

Fit for the Job: Biases and Perceptions of Leadership Performance of Gender-by-Race Groups

Joey Cheung

Tufts University

### Abstract

Women, especially women of color, remain underrepresented at the top of corporate leadership. Female leaders most often cite discrimination as the significant barrier for career advancement. The aim of this study is to examine the role of perception bias on evaluating leadership performance of different gender-by-race demographic groups. To examine leadership effectiveness, participants were presented responses from student leaders who belong to one of four demographic groups (White men, White women, Black women, Asian women). These responses were paired with profiles that either accurately matched the demographic information of the student leader (profile of an Asian woman when an Asian woman provided the responses) or inaccurately matched the demographic information of the student leader (profile of a White man when an Asian woman provided the responses). Participants (N = 182) were randomly assigned to one of eight conditions (4 demographic group x 2 profile match) and were asked to evaluate the student leaders' leadership performance. The results revealed that responses provided by White men were rated as significantly worse than all three women groups in performance, perceived power, warmth, competence, and confidence. In general, participants evaluated the responses similarly regardless of the accurate or inaccurate profiles, suggesting a lack of bias in evaluating leadership. Because this study is designed for an undergraduate setting, there are limitations to capturing the biases that may occur in upper management.

*Keywords:* perception bias, leadership, stereotypes, intersectionality, gender, race

### Fit for the Job: Biases and Perceptions of Leadership Performance of Gender-by-Race Groups

Over the last forty years, more women have gained entry into leadership roles. However, the number of women in the top tier of corporate leadership has been minimal and the CEO position is still considered a ‘gentleman’s club’ (Vecchio, 2002). While women currently account for 46.5% of the workforce, they are rarely found at the top levels of business organizations; women only hold 15.2% of corporate board seats at *Fortune 500* companies (Appelbaum et al, 2003; Black & Rothman, 1998; Buckalew, Konstantinopoulos, Russell, & El-Sherbini, 2012; Johnson, Murphy, Zewdie, & Reichard, 2006; Oakley, 2000; Stelter, 2002). Racial minority women face an even greater battle when trying to break into upper management. Among the women who hold *Fortune 500* board seats, only 21% of them are women of color; this accounts for 3.1% of all *Fortune 500* board seats (Catalyst, 2006). Given the increasing number of studies that have shown the benefits of a diverse workplace in 21st century markets, it is crucial to better understand the barriers that prevent women, particularly women of color, from accessing higher leadership positions (Buckalew et al, 2012; Eagly & Chin, 2010; Ellemers, Rink, Derks, & Ryan, 2012). This paper aims to examine the role of perception bias, as one of those potential barriers, on evaluating leadership performance of different gender-by-race demographic groups.

### **The Glass Ceiling: Barriers for Women in Leadership**

Although there is greater recognition for women in leadership positions, there seems to be a disconnect between what *makes* effective leadership and what is *perceived* to be good leadership (Omar & Davidson, 2001). The general consensus among male CEOs is that this underrepresentation of women in leadership positions is the result of a Pipeline Problem, or a systematic shortage of qualified women with the appropriate background for higher-level

positions (Ragins, Townsend, & Mattis, 1998). However, female leaders most often cite discrimination as the significant barrier for career advancement (Carli, 2001; Catalyst, 2005). The glass ceiling is frequently invoked to describe the prejudices that exclude women from higher-level leadership positions despite the near equality of the sexes in most other indicators of the work force (Cotter, Hermsen, Ovadia, & Vanneman, 2001; Buckalew et al, 2012). The glass ceiling presents itself in varied and pervasive forms, emerging through corporate practices, behaviors, and culture (Oakley, 2000). Indeed, even after controlling for education, experience, and other job-relevant categories, women, especially women of color, are facing unequal evaluations on their leadership potential (Cotter et al, 2001).

One explanation for gender inequality is based in Social Role Theory (SRT). Descriptive and prescriptive stereotypes inform individuals of how typical people within a given social role (such as gender) are like and how they are expected to behave (Burgess & Borgida, 1999). SRT posits that men and women are allocated different roles in society based on their gender and are assumed to possess the qualities that predisposes them for their perspective roles (Eagly, 1987; Eagly & Carli, 2007; Eagly & Karau, 1991). The content of these stereotypes affect how others might perceive and evaluate an individual's leadership skills. Prejudices towards female leaders form because the prescriptive and descriptive norms are incongruent with those for a leader. Developed in part from SRT, Role Congruity Theory (RCT) argues that gender roles and leadership roles produce two sets of prejudices that prevent women from occupying leadership positions. While stereotypes about women are more associated with communal qualities (e.g. cooperative, kind), agentic or masculine qualities (e.g. assertive, courageous) are perceived as necessary for a successful leader (Eagly, 1987; Koenig, Eagly, Michell, & Ristikari, 2011; Hoyt, 2012; Hoyt & Burnette, 2013; Schein, 1973; Schein, 2001). Feminine characteristics are,

therefore, seen as incongruent with the descriptive norms for leadership potential and prevent women from being categorized as leaders. This, in turn, makes it more difficult for women to be thought of in congruence with leadership (Scott & Brown, 2006)

With feminine traits associated with incompetence in leadership, women have to violate their gender norms in order to be perceived as capable (Jamieson, 1995; Oakley, 2000). Biased evaluations most often take place when there is ambiguous performance markers or minimal individuating information. Contrarily, evidence confirming role congruent information or is unambiguous is widely accepted when judging female leadership (Davison & Burke, 2000; Kunda & Spencer, 2003). When women *are* considered successful leaders, they often have to demonstrate exceptionally compelling evidence of leadership capabilities where there is no ambiguity to ‘deserve’ the accolade (Johnson et al, 2008; Lyness & Heilman, 2006). Based on these views, women are subject to stricter leadership performance requirements than men (Berger & Fisek, 2006; Foschi, 2000). Because this is not required from their male peers, the double standard presents itself as a perception bias that can affect the evaluation of female ability, performance, and fit in leadership.

The incongruence between leadership and gender roles not only limit women from being perceived as leaders but also produces a tendency to evaluate women negatively as leaders (Eagly & Johannesen-Schmidt, 2001; Eagly & Karau, 2002; Rosette & Tost, 2000). As role-specific traits are thought to be mutually exclusive, a woman exhibiting gender role-specific behavior would place expectations that are directly competing with their leadership role. If a female leader conforms to her gender role (e.g. cooperative, caring), she is poorly evaluated as a leader because she is not exhibiting the qualities assumed to be necessary for success in leadership. Likewise, if she behaves in a manner consistent with leadership norms (e.g. task-

driven, confident), she is perceived less favorably because she is too aggressive or too masculine for a woman. Both make it more difficult for women to garner respect from superiors, subordinates, or peers who evaluate their performances (Phelan, Moss-Racusin, & Rudman, 2008; Rudman, 1998; Rudman, Moss-Racusin, Phelan & Nauts, 2012). While demonstrating similar capabilities as men, women, who qualify for leadership positions, face backlash and are rated as less likeable and hireable.

### **Intersectionality: Gender and Race in Leadership**

While all women struggle to overcome the glass ceiling, race may form an additional barrier for racial minority women. Women of color have been largely ignored in leadership studies; studies on gender differences in leadership have predominately focused on the White majority. However, recent studies have shown that the intersection of race and gender create an additional layer of complexity that affects how racial minority female leaders are evaluated (Livingston, Rosette, & Washington, 2012). Indeed, racial minorities are perceived as less prototypical, less effective, and less favorable leaders (Festekjian et al, 2013; Knight, Hebl, Foster, & Mannix, 2003; Rosette, Leonardelli, & Phillips, 2012). Intersectional identities are “social identities such as race...and gender [that] interact to form qualitatively different meanings and experiences” (Warner, 2008, p. 454). Multiple competing hypotheses have been proposed regarding intersectional identities. However, the two most discussed in relation to racial minority women in leadership are the “double-jeopardy” hypothesis and the “gendered race” hypothesis

The double-jeopardy hypothesis posits that racial minority women experience discrimination as a result of the accumulative experiences of their gender *and* their race (Beale, 1970; Bell & Nkomo, 2001; Purdie-Vaughns & Eibach, 2008; Livingston et al, 2012). If White

males are representative of the prototypical leader, racial minority women may face a double-penalty because their identity as a woman and their identity as a racial minority are perceived as unfit for leadership positions (Chung-Herrera & Lankau, 2006; King, 1988). While White women can focus solely on their gender discrimination, women of color face an additive effect of prejudice because they occupy neither role congruent race nor gender categories.

Alternatively, Essed (1991) argues that the discrimination associated with such social identities (i.e. racism and sexism) combine under certain conditions to create a unique form of oppression. This phenomenon, described as gendered race, creates sets of stereotypes that are different than the stereotypes of each identity alone (Freeman & Ambady, 2011; Ghavami & Peplau, 2012; Thomas, Witherspoon, & Speight, 2008). Gendered race theory suggests that women with different racial identities have unique sets of stereotypes associated with their hybrid gender-race identity (Johnson, Freeman, & Pauker, 2012). Studies have shown that stereotype content for Black women are perceived to be more masculine (e.g. aggressive, hostile, dominating) and Asian women are perceived to be more feminine (e.g. gentle, passive, weak; Galinsky, Hall, & Cuddy, 2013; Ghavami & Peplau, 2012; Parker, 1996). If White women were considered the standard for feminine stereotypes, Black women are described in stereotypically more agentic ways than White women and may be perceived more favorably in leadership as a result (Livingston et al, 2012; Hall, Galinsky, & Phillips, 2015). Alternatively, Asian women are described in a stereotypically more submissive manner and may, therefore, be perceived less favorably compared to White women by being more feminine-typed.

Literature on intersectional identities also highlights the risk of intersectional invisibility whereby individuals of multiple subordinate group identities (e.g. racial minority women) experience more discrimination because they are not identified as prototypical members of either

constituent identity groups (Sesko & Biernat, 2009; Purdie-Vaughns & Eichbach, 2008; Sanchez-Hucles & Davis, 2010; Rosette, Leonardelli, & Phillips, 2008). In a culture that is androcentric (defining the standard person as male) and ethnocentric (defining the standard person as White), women of color are neither the standard or relevant representatives of their gender or race. Consequently women of color are simply not thought of when considering gender or race categories. Not considered as the prototypical member, this intersectional invisibility makes it more likely for racial minority women to fall into the out-group and experience segregation from their colleagues. As individuals tend to favor in-group members, women of color are less likely to be considered for promotions and mentoring relationships, as well as experience occupational success (Blake-Beard & Roberts, 2004; Browne & Askew, 2005; Combs, 2003).

### **Defining Good Leadership**

Leadership theories have been developed to define and identify the traits that make great leaders. Early theories were based on the “Great Man” or the innate qualities of contemporary social, political, and military leaders (Parker, 1996). The Great Man theories described leadership in a strictly masculine context and this attitude persisted as leaders continue to be perceived as those who possess the attitudes, characteristics, and temperaments more aligned with masculine qualities (Schein, 1973). While current leadership theories have moved away from the assumption that leadership is solely innate, definitions of effective leadership remain rooted in a male dominated corporate rhetoric. Thus, either implicitly or explicitly, definitions of effective leadership have depicted leadership as a male prerogative (Cames, Vinnicombe, & Singh, 2001).

Leadership is a social process. Therefore, it involves the formation of a social identity – role expectations shape how others evaluate one’s performance (Lord & Brown, 2004; Lord, Brown, & Freiberg, 1999). Leadership effectiveness can be measured through various indicators, such as follower’s attitude and productivity (Howell & Costley, 2006). However, the most critical indicator is based on others’ perceptions of leadership abilities, which, in turn, translate to how subordinates, superiors, and peers view the leader’s success. In other words, effective leadership is defined as the process of being perceived as a leader. Leadership Categorization Theory posits that such perceptions of leadership effectiveness is determined by a person-position fit or how well perceivers match a leaders’ core qualities with the qualities deemed necessary for the job (Lord, Foti, & De Vader, 1984; Lord & Maher, 2002). Because leaders may emerge in numerous contexts and asked to perform a variety of task, perception of leadership fit can also vary. Stereotypes prescribed by the roles create expectations about the likely characteristics of that individual (Dovidio & Hebl, 2005; Roberson et al, 2008). That is, stereotypes operate as standards against which an individual is judged. Known as the shifting standards model, Biernat, Manis, & Nelson (1991) argue that subjective evaluations change based on an individuals’ group membership because standards of performance alter according to stereotypic expectations. In other words, evaluation of leadership effectiveness changes based on the individuals’ demographic information and the context they are being evaluated in.

