may also be possible that participants are aware that expressing dislike or negativity toward Black people is unacceptable in a modern society, and seek to portray themselves as egalitarian (Crandall et al., 2002).

Differences in terms of participant gender were discovered in the present study. Particularly, there was a significant interaction of interviewer gender and participant gender on participant-rated positivity toward the interviewer. Among those who interviewed with males, female participants rated the interviewer more positively than males participants, and among those who interviewed with females, male participants rated the interviewer significantly more positively than female participants. Females may also feel a sense of competition with one another, thus evaluating other females negatively and harshly (Boring, 2017; Reynolds, 2021). As a whole, these two findings may also be due to the previously mentioned trend that people may be more comfortable negatively evaluating ingroup members. There was also a significant interaction between interviewer gender, interviewer body positioning, and participant gender on

eye contact such that female participants who interviewed with female interviewers made more eye contact with those who were in expansive positions than those who were in restrictive positions. This finding is supported by literature which suggests that people make more eye contact with those in power (Hall et al., 2005). Gender of the participant did not interact with the race of the interviewer, which was the primary variable of interest.

Limitations and Future Directions

A few methodological limitations exist in the present study. First, a stronger comparison of white people's behavior toward a Black vs. white interviewer could be made with a within-subjects design where individual participants interact with both a Black and a white interviewer (in a counterbalanced order). Second, the Modern Racism Scale score significantly differed according to condition, such that those speaking to a white interviewer had a higher MRS score. This could mean that random assignment was not sufficient enough in equally distributing MRS scores, but it could also mean that speaking with a Black interviewer promotes more egalitarian views toward Black people, as per Allport's Contact Theory (1954). Therefore, in future research, the MRS should be completed by participants at a different time point than when the actual behavior and interaction is recorded so as to not be influenced by the context of the experiment.

It may be beneficial for future research involving Zoom interactions to utilize a different framework than immediacy to capture anti-Black behavior. The immediacy variables of interest were unrelated to each other, namely, eye contact, smiling, moving toward the interviewer, and shoulders toward the interviewer ($\alpha = .36$). This may suggest that these three specific behaviors do not tap into immediacy as a whole, but it is also difficult to capture the construct of immediacy during computer-mediated communication, as there is already an inherent distance

between interactants. It should be noted that reliability of the behavioral codes was acceptable, but low for this type of work (Rosenthal & Rosnow, 2008). Future research should either train research assistants more precisely to be reliable or include more coders which usually increases reliability. Other studies have also measured nonverbal immediacy, but found that only interpersonal distance (not forward lean, eye contact, nor shoulder orientation) changed as a result of the demographic makeup of the dyad, such that white participants put more distance between themselves and a Black interviewer than a white interviewer (Word et al., 1974). In a separate program of research, it has been found that immediacy toward outgroup members could be enhanced by having participants exhibit “approach” behavior toward outgroup members, such as moving a joystick toward a Black face (Kawakami et al., 2007). Therefore, perhaps future research should explore other ways to enhance immediacy toward outgroup members, capture it in a different way than in the present study, or observe other potential behaviors that could impact interracial interactions.

The present study was designed in such a way where participant’s susceptibility to social desirability may have been enhanced: there was a self-presentational aspect of an interview where the participant may have felt pressured to reveal their best selves. Therefore, in future research, other nonverbal behaviors that are less susceptible to social desirability need to be observed, for example, blinking behavior. Blinking has been linked to anti-Black attitudes in past literature, for example, Dovidio and colleagues (2002) found that white people who scored higher on a measure of implicit anti-Black bias blinked more frequently in an interaction with a Black person than people who scored lower on anti-Black bias. One of the measures in the present study, coder-rated anxiety/fidgeting, did yield results consistent with anti-Black bias, particularly that participants exhibited more anxiety/fidgeting toward Black women in restrictive

positions compared to white women in restrictive positions. Global perceived anxiety and fidgeting behavior may be less relevant or salient to one's socially desirable presentation, thus why we might have been able to detect it in the interracial interviews.

Lastly, future research endeavors should center Black people's perspective on white people's nonverbal behavior. Some literature exists on this topic, for example, Richeson and Shelton (2005) found that Black people were able to infer a white person's score on a measure of implicit racial bias through short video clips. In addition, Rollman (1978) found that Black people were better able to infer a target person's anti-Black attitudes with more precision than white people. However, it is unknown specifically what nonverbal cues are more or less present in a target person when Black people infer higher anti-Black attitudes. This is incredibly important because, of the general population, Black people are the most disadvantaged by racism, so it is important to understand the effect that white people's behavior has on them specifically.

Conclusion and Implications

Prior to the present study, there has never been an attempt to examine computer-mediated interracial interactions with a Black person in power and in powerful nonverbal positions. Specifically, I found partial support for Hypothesis 1, that participants would show greater immediacy toward white men, such that participants moved toward the interviewer more when they were a white man. However, it was not hypothesized that participants would move toward Black women to the same degree of white men. Hypothesis 2 and 2a were not supported, in that there were no significant differences in participants' positive ratings of the interviewer and coder-rated global nonverbal positivity according to the race, gender, and body position of the interviewer. However, when considering the coder-rated impressions of participants'

anxiety/fidgeting during the interview, it was found that participants were perceived as more anxious and fidgety toward Black women in restrictive positions as opposed to white women in restrictive positions. This could suggest that the expectations for displays of power differ for Black women and white women, such that Black women are expected to be more expansive and exhibit agency behavior. There was also partial support for Hypothesis 3, that higher scores on the Modern Racism Scale would be negatively related to coder-rated nonverbal immediacy and positivity when the participant is interviewing with a Black interviewer. There were marginal associations between the MRS and global positivity and shoulder orientation, such that higher MRS scores were related to less coder-rated positivity and a shoulder orientation toward the interviewer. Even though these relationships were not significant, they may suggest that explicitly-reported anti-Black attitudes may be related to nonverbal behavior, particularly positivity and shoulder orientation.

