

# **The Challenges of Intergroup Communication: Warmth and Competence Perception Differences During Interracial Mentorship**

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## **Abstract**

The present study analyzes mentors' warmth and competence perceptions of Black and White mentees, as well as reciprocal Black and White mentees' warmth and competence perceptions of mentors. Under the guise of a study about advising students interested in pursuing a career in the health care, participants advise one Black confederate mentee and one White confederate mentee in a laboratory setting. All interactions were videotaped and audio recorded, and the heart rates, respiration rates and movement of the participants. The study is part of an ongoing, more comprehensive research project that aims to compare the mentor perceptions of confederate mentees before and after diversity training. Preliminary results indicate that mentors seem to perceive the competence and coldness of Black and White mentees in similar ways, yet Black mentees perceive mentors as more cold and competent than the White mentees. These findings suggest that mentoring yields a different subjective social experience for Black mentees, compared to White mentees. Implications for these findings, particularly in relation to workplace discrimination, are discussed in further detail.

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## Introduction

*“Show me a successful individual, and I’ll show you someone who had real positive influences in his or her life. I don’t care what you do for a living—if you do it well I’m sure there was someone cheering you on or showing the way. A mentor.”* (Guideposts, 2017)

— Denzel Washington

This quote from Denzel Washington (an extremely successful Black American actor, director and producer) conveys the pivotal role that mentors play in the lives of their mentees. As a successful Black man in the United States, where Blacks have traditionally suffered from societal exclusion and underrepresentation (Fiske, Dupree, Nicolas, Swencionis, 2016), Denzel Washington credits his success to the various mentors he has had along the way. Most people, like Washington, also attribute their personal and professional development to the various advisors, sponsors and mentors who invested in their success (Abbajay, 2019; “Workplace Loyalties Change, but the Value of Mentoring Doesn’t”, 2007). This is because mentorship is crucial for individuals to develop academically, socially, and, in particular, professionally (Blake-Beard, Murrell, Thomas, 2006). In the organizational hierarchy that exists in the corporate sector, mentoring plays a particularly useful role in allowing employees to navigate through and succeed in the workplace environment. However, the success of these mentorships is centered around communication and personal identification (Ghosh, 2018; Irby et al., 2017). Given the different levels of successful communication and personal identification that can occur between individuals with different characteristics, mentors can vary in the level of impact that they have on their mentees.

Interracial mentorship can be particularly challenging, since individuals of different races often lack the shared experiences and common social identities that facilitate personal identification and empathic connections (Ghosh, 2018). Moreover, interracial communication between mentors and mentees can be affected by psychological distance that is created by the power and status imbalance between the individuals (Magee & Smith, 2013). Mentors are inherently higher in power and status than their mentees—particularly when the mentors are White, since Whites have traditionally occupied higher status–higher power positions than Blacks in the United States (Fiske et al., 2016). The quality of the mentorship relationship, depicting the subjective social experience of the relationship (Onyeador et al., 2020), is significant because low quality interracial mentorship relationships disadvantage Black employees; mentorship is a valuable resource that provides a buffer against the negative health consequences of workplace discrimination and stressful organizational environments (Ragins, 1989; Ragins et al., 2015). Thus, psychological research concerning mentor and mentee perceptions during interracial mentoring is important to understand the underlying processes that either facilitate or inhibit successful intergroup communication and relationship-building.

The goal of the present experiment was to augment the existing literature on intergroup mentorship through a random sample of executives within a large health organization acting as mentors who advise Black and White confederate mentees. Survey data, Implicit Association Tests (Greenwald, McGhee & Schwartz, 1998), and psychophysiological data were used to analyze how Black confederate mentees' responses mentors differ from White confederate mentees' responses during standardized interactions.

## **Background**

Attitudes toward Black people in the United States have become significantly more favorable over the past 50 years. In the 1960s, sweeping legal and social reforms reduced the barriers facing Black Americans in many important domains, contributed to a rising Black middle class, and ultimately resulted in a growing acceptance of the principles of inclusion (Quillian, Pager, Hexel & Midtbøen, 2017). Additionally, survey data contrasting White opinions between the 1940s and the 1970s show that White Americans have increasingly rejected discriminatory statements against blacks over time. For example, in 1942, a “substantial majority” of whites in the United States approved of the discriminatory statement that “White people should have the first chance at any kind of job.” By 1972, nearly 100% of Whites rejected the same statement (Bobo, 1988).

Yet, despite the consistent improvement in attitudes towards Black Americans, the level of discrimination faced by Black people in the workplace remains a widespread problem. Workplace discrimination is defined as any action pursued by an institution or the individuals within an institution which creates a hostile workplace environment and sets unfair terms and conditions that systematically and disparately impair the ability of members of a group to work (Okechukwu, Souza, Davis & Butch de Castro, 2014; Rospenda, Richman & Shannon, 2009). There are a plethora of laws and protections in place that aim to prevent people of color from experiencing workplace discrimination, as well as provide equal opportunity for these individuals. Nevertheless, over half of African Americans personally report experiencing discrimination in the workplace (NPR 2017, p. 5). A meta-analysis of hiring discrimination studies from 1989 to 2018 reveals that Whites are 36% more likely to receive employment callbacks than are African Americans (Quillian et al., 2017). Likely in part due to racial

discrimination in hiring, from 1963 to 2013, African Americans have continued to be 2 to 2.5 times more likely to be unemployed than Whites (Austin, 2013). According to data from the U.S. Equal Employment Opportunity Commission (2018), the federal agency that administers and enforces federal laws regarding workplace discrimination, 34% of discrimination complaints in 2017 involved race, a mere two percentage point difference from the 36% of such complaints involving race filed in 1997. Racial claims are commonly filed with the EEOC, but they have the lowest probability of resulting in legal action or settlement, suggesting that employees who experience racial discrimination in the workplace are not likely to receive vindication or compensation for mistreatment (“Employment and Discrimination” 2019).

The prevalence of aversive racism, a more subtle form of discrimination, in the United States is one potential reason that racial discrimination in the workplace has not been effectively addressed. According to the aversive racism framework, many White Americans, even if they personally and publicly express favorable attitudes toward Blacks and endorse egalitarian principles, harbor unconscious negative feelings and beliefs about African Americans (Dovidio, Gaertner, & Pearson, 2017; Gaertner & Dovidio, 1986). Many individuals have deep-rooted prejudices against people of color, often due to sociocultural influences, despite the fact that they do not exhibit overt prejudices against people of color. White Americans’ actions and behavior manifest “a subtle racism that becomes evident where there are ambiguous social norms, where discrimination against a particular ethnic group can be rationalized by reasons other than race (for example, business needs) or where there is opportunity for prosocial behavior to their own group (for example, discounting negative aspects of same group candidates when making selection decisions)” (Noon, 2017, p. 201). Through this mechanism of subtle discrimination, prejudiced individuals in the workplace are able to conceal their violation of the egalitarian



social norms that have developed through equality advocacy over time (Jones, Arena, Nitttrouer, Alonso & Lindsey, 2017). Aversive racism's signature covert expression of bias can be a lot more difficult to pinpoint in the workplace due to its inconsistent, pervasive and variable nature (Hebl, Foster, Mannix & Dovidio, 2002; Jones, Peddie, Gilrane, King & Gray, 2016; Lear & Janssens, 2011; Noon, 2017; Pearson et al., 2009). It can be more difficult to address covert discrimination through organizational policies, and thus, the discrimination can occur with higher frequency if unchallenged over time. The Civil Rights Act of 1991 allows employees to sue their employers for discrimination in the workplace, but anti-discrimination legislation does not punish subtle discrimination (Van Lear & Janssens, 2011), and organizations do not have clear options to report such mistreatment, despite having some options for reporting overt prejudicial behaviors (Jones et al., 2016).

Aversive racism in the workplace has significant deleterious impacts on the well-being of Blacks in the United States, especially since American adults spend a significant portion of time at work, even more so than several other countries (Willard, Isaac & Carney, 2015). Racial discrimination, both subtle and overt, contributes to a variety of negative mental and physical health outcomes for the individuals who experience such treatment. The damaging effects of employment bias can be pervasive in one's environment, resulting in numerous distressing emotional feelings, including anger, hopelessness, resignation, depression and anxiety. Workplace harassment and discrimination has also been linked to alcohol and substance abuse which can be motivated by experiencing chronic depression (Rospenda et al., 2009). Repeated discriminatory treatment is also chronically stressful, which can tax both victims' cognitive and emotional capacities to cope with the situations (Jones et al., 2016; Rospenda et al., 2009). General psychological and physical responses to chronic stress include negative emotions,

chronic heightened blood pressure, and irregular cardiovascular activity (Belvet, 2012; Deitch, Barsky, Brief, Butz & Bradley, 2003; Mendes, Major, McCoy & Blascovich, 2008; Singleterry, 2009). Given the difficulty of addressing subtle, contemporary racism in the workplace, minority employees will continue to suffer from such deleterious consequences unless an effective solution is implemented in corporate environments.

Mentorship is often raised as an intervention to prevent Blacks from experiencing the plethora of negative consequences of workplace discrimination (Blake-Beard, Murrell, Thomas, 2006; Ragins, Ehrhardt, Lyness, Murphy & Capman, 2015). This is because mentorship provides an exchange of knowledge, experience and perspective that is crucial for individuals to develop both personally and professionally (Arnesson & Albinsson, 2017). The “mentors-as-buffers hypothesis” posits that mentorship represents a type of anchoring relationship that can buffer employees from the negative effects of stressful organizational experiences (Ragins, 1989; Ragins et al., 2015). However, in a diversified work environment, these mentoring relationships are often between individuals who differ on the basis of race, ethnicity, gender, sexual orientation, religion, disability, cultural background or other group memberships associated with power in organizations (Ghosh, 2018). Such relationships between individuals of different races is particularly challenging since the career strategies that may work for mentees from the dominant group are likely not to work for mentees from the minority group (Ghosh, 2018). It is also difficult to measure the prevalence of mentors’ aversive racism in the workplace since the theory defines this bias as a subtle form of discrimination that can not easily detected or blamed.