### **The Present Study**

Currently, limited research has investigated changing perceptions and biases on intersectional identities, specifically, on leadership performance. The present study aims to understand how stereotyping might bias overall perception of leadership performance of individuals with intersectional identities, specifically gender-by-race identity groups. Naïve

participants were asked to evaluate the performance of student leaders from a previous study; these student leaders belonged to one of the following gender-by-race groups (White men, White women, Black women, Asian women). To test whether shifting standards affect perceptions when evaluating individuals' leadership performance, participants were either presented with accurate profiles that matched the student leader's demographic information or an inaccurate profile that mismatched the demographic information.

The following hypotheses guided our investigation:

**H1.** Based on RCT, we hypothesized that responses paired with profiles of White men will be evaluated the best out of the four demographic groups as literature shows that White men are described to be the best fit and most qualified in leadership positions.

**H2.** In order to examine the two competing hypotheses surrounding intersectionality in leadership, double-jeopardy and gendered race, two hypotheses are proposed.

**A.** Based on the double-jeopardy hypothesis, we hypothesize that responses paired with profiles of White women will be evaluated as performing worse than White men but better than Black and Asian women as they are only affected by gender discrimination and not the additive effect of both gender and race.

Evaluation of racial minority women (i.e. Black and Asian women) will be evaluated as equally worse of the four demographic groups, as they are non-prototypical leaders in both gender and race.

**B.** Based on gendered race theory, we hypothesize that responses paired with profiles of Black women will be evaluated as better leaders than White and Asian women because their gender-by-race category is masculine-typed and, therefore, more prototypical of leaders. Responses paired with profiles of Asian women will

be evaluated as the worse leaders of the four demographic groups, as their gender-by-race category is feminine-typed and, therefore, the least prototypical of leaders.

**H3.** We expected perception bias will affect leadership performance evaluation according to shifting standards, such that the same response will be evaluated differently between the match or mismatch profile manipulation. We hypothesized that participants will evaluate leadership performance based on the profile they receive rather than based on the response alone. For example, responses provided by female leaders will be rated more positively when a White man is presented as the profile than when a female is presented as the profile. Similarly, responses by a White man will be rated as worse when paired with the profile of a woman than when paired with a profile of a White man.

## **Method**

### **Design**

In order to evaluate biases based on gender-by-race intersectional identities in leadership performance evaluation, participants were presented with either profiles that correctly matched or mismatched the demographic group of the leader who provided them. Half of the participants were randomly assigned to receive six accurate profiles that matched the demographic information of the individual providing the responses (i.e. profile is of a Black woman and the responses were collected from a Black woman). The other half of the participants received six inaccurate profiles that do not match the demographic information (i.e. profile is of a White man and the responses were collected from a Black woman). For the mismatched profiles, responses for all three groups of women were coupled with profiles of White men as White men are presumed to be the least stigmatized, experiencing neither gender nor racial discrimination in

leadership domains. In order to tease-apart gender and race discrimination, responses for White men in the mismatched condition were coupled with profiles of White women.

This study was a 4 (Gender-by-Race Identity Group: White men, White women, Black women, Asian women) x 2 (Profile: accurate or inaccurate) between-subjects experimental design. Naïve participants were randomly assigned to one of eight conditions; in each condition, participants were presented with six sets of responses from six different student leaders in the same gender-by-race identity group. Participants were presented with six sets of responses to ensure that the ratings of leaders performance were the average for each demographic group rather than on the evaluation of a unique response.

### **Participants**

One hundred and eighty-six Tufts University undergraduate students ( $M_{\text{age}} = 19.07$ ,  $SD_{\text{age}} = 1.32$ , 85.3% first or second year students) were recruited to participate in this study. Participants in the department participant pool were compensated with course credit for completing the study. Participants who had participated in the previous study that provided the responses for the current study were excluded from participating. There were no other exclusionary criteria for participants.

Our sample consisted of 72 males and 113 females. White participants ( $n = 113$ ) made up the majority of the sample with the remainder of the sample including, 9 Black, 28 East Asian, 11 Hispanic or Latino, 1 Middle Eastern, 11 South Asian, 10 multiracial, and 2 unlisted race individuals.

### **Materials**

This study included several materials: mock profiles of student leaders, leadership responses from student leaders, and questionnaires capturing participants' perception of leadership performance.

***Student Leader Profile Manipulation.*** Perception bias was manipulated by whether the gender-by-race profile presented to participants matched or mismatched the gender-by-race group of past participants who provided the responses. All profiles consisted of a portrait photo, name, represented student organization, position, age, gender, and race (see *Appendix A* for sample profile). A letter was inserted in place of the student leaders' names and student organizations to avoid predetermined biases. Participants were told that this information was replaced with a letter to protect confidentiality. Student leaders' position (President) and age (20 years old) were the same for all six profiles and across conditions; their gender and race varied based on condition they were randomly assigned to but were consistent across all six profiles. No other information was provided about the student leaders to the participants.

Pictures presented as part of the profiles were selected from the Chicago Face Database (CFD) and were not pictures of actual past participants (Ma, Correll, & Wittenbrink, 2015). The database contains faces of all demographic groups needed in this study and includes extensive norming data for each face. These data include measures of physical attributes as well as subjective ratings by independent judges. All subjective measures are rated on 1-7 Likert scale (1= Not at all, 7 = Extremely). Each face is also provided with proportion scores or the number of participants who indicated a certain race or gender divided by the total number of raters who rated the target.

Faces for the profiles used in this study were selected based on age, race, gender, and emotional expressions and were controlled for attractiveness. All faces were rated as being

between 18-25 years old ( $M = 22.91$ ,  $SD = 1.75$ ,  $Min = 18.32$ ,  $Max = 24.88$ ) and were highly identified as their race and gender.<sup>1</sup> All faces were identified as having a neutral facial expression. ANOVAs found no significant differences between ratings of attractiveness between faces of all four demographic groups,  $F(3, 20) = 1.076$ ,  $p = 0.382$ . Based on their order of selection, faces are randomized such that the same face is always presented with the same profile letter (i.e. 5th face in the order is paired with profile A regardless of condition).

***Leadership Performance Responses.*** With each profile, participants were given two separate sets of responses and questions on two specific leadership tasks: a negotiation task and a conflict task (see *Appendix B* and *C* for sample negotiation and conflict responses respectively). In the instructions, details about the context were provided to explain the tasks. Responses were collected from participants in a previous companion study where leadership skills were examined under different levels of stereotype threat.<sup>2</sup> All responses were described as transcripts from the student leaders' spoken responses (which were audio recorded) and participants were reminded that responses might differ from written language. Responses were presented alongside questionnaire items relevant to the task, such that participants could refer back to the response while completing the questionnaire.

For the negotiation task, participants were told that the leader's student organization could not afford to cover all the costs for a trip (roughly \$1785) and, thus, must request additional funding from a university Funding Allocation Board. Participants were presented the

---

<sup>1</sup> All faces received a proportion score; proportion scores indicate the number of participants who selected the appropriate identity out of the total number of participants who rated the target (i.e. the male proportion score is number of participants who indicated male gender divided by the number of participants who rated the target). Based on the proportion scores, all profiles were selected such that they were not identified by any race or gender than as labeled (i.e. profiles of Black women had a proportion score of 0 for male, White, and Asian identification).

<sup>2</sup> In the companion study, student leaders were asked to provide spoken responses to leadership tasks (negotiation and conflict) under high or low stereotype threat. Participants in the current study received three sets of responses from student leaders in the high threat group and three from the low threat group (in the same gender-by-race identity group), the average of the controlled variables for the three responses were reflective of the average for their threat group and demographic group.

transcription of the student leader's verbal request for additional funding as well as the dollar amount of funding requested. For the conflict task, participants were told that funding provided by the Allocation Board was insufficient to cover all the costs and the student leader selected one group member to not attend the event. The unselected member confronted the student leader about why they were excluded; participants saw the student leaders' initial explanation to the dissatisfied member about why they would not attend the event.

All responses from previous college student leaders were analyzed using the LIWC2007 text analysis application to extract psychometric data (Mehl, 2006; Tausczik & Pennebaker, 2009). We calculated average (median) word count, non-fluencies (e.g. er, hm, umm), and fillers (e.g. blah, you know) of the four demographic groups and selected six responses for each task that best represented the average for the respective groups. Specifically, for the negotiation task, we also controlled for the dollar amount of funding requested. None of the selected responses came from the same participant. In total, 96 (48 negotiation, 48 conflict resolution) responses were used in this study and participants received a subset of 12 (6 negotiation, 6 conflict resolution) responses based on the condition they were randomized to.

***Dependent Measures.*** Dependent measures were collected throughout the study. Questions were all presented on a scale from 1, strongly disagree or not at all, to 7, strongly agree or very (see *Appendix B - E* for questionnaire items). Participants were asked to provide task-specific (negotiation and conflict resolution) and overall evaluations.

In order to create composite scale score for performance, perceived power, warmth, confidence, competence, and overall rating in negotiation, conflict, and overall, we first calculated average (mean) scores across all six profiles within each condition (i.e. the item-level rating of 'friendliness' from the negotiation task for all six matching profiles of Asian women

was averaged to create an average negotiation friendliness score for Asian women with matching profiles). We then calculated inverse scores for items that negatively correlated with other items in the scale from these item-level average scores. A series of bivariate correlations were conducted to confirm positive correlations among all items within a scale after inverse scoring. After scales were checked and adjusted for internal consistency (Cronbach's  $\alpha > 0.7$ ), items were averaged (mean). Sixteen composite scale scores were created and used as the dependent variables.

*Performance.* Performance was evaluated at the task level (negotiation and conflict resolution specifically) but not overall, such that participants did not receive an overall evaluation score for performance. For the negotiation task, 8 items ( $\alpha = 0.91$ ) were used to the participant's appraisal of the student leader's performance. Participants were asked to imagine themselves as a member of the Funding Board and rated to what extent they agreed with statements of performance. Example items included: "The student leader expressed their thoughts clearly to the Funding Board" and "The student leader included irrelevant information in their initial request to the Funding Board". One item was reverse scored for the negotiation performance scale. For the conflict task, participants were asked to imagine themselves as the dissatisfied group member and rated to what extent they agreed with each statement. Six items ( $\alpha = 0.93$ ) were used to assess performance in the conflict resolution task. Example items included: "The student leader provided the right amount of information (not too short and not too long) to the dissatisfied group member" and "The student leader handled the conflict with the dissatisfied group member effectively". No items were reverse scored for the conflict performance scale.

*Perceived Power.* Perceived power was also only evaluated at the task level and not overall. For the negotiation task and for the conflict task, 5 items ( $\alpha = 0.87$ ,  $\alpha = 0.86$  respectively)

were used to appraise participants' evaluation of the student leaders' power. Participants were asked to assess the student leaders' power by imagining to what extent the student leader had an influence on the outcome. Example items assessing perceived power in the negotiation task included: "The student leaders' wishes didn't carry much weight during the Funding Board meeting" and "The student leader had an influence on the decision made by the Funding Board". Two items were reverse scored for the negotiation power scale. Example items assessing perceived power in the conflict resolution task included: "The student leader was able to get their way in the interaction with the dissatisfied group member" and "The student leader's ideas and opinions were ignored in the interaction with the dissatisfied group member". One item was reverse scored for the conflict power scale.

*Warmth.* Student leaders' warmth, or likeability, was evaluated at the task-level and overall. Participants were asked to rate to what extent the student leader seemed to exhibit certain personality characteristics. Three items (warm, friendly, likeable) were used to assess warmth for the negotiation task ( $\alpha = 0.96$ ), conflict task ( $\alpha = 0.96$ ), and overall evaluation ( $\alpha = 0.97$ ). No item was reverse scored for the warmth scale.