These results show a growing support for the literature on differential nonverbal behavior toward Black and white people (Toosi et al., 2012; Willard et al., 2015). In addition, as observed in this study, the gender and bodily expansiveness of the interviewer (or person in power) can intersect with race to alter judgments or behavior toward that person (Livingston et al., 2012). Ultimately, in the field of nonverbal communication, researchers refrain from ascribing meaning to nonverbal behaviors so as to not make assumptions about the internal states of the person performing the behavior (Hall et al., 2019). Particularly, it cannot be assumed that increased eye contact indicated participants' liking or anti-Black bias. However, through the present study, it can be derived that there is differential behavior toward Black and white people in power, and behavior also fluctuates as a function of the leader's gender and body positioning. This has implications in numerous settings, such as industry contexts. It is important to understand how

Black people in powerful positions are treated, so that one can more effectively target anti-Black bias toward this group and cultivate a more welcoming environment for Black people to live and work. For instance, although participants made more eye contact with Black interviewers, they also appeared more anxious and fidgety when speaking to Black women in restrictive positions than their white counterparts, which supports the argument that gender and nonverbal behavior of the leader matter as well. Anxious behavior toward Black people may be “contagious” to other people observing the interaction as well, in that members of non-marginalized groups who observe the anxiety will exhibit the behavior later in their subsequent interracial interactions (Willard et al., 2015).

It is possible as well that an increase in eye contact toward Black interviewers is perceived negatively by the Black interaction partner, such that they feel overly evaluated or “watched”. Feeling discriminated against in this manner negatively affects the health, longevity, and performance of the marginalized group (O’Brien, 2016; Pavalko et al., 2003; Shih et al., 2006). However, Role Congruity Theory is limited in that it does not incorporate the marginalized group’s (in this case, Black Americans) perspective. Specifically, it posits that groups are “rewarded” for certain behaviors that align with the stereotypes about social roles, however, do they actually perceive this “reward” as rewarding? This work informs the growing and rapidly evolving literature on interracial interactions, which should be updated often since race relations in the United States are also rapidly evolving.

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APPENDICES

Appendix A

Partial Experimental Script

Experimenter: Great! I am going to invite the interviewer in from the waiting room. They will have their video off because of privacy reasons. I will let you know when your mock interview starts.

interviewer joins

Ensure you are in gallery view and that you have hid your self-view.

Experimenter: Hi there, Jordan! We just finished up the paperwork on our end and we're ready to get started so I'll turn it over to you.

Interviewer: turn the volume up all the way before playing recordings.

Interviewer (1): Great! Thanks for getting us ready. Who do I have the pleasure of interviewing today?

Experimenter: Today you'll be interviewing (insert participant name). You can go ahead and get started.

Interviewer (2): Great, I'll take it from here. I know you signed up for this study knowing that I was going to ask you some questions, so I would like you to start by spending a couple of minutes talking about yourself and some of the jobs you've had in the past. What are your greatest strengths and skills?

Participant talks

Interviewer (3): Okay, thank you for answering my first question. My next question is, what do you consider to be your greatest weakness?

Participant talks

Interviewer (4): I apologize, but a work emergency just came up while you were speaking. I'm so sorry, but I have to go! Do you mind taking it over from here?

Experimenter: No not at all, I hope everything is okay! I don't mind taking over from here.

Interviewer (5): I really appreciate it, good luck!

Experimenter: Thank you for your time!

Interviewer (6): Of course! *logs off*

Experimenter leaves the call.

Appendix B

The Modern Racism Scale (McConahay, 1986)

Indicate how much you agree or disagree with the following statements on a scale of *Strongly Disagree* (1) to *Strongly Agree* (5).

Discrimination against Black people is no longer a problem in the United States.

It is easy to understand the anger of Black people in America.

Black people have more influence upon school desegregation plans than they ought to have.

Black people are getting too demanding in their push for equal rights.

Black people should not push themselves where they are not wanted.

Over the past few years, Black people have gotten more economically than they deserve.

Over the past few years, the government and news media have shown more respect to Black people than they deserve.

Appendix C

Nonverbal Codes and Impression Ratings

Nonverbal Behavior: Please rate the following behaviors on how often they occurred (on a scale from 1 (*Not at all often*) to 10 (*Extremely often*)).

Eye contact

Moving toward the interviewer

Shoulders oriented toward the interviewer

Nonverbal Impressions: The participant seemed... (on a scale of 1 (*Not at all*) to 10 (*Extremely*)).

Positive

Animated

Expressive

Hireable

Effortful

Engaged

Friendly

Irritated

Anxious

Fidgety

Sad

To like the interviewer

To have rapport with the interviewer

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