Interracial mentorship is particularly complex since it involves communication between an extremely salient ingroup and outgroup; race is a socially embedded phenomenon that affects just about every aspect of our lives (Blake-Beard et al., 2006). Blacks often report having much

more difficulty accessing mentor relationships, and when they do have mentors, the mentors are most often White men (Blake-Beard et al., 2006). One reason for mentorship difficulties as a function of race is that it is more difficult for Blacks and Whites to positively identify, empathize, or develop rapport with one another (Black-Beard et al., 2006; Dovidio, Johnson, Gaertner, Pearson, Saguy, Ashburn-Nardo, 2010; Leitner, Ayduk, Boykin, Mendoza-Denton, 2018; Vanman, 2016), yet personal identification is a key component of empathic connection, which is crucial for successful mentoring (Ghosh, 2018). Another reason is that interracial communication has been found to be particularly distressing for both Whites and minorities (Richeson & Shelton, 2007; Trawalter, Richeson & Shelton, 2009). Black mentees may experience negative affect, like anxiety, during interracial mentoring because they are often concerned about being the target of prejudice (Leitner et al., 2018; Richeson & Shelton, 2007). Interracial communication may also be distressing because modern racism is more often expressed through negative non-verbal behaviors; for example, White mentors with bias against Black mentees may sit further away from, make less eye contact, smile less, and orient their bodies away from them (Willard, Isaac & Carney, 2015). Blacks are likely to pick up on these non-verbal measures of bias during conversations with Whites (Leitner et al., 2018), which impedes positive communication between Black mentees and White mentors (Meadors & Meadow, 2014).

In situations of hierarchy, like in the workplace, power and status imbalances are inherent in mentoring relationships—providing an interesting lens to examine interracial mentoring. Power is defined as asymmetrical control over resources while status is defined as “the prominence, respect, and influence that one holds in other people’s eyes” (Ivanic, Overbeck & Nunes, 2011). In the workplace, organizational hierarchy inherently exists where certain

individuals, like managers, have asymmetrical control over the company's resources and higher levels of respect and influence, compared to the employees they manage. This is particularly important because social stratification, the differentiation and categorization of individuals in a society by socioeconomic tiers, in the United States is often maintained by the cognitive biases of individuals who hold positions of relative situational power (Fiske et al, 2016; Richeson, Ambady, 2003; Ridgeway, 2014; Vial, Dovidio & Brescoll, 2019). Moreover, both power and status can even create psychological distance, a subjective experience that something is close or far away from the self (Trope & Liberman, 2010), that reinforces or exacerbates racial biases (Fiske et al., 2016; Ivanic, Overbeck & Nunes, 2011).

Though the psychological distance created by asymmetrical organizational power can impede successful interracial mentorship, there has not been extensive literature published regarding the effects of race in interactions between individuals of different power and social status. Mentors, by virtue of their knowledge, experience, and defined role, are high in power in their mentoring interactions, whereas mentees are low in power. The power differential creates psychological distance between the mentor and the mentee that inhibits personal identification and empathic connection—both prerequisites of successful mentoring (Ghosh, 2018).

Furthermore, race can significantly impact the psychological distance between the mentee and the mentor. Individuals generally associate Blacks with low-status positions and White targets with high-status positions (Fiske et al., 2016). According to the social distance theory of power (Magee & Smith, 2013), such asymmetric power between racial groups produces asymmetric social distance. Because of Blacks' association with low power–low status, as well as Blacks' traditional societal exclusion and underrepresentation, Black mentees may tend to see the psychological distance between them and a mentor as greater than White mentees do.

Experiencing greater psychological distance would likely result in Black and White mentees having different perceptions of mentors in general.

Given the fact that Whites have traditionally occupied higher power and higher status positions in American society (Fiske et al., 2016), the psychological distance differential between Black and White mentees may be significantly pronounced when the mentor is White. It is well-known in the psychology literature that warmth and competence traits govern social judgement perceptions of individuals and groups, and that these judgments (stereotypes) shape people's emotions and behaviors (Cuddy, Fiske & Glick, 2007; Cuddy, Glick & Beninger, 2011). Moreover, these warmth and competence judgements are derived from power and status relations between groups (Oldmeadow & Fiske, 2010). Thus, power and status differentials in interracial interactions can cause reinforcement of racial stereotypes because a racial group's social status often aligns with perceptions of the group's competence and warmth (Swencionis, Dupree & Fiske, 2017). In general, individuals in positions of high power/status are perceived by those low in power as competent, but cold; reciprocally, those low in power/status are perceived by individuals high in power to be relatively low in competence, but warm (Fiske, Cuddy, Glick, 2007; Fiske et al., 2016; Olmeadow & Fiske, 2010). For example, stereotyping racial minorities as being low in competence reflects a societal representation of Blacks as a low-status, low-power racial group relative to Whites (Swencionis, Dupree & Fiske, 2017; Swencionis & Fiske, 2016). This stereotype can affect Whites' behaviors during interracial communication. Dupree and Fiske (2019) find that White participants often self-present lower competence to minorities due to the fact that they stereotype Black partners as less competent and lower in social status. This can be interpreted as a non-verbal measure of racial bias presented as the downplay of competence.

Blacks in the United States are traditionally lower in power and occupy lower social status than Whites (Fiske et al., 2016), so one would expect that in mentorship scenarios, Black mentees perceive White mentors as more cold and more competent than White mentees perceive White mentors. Olmadow and Fiske (2010) found that in intergroup interactions, the high-status group perceives their ingroup target partners as more competent and more cold than their outgroup target partners. In interracial mentorship relationships, Black mentees are the low-status group, and White mentors are the high-status group. So in alignment with the previous literature finding, it is probable that Black mentees perceive White mentors differently than White mentees perceive them. More pronounced mentor perception differences between Black mentees and White mentees would lead to pronounced differences on the quality of the interactions. This is important because the quality of interracial contact is a stronger predictor of racial bias than the quantity of interracial contact, and because the quality of interracial contact reflects the subjective social experience of the mentorship relationship (Onyeador et al., 2020; Olsen, Johnson, Zabel, Phillips, 2018). If the quality of mentorship is poor for Black mentees, then the “mentors-as-buffers” hypothesis (Ragins, 1989; Ragins et al., 2015) —where mentors can protect mentees from the effects of workplace discrimination—falls apart. Black employees would still face the harmful consequences of racial discrimination in the workplace because of the disconnect in their mentorship relationships.

One might also expect a reciprocal effect, where mentors (the high power–high status group) perceive Black mentees as less competent and less cold than White mentees, particularly when the mentor is White. However, research on aversive racism suggests that mentors, and particularly White mentors, may be guarded about expressing negative evaluations of Black relative to White mentees (Dovidio & Gaertner, 2008; Pearson et al., 2009). Dovidio, Kawakami

and Gartner (2002) found that White target partners are often evaluated more positively than Black target partners during interracial interactions. A key feature of an aversive racist response is that Whites are evaluated more positively than Blacks, not that Blacks are rated more negatively than Whites. This can be interpreted as aversive racial bias, since aversive racists hold more pro-White than anti-Black beliefs, and they resist reporting that Blacks are bad or worse than Whites (Dovidio & Gaertner, 2008).

Given the limited number of studies analyzing the effects of power/status differentials on interracial mentorship interactions, the present study seeks to analyze coldness and competence perceptions of mentors in intraracial and interracial mentoring conversations. Participants in the present research were managers and executives in the Yale New Haven Health system. Under the guise of a study about mentorship, the employees interacted with Black and White college students, who were presented as mentees interested in pursuing a career in health care. The order in which the participants interacted with the Black and White confederates was counterbalanced across participants. All interactions were videotaped and audio recorded, and the heart rates, respiration rates and movement (e.g. fidgeting) of the confederates and the participants were also recorded during the interaction. Participants will be scheduled for a second session, following the same procedure, but after receiving formal diversity training. Because data representing the physiological responses and the coding of the nonverbal and verbal exchanges were not yet available, this paper focuses on the baseline difference in perceptions of interaction partners on the dimensions of coldness (negative warmth) and competence, which are the two main dimensions on which individuals and groups are perceived and judged. After each conversation, both the mentors and the mentees complete a post-interaction survey where they evaluate one other on the dimensions of warmth and competence. A 2 (Race of Participant: White vs. Non-

White) x 2 (Race of Confederate Mentee: Black and White) analysis of variance was used to evaluate how Black and White mentors and Black and White students perceive each other after brief interaction.

I predicted that mentors (high-status group) would rate the White mentees as more cold and more competent than the Black mentees (low-status group), based on the pro-White bias associated with the aversive racism framework (Dovidio, Kawakami and Gartner, 2002; Dovidio & Gaertner, 2008) and the traditional warmth and competence perceptions associated with low-power, low-status groups (Fiske, Cuddy, Glick, 2007; Fiske et al., 2016; Olmstead & Fiske, 2010). Reciprocally, I predicted that Black mentees (low-status group) would rate the mentors (high-status group) as more cold and more competent than the White mentees rate them, based on the social distance theory of power (Magee & Smith, 2013) and the traditional warmth and competence perceptions associated with high-power, high-status groups (Fiske, Cuddy, Glick, 2007; Fiske et al., 2016; Olmstead & Fiske, 2010).

## **Method**

### **Participants**

Participants (the “Mentors”) were employees of the Yale New Haven Health System who responded to an email (Appendix 1) or flyer (Appendix 2) inviting them to participate in a two-part study of mentoring interactions. The participants were rewarded with \$25 for participating in a lab session. Forty-eight employees participated in the study during the fall 2019 and spring 2019 academic semesters. Of the 48 participants, 37 had interactions with both a Black and a White confederate and had complete data for analysis (28 women, 8 men, 1 did not indicate a gender; 19 White, 12 Black, 1 Asian, 3 Latino, 2 Other;  $M_{\text{age}} = 43.24$ ,  $SD = 10.67$ ). Additional demographic information is available in Appendix 3.



## Procedure

The procedure for the study was approved by the university's Institutional Review Board (IRB). Participants responded to an email or flyer inviting them to be part of a study on mentoring interactions. To conceal the primary purpose of the present research while still informing participants of the procedure of the study, participants were informed that they would meet with two Yale University students to answer their questions about working in the health care sector. The mentoring sessions were scheduled at various time points during the day, based on the participant's and the research staff's availability.

The participants in the present study were also recruited for a larger intervention study involving initial interactions with confederates portrayed as mentees, random assignment to a diversity training intervention or control condition, and follow-up interactions. The larger study also includes self-report measures of the interaction, behavioral coding, and physiological measures. Because too few ( $n = 8$ ) mentors participated in the second laboratory session, and behavioral coding and physiological data were not yet available, the focus of the present study is on the survey responses after the first interaction session.