*Competence.* Student leaders' competence, or skillfulness, was evaluated at the task level and overall. Like warmth, participants were asked to evaluate to what extent the student leaders seemed to demonstrate competence. Three items (competent, capable, skillful) were used to assess competence for the negotiation task ( $\alpha = 0.96$ ), conflict task ( $\alpha = 0.96$ ), and overall evaluation ( $\alpha = 0.96$ ). No item was reverse scored for the competence scale.

*Confidence.* Student leaders' confidence, or lack of nervousness, was evaluated at the task level and overall. Confidence was evaluated in a similar manner as the previous two character trait measures. Four items (hesitant, confident, certain, nervous) were used to assess

confidence score for the negotiation task ( $\alpha = 0.83$ ), conflict task ( $\alpha = 0.82$ ), and overall evaluation ( $\alpha = 0.80$ ). Two items were reverse scored for the confidence scale.

*Overall Evaluation.* At the end of each negotiation and conflict task, participants were asked to provide an overall rating of the student leaders' performance specific to the task. Once participants have completed the questionnaire items for both the negotiation task and the conflict task, they were asked to provide a rating for the student leaders' performance as a whole. Overall ratings were all single item questions.

*Demographic Questionnaire and Manipulation Check.* Participants were asked to provide demographic information and manipulation check items after all six profiles and sets of responses. Participants were asked to indicate their level of leadership experience, specifically related to tasks similar to the negotiation and conflict tasks as well as their knowledge about the responsibilities of university student leaders. For the manipulation check, participants were asked if the race and gender of all six profiles were the same and, if yes, to indicate what the race and gender were.

## **Procedure**

For the experiment, participants were scheduled for an hour-long appointment to complete the study in a social psychology lab in a mid-sized, New England university. Participants were seated at a computer and the researcher would complete the consent process. If the participant consented, the experimenter read a prompt that explained the purpose of the study and provided general information about how to complete the study. Participants completed the task on the computer via a Qualtrics survey. In each condition, participants were presented six profiles and sets of responses (each set consists of a negotiation and conflict response). Participants received a total of 12 (6 profiles x 2 responses each) responses. Participants were

reminded to rate each student leader and their corresponding responses as independently as possible. After reviewing all six student-leaders, participants were asked to complete an exit questionnaire. Participants were thanked, debriefed, and compensated by the experimenter at the end of the study.

## Results

### Manipulation Assessment

In order to check if participants were paying attention to the race and gender of profiles, participants were asked to indicate if the race and gender of all six profiles were the same and, if yes, which race and gender were they. Given this, participants should have answered *yes* to all six profiles being the same race and gender and should indicate the appropriate demographic information according to the condition they were randomly assigned to. One hundred and seventy-six (96.7%) answered *yes* to all profiles being of the same gender and 177 (97.3%) answered *yes* to all profiles being of the same race. Of those who answered *yes*, all participants were able to correctly indicate the race and gender of their profiles.

Seven participants failed the manipulation check; the majority of those participants indicated that they could not remember the race and/or the gender of the profile. Because participants were only briefly shown the profiles and spent the majority of the study reading responses, details of the profiles may have been lost. Two of the participants who failed the manipulation check explicitly mentioned that they did not pay attention to one or more of the profiles; these two participants were excluded from subsequent analyses. In addition, two participants provided responses in the companion study. Because they were knowledgeable about the tasks in question and may have provided the responses rated in the current study, their data were also removed from analyses. Thus, 182 participants were included in the final sample.

## Main Analyses

Responses paired with profiles of White men were hypothesized to be considered the best of all four demographic groups. If the double-jeopardy hypothesis was supported, responses paired with profiles of White women will be evaluated as more effective leaders than both racial minority women demographic groups (i.e. Black and Asian women). If gendered race theory was supported, responses paired with profiles of Black women will be evaluated as more effective leaders, followed by White women, then Asian women. Student leaders' leadership performances were expected to be evaluated based on the race and gender of profiles presented. We expected that participants would evaluate performance based on the profiles received, such that a responses from Asian women would be evaluated better if it was paired with profiles of White men compared to if it was paired with profiles of Asian women. A series of 4 (Demographic group: White women, Black women, Asian women, White men) x 2 (Profile manipulation: match, mismatch) ANOVAs were conducted to test the hypotheses.<sup>3</sup> The results and findings are detailed and summarized below. *Table 1* provides overall descriptive statistics of the 16 dependent variables, *Table 2* and *3* provides interaction descriptive statistics, *Table 4* and *5* provides main effect descriptive statistics, and *Table 6* provides an effects and interactions summary of all ANOVAs.

***Performance.*** Performance was only evaluated at the task level, such that no overall performance score was given to each student leader. Participants were asked to imagine themselves as a member of the Funding Board and as the dissatisfied group member (for the negotiation and the conflict task respectively) and rated how well the student leader conducted themselves in these interactions. For the negotiation task, the results revealed a main effect

---

<sup>3</sup> Because there was some evidence of violations of the normality and equal variance assumptions, I attempted a few data transformations. However, none of the transformations worked to correct the cases of assumption violations. Thus, all subsequent analyses were conducted based on the untransformed data.

difference for demographic group,  $F(3,174) = 12.847, p < 0.001$ . Responses written by White men ( $M = 3.28, SD = 0.60$ ) were evaluated as performing significantly worse than responses written by White women ( $M = 3.95, SD = 0.61, p < 0.001$ ), Black women ( $M = 3.92, SD = 0.55, p < 0.001$ ), and Asian women ( $M = 3.66, SD = 0.64, p = 0.018$ ). There was no statistical difference between any of the other demographic groups ( $p > 0.10$ ). There was no significant main effect for the profile manipulation,  $F(3,174) = 0.299, p = 0.585$ , and no significant interaction effect,  $F(3,174) = 2.108, p = 0.101$ .

For the conflict task, the results also revealed a significant main effect for demographic group,  $F(3,174) = 5.88, p = 0.001$ . Responses written by White men ( $M = 4.20, SD = 0.78$ ) were evaluated as performing significantly worse than responses written by White women ( $M = 4.69, SD = 0.56, p = 0.003$ ) and Asian women ( $M = 4.69, SD = 0.68, p = 0.003$ ) but not worse than Black women ( $M = 4.49, SD = 0.55, p = 0.224$ ). Similar to the negotiation task, no other significant differences were found between the demographic groups ( $p > 0.10$ ). The results also revealed no significant main effect for profile manipulation,  $F(3,174) = 0.000, p = 0.998$ , and no significant interaction effect,  $F(3,174) = 0.288, p = 0.834$ .

***Perceived Power.*** Perceived power was also only evaluated at the task level. Participants were asked to rate how much they imagine the student leader had power or influence over the given situations. A significant main effect for demographic group was found for the negotiation task,  $F(3,174) = 11.851, p < 0.001$ . Responses written by White men ( $M = 3.76, SD = 0.64$ ) were perceived as being less influential to the decision made by the Funding Board than responses written by White women ( $M = 4.47, SD = 0.66, p < 0.001$ ), Black women ( $M = 4.27, SD = 0.46, p < 0.001$ ), and Asian women ( $M = 4.12, SD = 0.59, p = 0.004$ ). No statistical differences were found between any of the other demographic groups ( $p > 0.10$ ). The results also

revealed no significant main effect in profile manipulation,  $F(3,174) = 0.279, p = 0.598$ , and interaction effect,  $F(3,174) = 0.486, p = 0.101$ . For the conflict task, there was no main effect for demographic group,  $F(3, 174) = 0.590, p = 0.622$ , nor profile manipulation,  $F(3,174) = 0.012, p = 0.912$ . In addition, no significant interaction effect was found,  $F(3,174) = 0.119, p = 0.949$ .

**Warmth.** Participants evaluated the student leaders' warmth or likeability at the task level and overall. For the negotiation task, a significant main effect difference was found for demographic group,  $F(3, 174) = 3.211, p < 0.001$ . Responses written by White men ( $M = 3.75, SD = 0.084$ ) were rated as significantly less warm than responses written by White women ( $M = 4.33, SD = 0.61, p < 0.001$ ), Black women ( $M = 4.17, SD = 0.63, p = 0.022$ ), and Asian women ( $M = 4.21, SD = 0.64, p = 0.015$ ). No other demographic group differences were statistically significant. There was also no significant main effect difference in profile manipulation,  $F(3,174) = 2.719, p = 0.101$ , nor interaction effect,  $F(3,174) = 1.722, p = 0.164$ . Similarly, in the conflict task, there was a significant main effect difference in demographic group,  $F(3, 174) = 3.211, p = 0.024$ . However, there were no significant differences between any of the demographic groups; responses written by White women ( $M = 3.95, SD = 0.67, p = 0.052$ ) and Asian women ( $M = 3.93, SD = 0.74, p = 0.067$ ) were rated as marginally warmer than responses written by White men ( $M = 3.52, SD = 0.93$ ). No significant main effect in profile manipulation,  $F(3, 174) = 0.672, p = 0.413$ , nor interaction effect was found,  $F(3, 174) = 2.087, p = 0.104$ .

In regards to participants' evaluation to the student leaders' overall warmth, there was a significant main effect in demographic group,  $F(3, 174) = 5.623, p = 0.001$ . Responses written by White women ( $M = 4.10, SD = 0.62, p = 0.001$ ) and Asian women ( $M = 3.98, SD = 0.73, p = 0.016$ ) were rated as significantly more warm than responses written by White men ( $M = 3.51, SD = 0.92$ ); responses written by Black women ( $M = 3.90, SD = 0.70, p = 0.071$ ) were rated as

marginally more warm than responses written by White men. No other significant differences were found between demographic groups ( $p > 0.10$ ). There was no significant main effect finding in the profile manipulation,  $F(3, 174) = 1.413, p = 0.236$ , nor in the interaction effect,  $F(3, 174) = 1.199, p = 0.312$ .

**Competence.** Participants evaluated the competence or the capableness of the student leaders at the task level and overall. There was a significant main effect for perceived competence in the negotiation task,  $F(3, 174) = 7.687, p < 0.001$ . Responses written by White women ( $M = 3.51, SD = 0.92, p < 0.001$ ) and Black women ( $M = 3.51, SD = 0.92, p = 0.009$ ), but not Asian women ( $M = 3.51, SD = 0.92, p = 0.191$ ) were perceived as significantly more competent than responses written by White men ( $M = 3.51, SD = 0.92$ ). There were no other statistical differences between demographic groups ( $p > 0.10$ ). There was no significant main effect in the profile conditions,  $F(3, 174) = 0.711, p = 0.400$ . However, there was a significant interaction effect between demographic group and profile conditions,  $F(3, 174) = 3.052, p = 0.030$ . Responses written by Asian women were evaluated as significantly less competent when paired with mismatched profiles (profiles of White men;  $M = 3.52, SD = 0.83$ ) than when paired with matched profiles (profiles of Asian women;  $M = 4.21, SD = 0.58$ ) condition,  $t(41) = 3.110, p = 0.003$ . None of the other demographic groups had statistically significant differences ( $p > 0.10$ ).

In the conflict task, there was also a significant main effect difference for demographic group,  $F(3, 174) = 2.955, p = 0.034$ . Responses written by White women ( $M = 4.57, SD = 0.79, p = 0.031$ ) were perceived as more competent than responses written by White men ( $M = 4.10, SD = 0.84$ ). However, no other statistical differences were found between demographic groups ( $p > 0.10$ ). There was a marginally significant difference in the profile conditions,  $F(3, 174) = 3.389,$

$p = 0.067$ ; participants evaluated responses paired with inaccurate profiles ( $M = 4.26$ ,  $SD = 0.88$ ) as slightly less competent in the conflict task than responses paired with accurate profiles ( $M = 4.48$ ,  $SD = 0.74$ ). There was no significant interaction effect between demographic group and profile manipulation,  $F(3, 174) = 1.651$ ,  $p = 0.179$ . Thus, we cannot interpret how participants were biasing their evaluations of the student leaders based on their gender and race.

In participants' overall evaluation of student leaders' competence, there was a significant main effect difference for demographic group,  $F(3, 174) = 6.486$ ,  $p < 0.001$ . Responses written by White women ( $M = 4.44$ ,  $SD = 0.79$ ,  $p = 0.031$ ) were evaluated as more competent than responses written by White men ( $M = 3.75$ ,  $SD = 0.85$ ) but responses written by Black women ( $M = 4.24$ ,  $SD = 0.70$ ,  $p = 0.303$ ) and Asian women ( $M = 4.11$ ,  $SD = 0.83$ ,  $p = 0.349$ ) were not. There was no significant main effect difference in profile conditions,  $F(3, 174) = 2.153$ ,  $p = 0.144$ . However, there was a marginally significant interaction effect in demographic groups and profile conditions,  $F(3, 174) = 2.287$ ,  $p = 0.080$ . As with the negotiation task, responses written by Asian women were evaluated as significantly less competent when the response were paired with the profiles of White men (mismatched condition;  $M = 3.79$ ,  $SD = 0.87$ ) than when paired with profiles of Asian women ( $M = 4.48$ ,  $SD = 0.60$ ),  $t(41) = 2.42$ ,  $p = 0.020$ . None of the other demographic groups had statistically significant differences ( $p > 0.10$ ).

**Confidence.** Participants rated the student leaders on their perceived confidence level, or how certain or how un-nervous they seemed. There was a significant main effect difference in the demographic group,  $F(3, 174) = 16.656$ ,  $p < 0.001$ . Responses written by White women ( $M = 4.38$ ,  $SD = 0.67$ ) were perceived to be more confident than responses written by White men ( $M = 3.71$ ,  $SD = 0.61$ ,  $p < 0.001$ ), Black women ( $M = 3.90$ ,  $SD = 0.49$ ,  $p = 0.001$ ), and Asian women ( $M = 3.81$ ,  $SD = 0.81$ ,  $p < 0.001$ ). Responses written by Black women were perceived to be

significantly more confident than responses written by Asian women as well ( $p = 0.025$ ). Aside from those reported, there were no other significant differences between demographic groups ( $p > 0.10$ ). In addition, there was no significant main effect in profile conditions,  $F(3, 174) = 0.209$ ,  $p = 0.648$ , and no significant interaction effect,  $F(3, 174) = 1.408$ ,  $p = 0.242$ .

Unlike the negotiation task, there were no statistically significant findings in main effects or interactions in the conflict task. There were no significant main effect differences in demographic group,  $F(3, 174) = 1.838$ ,  $p = 0.142$ , and profile conditions,  $F(3, 174) = 0.385$ ,  $p = 0.536$ , and no significant in interaction effect,  $F(3, 174) = 1.113$ ,  $p = 0.345$ . However, when evaluating student leaders' overall confidence level, there was a statistically significant main effect difference in demographic group,  $F(3, 174) = 4.794$ ,  $p = 0.003$ . Responses written by White women ( $M = 4.35$ ,  $SD = 0.67$ ,  $p = 0.001$ ) and Black women ( $M = 4.22$ ,  $SD = 0.51$ ,  $p = 0.040$ ) were evaluated as significantly more confident than responses written by Asian women ( $M = 3.86$ ,  $SD = 0.64$ ). No other differences were found between demographic groups ( $p > 0.10$ ). There were also no statistically significant main effect for profile manipulation,  $F(3, 174) = 0.002$ ,  $p = 0.964$ , nor interaction effect,  $F(3, 174) = 1.907$ ,  $p = 0.130$ , for participants' ratings of overall confidence.

***Overall Evaluations.*** Participants were asked to give an overall rating of the student leader's on each independent task as well as an overall leadership score. For the negotiation task, there was a significant main effect difference in demographic group,  $F(3, 174) = 12.803$ ,  $p < 0.001$ . Responses written by White women ( $M = 4.28$ ,  $SD = 0.70$ ,  $p < 0.001$ ), Black women ( $M = 4.05$ ,  $SD = 0.76$ ,  $p < 0.001$ ), and Asian women ( $M = 3.81$ ,  $SD = 0.81$ ,  $p = 0.043$ ) were rated as significantly better overall than responses written by White men ( $M = 3.36$ ,  $SD = 0.76$ ). Responses written by White women were also rated as significantly better than responses written

by Asian women ( $p = 0.043$ ). There were no other statistically significant differences between demographic groups ( $p > 0.10$ ). No main effect difference in profile manipulation,  $F(3, 174) = 0.553$ ,  $p = 0.458$ , nor interaction effect,  $F(3, 174) = 2.018$ ,  $p = 0.113$ , was found. In the conflict task, there was also a significant main effect difference in demographic group,  $F(3, 174) = 4.827$ ,  $p = 0.003$ . Responses written by White men ( $M = 4.25$ ,  $SD = 0.81$ ) were rated as significantly worse than responses written by White women ( $M = 4.78$ ,  $SD = 0.69$ ,  $p = 0.005$ ) and Asian women ( $M = 4.71$ ,  $SD = 0.76$ ,  $p = 0.022$ ) but not worse than responses written by Black women ( $M = 4.48$ ,  $SD = 0.70$ ,  $p = 0.862$ ). Aside from those reported, no other differences were found between demographic groups ( $p > 0.10$ ). Like the negotiation task, there was no significant interaction effect,  $F(3, 174) = 0.524$ ,  $p = 0.667$ , and no significant main effect for profile conditions,  $F(3, 174) = 0.059$ ,  $p = 0.808$ .

Student leaders' overall ratings were similar to task-independent ratings. There was a statistically significant main effect difference between demographic group,  $F(3, 174) = 9.704$ ,  $p < 0.001$ . Responses written by White women ( $M = 4.73$ ,  $SD = 0.66$ ,  $p < 0.001$ ) and Black women ( $M = 4.35$ ,  $SD = 0.69$ ,  $p = 0.034$ ) were evaluated as significantly better than responses written by White men ( $M = 3.93$ ,  $SD = 0.78$ ); responses written by Asian women ( $M = 4.33$ ,  $SD = 0.73$ ,  $p = 0.056$ ) were evaluated as statistically marginally better leaders than White men. No other significant differences in demographic groups were found ( $p > 0.10$ ). There were also no significant main effect differences in profile conditions,  $F(3, 174) = 0.624$ ,  $p = 0.431$ , nor interaction effect,  $F(3, 174) = 0.842$ ,  $p = 0.473$ .

### **Discussion**

The aim of this study was to examine how perception biases may affect individuals' evaluation of leadership performance of different gender-by-race identity groups by asking naïve

participants to rate transcribed verbal responses to negotiation and conflict resolution tasks paired with profiles featuring faces that matched the demographic information of a student leader or not. Overall, the results indicated that responses were not evaluated based on the demographic information of the profiles paired with the responses, and thereby did not support any of the three hypotheses. Responses provided by White men were rated as significantly worse compared to responses by some or all of the women gender-by-race demographic groups (White women, Black women, Asian women). Responses by female student leaders were evaluated as better than responses by White men regardless of whether the profile was that of White men or any of the women groups, which could suggest that women do perform better in certain leadership contexts (Eagly, 2007; Eagly & Carli, 2003; Eagly & Carli, 2003; Rosette; Garcia-Retamero & López-Zafra, 2006; Rosette & Tost, 2007).

Recent studies have found that men and women may have different leadership styles and approaches. Being task oriented, leadership scholars have coined the male-based leadership style as *transactional* and placing greater emphasis on achieving results, having a high sense of control, and exercising a competition-based motivational style. Female-based, or *transformational*, leadership is argued to be cooperative and emphasizes an ability to motivate and inspire potential in followers (Eagly & Johnson, 1990; Eagly & Johannesen-Schmidt, 2001). Given that corporate leadership is often results-driven, focused goal-driven leadership may be considered better suited and be viewed as more characteristic (Eagly, 2007; Heilman, 2002). Women working in highly masculine environments may find it difficult to implement their democratic style of leadership and to build helpful relationships that will allow them to excel (Alvesson & Billing, 1992; Timberlake, 2005). Thus, the structure of top-tier leadership may be hindering women's success in these positions either by preventing them from being recognized

as equal but different leaders or by emphasizing tasks they may not perform the best in. However, our results show that responses provided by female student leaders were evaluated significantly better than responses provided by White men, suggesting that leadership performance by women, independent of identity information, is perceived to be more effective leadership. Indeed, organizations with a percentage of women in their leadership report better outcomes, both financially and functionally (Krishnan & Park, 2005; Carter, Simkins, & Simpson, 2003; Erhardt, Werbel, & Shrader, 2003; Vieito, 2012).

While recent studies have found transformational leadership to be valuable in corporate environments, differences in evaluating leadership effectiveness emerge when it comes to evaluating individual women, and not as a social group. Evaluations of individual female leaders are highly contextual, based on the task and on the position. Women are expected to excel on tasks that require complex interpersonal skills or that emphasize communal qualities and, thus, are evaluated favorably compared to men on jobs that fit the stereotypically female roles. Contrarily, women are perceived to not be qualified for highly masculine jobs (i.e. jobs that have more men occupying those positions) and have difficulty convincing subordinates to respect her authority (Carli, 1999; Eagly & Karau, 2002; Heilman, 2002; Heilman, Wallen, Fuchs & Tamkins, 2004). These patterns emerge in the gender breakdown of industries; women are judged hostilely in corporate or military domains but are perceived as more effective in educational or social services. Similarly, female leaders feel more comfortable performing tasks that they are expected to be better in and are less likely to experience stereotype threat in contexts that favor women. With this study set in the context of a university and considering that both tasks (negotiation and conflict resolution) required navigating interpersonal interactions, it may have brought out the female advantage in performance and perception.

While the study found evidence for a female leadership advantage in actual performance, there is little to no evidence suggesting that there is a perception bias in favor of women on these tasks. The experimental design of this study aimed to disentangle evaluations of leadership based on performance by different gender-by-race demographic groups and evaluations based on stereotypes. However, the results revealed only one significant interaction effect. In rating student leaders' competence in the negotiation task, Asian women responses were perceived as more competent when they were thought to be coming from Asian women than from White men. There was a moderately significant interaction effect for overall competence; the same pattern was observed. Asian women may benefit from the stereotypes of being intelligent and hardworking and, therefore, be perceived as more competent than White men. However, evidence to support bias in response evaluation and a shifting-standard occurred only in this instance. In order to conclude that there was a subjective bias advantage for women, significant interactions must be found. In general, participants evaluated the responses as is, thus suggesting that participants were evaluating leadership effectiveness not based on identity information but on actual performance. Because participants were only exposed to each profile once but were able to consistently refer back to the responses while they were answering the questions, it is possible that participants relied more on the responses to form their evaluations rather than on the profiles. This, in turn, may lead to participants being less affected by gender or race biases when evaluating performance.

Changes in context affect how individuals are perceived and how they may perform. Although our findings highlighted that responses by female student leaders were viewed most favorably, it is important to note that glass ceiling effects are the most striking at the highest of leadership positions (Oakley, 2000; Weyer, 2007). While student leaders used in this study were

assigned the highest position title in a student organization and possible for an undergraduate institution, these roles do not hold the same level of responsibility or are not of the same magnitude as that of a *Fortune 500* CEO or a ranking government official. Because we wanted participants to perceive the leaders as peers and to evaluate tasks that may be familiar to them, we deliberately used situationally appropriate positions of leadership. However, the limitation of this design is that we were examining leadership performance outside of the context that we most wished to understand. Thus, we cannot generalize our findings to what happens at the highest levels of leadership where the gender and race disparities are drastic. Given that gender and race representation is the scarcest in corporate leadership, a future extension of this study may be to examine these trends outside of a university setting or to ask participants to evaluate hypothetical CEO candidates.