**Pre-interaction phase.** The participant mentors were greeted by a White female experimenter who led them into a room in the laboratory to complete the pre-interaction survey. A White female experimenter was consistently used in each lab session in order to limit any effects of the race of the experimenter on the participants' interracial interactions with the mentees. The pre-interaction survey (Appendix 4) consisted of an IAT (Greenwald et al., 1998), as well as questions about the participant's self-rated mentorship ability, level of interaction with various social groups, social dominance orientation, agreement with various stereotypical statements, and demographic information. The responses for feelings towards Blacks and Whites were of primary interest to measure participants' baseline racial bias.

**Interaction phase.** After completing the initial questionnaire, the participants were asked to put on a bioharness. The bioharness measures heart rate, respiration rate, and movement (e.g., fidgeting). The experimenter then led the participant into the interaction room, which had two chairs facing each other and a video camera in each corner of the room. All participants were instructed to sit in the chair closest to the door, facing the wall, while all confederate Mentees were instructed to sit in the chair closest to the wall, facing the participant.

The students whom the participants met with (the “mentees”) were actually Black and White laboratory confederates recruited from Yale University. Twenty-eight total confederates were used as interaction partners throughout the data collection process, 13 Black confederates and 15 White confederates. In Spring 2019, the two partner confederates interacting with the same Mentor in one session were matched for gender. This was not possible after Spring 2019 because of a limited number of Black male research assistants. The idea was to limit the endogenous differences between the White confederate and the Black confederate in each advising session with the same participant. In order to control homogeneity between confederates, the confederates were instructed to dress in business casual attire, with strict guidelines to avoid flashy accessories. Female research assistants were asked to wear dresses, slacks, blouses and flats. Male research assistants were asked to wear khakis, business pants, collared-shirts, quarter zips and appropriate business shoes.

The confederate mentees in the experiment were portrayed as having the same academic year and major. The Black mentees were given a stereotypical African-American name, “Jada” or “Jamal”, and the White mentees were given a stereotypical Caucasian name, “Sara” or “Garrett”. All of the students were second-year students. “Jamal” and “Sara” both majored in History of Science and Medicine while “Jada” and “Garrett” both majored in Psychology. The Black mentees’ hometowns were listed as Atlanta, Georgia, while the White mentees’

hometowns were listed as Claremont, California. The Black mentees were also described as participating in stereotypically Black extracurricular activities at Yale University while the White mentees were described as participating in stereotypically White extracurricular activities. Jada's extracurricular activities consisted of the Yale Black Women's Coalition, the Black Solidarity Conference at Yale, and the Downtown Evening Soup Kitchen. Sara's extracurricular activities consisted of Kappa Kappa Gamma Sorority, First-year Outdoor Orientation Leader, and Community Consent Educator. Jamal's extracurricular activities consisted of Yale Black Men's Union, Black Solidarity Conference at Yale, and the Downtown Evening Soup Kitchen. Garrett's extracurricular activities consisted of Sigma Nu Fraternity, First-year Outdoor Orientation Leader, and the Yale Undergraduate Boat Building Club.

In the interaction session, the mentors each met with one Black mentee, "Jada" or "Jamal", and one White mentee, "Sara" or "Garrett", in an order counterbalanced across participants. Each interaction lasted up to 10 minutes and was video- and audio-recorded. During the interaction, both the mentees and the mentors wore bio-harnesses that measured their movement, heart rates and respiration rates. Each mentee followed a strict script for the conversation and asked four mentorship questions to the mentor, either set A or set B. Confederate mentees were instructed not to deviate from the conversation script and to respond minimally to the mentor's answers. The lab experimenter set the guidelines at the beginning of each conversation by telling the mentor that each mentee had prepared a set of four questions to ask, and by telling the mentor that the conversation would only last ten minutes, at most. If the mentee finished asking the four questions before ten minutes expired, then the mentee would retrieve the experimenter at the conclusion of the conversation.

### Figure 1: Conversation Script for Student Mentees

*Student:* Hello, my name is [ASSIGNED NAME]. I am a sophomore in [TRUE COLLEGE] and I am majoring in [ASSIGNED MAJOR]. Thank you so much for taking the time to speak with me today. First, what is your name, and what is your current job at Yale-New Haven Health?

*Mentee:* Response

*Student:* Great, let's begin, I know we have a time limit. QUESTION 1.

*Mentee:* Response

*Student:* Interesting! Thanks for sharing that. QUESTION 2.

*Mentee:* Response

*Student:* Got it! QUESTION 3.

*Mentee:* Response

*Student:* Great! Last question, QUESTION 4.

*Mentee:* Response

*Student:* Thank you again for taking the time to meet with me and talk to me about your experiences. I really appreciate it. *Stand up, reach for handshake.*

### Figure 2: Set A questions

1. How did you decide to pursue a career in healthcare?
2. What advice would you offer to someone who wants to do what you do?
3. What is the best/worst thing about working at Yale-New Haven Health?
4. How do you balance work and your personal life? Is it easy? Difficult?

### Figure 3: Set B Questions

1. What path did you take to your current position?
2. What kind of professional development opportunities should I take advantage of to prepare for a career in the healthcare field?
3. What is it like to work in your position at Yale-New Haven Health?
4. What is your ultimate career goal?

**Post-interaction phase.** After each interaction, the mentors and mentees responded to a number of items assessing their feelings about the interaction and their impressions of their interaction partner. Following each conversation, both the mentor and the mentee were asked to

complete a post-interaction survey (Appendix 5) to report their emotional responses after the interaction. Overall, this resulted in one mentor completing two post-interaction surveys—one for the Black mentee and one for the White mentee. Reciprocally, two post-interaction surveys were completed for the same mentor, one from the Black mentee and one from the White mentee. The survey included questions about how they would rate their feelings after the interaction, how they thought their partner would rate the interaction, as well as how they would evaluate their partner in terms of warmth and competence. The questionnaire required respondents to rate on a seven-point scale ranging from 1 (not at all) to 7 (extremely) their impressions of their partner's behavior as well as how they wanted to behave during the interaction. This questionnaire required respondents to describe on scales. The nine items designed to assess perceptions of warmth and competence are of primary interest.

The five items for warmth, consistent with a similar previous study (Dovidio, Kawakami & Gaertner 2002), were “pleasant”, “cold”, “cruel”, “unfriendly” and “unlikeable”. The “pleasant” rating was reverse-coded to measure negative warmth (i.e. coldness) along with the ratings for the “cold”, “cruel”, “unfriendly” and “unlikeable” adjectives, since the majority of the adjectives used in the survey to evaluate the warmth of the interaction partner were already negative. The four items for competence were “intelligent”, “competent”, “confident” and “unassertive”. The “unassertive” rating was reverse-coded to measure positive competence, since the majority of the adjectives used in the survey to evaluate the competence of the interaction partner were already positive.

## **Results**

No differences were obtained as a function of sex of the participant, sex of the confederates, whether the participants were of the same or of a different sex than the confederates, or the order in which the participants interacted with Black and White

confederates. Thus, these variables were excluded from subsequent analyses. However, when classified as either White or non-White (because of limited numbers of each, Black/African-American, Asian/Asian-American/Pacific Islander and Latino/Hispanic were all categorized as non-White), differences were obtained as a function of race of the participant. Subsequent analyses include presentation of these results.

The baseline racial bias measure derived from the pre-interaction surveys was the difference in feeling thermometer responses towards Whites compared to feeling thermometer responses towards Blacks. Participants were asked to self-report their feelings towards Blacks and Whites by responding with a number from 0 to 100. The higher the number, the warmer the participant felt towards individuals in the racial group. Overall, participants reported warmer feelings toward Black people ( $M = 87.06$ ,  $SD = 16.32$ ) than toward White people ( $M = 75.94$ ,  $SD = 22.84$ ),  $t(31) = 2.68$ ,  $p = .012$ , indicating that the participants, overall, had a pro-Black bias. This is unexpected, since the theory of aversive racism would predict a subtle pro-White bias in the results. However, the pro-Black bias could be a feature of the social desirability or the political ideology of the participants. Data were collapsed across all participants, regardless of the level of pro-Black bias.

The main focus of this study was the difference in coldness and competence ratings between Black and White mentees, as well as between non-White and White mentors. Each of the mentors' racial bias was determined by computing the extent to which they rated coldness and competence measures differently between the White and Black confederates. Analogously, perceived racial bias of the mentor was determined by the extent to which Black and White confederates rated coldness and competence measures differently between the White and non-White mentors. Because confederates were instructed to respond in similar ways to the participant, there should be no difference between the coldness and competence ratings of the

confederates by race. However, given the predictions of aversive racism theory, a difference between the ratings of the mentees was expected. The means in each condition for ratings of coldness and competence are presented in Table 1.

**Table 1: Mentors' and Mentees' Coldness and Competence Ratings**

	<i>Coldness</i>		<i>Competence</i>	
	Mentor rating of mentee	Mentee rating of mentor	Mentor rating of mentee	Mentee rating of mentor
White mentor / White mentee	4.50	4.50	4.78	4.21
White mentor / Black mentee	4.46	5.15	4.74	4.30
Non-White mentor / White mentee	4.28	4.28	5.21	4.32
Non-White mentor / Black mentee	4.52	4.88	5.24	4.96

Coldness and competence perceptions ( $n = 37$ ) of each interaction partner are rated on a scale of 1 (not at all) to 7 (extremely). On average, White mentors do not significantly rate Black and White mentees differently on the dimensions of coldness or competence, while Black mentees see the mentors (both White and non-White) as more cold and more competent than White mentees do.

**Ratings of Coldness.** To evaluate how the mentors perceived Black and White confederates during the conversations, a 2 (Race of Participant mentor: White vs. non-White) x 2 (Race of Confederate mentee: Black and White) analysis of variance with repeated measures on the second factor was used. There was no significant effect for race of participant ( $p = .508$ ) or for race of the confederate mentee ( $p = .148$ ). There was, however, a marginally significant Race of Participant x Race of Confederate mentee interaction,  $F(1,35) = 3.68$ ,  $p = .063$ ,  $\eta^2 = .095$ .