Among the results, there are subtle significant differences in ratings of leadership effectiveness between White women, Black women, and Asian women; actual responses by Asian women were perceived as less confident than White women and Black women. Furthermore, responses written by White women were rated consistently more positively than responses written by White men while responses by Black women and Asian women were evaluated more favorably only in some. These results suggest that gender may not be perceived as an independent category but is moderated by race. As proposed by literature on intersectionality, the interaction of gender and race creates unique meanings and experiences that are independent from gender or race. While women may be perceived as effective leaders as a group, these differences between the women demographic groups suggest that racial minority women may face a different set of circumstances (Essed 1991; Thomas, Witherspoon, & Speight, 2008). However, the results did not exhibit the predicted patterns based on double-jeopardy or

gendered race. Because only minor differences were found between the women demographic groups, future studies should aim to better understand the differences within female leadership, such as communication style, coping strategies, or problem solving approaches, that can affect how they are perceived as effective leaders.

A major limitation in the present study is its reliance on transcribed verbal responses. Responses were selected, in their transcribed form, to represent the average responses of that demographic group such that they were meant to be representative of the leadership responses for that demographic group. However, transcriptions lose a lot of nonverbal information, such as tone, body movements, facial expressions, that are key to capturing communication styles. Female leaders are found to express more verbal considerations (leadership behavior that expresses esteem and respect for the follower and his or her work), which make the leader more likeable to followers based on the content of what is said (Mohr & Wolfram, 2008). However, paired with pitch and tone, female communication is often perceived as more indirect, emotional and tentative (Popp, Donovan, Crawford, Marsh, and Peele, 2003; von Hippel, Wiryakusuma, Bowden, & Shochet, 2011). On the other hand, masculine communication styles tend to be instrumental and succinct, which translates to shortness in length. The physical length of the response in its transcribed form may have given participants less material to work with and, thus, evaluated those responses poorly. The differences in communication found in transcription form between the demographic groups may be different than when they are presented in their spoken form. It may be essential, at least for White men, to have confident tone and body language with their concise responses to convey leadership skills. Future studies should retain responses in the manner they were delivered in order for participants to evaluate performance as directly as possible.

In contemporary culture, women are lauded for displaying the right set of leadership skills, yet, on the other hand, there remains a widespread recognition that women come in second to men in top-tiered leadership positions. The present research is the first effort to examine the role of perception bias on intersectional identities when evaluating leadership effectiveness in a holistic manner. Although the results did not support the original hypotheses, it highlights potential differences between White men, White women, Black women, and Asian women in the leadership domain and indicates future studies to examine the specific differences between the identities. As women, especially women of color, are experiencing unfair treatment the higher they climb up the corporate ladder, it becomes increasingly important to understand the circumstances under which biases occur and, more importantly, the circumstances under which women excel.

## References

- Alvesson, M., & Billing, Y. D. (1992). Gender and organization: Towards a differentiated understanding. *Organization Studies*, *13*(1), 073–103.  
<http://doi.org/10.1177/017084069201300107>
- Azura Omar, & Marilyn J. Davidson. (2001). Women in management: A comparative cross-cultural overview. *Cross Cultural Management: An International Journal*, *8*(3/4), 35–67.  
<http://doi.org/10.1108/13527600110797272>
- Beale, F. (1970). Double jeopardy: To be black and female. *The black woman: An anthology*, 90–100.
- Bell, E. L. J. E., & Nkomo, S. M. (2003). *Our Separate Ways: Black and White Women and the Struggle for Professional Identity*. Harvard Business Press.
- Berger, J., & Fişek, M. H. (2006). Diffuse status characteristics and the spread of status value: A formal theory. *American Journal of Sociology*, *111*(4), 1038–1079.  
<http://doi.org/10.1086/498633>
- Biernat, M., Manis, M., & Nelson, T. E. (1991). Stereotypes and standards of judgment. *Journal of Personality and Social Psychology*, *60*(4), 485–499. <http://doi.org/10.1037/0022-3514.60.4.485>
- Black, A. E., & Rothman, S. (1998). Have you really come a long way? Women's access to power in the United States. *Gender Issues*, *16*(1-2), 107–133. <http://doi.org/10.1007/s12147-998-0018-9>
- Blake-Beard, S. D., & Roberts, L. M. (2004). Releasing the double bind of visibility for minorities in the workplace. *Boston: Center for Gender in Organizations, Simmons School of Management*.

- Brescoll, V. L., Dawson, E., & Uhlmann, E. L. (2010). Hard won and easily lost: the fragile status of leaders in gender-stereotype-incongruent occupations. *Psychological Science*, *21*(11), 1640–1642. <http://doi.org/10.1177/0956797610384744>
- Browne, I., & Askew, R. (2005). Race, ethnicity, and wage inequality among women: What happened in the 1990s and early 21st century? *American Behavioral Scientist*, *48*(9), 1275–1292. <http://doi.org/10.1177/0002764205274819>
- Buckalew, E., Konstantinopoulos, A., Russell, J., & El-Sherbini, S. (2012). The Future of Female CEOs and Their Glass Ceiling. *Journal of Business Studies Quarterly*, *3*(4), 145–153. Retrieved from <http://search.proquest.com/docview/1036929638/abstract/74F187CE771748D7PQ/1>
- Burgess, D., & Borgida, E. (1999). Who women are, who women should be: Descriptive and prescriptive gender stereotyping in sex discrimination. *Psychology, Public Policy, and Law*, *5*(3), 665–692. <http://doi.org/10.1037/1076-8971.5.3.665>
- Carli, L. L. (1999). Gender, interpersonal power, and social influence. *Journal of Social Issues*, *55*(1), 81–99. <http://doi.org/10.1111/0022-4537.00106>
- Carli, L. L. (2001). Gender and social influence. *Journal of Social Issues*, *57*(4), 725–741. <http://doi.org/10.1111/0022-4537.00238>
- Carter, D. A., Simkins, B. J., & Simpson, W. G. (2003). Corporate governance, board diversity, and firm value. *Financial Review*, *38*(1), 33–53. <http://doi.org/10.1111/1540-6288.00034>
- Catalyst. (2005). Women “take care,” men “take charge”: Stereotyping of U.S. business leaders exposed. Retrieved from <http://www.catalyst.org/publication/94/women-take-care-men-take-charge-stereotyping-of-usbusiness-leaders-exposed>

- Catalyst. (2006). Connections that count: The informal networks of women of color in the United States. Retrieved from <http://www.catalyst.org/publication/52/connections-that-count-the-informalnetworks-of-women-of-color-in-the-united-states>
- Chung-Herrera, B. G., & Lankau, M. J. (2005). Are we there yet? An assessment of fit between stereotypes of minority managers and the successful-manager prototype. *Journal of Applied Social Psychology*, 35(10), 2029–2056. <http://doi.org/10.1111/j.1559-1816.2005.tb02208.x>
- Combs, G. M. (2003). The duality of race and gender for managerial African American women: Implications of informal social networks on career advancement. *Human Resource Development Review*, 2(4), 385–405. <http://doi.org/10.1177/1534484303257949>
- Cotter, D. A., Hermsen, J. M., Ovadia, S., & Vanneman, R. (2001). The Glass Ceiling Effect. *Social Forces*, 80(2), 655–681. <http://doi.org/10.1353/sof.2001.0091>
- Davidson, M. J., & Burke, R. J. (2000). *Women in Management: Current Research Issues*. SAGE.
- Dovidio, J. F., & Hebl, M. R. (2013). Discrimination at the level of the individual: Cognitive and affective factors. In R. L. Dipboye & A. Colella, *Discrimination at Work: The Psychological and Organizational Bases*. Psychology Press.
- Duehr, E. E., & Bono, J. E. (2006). Men, women, and managers: Are stereotypes finally changing? *Personnel Psychology*, 59(4), 815–846. <http://doi.org/10.1111/j.1744-6570.2006.00055.x>
- Eagly, A. H. (1987). Reporting sex differences. *American Psychologist*, 42(7), 756–757. <http://doi.org/10.1037/0003-066X.42.7.755>

- Eagly, A. H. (2007). Female leadership advantage and disadvantage: Resolving the contradictions. *Psychology of Women Quarterly*, *31*(1), 1–12. <http://doi.org/10.1111/j.1471-6402.2007.00326.x>
- Eagly, A. H., & Carli, L. L. (2003). Finding gender advantage and disadvantage: Systematic research integration is the solution. *The Leadership Quarterly*, *14*(6), 851–859. <http://doi.org/10.1016/j.leaqua.2003.09.003>
- Eagly, A. H., & Carli, L. L. (2003). The female leadership advantage: An evaluation of the evidence. *The Leadership Quarterly*, *14*(6), 807–834. <http://doi.org/10.1016/j.leaqua.2003.09.004>
- Eagly, A.H., & Carli, L.L. (2007). Women and the labyrinth of leadership. *Harvard Business Review*, *85*(9), 62–71, 146. Retrieved from <http://europaemc.org/abstract/med/17886484>
- Eagly, A. H., & Chin, J. L. (2010). Diversity and leadership in a changing world. *American Psychologist*, *65*(3), 216–224. <http://doi.org/10.1037/a0018957>
- Eagly, A. H., & Johannesen-Schmidt, M. C. (2001). The leadership styles of women and men. *Journal of Social Issues*, *57*(4), 781–797. <http://doi.org/10.1111/0022-4537.00241>
- Eagly, A. H., & Johnson, B. T. (1990). Gender and leadership style: A meta-analysis. *Psychological Bulletin*, *108*(2), 233–256. <http://doi.org/10.1037/0033-2909.108.2.233>
- Eagly, A. H., & Karau, S. J. (1991). Gender and the emergence of leaders: A meta-analysis. *Journal of Personality and Social Psychology*, *60*(5), 685–710. <http://doi.org/10.1037/0022-3514.60.5.685>
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, *109*(3), 573–598. <http://doi.org/10.1037/0033-295X.109.3.573>

- Ellemers, N., Rink, F., Derks, B., & Ryan, M. K. (2012). Women in high places: When and why promoting women into top positions can harm them individually or as a group (and how to prevent this). *Research in Organizational Behavior*, *32*, 163–187.  
<http://doi.org/10.1016/j.riob.2012.10.003>
- Erhardt, N. L., Werbel, J. D., & Shrader, C. B. (2003). Board of director diversity and firm financial performance. *Corporate Governance: An International Review*, *11*(2), 102–111.  
<http://doi.org/10.1111/1467-8683.00011>
- Essed, P. (1991). Knowledge and resistance: Black women talk about racism in the Netherlands and the USA. *Feminism & Psychology*, *1*(2), 201–219.  
<http://doi.org/10.1177/0959353591012003>
- Festekjian, A., Tram, S., Murray, C. B., Sy, T., & Huynh, H. P. (2014). I see me the way you see me: The influence of race on interpersonal and intrapersonal leadership perceptions. *Journal of Leadership & Organizational Studies*, *21*(1), 102–119.  
<http://doi.org/10.1177/1548051813486522>
- Foschi, M. (2000). Double standards for competence: Theory and research. *Annual Review of Sociology*, *26*, 21–42. Retrieved from <http://www.jstor.org/stable/223435>
- Freeman, J. B., & Ambady, N. (2011). A dynamic interactive theory of person construal. *Psychological Review*, *118*(2), 247–279. <http://doi.org/10.1037/a0022327>
- Galinsky, A. D., Hall, E. V., & Cuddy, A. J. (2013). Gendered races implications for interracial marriage, leadership selection, and athletic participation. *Psychological Science*, *0956797612457783*.