White participants rated Black and White confederates similarly,  $M = 4.46$ ,  $SD = 0.50$  vs.  $M = 4.50$ ,  $SD = 0.50$ ,  $p = .752$ , while non-White participants perceived the Black confederate as more cold than the White Confederate,  $M = 4.52$ ,  $SD = 0.42$  vs.  $M = 4.28$ ,  $SD = 0.12$ ,  $F(1,17) = 5.37$ ,  $p = .033$ ,  $\eta^2 = .240$ . In other words, though White and non-White participants did not significantly differ in their ratings of the coldness of the Black confederate mentee ( $p = .701$ ), they tended to view the Black confederate as colder than the White confederate,  $F(1,35) = 3.15$ ,  $p = .085$ ,  $\eta^2 = .082$ <sup>1</sup>.

Similarly, to evaluate how confederate mentees perceived the White and non-White participant mentors, a 2 (Race of Participant: White vs. non-White) x 2 (Race of Confederate Mentee: Black and White) an analysis of variance with repeated measures on the second factor was also used. Overall, Black confederates perceived participant mentors as more cold than White confederates did,  $Ms = 5.01$  vs.  $4.39$ ,  $F(1,35) = 14.59$ ,  $p < .001$ ,  $\eta^2 = .294$ . The main effect for race of participant ( $p = .200$ ) and the Race of Participant x Race of Confederate interaction ( $p = .873$ ) were not significant. Black confederates viewed the participant as more cold than White confederates did when the participant was White,  $F(1,18) = 6.65$ ,  $p = .018$ ,  $\eta^2 = .273$ , and non-White,  $F(1,17) = 8.35$ ,  $p = .010$ ,  $\eta^2 = .329$ .

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<sup>1</sup> When only the effects of White versus Black Participants (i.e., excluding the 4 non-White, non-Black participants) were considered in a 2 (Race of Participant) x 2 (Race of Confederate) analysis for ratings of confederate and mentee coldness, the interaction was significant,  $F(1,29) = 4.60$ ,  $p = .041$ ,  $\eta^2 = .137$ . White mentors rated the Black and White mentees similarly on the dimension of coldness ( $M = 4.50$  for White mentees vs.  $M = 4.46$  for Black mentees). However, Black mentors rated the White mentee as less cold than the Black mentees ( $M = 4.22$  for White mentees vs.  $M = 4.55$  for Black mentees). In other words, White participants do not show a difference in coldness ratings based on mentee race, while Black participants see Black mentees as more cold than White mentees.



**Ratings of Competence.** The 2 (Race of Participant: White vs. Non-White) x 2 (Race of Confederate Mentee: Black and White) analysis of variance on participants' ratings of the competence of the mentees revealed a main effect for race of the participants,  $F(1,35) = 4.12, p = .050, \eta^2 = .105$ . Non-White participants rated confederate mentees as generally more competent than did White participant mentors,  $M_s = 5.22$  vs.  $4.76^2$ . The effects for race of confederate ( $p = .966$ ) and the interaction ( $p = .809$ ) were non-significant.

For ratings of confederates' perceptions of the competence of the Mentor, the 2 (Race of Participant: White vs. Non-White) x 2 (Race of Confederate Mentee: Black and White) analysis of variance yielded a main effect for race of the confederate,  $F(1,35) = 4.37, p = .044, \eta^2 = .111$ . Black confederates perceived the Mentor as generally more competent than did White confederates,  $M_s = 4.63$  vs.  $4.27$ . The main effect for race of the participant was not significant ( $p = .119$ ). Although the Race of Participant x Race of Confederate interaction ( $p = .127$ ) was not significant, the effect of confederate race was somewhat stronger when they were rating the competence of the non-White participant,  $F(1,17) = 6.48, p = .021, \eta^2 = .276$ , than when they were rating the White participant,  $F(1,18) = 0.14, p = .710, \eta^2 = .008$ .

## Discussion

The results of this study provide interesting implications that augment the existing literature on intergroup communication and mentoring. In this research, as outlined previously, Black mentees were expected to perceive the mentors as more competent and more cold than the

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<sup>2</sup> When only the effects of White versus Black Participants (i.e., excluding the 4 non-White, non-Black participants) were considered in a 2 (Race of Participant) x 2 (Race of Confederate) analysis for ratings of confederate and mentee competence, the main effect for Mentor Race was not significant,  $F(1,29) = 1.96, p = .172, \eta^2 = .063$ . However, the means when only Black participants were considered were similar,  $M = 5.15$  vs.  $M = 4.76$ , to those when all non-White mentors were included.

White mentees, particularly when the mentor was White. This finding would be consistent with the social distance theory of power (Magee & Smith, 2013), where asymmetric power dynamics yield asymmetric social distance, as well as the typical low warmth–high competence perceptions associated with individuals of higher power and status (Fiske et al., 2016; Olmstead & Fiske, 2010). Mentors were also predicted to perceive the Black mentees as less cold and less competent than the White confederate mentees. This finding would be consistent with aversive racism theory (Dovidio et al., 2017; Gaertner & Dovidio, 1986), which posits that individuals harbor unconscious negative perceptions of Blacks despite not overtly expressing such prejudice, as well as the typical high warmth–low competence perceptions associated with individuals of lower power and status (Fiske et al., 2016).

In the present research, the mentees’ perceptions of the mentors were consistent with the expected findings; Black mentees rated the mentors as more cold and more competent than the White mentees did. However, the mentors’ perceptions of the mentees were not completely consistent with the expected findings; mentors did not rate the Black mentees differently than the White mentees on the measures of coldness and competence. In other words, even though mentors perceived Black and White confederates in similar ways, at least in how they report their assessments of mentees’ competence and coldness, Black confederates still perceived the mentors differently.

The explanations for these results fall into two domains: behavior versus perception. The behavior explanation would be that the mentors, despite not indicating so, do actually act differently towards Black mentees than they act towards White mentees for several reasons relating to aversive racism and interracial communication anxiety. The perception explanation would be that Black mentees are simply perceiving the mentors’ actions differently than the

White mentees for other reasons relating to hierarchical social power structures. It is difficult to distinguish between these two alternatives through self-reported measures, since any mentor bias could be concealed through self-reporting. Both of these explanations could also be operating at the same time, since they are not contradictory. However, because this study is part of an ongoing, comprehensive research project involving videotaped interactions, psychophysiological data and Implicit Association Tests, systematic coding of the videotaped interactions and the physiological responses could be one way to further investigate the two explanations and mitigate the self-reporting bias. Such analysis is outside of the scope of the present study, while future work on the project will conduct more comprehensive analysis.

Aversive racism and the traditional perceptions associated with low power–low status groups would suggest that mentors rate the Black confederate mentee as less cold and less competent than the White confederate mentee. This is because previous research has found that White target partners are often perceived more positively than Black target partners (Dovidio et al., 2002), and that low power–low status groups (Blacks) are perceived as more warm and less competent than groups high in power and status (Whites) (Fiske, Cuddy, Glick, 2007; Fiske et al., 2016). Thus, rating Black mentees as less cold and less competent would reflect a positive bias in favor of White mentees—the expected pro-White bias associated with aversive racism (Dovidio & Gaertner, 2008). However, the mentors in general did not rate the confederates differently on the measure of coldness ( $p = .752$ ) or competence ( $p = .966$ ). The reciprocal findings for the mentees’ perceptions of the mentors was as expected; Black mentees, compared to White confederates, perceived the mentors as more cold ( $p = 0.018$  for White mentors;  $p = 0.010$  for non-White mentors) and more competent ( $p = .044$  for White and non-White mentors). The effect of confederate race was somewhat stronger when they were rating the competence of the non-White participant ( $p = .021$ ) than when they were rating the White participant ( $p =$

0.710), suggesting that Black mentees seemed to perceive a greater difference in the competence of non-White mentors than White mentees did.

Interestingly, non-White mentors actually rated the Black mentee as more cold than the White mentee ( $p = .033$ ), and they rated mentees as generally more competent than did White participant mentors ( $p = .050$ ), regardless of the mentee's race. This is surprising because the non-White mentors are higher in power and status than the Black mentees, so they should perceive the Black mentees as less cold and less competent than White mentees. Because of limited numbers of Black mentors ( $n = 12$ ), Asian mentors ( $n = 1$ ) and Latino mentors ( $n = 3$ ), each of these demographic groups were classified together as non-White. So, one plausible explanation for these findings is that the non-White mentorship interactions may still reflect interracial communication involving intergroup power dynamics; for example, between Asian mentors and Black mentees. Such communication between two traditionally minority groups in the United States may narrow the social and psychological distance between some of the non-White mentors and the mentees. This is because minorities in general often occupy positions of relatively low situational power relative to Whites in the United States (Fiske et al., 2016), and a closer level of situational power would decrease the psychological distance between these groups (Magee & Smith, 2013). However, when only the response of the Black participants ( $n = 12$ ) were considered rather than all non-White participants ( $n = 16$ ), Black mentors showed weaker, yet similar effects to those observed for all non-White mentors. Like non-White mentors, Black mentors find Black mentees more cold than White mentees, but they don't find a difference in competence between the mentees. This finding suggests that while minority-minority relations may still be involved, Black-White relations are contributing substantially to the differences between non-White and White mentors obtained in the analyses.

Understanding why Black mentors rate the White mentees as less cold than Black mentees (whereas White mentors do not rate them differently) could be a factor of either perceptual or behavioral influences. With respect to perceptual influences, Black mentors may expect White mentees to be more common beneficiaries of mentoring support than Black mentees (Blake-Beard et al., 2006), and thus be more comfortable (and less cold) in the mentoring conversation with White than with Black mentees. This is plausible because members of minority groups often anticipate and are systematically influenced by cultural stereotypes (Jost, Gaucher, Stern, 2015; Ridgeway, 2014). With respect to behavioral influences, White mentees may actually behave in a more comfortable (and less cold) manner than Black mentees due to the fact that White individuals traditionally occupy higher status positions in American society (Ridgeway, 2014). However, the White mentors may be reluctant to report this behavioral difference because of aversive racism, the idea that individuals conceal prejudiced beliefs about Blacks (Dovidio et al., 2017; Gaertner & Dovidio, 1986). If aversive racism is affecting the White mentors, they would not report the White mentees as less cold than the Black mentees in order to conceal their bias against the Black students. Coding of the study's behavioral and physiological measures would be able to distinguish between these two explanations. If White mentees actually are more comfortable with the mentorship interaction, then the behavioral data would indicate that the White mentees act more friendly towards the mentors compared to the Black mentees; the physiological data would indicate that the White mentees exhibit lower stress levels when interacting with the mentors than the Black mentees.

Regardless of the underlying mechanisms for this finding, minority mentors that exhibit ingroup bias can dilute the efficacy of workplace mentoring. The “mentors-as-buffers” hypothesis (Ragins, 1989; Ragins et al., 2015) maintains that mentoring can buffer employees

from the negative consequences of organizational environments. Same-race mentoring has been argued as being particularly useful for Black employees because racial experiences transcend social class and geographical boundaries (Rhodes, Reddy, Grossman, Lee, 2002), and because interracial mentoring relationships are often strained by negative affect and low rapport (Leitner et al., 2018). It is easier for members of the same group to identify, empathize and have natural rapport with one another (Blake-Beard et al., 2006; Vanman, 2016). But if minority mentors exhibit an ingroup bias against other minority employees, the quality of the same-group mentorship would be strained. The empathic connection required for successful mentoring (Ghosh, 2018) would not be attained if both White AND non-White mentors are biased against Black employees. As a result, mentoring no longer buffers Black employees from discriminatory workplace environments, and Blacks will continue to suffer from the negative health consequences of workplace discrimination.

Together, the results of the study provide a more nuanced picture of biases within interracial mentoring scenarios that has valuable social implications. Mentors in general seem to perceive the competence and coldness of Black and White confederates in similar ways, yet Black confederates perceive the mentors differently. This could be a factor of the mentors' non-verbal behaviors during the interactions. Social desirability bias maintains that individuals have a tendency to give socially desirable responses that present themselves in the best possible light (Fisher, 1993). Consistent with this bias, aversive racism (Dovidio et al., 2017; Gaertner & Dovidio, 1986) argues that Americans are not likely to endorse prejudiced beliefs about Blacks, though they may harbor such prejudiced beliefs. Thus, the participants' self-reported ratings would not likely reflect a difference between the Black and White confederates since the participant mentors are subject to aversive racism and social desirability bias. However, their behavior during the interracial mentoring interaction could still be biased against the Black

mentee. Blacks are more sensitive to cues of non-verbal bias than are Whites (Leitner et al., 2018), and their greater likelihood of detecting bias could cause the Black confederates to rate the mentors differently than the White confederates.

Given the fact that Blacks are more likely to detect biases displayed in non-verbal behavior, it makes sense that the Black mentees rated the mentors as more cold than the White mentees did. Black mentees may perceive the mentors as more competent because they also perceive the mentors as more credible and as occupying an envied occupational position. Ambivalent stereotypes are those that characterize groups as high on one dimension, but low on the other (Cuddy, Glick, & Beninger, 2011), and they often lead to ambivalent feelings towards the group. This study's results seem to show that the mentees hold an ambivalent impression of the mentors (high in competence, but low in warmth). Such perceptions of low warmth and high competence are often associated with educated professionals (Cuddy, Fiske, Glick, 2007; Fiske, Dupree, 2014), which might explain why the Black mentees detect bias, but still rate the mentors as more competent, yet less warm, than the White mentees do.

The power dimension provides another critical lens to view this phenomenon. The mentorship interaction reflects an inherent power imbalance, where power is defined as status (Ivanic, Overbeck & Nunes, 2011), since the mentors are corporate executives and the mentees are students. Previous research has found that Blacks may experience more anxiety during interracial mentoring because they are often concerned about being the target of prejudice (Leitner, Ayduk, Boykin, Mendoza-Denton, 2018; Richeson & Shelton, 2007). Further, System Justification Theory (Jost & Banaji, 1994) argues that disadvantaged groups (Black mentees) may accept traditional negative stereotypes about their disadvantaged group (Black individuals) which reinforces and legitimizes the power imbalance at the expense of the disadvantaged group (Jost, Gaucher, Stern, 2015; Ridgeway, 2014). Given these findings, Black confederates may

perceive themselves – by virtue of traditional racial exclusion – as lower in power than White confederates do in the situation, especially since situational power is often confounded with sociocultural status (Richeson & Ambady, 2003). Thus, the increase in psychological distance between Black mentees and the mentors would lead the Black mentees to perceive the mentors (high in power) as particularly cold and competent, despite the mentors acting the same way towards the White and Black mentees. This presumption of greater competence implies that the mentors occupy such higher power positions on the basis of their own superior merit, providing an especially powerful form of legitimation in an ostensibly meritocratic society such as the United States (Ridgeway, 2014).

### **Limitations**

The results of the current study reflect a portion of a larger project that included behavioral coding and psychophysiological measures. Analysis of these measures is beyond the scope of the present study but will ultimately be extremely informative to understand the results' underlying mechanisms. If a social desirability bias is in effect, behavioral coding of the interactions will show the mentors exhibiting more negative orientations towards the Black mentees—that is, sitting further away from, making less eye contact, smiling less, and orienting their bodies away from them (Willard, Isaac & Carney, 2015)—despite not self-reporting any perception difference between the Black and White mentees. Analysis of the psychophysiological measures may also indicate the mentors' social desirability bias if they experience heightened stress levels, for example in increased heart, fidgeting, and respiration rates (Belvet, 2012; Deitch, Barsky, Brief, Butz & Bradley, 2003; Mendes, Major, McCoy & Blascovich, 2008; Singletary, 2009), when interacting with the Black, compared to White, mentees. If a situational power effect is present, the psychophysiological data of the Black



mentees will show them experiencing higher stress levels than the White mentees throughout the interaction with the same mentor.

The credibility of the experiment is one other potential limitation of the study. There is some concern about potential differences between confederates that could not be controlled; for example, some Black confederates were lighter in skin tone than others. White people generally apply racial stereotypes and display greater biases against racially phenotypical (e.g. darker skin tone) Black individuals (Maddox & Perry, 2017). These differences between the Black mentees could have a joint effect on the mentors' non-verbal bias during the interactions. However, these concerns are minimal since all RAs were instructed to dress the same and followed the same script. Another concern is that the health executives from the Yale New Haven Health System may have suspected that the mentorship study was really about diversity or interracial mentorship, given that the pre-interaction survey included questions to gauge baseline racial bias. However, any participant suspicion of the experiment would only strengthen the social desirability bias effect, since the priming of a diversity experiment would motivate the participants to appear unbiased. Non-verbal and physiological data measures were included in this research project to identify the social desirability bias that could be present in self-reporting the warmth and competence perceptions, but analysis of these measures was not yet completed for the present study.

### **Further Research**

Though the underlying psychological phenomena are not fully understood, the different perceptions (and thus experience) of Black and White mentees can have influential consequences on the success of interracial mentorship. Positive communication, personal identification, natural rapport and empathic connection between both parties are necessary for successful mentorship

(Black-Beard et al., 2006; Dovidio, Johnson, Gaertner, Pearson, Saguy, Ashburn-Nardo, 2010; Ghosh, 2018; Leitner, Ayduk, Boykin, Mendoza-Denton, 2018; Vanman, 2016). However, the results of this study suggest that these prerequisites may not always be present in interracial or intraracial interactions. Cultural diversity within professional sectors demands that organizations identify ways to support mentoring relationships among people from different cultures, backgrounds, and perspectives; mentoring in business and industry has become a common practice as a strategy for recruiting, retaining, and promoting high potential talent, particularly diverse talent (Brondyk & Searby, 2013). However, Blacks often report having much more difficulty accessing mentor relationships, and when they do have mentors, the mentors are most often White men (Blake-Beard et al., 2006). If interracial mentoring is not successful, as this study suggests, then many minority employees may suffer in workplace environments, and organizations may suffer from a non-inclusive environment that perpetuates workplace discrimination.

The use of diversity trainings, as well as mentorship, as another effective solution to workplace discrimination is also questionable. Diversity training is defined as a distinct set of instructional programs aimed at facilitating positive intergroup interactions, reducing prejudice and discrimination, and enhancing the skills, knowledge, and motivation of participants to interact with diverse others (Bezrukova, Spell, Perry & Jehn, 2016). Given the pervasive and undetectable nature of racism in the workplace today, one can be skeptical of the true effect of organizational diversity trainings—especially if the training curricula only targets overt forms of discrimination. If aversive racists exist in the workplace, then diversity initiatives may only contribute to their deep-rooted prejudices against people of color and may even contribute to backlash and resentment of minorities for raising the issue of diversity (Bezrukova et al. 2016; DiAngelo 2011; Paluck 2006). The present study is part of a larger research project that aims to

compare participants' perception ratings of Black and White confederates, before and after diversity training. More comprehensive analysis of the research project will provide insights into how diversity training affects the success of interracial mentorship.

Overall, the true psychological explanations for the present study's findings would have disparate implications for the interventions needed to combat workplace discrimination. If the mentors' non-verbal behavior is causing Black mentees to detect racial bias, indicated by different perceptions of the mentors, workplace interventions should target biased behaviors rather than attitudes; for example, cultural competence trainings and greater interracial contact. Workplace diversity trainings that educate employees about unconscious bias would not alter their behaviors. The trainings would have to practice behaviors that increase contact with members of other groups and empathy for other groups, which have been proven to avoid stereotype application and reduce anti-Black bias (Dobbin & Kalev, 2018; Onyeador et al., 2020).

If the mentees are simply perceiving the mentors differently, despite the mentors not exhibiting biased behaviors, workplace interventions should emphasize compensatory strategies. Compensatory strategies are behaviors that are adopted by stigmatized individuals, in an attempt to reduce or altogether eliminate interpersonal discrimination against them (Singletary & Hebl, 2009). Shelton, Richeson & Salvatore (2005) found that minorities may often expect discriminatory behavior from their White interaction partners, and that this expectation causes minorities to experience negative affect during the interaction, as well as like their White partners less. However, compensatory strategies can allow Blacks to engage in social interaction tactics that allow them to overcome expected prejudice from mentors (Shelton et al., 2005; Singletary & Hebl, 2009). Individuated perceptions are one example of a successful

compensatory strategy where stigmatized individuals reveal personal information to allow others to see them as individuals, rather than representatives of a stereotype (Singletary & Hebl, 2009). The logic behind this strategy is that personalization can differentiate Black employees from the negative stereotypes associated with the racial group, and thus alter discriminatory behavior towards them. Future studies could investigate the efficacy of this intervention in improving the success of interracial mentorship by including individuated information in the confederate mentees' interaction scripts.