- Garcia-Retamero, R., & López-Zafra, E. (2006). Prejudice against women in male-congenial environments: Perceptions of gender role congruity in leadership. *Sex Roles, 55*(1-2), 51–61. <http://doi.org/10.1007/s11199-006-9068-1>
- Ghavami, N., & Peplau, L. A. (2013). An intersectional analysis of gender and ethnic stereotypes testing three hypotheses. *Psychology of Women Quarterly, 37*(1), 113–127. <http://doi.org/10.1177/0361684312464203>
- Giessner, S. R., van Knippenberg, D., & Sleebos, E. (2009). License to fail? How leader group prototypicality moderates the effects of leader performance on perceptions of leadership effectiveness. *The Leadership Quarterly, 20*(3), 434–451. <http://doi.org/10.1016/j.leaqua.2009.03.012>
- Hall, E. V., Galinsky, A. D., & Phillips, K. W. (2015a). Gender profiling: A gendered race perspective on person–position fit. *Personality and Social Psychology Bulletin, 41*(6), 853–868. <http://doi.org/10.1177/0146167215580779>
- Heilman, M. E. (2001). Description and prescription: How gender stereotypes prevent women’s ascent up the organizational ladder. *Journal of Social Issues, 57*(4), 657–674. <http://doi.org/10.1111/0022-4537.00234>
- Heilman, M. E., & Haynes, M. C. (2008). Subjectivity in the appraisal process: A facilitator of gender bias in work settings. In E. Borgida & S. T. Fiske, *Beyond Common Sense: Psychological Science in the Courtroom*. John Wiley & Sons. Retrieved from [https://books.google.com/books?hl=en&lr=&id=G7lGt8UkU\\_AC&oi=fnd&pg=PA127&ots=IDX24MQF7f&sig=XX-VEqyOIA3yziT9gtM9Kk5ufn8#v=onepage&q&f=false](https://books.google.com/books?hl=en&lr=&id=G7lGt8UkU_AC&oi=fnd&pg=PA127&ots=IDX24MQF7f&sig=XX-VEqyOIA3yziT9gtM9Kk5ufn8#v=onepage&q&f=false)

- Heilman, M. E., Wallen, A. S., Fuchs, D., & Tamkins, M. M. (2004). Penalties for success: Reactions to women who succeed at male gender-typed tasks. *Journal of Applied Psychology, 89*(3), 416–427. <http://doi.org/10.1037/0021-9010.89.3.416>
- Howell, J. P., & Costley, D. L. (2001). *Understanding behaviors for effective leadership*. Prentice Hall.
- Hoyt, C. L. (2012). Gender bias in employment contexts: A closer examination of the role incongruity principle. *Journal of Experimental Social Psychology, 48*(1), 86–96. <http://doi.org/10.1016/j.jesp.2011.08.004>
- Hoyt, C. L., & Burnette, J. L. (2013). Gender bias in leader evaluations merging implicit theories and role congruity perspectives. *Personality and Social Psychology Bulletin, 39*(10), 1306–1319. <http://doi.org/10.1177/0146167213493643>
- Isabelle Cames, Susan Vinnicombe, & Val Singh. (2001). Profiles of “successful managers” held by male and female banking managers across Europe. *Women in Management Review, 16*(3), 108–118. <http://doi.org/10.1108/09649420110390273>
- Jamieson, K. H. (1995). *Beyond the Double Bind: Women and Leadership*. Oxford University Press.
- Johnson, K. L., Freeman, J. B., & Pauker, K. (2012). Race is gendered: How covarying phenotypes and stereotypes bias sex categorization. *Journal of Personality and Social Psychology, 102*(1), 116–131. <http://doi.org/10.1037/a0025335>
- Johnson, S. K., Murphy, S. E., Zewdie, S., & Reichard, R. J. (2008). The strong, sensitive type: Effects of gender stereotypes and leadership prototypes on the evaluation of male and female leaders. *Organizational Behavior and Human Decision Processes, 106*(1), 39–60. <http://doi.org/10.1016/j.obhdp.2007.12.002>

- King, P. M., & Bauer, B. A. (1988). Leadership issues for nontraditional-aged women students. *New Directions for Student Services, 1988(44)*, 77–88.  
<http://doi.org/10.1002/ss.37119884409>
- Knight, J. L., Hebl, M. R., Foster, J. B., & Mannix, L. M. (2003). Out of role? Out of luck: The influence of race and leadership status on performance appraisals. *Journal of Leadership & Organizational Studies, 9(3)*, 85–93. <http://doi.org/10.1177/107179190300900308>
- Kobryniewicz, D., & Biernat, M. (1997). Decoding subjective evaluations: How stereotypes provide shifting standards. *Journal of Experimental Social Psychology, 33(6)*, 579–601.  
<http://doi.org/10.1006/jesp.1997.1338>
- Koenig, A. M., Eagly, A. H., Mitchell, A. A., & Ristikari, T. (2011). Are leader stereotypes masculine? A meta-analysis of three research paradigms. *Psychological Bulletin, 137(4)*, 616–642. <http://doi.org/10.1037/a0023557>
- Krishnan, H. A., & Park, D. (2005). A few good women—on top management teams. *Journal of Business Research, 58(12)*, 1712–1720. <http://doi.org/10.1016/j.jbusres.2004.09.003>
- Kunda, Z., & Spencer, S. J. (2003). When do stereotypes come to mind and when do they color judgment? A goal-based theoretical framework for stereotype activation and application. *Psychological Bulletin, 129(4)*, 522–544. <http://doi.org/10.1037/0033-2909.129.4.522>
- Livingston, R. W., Rosette, A. S., & Washington, E. F. (2012). Can an agentic Black woman get ahead? The Impact of Race and Interpersonal Dominance on Perceptions of Female Leaders. *Psychological Science, 23(4)*, 354–358. <http://doi.org/10.1177/0956797611428079>
- Lord, R. G., & Brown, D. J. (2003). *Leadership Processes and Follower Self-identity*. Psychology Press.

- Lord, R. G., Brown, D. J., & Freiberg, S. J. (1999). Understanding the dynamics of leadership: The role of follower self-concepts in the leader/follower relationship. *Organizational Behavior and Human Decision Processes*, *78*(3), 167–203.  
<http://doi.org/10.1006/obhd.1999.2832>
- Lord, R. G., Foti, R. J., & De Vader, C. L. (1984). A test of leadership categorization theory: Internal structure, information processing, and leadership perceptions. *Organizational Behavior and Human Performance*, *34*(3), 343–378. [http://doi.org/10.1016/0030-5073\(84\)90043-6](http://doi.org/10.1016/0030-5073(84)90043-6)
- Lord, R. G., & Maher, K. J. (2002). *Leadership and Information Processing: Linking Perceptions and Performance*. Routledge.
- Lyness, K. S., & Heilman, M. E. (2006). When fit is fundamental: Performance evaluations and promotions of upper-level female and male managers. *Journal of Applied Psychology*, *91*(4), 777–785. <http://doi.org/10.1037/0021-9010.91.4.777>
- Ma, D. S., Correll, J., & Wittenbrink, B. (2015). The Chicago face database: A free stimulus set of faces and norming data. *Behavior Research Methods*, *47*(4), 1122–1135.  
<http://doi.org/10.3758/s13428-014-0532-5>
- Mehl, M. R. (2006). Quantitative Text Analysis. In M. Eid & E. Diener (Eds.), *Handbook of multimethod measurement in psychology* (pp. 141–156). Washington, DC, US: American Psychological Association.
- Mohr, G., & Wolfram, H.J. (2008). Leadership and effectiveness in the context of gender: The role of leaders' verbal behaviour. *British Journal of Management*, *19*(1), 4–16.  
<http://doi.org/10.1111/j.1467-8551.2007.00521.x>

- Mohr, R. I., & Purdie-Vaughns, V. (2015). Diversity within women of color: Why experiences change felt stigma. *Sex Roles, 73*(9-10), 391–398. <http://doi.org/10.1007/s11199-015-0511-z>
- Nadler, J. T. (2010). *Explicit and implicit gender bias in workplace appraisals: How automatic prejudice affects decision making* (Doctoral dissertation, Southern Illinois University Carbondale).
- Oakley, J. G. (2000). Gender-based barriers to senior management positions: Understanding the scarcity of female CEOs. *Journal of Business Ethics, 27*(4), 321–334.  
<http://doi.org/10.1023/A:1006226129868>
- Parker, P. S., & Ogilvie, D.T. (1996). Gender, culture, and leadership: Toward a culturally distinct model of African-American women executives' leadership strategies. *The Leadership Quarterly, 7*(2), 189–214. [http://doi.org/10.1016/S1048-9843\(96\)90040-5](http://doi.org/10.1016/S1048-9843(96)90040-5)
- Phelan, J. E., Moss-Racusin, C. A., & Rudman, L. A. (2008). Competent yet out in the cold: Shifting criteria for hiring reflect backlash toward agentic women. *Psychology of Women Quarterly, 32*(4), 406–413. <http://doi.org/10.1111/j.1471-6402.2008.00454.x>
- Popp, D., Donovan, R. A., Crawford, M., Marsh, K. L., & Peele, M. (2003). Gender, race, and speech style stereotypes. *Sex Roles, 48*(7-8), 317–325.  
<http://doi.org/10.1023/A:1022986429748>
- Purdie-Vaughns, V., & Eibach, R. P. (2008). Intersectional invisibility: The distinctive advantages and disadvantages of multiple subordinate-group identities. *Sex Roles, 59*(5-6), 377–391. <http://doi.org/10.1007/s11199-008-9424-4>
- Ragins, B. R., Townsend, B., & Mattis, M. (1998). Gender gap in the executive suite: CEOs and female executives report on breaking the glass ceiling. *The Academy of Management Executive, 12*(1), 28–42. <http://doi.org/10.5465/AME.1998.254976>

- Roberson, L., Galvin, B. M., & Charles, A. C. (2007). When Group Identities Matter: Bias in Performance Appraisal. *The Academy of Management Annals*, *1*(1), 617–650.  
<http://doi.org/10.1080/078559818>
- Rosette, A. S., Leonardelli, G. J., & Phillips, K. W. (2008). The White standard: Racial bias in leader categorization. *Journal of Applied Psychology*, *93*(4), 758–777.  
<http://doi.org/10.1037/0021-9010.93.4.758>
- Rosette, A. S., & Tost, L. P. (2010). Agentic women and communal leadership: How role prescriptions confer advantage to top women leaders. *Journal of Applied Psychology*, *95*(2), 221–235. <http://doi.org/10.1037/a0018204>
- Rudman, L. A. (1998). Self-promotion as a risk factor for women: The costs and benefits of counterstereotypical impression management. *Journal of Personality and Social Psychology*, *74*(3), 629–645.
- Rudman, L. A., & Glick, P. (2001). Prescriptive gender stereotypes and backlash toward agentic women. *Journal of Social Issues*, *57*(4), 743–762. <http://doi.org/10.1111/0022-4537.00239>
- Rudman, L. A., Moss-Racusin, C. A., Phelan, J. E., & Nauts, S. (2012). Status incongruity and backlash effects: Defending the gender hierarchy motivates prejudice against female leaders. *Journal of Experimental Social Psychology*, *48*(1), 165–179.  
<http://doi.org/10.1016/j.jesp.2011.10.008>
- Sanchez-Hucles, J. V., & Davis, D. D. (2010). Women and women of color in leadership: Complexity, identity, and intersectionality. *American Psychologist*, *65*(3), 171–181.  
<http://doi.org/10.1037/a0017459>

- Schein, V. E. (1973). The relationship between sex role stereotypes and requisite management characteristics. *Journal of Applied Psychology, 57*(2), 95–100.  
<http://doi.org/10.1037/h0037128>
- Schein, V. E. (2001). A global look at psychological barriers to women's progress in management. *Journal of Social Issues, 57*(4), 675–688. <http://doi.org/10.1111/0022-4537.00235>
- Schug, J., Alt, N. P., & Klauer, K. C. (2015). Gendered race prototypes: Evidence for the non-prototypicality of Asian men and Black women. *Journal of Experimental Social Psychology, 56*, 121–125. <http://doi.org/10.1016/j.jesp.2014.09.012>
- Scott, K. A., & Brown, D. J. (2006). Female first, leader second? Gender bias in the encoding of leadership behavior. *Organizational Behavior and Human Decision Processes, 101*(2), 230–242. <http://doi.org/10.1016/j.obhdp.2006.06.002>
- Sesko, A. K., & Biernat, M. (2010). Prototypes of race and gender: The invisibility of Black women. *Journal of Experimental Social Psychology, 46*(2), 356–360.  
<http://doi.org/10.1016/j.jesp.2009.10.016>
- Settles, I. H. (2006). Use of an intersectional framework to understand Black women's racial and gender identities. *Sex Roles, 54*(9-10), 589–601. <http://doi.org/10.1007/s11199-006-9029-8>
- Sharon Timberlake. (2005). Social capital and gender in the workplace. *Journal of Management Development, 24*(1), 34–44. <http://doi.org/10.1108/02621710510572335>
- Stelter, N. Z. (2002). Gender differences in leadership: Current social issues and future organizational implications. *Journal of Leadership & Organizational Studies, 8*(4), 88–99.  
<http://doi.org/10.1177/107179190200800408>

Steven H. Appelbaum, Lynda Audet, & Joanne C. Miller. (2003). Gender and leadership?

Leadership and gender? A journey through the landscape of theories. *Leadership & Organization Development Journal*, 24(1), 43–51.

<http://doi.org/10.1108/01437730310457320>

Tausczik, Y. R., & Pennebaker, J. W. (2010). The psychological meaning of words: LIWC and

computerized text analysis methods. *Journal of Language and Social Psychology*, 29(1),

24–54. <http://doi.org/10.1177/0261927X09351676>

Thomas, A. J., Witherspoon, K. M., & Speight, S. L. (2008). Gendered racism, psychological

distress, and coping styles of African American women. *Cultural Diversity and Ethnic*

*Minority Psychology*, 14(4), 307–314. <http://doi.org/10.1037/1099-9809.14.4.307>

van Knippenberg, D. (2011). Embodying who we are: Leader group prototypicality and

leadership effectiveness. *The Leadership Quarterly*, 22(6), 1078–1091.

<http://doi.org/10.1016/j.leaqua.2011.09.004>

van Knippenberg, D., & Hogg, M. A. (2003). A social identity model of leadership effectiveness

in organizations. *Research in Organizational Behavior*, 25, 243–295.

[http://doi.org/10.1016/S0191-3085\(03\)25006-1](http://doi.org/10.1016/S0191-3085(03)25006-1)

Vecchio, R. P. (2002). Leadership and gender advantage. *The Leadership Quarterly*, 13(6), 643–

671. [http://doi.org/10.1016/S1048-9843\(02\)00156-X](http://doi.org/10.1016/S1048-9843(02)00156-X)

Vieito, J. P. T. (2012). Gender, top management compensation gap, and company performance:

Tournament versus behavioral theory. *Corporate Governance: An International Review*,

20(1), 46–63. <http://doi.org/10.1111/j.1467-8683.2011.00878.x>

von Hippel, C., Wiryakusuma, C., Bowden, J., & Shochet, M. (2011). Stereotype threat and female communication styles. *Personality and Social Psychology Bulletin*, 37(10), 1312-1324. <http://doi.org/10.1177/0146167211410439>

Warner, L. R. (2008). A best practices guide to intersectional approaches in psychological research. *Sex Roles*, 59(5-6), 454–463. <http://doi.org/10.1007/s11199-008-9504-5>

Table 1. *Descriptive Statistics for Major Study Variables (N= 185)*

Variable	Items	$\alpha$	M	SD	Range		Skew	Kurtosis
					Potential	Actual		
Negotiation								
Performance	8	0.910	3.69	0.66	1 - 7	2.02 - 6.02	-0.12	0.68
Perceived Power	5	0.873	4.16	0.64	1 - 7	2.17 - 5.57	-0.52	0.57
Warmth	3	0.957	4.08	0.73	1 - 7	1.22 - 5.78	-0.48	1.23
Competence	3	0.959	3.87	0.81	1 - 7	1.33 - 6.17	-0.35	0.83
Confidence	4	0.827	3.88	0.66	1 - 7	2.04 - 6.13	0.21	0.60
Overall	1	-	3.85	0.83	1 - 7			
Conflict								
Performance	6	0.930	4.50	0.68	1 - 7	2.00 - 5.92	-0.51	0.58
Perceived Power	5	0.864	4.82	0.62	1 - 7	3.03 - 6.43	-0.14	-0.07
Warmth	3	0.963	3.80	0.80	1 - 7	1.06 - 5.61	-0.27	-0.03
Competence	3	0.956	4.37	0.81	1 - 7	1.72 - 6.72	-0.23	0.41
Confidence	4	0.821	4.43	0.68	1 - 7	2.33 - 6.71	0.03	0.81
Overall	1	-	4.55	0.77	1 - 7			
Overall Evaluation								
Warmth	3	0.965	3.85	0.78	1 - 7	1.00 - 6.00	-0.23	0.74
Competence	3	0.960	4.13	0.82	1 - 7	1.17 - 6.17	-0.28	0.49
Confidence	4	0.800	4.15	0.64	1 - 7	2.46 - 6.17	0.13	0.43
Overall	1	-	4.32	0.77	1 - 7			

Table 2. *Interaction effect descriptive for demographic groups condition (White men, White woman) and profile condition (match, mismatch)*

Variable	White Men				White Woman			
	Match		Mismatch		Match		Mismatch	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Condition N	24		26		23		22	
Negotiation								
Performance	3.22	0.51	3.35	0.68	3.94	0.53	3.97	0.70
Perceived Power	3.76	0.67	3.76	0.62	4.48	0.69	4.46	0.63
Warmth	3.77	0.74	3.74	0.94	4.27	0.57	4.39	0.67
Competence	3.41	0.79	3.57	0.89	4.15	0.65	4.28	0.78
Confidence	3.64	0.69	3.79	0.54	4.39	0.61	4.37	0.73
Overall	3.26	0.64	3.46	0.86	4.30	0.66	4.25	0.76
Conflict								
Performance	4.18	0.66	4.22	0.89	4.63	0.46	4.75	0.65
Perceived Power	4.77	0.67	4.83	0.75	4.90	0.70	4.85	0.54
Warmth	3.59	0.86	3.46	1.00	3.76	0.54	4.15	0.74
Competence	4.15	0.77	4.06	0.92	4.51	0.77	4.63	0.83
Confidence	4.57	0.76	4.63	0.60	4.31	0.72	4.46	0.79
Overall	4.22	0.72	4.28	0.90	4.71	0.67	4.85	0.73
Overall Evaluation								
Warmth	3.56	0.79	3.46	1.04	4.00	0.49	4.20	0.74
Competence	3.73	0.72	3.77	0.97	4.40	0.78	4.49	0.83
Confidence	4.10	0.75	4.26	0.52	4.29	0.60	4.42	0.75
Overall	3.86	0.64	4.00	0.90	4.73	0.57	4.73	0.77

Table 3. *Interaction effect descriptive for demographic groups condition (Black women, Asian women) and profile condition (match, mismatch)*

Variable	Black Women				Asian Woman			
	Match		Mismatch		Match		Mismatch	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Condition N	22		22		20		23	
Confidence								
Performance	3.88	0.72	3.96	0.32	3.89	0.53	3.46	0.67
Perceived Power	4.24	0.51	4.30	0.51	4.31	0.39	4.08	0.71
Warmth	4.30	0.65	4.04	0.60	4.46	0.58	3.96	0.62
Competence	3.99	0.80	4.01	0.65	4.21	0.58	3.52	0.83
Confidence	3.87	0.56	3.92	0.41	3.71	0.48	3.37	0.63
Overall	4.02	0.91	4.08	0.59	4.08	0.69	3.55	0.84
Conflict								
Performance	4.55	0.51	4.42	0.60	4.71	0.68	4.67	0.69
Perceived Power	4.72	0.52	4.74	0.51	4.92	0.56	4.84	0.66
Warmth	4.00	0.68	3.74	0.87	4.13	0.64	3.75	0.79
Competence	4.57	0.62	4.28	0.77	4.74	0.70	4.14	0.92
Confidence	4.52	0.50	4.41	0.56	4.45	0.65	4.11	0.78
Overall	4.60	0.63	4.36	0.76	4.75	0.73	4.68	0.81
Overall Evaluation								
Warmth	4.04	0.65	3.77	0.73	4.18	0.62	3.81	0.79
Competence	4.29	0.72	4.18	0.70	4.48	0.60	3.79	0.87
Confidence	4.17	0.58	4.27	0.58	4.06	0.63	3.68	0.59
Overall	4.42	0.76	4.28	0.63	4.50	0.71	4.18	0.74

Table 4. *Main effect descriptive for demographic group conditions (White man, White woman, Black woman, Asian woman)*

Variable	White Man		White Woman		Black Woman		Asian Woman	
	M	SD	M	SD	M	SD	M	SD
Condition N	50		45		44		43	
Negotiation								
Performance	3.28	0.60	3.95	0.61	3.92	0.55	3.66	0.64
Perceived Power	3.76	0.64	4.47	0.66	4.27	0.46	4.12	0.59
Warmth	3.75	0.84	4.33	0.61	4.17	0.63	4.21	0.64
Competence	3.49	0.84	4.22	0.71	4.00	0.72	3.86	0.80
Confidence	3.71	0.61	4.38	0.67	3.90	0.49	3.54	0.59
Overall	3.36	0.76	4.28	0.70	4.05	0.76	3.81	0.81
Conflict								
Performance	4.20	0.78	4.69	0.56	4.49	0.55	4.69	0.68
Perceived Power	4.80	0.71	4.88	0.62	4.73	0.51	4.88	0.61
Warmth	3.52	0.93	3.95	0.67	3.87	0.78	3.93	0.74
Competence	4.10	0.84	4.57	0.79	4.43	0.70	4.42	0.87
Confidence	4.60	0.68	4.38	0.75	4.47	0.53	4.27	0.74
Overall	4.25	0.81	4.78	0.69	4.48	0.70	4.71	0.76
Overall Evaluation								
Warmth	3.51	0.92	4.10	0.62	3.90	0.70	3.98	0.73
Competence	3.75	0.85	4.44	0.79	4.24	0.70	4.11	0.83
Confidence	4.18	0.64	4.35	0.67	4.22	0.51	3.86	0.63
Overall	3.93	0.78	4.73	0.66	4.35	0.69	4.33	0.73

Table 5. *Main effect descriptive for profile condition (match, mismatch)*

Variable	Match		Mismatch	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Condition N	89		93	
Negotiation				
Performance	3.73	0.65	3.68	0.67
Perceived Power	4.20	0.64	4.15	0.66
Warmth	4.20	0.68	4.03	0.75
Competence	3.99	0.77	4.01	0.85
Confidence	3.90	0.66	3.86	0.68
Overall	3.92	0.83	3.84	0.84
Conflict				
Performance	4.50	0.61	4.50	0.74
Perceived Power	4.82	0.62	4.82	0.62
Warmth	3.86	0.71	3.76	0.88
Competence	4.48	0.74	4.26	0.88
Confidence	4.47	0.67	4.41	0.70
Overall	4.56	0.71	4.53	0.82
Overall Evaluation				
Warmth	3.93	0.68	3.80	0.87
Competence	4.21	0.76	4.04	0.89
Confidence	4.16	0.64	4.16	0.64
Overall	4.37	0.74	4.28	0.81

Table 6. Results summary of all 4 (demographic groups) x 2 (profile manipulation) ANOVAs ( $N = 182$ )

Variable	Main Effect Gender-by-Race			Main Effect Profile			Interaction		
	<i>F</i>	<i>p</i>	$\eta_p^2$	<i>F</i>	<i>p</i>	$\eta_p^2$	<i>F</i>	<i>p</i>	$\eta_p^2$
Negotiation									
Performance	12.847	.000***	0.181	0.299	.585	0.002	2.108	.101	0.035
Perceived Power	11.851	.000***	0.170	0.279	.598	0.002	0.486	.101	0.008
Warmth	6.421	.000***	0.100	2.719	.101	0.015	1.722	.164	0.029
Competence	7.687	.000***	0.117	0.711	.400	0.117	3.052	.030*	0.050
Confidence	16.656	.000***	0.223	0.209	.648	0.001	1.408	.242	0.024
Overall	12.803	.000***	0.181	0.553	.458	0.003	2.018	.113	0.034
Conflict									
Performance	5.880	.001***	0.092	.000	.998	0.000	0.288	.834	0.005
Perceived Power	0.590	.622	0.010	0.012	.912	0.000	0.119	.949	0.002
Warmth	3.211	.024*	0.052	0.672	.413	0.004	2.087	.104	0.035
Competence	2.955	.034*	0.048	3.389	.067 <sup>t</sup>	0.019	1.651	.179	0.028
Confidence	1.838	.142	0.031	0.385	.536	0.002	1.113	.345	0.019
Overall	4.827	.003**	0.077	0.059	.808	0.000	0.524	.667	0.009
Overall Evaluation									
Warmth	5.623	.001***	0.088	1.413	.236	0.008	1.199	.312	0.200
Competence	6.486	.000***	0.101	2.153	.144	0.012	2.287	.080 <sup>t</sup>	0.038
Confidence	4.794	.003**	0.076	0.002	.964	0.000	1.907	.130	0.032
Overall	9.704	.000***	0.143	0.624	.431	0.004	0.842	.473	0.014

Note. All degrees of freedom were (3, 174)

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ , <sup>t</sup> $p < 0.1$

## Appendix A

**Profile Manipulation***Instructions:*

Below is some information about the student leader who provided the responses. For confidentiality reasons we replaced the person's name with a random letter. In addition, we replaced the student organization's name with the same letter because we did not want the organization type/name to influence your evaluations. Please pay attention and remember the details of this profile, particularly the letter, as this information will be used to help you differentiate the student leaders in later questions.