### **Conclusion**

Overall, the results of the present study indicate that although mentors do not perceive Black and White mentees differently, Black mentees perceive the mentors as more cold and more competent than White mentees do. One explanation for this finding is that the mentors exhibit non-verbal biased behavior in their interactions with the Black mentees that they do not exhibit in their interactions with the White mentees. Another explanation is that the Black mentees are simply perceiving bias, though the mentors are not behaving differently towards them. Though the underlying psychological phenomena are not fully understood, Black mentees' different perceptions of the mentorship interaction have interesting implications for the success of interracial mentoring in buffering Black employees from workplace discrimination because perception differences of mentors translate to differences in the subjective social experience and quality of the mentorship relationship (Blacke-Beard et al., 2006; Ghosh, 2018; Onyeador et al., 2020; Ragins et al., 2015). More comprehensive analysis on the videotaped interactions, Implicit Association Tests and psychophysiological data measures included in the broader research project can shed light on the two leading explanations for this study's findings, yielding different interventions to address workplace discrimination.

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## Appendices

### Appendix 1: Email Advertisement



**We Need You!!**

***Come be a part of the Inclusion Movement at Yale New Haven Health!!***

#### ***Groundbreaking Initiative***

Yale New Haven Health's Office of Diversity and Inclusion is partnering with the RDR Group, a training and consulting group based out of Chicago, and Yale University to evaluate a promising initiative. The program is designed to reach performance potential through inclusion in our organization and in the medical field more broadly. We are looking for all employees to participate and be a part of this important work. Participants may receive up to \$75 for time and travel.

#### ***This initiative involves two components:***

First, you will meet with Yale University undergraduate students to answer questions about the medical field. These interviews will help students gain a broad perspective on medical professions through interactions with professionals in these areas. Yale researchers are interested in evaluating these interactions with undergraduates. We will need your permission to videotape the interviews and to use a simple device for measuring bio-reactions. Participants will meet with up to 4 students across two rounds of interviews that will take place over the course of the 2019 academic year. Participation in these interviews will take no more than 2 hours total (not consecutive) and will take place during working hours.

In the second component, the RDR Group will lead several **"Connecting with Others"** full day workshops that take diversity and inclusion training to a whole new level. The class goes beyond awareness and looks at 5 strategic skills which are necessary to connect with a wider scope of individuals – the goal of which is to markedly improve employee engagement, patient satisfaction, and overall performance. You will receive an email about available workshop sessions. We will send out surveys after each session to evaluate the components of this initiative.

***Click link below to select the time slot for your Undergraduate Conversation:  
You will receive a confirmation email with your time slot selection and directions.***





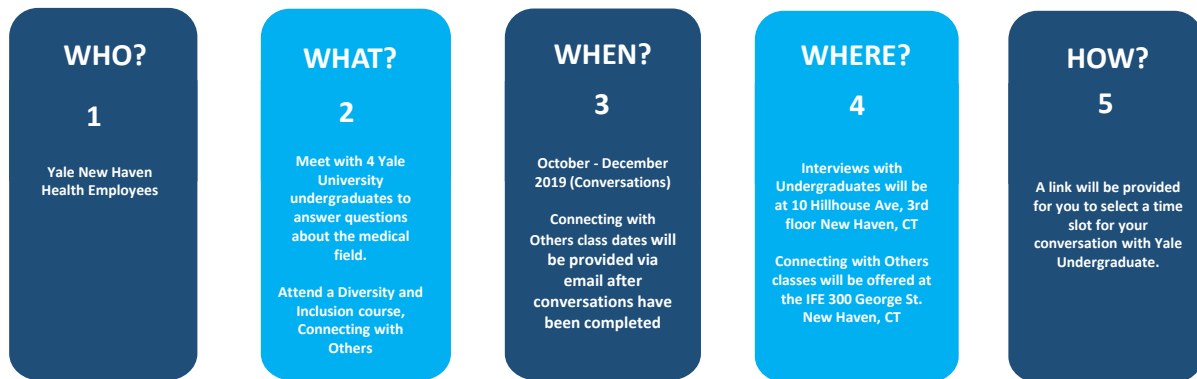
## Appendix 2: Flyer Advertisement

# Inclusion | Diversity | Equity Research

**WE ARE EXCITED ABOUT THIS GREAT OPPORTUNITY!**

Are you looking for better ways to connect with your patients and co-workers? Would you be interested in exploring how you could go about doing so?

The Office of Diversity & Inclusion for Yale New Haven Health is partnering with Yale University and the RDR Group, a training/consulting group out of Chicago, to provide diversity training and an opportunity to mentor Yale undergraduates through informal conversations about your work.



**Participants may receive up to \$75 for time and travel**

If interested, email [Kwame.davenport@ynhh.org](mailto:Kwame.davenport@ynhh.org), or contact via phone at (203) 502-6553.



### Appendix 3: Participants' Demographic Information

	Frequency	Valid Percent
<i>Gender</i>		
Male	8	22.2
Female	28	77.8
<i>Education</i>		
Some college, no degree	5	13.5
Associates degree	2	5.4
Bachelors degree	13	35.1
Graduate degree	17	45.9
<i>Income</i>		
\$40,000 – \$49,999	5	13.9
\$50,000 - \$74,999	4	11.1
\$75,000 - \$99,999	5	13.9
\$100,000 - \$124,000	6	16.7
\$125,000 - \$149,999	4	11.1
Over \$150,000	12	33.3
<i>Socio-economic Status</i>		
Working class	2	5.4
Lower-middle class	9	24.3
Middle class	19	51.4
Middle-upper class	4	10.8
Upper class	2	5.4
Upper upper class	1	2.7
<i>Political Affiliation/Ideology</i>		
Independent-leaning Conservative	7	18.9
Independent	13	35.1
Independent-leaning Liberal	5	13.5
Moderate Liberal	9	24.3
Very Liberal	3	8.1

**Appendix 4: Pre-Interaction Survey***Yale Qualtrics Survey Tool***Incorrect device**

The survey software has detected that you are attempting to take this survey from an incompatible device. The survey contains questions that will only function correctly on a computer with a keyboard. Please open this survey from a computer with a keyboard.

**ID**

Please enter your ID.

**Consent****Verbal/Online Informed Consent Script for Participation in a  
Research Study HSC # 2000024080****Purpose:**

You are invited to participate in a research study as part of a larger project to examine how people make sense of human behavior. You have been asked to take part because you are an adult US citizen completing a study on mentoring through the Yale New Haven Hospital. We will be conducting this study with approximately 200 Yale New Haven Hospital managers.

**Procedures:**

Thanks for agreeing to take part in the study. The first part will involve surveys of your beliefs about society and social situations. We anticipate that the survey will require 15 minutes.

**Risks and Benefits:**

There are no known or anticipated risks associated with this study. However, some questions may make you uncomfortable and there is the possible risk of loss of confidentiality. Every effort will be made to keep your information confidential; however,

this cannot be guaranteed. Individuals benefit by getting greater insight into the research process, and we hope that our results will add to the knowledge about social judgment and human behavior.

**Confidentiality:**

All of your responses will be held in confidence. Only the researchers involved in this study and those responsible for research oversight (such as the Yale University Human Subjects Committee) will have access to any information that could identify you/that you provide. To minimize risk of loss of confidentiality all identifying information on videos and names on consents will be stored separately from all other questionnaire responses, which will be linked by code number. Materials will be kept in password protected data files on secure servers provided by Yale University.

Please remember that while we (the researchers) will keep your information confidential and will remind all participants that what is said in the laboratory should not be repeated outside of the laboratory, we have no control over what happens outside of the lab. You are reminded to not share anything you wouldn't want repeated outside of this space.

**Voluntary Participation:**

Your participation in this study is voluntary. You are free to decline to participate, to end your participation at any time for any reason, or to refuse to answer any individual question without penalty. Your decision whether to participate or not will have no effect your relationship with the hospital or the university.

**Questions:**

If you have any questions about this study, you may contact the principal investigator, Cydney Dupree at [cydney.dupree@yale.edu](mailto:cydney.dupree@yale.edu) or 203-432-2022.

If you would like to talk with someone other than the researchers to discuss problems or concerns, to discuss situations in the event that a member of the research team is not available, or to discuss your rights as a research participant, you may contact the Yale University Human Subjects Committee, 203-785-4688, [human.subjects@yale.edu](mailto:human.subjects@yale.edu). Additional information is available at <https://your.yale.edu/research-support/human-research/research-participants/rights-research-participants>.

Do you have any questions at this time? Would you like to participate in the study?

I consent




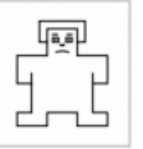
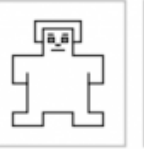
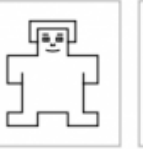
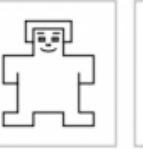
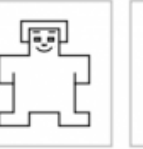
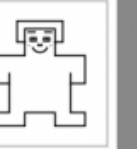
☐

I do not consent

☐

## Mood

Using the following scale, please indicate how you feel ***right now***.

								
1 - very unpleasant (far left image)	2	3	4	5	6	7	8	9 - very pleasant (far right image)
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Mentoring Skills

Please rate how skilled you are in each of the following mentoring areas.

Think about your skills generally, with all your mentees. Please only choose 'not applicable' (NA) when a skill cannot be applied to any of your mentees or subordinates.

	Not at all skilled 1	2	Moderately skilled 3	4	Extremely skilled 5	N/A
Active listening	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Providing constructive feedback	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Establishing a relationship based on trust	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Motivating your mentee	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helping your mentee set career goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Outgroup Contact

We would like to know how much you interact with different groups of people. Please report what percentage of your social interactions are with members of each group. Please make your best guess.

You can pick any number between **0** (*0% of my social interactions are with members of this group*) and **100** (*100% of my social interactions are with members of this group*).

Remember that all responses are anonymous; please answer openly and honestly.

	0	10	20	30	40	50	60	70	80	90	100
Members of the Lower class											
People with disabilities											
Blacks/African-Americans											
Transgender people											
Members of the Middle class											
Asians/Asian-Americans											
Members of the Upper class											
Hispanics/Latin-Americans											
Whites/Caucasian-Americans											
Women											
Men											
People with obesity											

0 10 20 30 40 50 60 70 80 90 100

Gay and lesbians

## Subjective Social Status

**Think of this ladder as representing where different social groups stand in the United States.**

At the **top** of the ladder are the groups that are the best off—those who have the most money, the most education, and the most respected jobs.