*Example of profiles for each demographic group (Each will be presented one at a time before each set of responses)*

**Profile A****Name:** A**Student Organization:** A**Position:** President**Age:** 20**Gender:** Female**Race:** Caucasian American/White**Profile B****Name:** B**Student Organization:** B**Position:** President**Age:** 20**Gender:** Female**Race:** African American/Black

## Profile C



**Name:** C

**Student Organization:** C

**Position:** President

**Age:** 20

**Gender:** Female

**Race:** East Asian

## Profile D



**Name:** D

**Student Organization:** D

**Position:** President

**Age:** 20

**Gender:** Male

**Race:** Caucasian American/White

## Appendix B

**Negotiation Task***Instructions:****Task 1 (Requesting Funding for Student Organization):***

The leader's student organization could not afford to cover all of the costs (approximately \$1785) of attending an upcoming out-of-state national event, which the group was recently invited to attend. Thus, the student organization leader approached the University's Funding Allocation Board to request funding for this event. The student leader was given the opportunity to propose and justify the funding request to the Funding Board.

**Please read the transcript of the student leader's initial proposal to the Funding Board carefully and answer the following questions to evaluate their performance as a leader.** Please note that the response was originally spoken and was transcribed verbatim by a Research Assistant. Spoken language often differs from written language (i.e. spoken language tends to be full of repetitions, incomplete sentences, corrections and interruptions while written language tends to be more complex and intricate). In other words, spoken language will often not read easily like a book. You should keep this in mind when evaluating the response.

*Example of Negotiation response:*

"Speaking for the allocation board today I'd like to ask that we get 1150 dollars of funds that we need in order to go on our trip uh we feel that we can raise money through fundraisers and other ways of uh getting income but we feel that in order to go and represent our school at this conference, we need help from the allocation board to fund us and this would be done through the payment as shown below."

Student A proposed an initial request of \$ 1150 to the Funding Board.

*Question items:*

After reading the student leader's initial request to the Funding Board, to what extent do you agree with the following statements? It may help to imagine yourself as a member of the Funding Board.

Provide a rating on a scale from 1, *strongly disagree*, to 7, *strongly agree*, for each of the following:

- The student leader expressed their thoughts clearly to the Funding Board.
- The student leader's initial request to the Funding Board was persuasive.
- The student leader provided sound justification for their request.
- The student leader provided the right amount of information (not too short and not too long) in their initial request to the Funding Board.
- The student leader included the essential information in their initial request to the Funding Board.

- The student leader included irrelevant information in their initial request to the Funding Board.
- The student leader negotiated well for their group.
- If I were on the Funding Board, I would fully support the student leader's request.

After reading the student leader's initial request to the Funding Board, to what extent do you agree with the following statements? It may help to imagine yourself as a member of the Funding Board.

Provide a rating on a scale from 1, strongly disagree, to 7, strongly agree, for each of the following:

I imagine...

- The student leader's wishes didn't carry much weight during the Funding Board meeting.
- The student leader was able to get their way during the Funding Board meeting.
- The student leader had an influence on the decision made by the Funding Board.
- The student leader's ideas and opinions were ignored during the Funding Board meeting.
- The Funding Board listened to what the student leader said.

After reading the student leader's initial request to the Funding Board, to what degree did the student leader seem \_\_\_\_\_?

Provide a rating on a scale from 1 *not at all* to 7 *very* for each of the following:

- |                                 |                                 |
|---------------------------------|---------------------------------|
| <input type="radio"/> warm      | <input type="radio"/> friendly  |
| <input type="radio"/> competent | <input type="radio"/> likeable  |
| <input type="radio"/> capable   | <input type="radio"/> confident |
| <input type="radio"/> skillful  | <input type="radio"/> certain   |
| <input type="radio"/> hesitant  | <input type="radio"/> nervous   |

Please provide an overall rating of the student leader's performance for this task (Requesting Funding for Student Organization) on a scale from 1, very bad, to 7, very good.

## Appendix C

**Conflict Task***Instructions:****Task 3 (Conflict with Group Member):***

Next, the group member that the student leader had selected to not attend the event confronted them. The dissatisfied group member wanted to know why they were being excluded. The student leader provided an initial response to the dissatisfied group member.

**Please read the transcript of the student leader’s initial reply to the member carefully and answer the following questions to evaluate their performance as a leader.** Please note that the response was originally spoken and was transcribed verbatim by a Research Assistant. Spoken language often differs from written language (i.e. spoken language tends to be full of repetitions, incomplete sentences, corrections and interruptions while written language tends to be more complex and intricate). In other words, spoken language will often not read easily like a book. You should keep this in mind when evaluating the response.

*Example of Conflict response:*

“I’m sorry to say that you are not included on the trip to the American Medical Association’s uh conFERENCE this year. As president, I had to review important criteria in deciding which members were capable of excuse me were included on the trip this year. The criteria that I looked for included attendance, fundraising, and dues paid (3.8). I worked with other officers on the executive board to decide which members did well and did not well did not DO well in these areas of evalUATION. Unfortunately we felt that your present levels of involvement with our group using these criteria (1.9) were not strong indicators of your interest in the medical field.”

*Question items:*

After reading the student leader’s reply to the dissatisfied group member, to what extent to you agree with the following statements? It may help to imagine yourself as the dissatisfied group member.

Provide a rating on a scale from 1, *strongly disagree*, to 7, *strongly agree*, for each of the following:

- The student leader expressed their thoughts clearly to the dissatisfied group member.
- The student leader struck a balance between assertively stating their decision and being empathetic towards the dissatisfied group member.
- The student leader provided the right amount of information (not too short and not too long) to the dissatisfied group member.
- The student leader’s reply to the dissatisfied group member contained sound reasoning for their decision about event attendance.

- The student leader handled the conflict with the dissatisfied group member effectively.
- If I were the dissatisfied group member, I would understand the student leader's reasoning.

After reading the student leader's reply to the dissatisfied group member, to what extent do you agree with the following statements? It may help to imagine yourself as the dissatisfied group member.

Provide a rating on a scale from 1, strongly disagree, to 7, strongly agree, for each of the following.

I imagine...

- The student leader was able to get their way in the interaction with the dissatisfied group member.
- The student leader had a great deal of power in the interaction with the dissatisfied group member.
- The student leader's ideas and opinions were ignored in the interaction with the dissatisfied group member.
- The dissatisfied group member listened to what the student leader said.
- The student leader was in control of the interaction with the dissatisfied group member.

After reading the student leader's reply to the dissatisfied group member, to what degree did the student leader seem \_\_\_\_\_?

Provide a rating on a scale from 1, not at all, to 7, very, for each of the following:

- |                                 |                                 |
|---------------------------------|---------------------------------|
| <input type="radio"/> warm      | <input type="radio"/> friendly  |
| <input type="radio"/> competent | <input type="radio"/> likeable  |
| <input type="radio"/> capable   | <input type="radio"/> confident |
| <input type="radio"/> skillful  | <input type="radio"/> certain   |
| <input type="radio"/> hesitant  | <input type="radio"/> nervous   |

Please provide an overall rating of the student leader's performance for this task (Conflict with Group Member) on a scale from 1, very bad, to 7, very good.

## Appendix D

**Overall Evaluation Questions***Instructions:*

You have now read all of student leader A's [or B etc.] responses. Please think about this student leader's performance as a whole and answer the following questions to evaluate how well they handled the situations and tasks.

*Question items:*

Based on all the student leader's responses as the President of a student organization, to what degree did the student leader seem \_\_\_\_\_? Providing a rating on a scale from 1, not at all, to 7, very, for each of the following:

- |                                 |  |                                     |
|---------------------------------|--|-------------------------------------|
| <input type="radio"/> Competent | <input type="radio"/> Friendly               | <input type="radio"/> Driven        |
| <input type="radio"/> Capable   | <input type="radio"/> Intelligent            | <input type="radio"/> Motivational  |
| <input type="radio"/> Skillful  | <input type="radio"/> Effective communicator | <input type="radio"/> Understanding |
| <input type="radio"/> Certain   | <input type="radio"/> Assertive              | <input type="radio"/> Powerful      |
| <input type="radio"/> Nervous   | <input type="radio"/> Persuasive             | <input type="radio"/> Aggressive    |
| <input type="radio"/> Hesitant  | <input type="radio"/> Charismatic            | <input type="radio"/> Supportive    |
| <input type="radio"/> Confident | <input type="radio"/> Dominant               | <input type="radio"/> Fair          |
| <input type="radio"/> Warm      | <input type="radio"/> Reliable               |                                     |
| <input type="radio"/> Likeable  | <input type="radio"/> Responsible            |                                     |

Please provide an overall rating of the student leader's performance on a scale from 1, very bad, to 7, very good.

## Appendix E

**End of Task Questionnaire (Demographic Information and Manipulation Check)***Question items:*

## Manipulation Check

In the profiles of the student leaders that you saw and evaluated, were the people all of the same gender? \_\_\_\_ Yes \_\_\_\_ No

If yes, please indicate the gender of the student leaders.

1. Male
2. Female

In the profiles of the student leaders that you saw and evaluated, were the people all of the same race? \_\_\_\_ Yes \_\_\_\_ No

If yes, please indicate the race of the student leaders.

1. White or European American
2. Black or African American
3. Asian or Asian American

Please provide a rating on a scale from 1, strongly disagree, to 7, strongly agree.

I believe...

- I carefully read the responses and information given about each student leader.
- I provided thorough evaluations of the student leaders with the information provided.
- My ratings reflect my honest impressions of the student leaders.

## Demographics &amp; Prior Experience

What is your age? (please enter a number) \_\_\_\_\_

What is your gender? (Please check one):

- Male
- Female
- Not Listed \_\_\_\_\_
- 

What is your race? (Please check one):

- African American or Black
- East Asian
- European American or White
- Hispanic or Latino(a)
- Middle Eastern
- Multiracial \_\_\_\_\_
- Native American/First Nations
- South Asian
- Not Listed \_\_\_\_\_

Is English your first language? \_\_\_\_ Yes \_\_\_\_ No

If no, at what age did you learn English? \_\_\_\_\_

If no, how proficient would you say you are with English? 1 (not at all) 7  
(extremely)

Are you currently enrolled at a university?

\_\_\_\_\_ Yes \_\_\_\_\_ No

Are you currently enrolled at Tufts?

\_\_\_\_\_ Yes \_\_\_\_\_ No

What is your class standing? (Please check one):

- Freshman
- Sophomore
- Junior
- Senior
- Post-Bachelor/Graduate Student
- Not Listed \_\_\_\_\_

To what degree have you had leadership experiences similar to the individual tasks (negotiation, decision making, conflict) that the student leaders completed? Please provide a rating on a scale of 1 = not at all to 7 = extremely

To what degree are you knowledgeable about the responsibilities and duties that university student organization Presidents typically are assigned and carry out? Please provide a rating on a scale of 1 = not at all to 7 = extremely

#### Final Questions

What do you think the study was about? {text box}

In your honest opinion, should we use your data in our analyses in this study? This question will not affect your compensation.

- Yes
- No (Please explain) \_\_\_\_\_

#### *End Instructions:*

Thank you for participating in our study! Please find your research assistant for questions and debriefing. Have a nice day.