At the **bottom** are the groups that are the worst off—who have the least money, least education, and the least respected jobs or no job.

The higher up groups are on this ladder, the closer they are to the very top tier of society; the lower groups are, the farther they are from the very top tier of society.

**Where would you place the following social groups on this ladder?**

Please select the **number** for the rung where you think these groups stand at this time in society, relative to other groups in the United States.



	1	2	3	4	5	6	7	8	9	10
Women	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whites/Caucasian-Americans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The middle class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Men	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The lower class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The upper class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hispanics/Latin-Americans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asians/Asian-Americans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Blacks/African-Americans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Now think of this ladder as representing where people stand in the United States.



At the **top** of the ladder are the people who are the best off—those who have the most money, the most education, and the most respected jobs.

At the **bottom** are the people who are the worst off—who have the least money, least education, and the least respected jobs or no job.

The higher up you are on this ladder, the closer you are to the people at the very top; the lower you are, the closer you are to the people at the very bottom.

### Where would you place yourself on this ladder?

Please select the **number** for the rung where you think you stand at this time in your life, relative to the other people in the United States.



1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Feeling Thermometer

Please rate how you feel about the following social groups on a feeling thermometer using a scale of 0 to 100. The higher the number, the warmer or more favorable you feel toward that group, the lower the number, the colder or less favorable you feel.

You can pick any number between 0 and 100.

Remember that all responses are anonymous; please answer openly and honestly.

	0	10	20	30	40	50	60	70	80	90	100
Women											
Hispanics/Latin-Americans											
Blacks/African-Americans											
Men											
Whites/Caucasian-Americans											
Transgender people											
Members of the Lower class											
Members of the Middle class											
People with obesity											
Gay and lesbians											
People with disabilities											
Members of the Upper class											
Asians/Asian-Americans											

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First Click: 0 seconds

Last Click: 0 seconds

Page Submit: 0 seconds

Click Count: 0 clicks

## SD07

Please read each of the following statements carefully.

Show how much you favor or oppose each idea by selecting an option on the scale below. You can work quickly; your first feeling is generally best.

An ideal society requires some groups to be on top and others to be on the bottom.

Strongly oppose	Somewhat oppose	Slightly oppose	Neutral	Slightly favor	Somewhat favor	Strongly favor
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Some groups of people are simply inferior to other groups.

Strongly oppose	Somewhat oppose	Slightly oppose	Neutral	Slightly favor	Somewhat favor	Strongly favor
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

No one group should dominate in society.

Strongly oppose	Somewhat oppose	Slightly oppose	Neutral	Slightly favor	Somewhat favor	Strongly favor
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Groups at the bottom are just as deserving as groups at the top.

Strongly oppose	Somewhat oppose	Slightly oppose	Neutral	Slightly favor	Somewhat favor	Strongly favor
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Group equality should not be our primary goal.

Strongly oppose	Somewhat oppose	Slightly oppose	Neutral	Slightly favor	Somewhat favor	Strongly favor
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



It is unjust to try to make groups equal.

Strongly  
oppose



Somewhat  
oppose



Slightly  
oppose



Neutral



Slightly  
favor



Somewhat  
favor



Strongly  
favor



We should do what we can to equalize conditions for different groups.

Strongly  
oppose



Somewhat  
oppose



Slightly  
oppose



Neutral



Slightly  
favor



Somewhat  
favor



Strongly  
favor



We should work to give all groups an equal chance to succeed.

Strongly  
oppose



Somewhat  
oppose



Slightly  
oppose



Neutral



Slightly  
favor



Somewhat  
favor



Strongly  
favor



## RWA15

Please read each of the following statements carefully.

Show how much you favor or oppose each idea below by selecting an option from "strongly disagree" to "strongly agree" on the scale below. You can work quickly; your first feeling is generally best.

Our country needs a powerful leader, in order to destroy the radical and immoral currents prevailing in society today.

Strongly  
disagree



Disagree



Somewhat  
disagree



Neutral



Somewhat  
agree



Agree



Strongly  
agree



Our country needs free thinkers, who will have the courage to stand up against traditional ways, even if this upsets many people.

Strongly  
disagree



Disagree



Somewhat  
disagree



Neutral



Somewhat  
agree



Agree



Strongly  
agree





The “old-fashioned ways” and “old-fashioned values” still show the best way to live.

Strongly  
disagree



Disagree



Somewhat  
disagree



Neutral



Somewhat  
agree



Agree



Strongly  
agree



Our society would be better off if we showed tolerance and understanding for untraditional values and opinions.

Strongly  
disagree



Disagree



Somewhat  
disagree



Neutral



Somewhat  
agree



Agree



Strongly  
agree



God's laws about abortion, pornography and marriage must be strictly followed before it is too late, violations must be punished.

Strongly  
disagree



Disagree



Somewhat  
disagree



Neutral



Somewhat  
agree



Agree



Strongly  
agree



The society needs to show openness towards people thinking differently, rather than a strong leader, the world is not particularly evil or dangerous.

Strongly  
disagree



Disagree



Somewhat  
disagree



Neutral



Somewhat  
agree



Agree



Strongly  
agree



It would be best if newspapers were censored so that people would not be able to get hold of destructive and disgusting material.

Strongly  
disagree



Disagree



Somewhat  
disagree



Neutral



Somewhat  
agree



Agree



Strongly  
agree



Many good people challenge the state, criticize the church and ignore “the normal way of living”.

Strongly

Disagree

Somewhat

Neutral

Somewhat

Agree

Strongly

disagree ☐ disagree ☐ agree ☐ agree ☐

Our forefathers ought to be honored more for the way they have built our society, at the same time we ought to put an end to those forces destroying it.

Strongly disagree ☐ Disagree ☐ Somewhat disagree ☐ Neutral ☐ Somewhat agree ☐ Agree ☐ Strongly agree ☐

People ought to put less attention to the Bible and religion, instead they ought to develop their own moral standards.

Strongly disagree ☐ Disagree ☐ Somewhat disagree ☐ Neutral ☐ Somewhat agree ☐ Agree ☐ Strongly agree ☐

There are many radical, immoral people trying to ruin things; the society ought to stop them.

Strongly disagree ☐ Disagree ☐ Somewhat disagree ☐ Neutral ☐ Somewhat agree ☐ Agree ☐ Strongly agree ☐

It is better to accept bad literature than to censor it.

Strongly disagree ☐ Disagree ☐ Somewhat disagree ☐ Neutral ☐ Somewhat agree ☐ Agree ☐ Strongly agree ☐

Facts show that we have to be harder against crime and sexual immorality, in order to uphold law and order.

Strongly disagree ☐ Disagree ☐ Somewhat disagree ☐ Neutral ☐ Somewhat agree ☐ Agree ☐ Strongly agree ☐

When counting up, the number nine comes after the number ten.

Strongly Disagree Somewhat Neutral Somewhat Agree Strongly

disagree ☐ disagree ☐ agree ☐ agree ☐

The situation in the society of today would be improved if troublemakers were treated with reason and humanity.

Strongly disagree ☐ Disagree ☐ Somewhat disagree ☐ Neutral ☐ Somewhat agree ☐ Agree ☐ Strongly agree ☐

If the society so wants, it is the duty of every true citizen to help eliminate the evil that poisons our country from within.

Strongly disagree ☐ Disagree ☐ Somewhat disagree ☐ Neutral ☐ Somewhat agree ☐ Agree ☐ Strongly agree ☐

### Self-monitoring

The statements below concern personal reactions to a number of different situations. No two statements are exactly alike, so consider each statement carefully before answering. If a statement is TRUE or MOSTLY TRUE as applied to you, select "True" and If a statement is FALSE or NOT USUALLY TRUE as applied to you, select "False".

I find it hard to imitate the behavior of other people.

True ☐ False ☐

At parties and social gatherings, I do not attempt to say things that others will like.

True ☐ False ☐

I can only argue for ideas which I already believe.

True ☐ False ☐

I can make impromptu speeches on topics about which I have almost no information.

True

☐

False

☐

I guess I put on a show to impress or entertain others.

True

☐

False

☐

I would probably make a good actor.

True

☐

False

☐

In a group of people I am rarely the center of attention.

True

☐

False

☐

In different situations and with different people, I act like very different persons.

True

☐

False

☐

I am not particularly good at making other people like me.

True

☐

False

☐

I'm not always the person I appear to be.

True

☐

False

☐

I would not change my opinions (or the way I do things) in order to please someone else or win their favor.

True

False





I have considered being an entertainer.

True

False



I have never been good at games like charades or improvisational acting.

True

False



I have trouble changing my behavior to suit different people and different situations.

True

False



At parties I let others keep the jokes and stories going.

True

False



I feel a bit awkward in company and do not show up as well as I should.

True

False



I can look anyone in the face and tell a lie with a straight face (if for a right end).

True

False



I may deceive people by being friendly when I really dislike them.

True

False



**ASI**

Please read the following statements carefully and then make the selection that best corresponds with how strongly you agree or disagree with the statement.

Many women have a quality of purity that few men possess.

Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Women should be cherished and protected by men.

Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Women seek to gain power by getting control over men.

Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Every man ought to have a woman whom he adores.

Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Men are incomplete without women.

Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Women exaggerate problems they have at work.

Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Once a women gets a man to commit to her, she usually tries to put him on a tight leash.

Strongly  
disagree



Disagree



Somewhat  
disagree



Neither agree  
nor disagree



Somewhat  
agree



Agree



Strongly  
agree



When women lose to men in a fair competition, they typically complain about being discriminated against.

Strongly  
disagree



Disagree



Somewhat  
disagree



Neither agree  
nor disagree



Somewhat  
agree



Agree



Strongly  
agree



Many women get a kick out of teasing men by seeming sexually available and then refusing male advances.

Strongly  
disagree



Disagree



Somewhat  
disagree



Neither agree  
nor disagree



Somewhat  
agree



Agree



Strongly  
agree



Women, compared to men, tend to have a superior moral sensibility.

Strongly  
disagree



Disagree



Somewhat  
disagree



Neither agree  
nor disagree



Somewhat  
agree



Agree



Strongly  
agree



Men should be willing to sacrifice their own well being in order to provide financially for the women in their lives.

Strongly  
disagree



Disagree



Somewhat  
disagree



Neither agree  
nor disagree



Somewhat  
agree



Agree



Strongly  
agree



Feminists are making unreasonable demands of men.

Strongly  
disagree



Disagree



Somewhat  
disagree



Neither agree  
nor disagree



Somewhat  
agree



Agree



Strongly  
agree



## Internal Motives to Control Prejudice

I attempt to act in nonprejudiced ways toward Black people because it is personally important to me.

Strongly disagree ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Strongly agree

According to my personal values, using stereotypes about Black people is OK.

Strongly disagree ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Strongly agree

I am personally motivated by my beliefs to be nonprejudiced toward Black people.

Strongly disagree ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Strongly agree

Because of my personal values, I believe that using stereotypes about Black people is wrong.

Strongly disagree ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Strongly agree

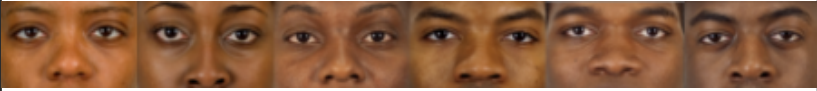
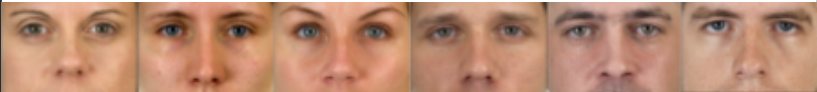
Being nonprejudiced toward Black people is important to my self-concept.

Strongly disagree ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Strongly agree

## IAT inst

Last, you will use the 'E' and 'I' computer keys to categorize items into groups as fast as you can. These are the four groups and the items that belong to each:

--	--

Category	Items
Good	Joyous, Friendship, Pleasing, Fabulous, Beautiful, Smiling, Laughing, Magnificent
Bad	Hurtful, Hate, Disgust, Evil, Hatred, Poison, Ugly, Failure
Black Faces	
White Faces	

There are seven parts. Be sure to read the instructions for each part and pay attention!

IAT 1 - Compatible First [Target A on Right with Pos]

Black		White
Bad		Good
Black		White
or		or
Black		White
or		or
Good	+	Bad
Bad		Good
Loading all the content...		
Black	+	White
or		or
Black		White
or		or
Good	+	Bad
Bad		Good
This should take less than 1 minute		
Loading all the content...		
Black	+	White
or		or
Black		White
or		or
Good	+	Bad
Bad		Good
This should take less than 1 minute		
Loading all the content...		
Black	+	White
or		or
Black		White
or		or
Good	+	Bad
Bad		Good
This should take less than 1 minute		
Loading all the content...		

IAT 2 - Incompatible First [Target A on Right with Neg]

<b>Black</b>		<b>White</b>
<b>Black</b>	This should take less than 1 minute Loading all the content...	<b>White</b>
<b>Good</b>		<b>Bad</b>
<b>Bad</b>	This should take less than 1 minute +	<b>Good</b>
	Loading all the content...	
<b>Black</b>	+	<b>White</b>
<b>or</b>	This should take less than 1 minute Loading all the content...	<b>or</b>
<b>Black</b>	+	<b>White</b>
<b>Bad</b>		<b>Good</b>
<b>or</b>	This should take less than 1 minute Loading all the content...	<b>or</b>
<b>Bad</b>	+	<b>Good</b>
AT 3 - Compatible First [Target A on Left with Pos]		
<b>White</b>	This should take less than 1 minute Loading all the content...	<b>Black</b>
	+	
<b>Good</b>	This should take less than 1 minute Loading all the content...	<b>Bad</b>
	+	
<b>White</b>	This should take less than 1 minute Loading all the content...	<b>Black</b>
	+	
<b>or</b>	This should take less than 1 minute Loading all the content...	<b>or</b>
<b>White</b>		<b>Black</b>
<b>Good</b>		<b>Bad</b>
<b>or</b>	This should take less than 1 minute Loading all the content...	<b>or</b>
<b>Bad</b>	+	<b>Good</b>
	Loading all the content...	
<b>White</b>	+	<b>Black</b>
<b>or</b>	This should take less than 1 minute Loading all the content...	<b>or</b>
<b>White</b>	+	<b>Black</b>
<b>Bad</b>		<b>Good</b>
<b>or</b>	This should take less than 1 minute Loading all the content...	<b>or</b>
<b>Bad</b>	+	<b>Good</b>
AT 4 - Incompatible First [Target A on Left with Neg]		
<b>White</b>	This should take less than 1 minute Loading all the content...	<b>Black</b>
	+	
<b>Bad</b>	This should take less than 1 minute Loading all the content...	<b>Good</b>
	+	
<b>White</b>	This should take less than 1 minute Loading all the content...	<b>Black</b>
	+	
<b>or</b>	This should take less than 1 minute Loading all the content...	<b>or</b>
<b>White</b>		<b>Black</b>

Bad Good Bad	This should take less than 1 minute					Good Bad Good
Loading all the content...						
White	+					Black
or	This should take less than 1 minute					or
White	+					Black
or	This should take less than 1 minute					or
Natural Mentoring Style	+					Bad
Good	This should take less than 1 minute					
Which statements below best describe your style as a mentor.						
A mentor that enables constructive feedback from peers.						
Definitely true	Probably true	Neither true nor false	Probably false	Definitely false		
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
A mentor that makes introductions to useful contacts.						
Definitely true	Probably true	Neither true nor false	Probably false	Definitely false		
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
A mentor that can help you find where information is held.						
Definitely true	Probably true	Neither true nor false	Probably false	Definitely false		
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		

A mentor that can answer direct questions.

Definitely true	Probably true	Neither true nor false	Probably false	Definitely false
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

A mentor that offers creative ways to evaluate problems.

Definitely true	Probably true	Neither true nor false	Probably false	Definitely false
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Demog

What is your age?

What is your gender?

- ☐ Male
- ☐ Female

Which of the following best describes your highest achieved education level? If currently enrolled, mark the previous grade or highest degree received.

- ☐ Some high school
- ☐ High school graduate
- ☐ Some college, no degree
- ☐ Associates degree
- ☐ Bachelors degree
- ☐ Graduate degree (Masters, Doctorate, ect.)

What is the total income of your household?

- ☐ Under \$25,000
- ☐ \$25,000 - \$39,999
- ☐ \$40,000 - \$49,999
- ☐ \$50,000 - \$74,999
- ☐ \$75,000 - \$99,999
- ☐ \$100,000 - \$124,000
- ☐ \$125,000 - \$149,999
- ☐ Over \$150,000

How would you describe your socio-economic status?

- ☐ Lower class
- ☐ Working class



- ☐ Lower-middle class
- ☐ Middle class
- ☐ Middle-upper class
- ☐ Upper class
- ☐ Upper upper class

Please specify your race/ethnicity.

- ☐ American Indian/Native American
- ☐ Asian/Asian-American/Pacific Islander
- ☐ Black/African-American
- ☐ Latino/Hispanic
- ☐ White/Caucasian/European American
- ☐  Other

What is your political affiliation/ideology?

- ☐ Very Conservative
- ☐ Moderate Conservative
- ☐ Independent-leaning Conservative
- ☐ Independent
- ☐ Independent-leaning Liberal
- ☐ Moderate Liberal
- ☐ Very Liberal

Are you a first-generation American? (Your parents were born in another country before relocating to America, but you were born in this country)

- ☐ Yes
- ☐ No

If yes, please write your parents' country of origin.

Are you a second-generation American? (Your grandparents were born in another country before relocating to America, but you and your parents were born in this country)

☐ Yes

☐ No

If yes, please write your grandparents' country of origin.

## Debrief

Please click the next button to record your results and open the door to let the experimenter know you are done with this part of the study.

Powered by Qualtrics

## Appendix 5: Post-Interaction Survey

# Yale Qualtrics Survey Tool

## ID

Please enter your ID.

What was your role in this past session?

Mentor

☐

Mentee

☐

How many sessions have you completed today?

One

☐

Two

☐


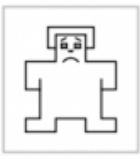
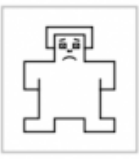
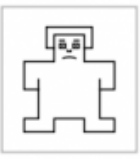

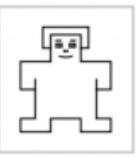

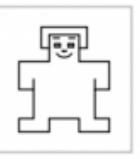
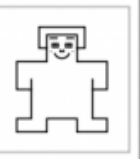
Please answer to the following questions to be best of your ability.

Your responses will remain confidential and will not be shared with your partner.

## Mood

### Describe your mood!

Using the following scale, please indicate how you feel ***right now***.

								
1 - very unpleasant	2	3	4	5	6	7	8	9 - very pleasant

(far left  
image)(far right  
image)**Perceived friendliness and competence****Describe your partner!**

Please read each statement carefully and then choose the option that best corresponds with how strongly you agree or disagree with each statement.

*To what extent was your partner...*

	1 Not at all	2	3	4	5	6	7 Extremely
Cruel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Intelligent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Confident	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cold	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unassertive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unfriendly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unlikable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Interaction Goals****Describe your goals!**

Please rate your thoughts and feelings during this session. How did you hope to come across? As a reminder all responses are confidential.

*To what extent did you want to appear...*

	Not at all						Extremely
A good person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fair	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Open-minded	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Not at all						Extremely
Kind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Capable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Intelligent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Future contact mentor

#### Based on the interview that just took place...

As a **mentor**, how interested are you in future contact with your mentee?

Not at all	A little	A moderate amount	A lot	A great deal
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

As a **mentor**, how satisfied are you with this interview?

Not at all	A little	A moderate amount	A lot	A great deal
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How satisfied do you think the **mentee** is with this interview?

Not at all	A little	A moderate amount	A lot	A great deal
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How interested do you think the **mentee** is in future contact?

Not at all	A little	A moderate amount	A lot	A great deal
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Future contact mentee

#### Based on the interview that just took place...

As a **mentee**, how interested are you in future contact with your mentor?

Not at all

☐

A little

☐A moderate  
amount☐

A lot

☐

A great deal

☐

As a **mentee**, how satisfied are you with this interview?

Not at all

☐

A little

☐A moderate  
amount☐

A lot

☐

A great deal

☐

How satisfied do you think the **mentor** is with this interview?

Not at all

☐

A little

☐A moderate  
amount☐

A lot

☐

A great deal

☐

How interested do you think the **mentor** is in future contact?

Not at all

☐

A little

☐A moderate  
amount☐

A lot

☐

A great deal

☐

**done**

Thank you for completing this short survey.

Please click the next button to record your responses. The experimenter will be with you shortly.

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