**Methods**

This study uses a 3 (job type: American, High-Status, Control; between) X 2 (applicant race: African American, Asian American; within) mixed model design.

**Participants & Procedures**

Undergraduates from the University of Washington were recruited to participate in this study (N = 420). The study was advertised as a survey on hiring practices where applicants would be asked to evaluate applicants for a job listing. As this study focuses on perceptions of racial minorities, we controlled for participant race in recruiting and selected only white participants in addition to taking the step of using only white research assistants.

Participants were invited to the lab to participate in the ‘Hiring Perceptions’ study for credit toward their undergraduate psychology courses. After arriving, participants were provided with an informed consent and read a brief cover story. Participants were randomly assigned to receive a packet containing descriptions for either an American job, a high-status job, or a control job with the fictional ‘Edge Company Inc’ (see. Appendix 1a-c for job postings). Each packet contained two resumes for the fictional applicants (one African American, one Asian American) in a counterbalanced order. Participants were asked to evaluate the candidates from the perspective of a hiring manager and to ultimately decide which of the applicants to hire for the position.

**Materials**

**Jobs.** All job descriptions presented were for a “Program Response Specialist” position and included a two-sentence job description, and (in all but the control condition) a list of two job requirements.

*American.* The American job was described the ideal candidate as one who was “…*dedicated to* ***democracy and happiness for all Americans***”as well as someone who was *“****familiar with American customs and traditions***.”Additionally, the job requirements noted the need for strong English skills and an American citizenship.

*High-status.* The high-status job was described as needing a “*…* ***skilled, competent,*** *and* ***highly-educated****”* employee who “…*can* ***deliver superior results.***” Additionally, the job requirements noted the need for a college degree as well as the ability to produce high quality work.

*Control.* The control job contained no emphasized language in addition to listing no job requirements. It simply said, “If you are looking for a new job, Edge Company Inc. can offer a satisfying opportunity. We are looking for an employee to be a Program Response Specialist.” The job noted that no college education was required, and that no citizenship was required.

All three job descriptions were pretested on mechanical turk (N=150). Participants saw one of the three job descriptions and were asked to rate the ideal applicant along stereotype measures, Participants rated our high-status job description to require greater levels of education (*F*(2,149) = 22.2, *p* < .001), competence (*F*(2,151) = 8.23, *p* < .001), and professional skills (*F*(2,151) = 15.73, *p* < .001) relative to the American and control jobs. Participants in the American job condition rated the American job to require someone who is American (*F*(2,151) 25.79, *p* < .001), familiar with American customs and culture (*F*(2,151) 32.58, *p* < .001), and a native English speaker (*F*(2,151) 27.65, *p* < .001) relative to the control and high-status jobs. The job descriptions were not identified as being significantly different in their likelihood of being filled by someone who is friendly, moral, liberal, or conservative.

**Applicants.** In order to develop racially distinct names for our fictional applicants, participants on mechanical turk (N=108) were presented with a list of 100 first names taken from searching lists of baby names published online. Participants were asked to rate each name on a 7-point Likert scale for its stereotypical association with both gender and race (Asian American, Latino, White, Arab American, African American). First names with mean ratings of above 5 in only one racial category were gathered into a bank. An identical procedure was conducted with a list of 51 last names.

Next, first names and last names were randomly selected from their respective banks and randomly paired with one another to generate a list of 4 Asian American male names and 4 African American male names for use in the study (see Table 1).

**Resumes.** To develop resumes we follow procedures similar to Bertrand & Mullainathan (2004) to develop two separate resumes that were matched on work history, domains of experience, and educational backgrounds.

Resumes were fabricated to include matching sets of skills (e.g. – Microsoft Office), equivalent work history, domains of experience, and educational backgrounds. Both resumes were pretested on mechanical turk (N=100). Participants were asked to rate their perception of an applicant with the given resume on measures of rated each applicant with the given resume on their perceived hireability, status, and cultural foreignness (see measures described below). On all measures of interest, resumes were found to be not significantly different from one another on a paired samples t-test.

Resumes were paired with the 8 pretested names such that in total there were 16 final resumes. Email addresses and local addresses were also fabricated for each of the applicants for use on the final resumes. Given that each participant would see both one African American resume and one Asian American resume, resume order was counterbalanced and care was taken to ensure that no individual participant would receive two of the same resumes with different names on each of them.

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| Table 1 |  |  |  |
|  |  |  |  |
| *Applicant Names* |  |  |  |
| First Name | Last Name |  | Applicant Race |
|  |  |  |  |
| Wang Xiu | Wong |  | Asian American |
| Chen | Yang |  | Asian American |
| Dong | Huang |  | Asian American |
| Zhang Wei | Chan |  | Asian American |
| Deshawn | Jefferson |  | African American |
| Terell | Jackson |  | African American |
| Tyrone | King |  | African American |
| Lamar | Washington |  | African American |

**Measures.**

After each resume participants were presented with a 13-item questionnaire consisting of 5 scales intended to measure our stereotype constructs, each item on the questionnaire was presented next to a 7-point Likert scale (1: Not at All Likely – 7: Extremely Likely).

*Hireability.* Three items (α = .86 - .88) assessed perceptions of applicant’s hireability. Participants were asked to rate applicants on qualification as well as likelihood to hire or invite the applicant to interview. These items were designed to serve as a baseline measure of their perception of the applicant.

*Status.* The three subsequent items (α = .79 - .80) assessed the perceived status qualities of the applicant. Participants evaluated the likelihood that the applicant was well-educated, skilled, and competent.

*Cultural Foreignness.* Next, three items (α = .81 - .84) measures the perceived cultural foreignness of our applicants. These items included measures of the applicant’s Americanness, familiarity with American culture, and familiarity with American customs and traditions.

The final two subscales were both 2 items and included measures of warmth (friendly/moral: α = .88 - .90) as well as measures of political beliefs (liberal/conservative: α = .52 - .66).

After responding to the 13 scale items, participants were asked to make a final forced choice decision. They were required to manually write the name of the applicant they would recommend for the position. This choice served as the primary depended measure of the study.

**Results**

**Who is hired more often?** A 3 (job type) x 2 (applicant race) chi-square test of independence was conducted to determine whether rates of hiring differed significantly between African Americans and Asian American applicants. We found meaningful differences in rates of hiring for the three job types, *X2* (2, *N* = 357) = 14.7, *p* < .001. African Americans were hired more often for the control job (53%), the high-status job (61%), and the American job (76%) relative to the Asian American applicant. Overall, African American applicants were hired more often than Asian American ones, and the difference was the most pronounced when selecting for the American job.

Preliminary comparisons between counterbalanced measures found no effects of applicant name, resume type, or presentation order. Reported results will be described collapsing across all counterbalanced measures. Continuous stereotype measures were analyzed using a 3 (job type) X 2 (applicant race) mixed within-between ANOVA.

*Hireability.* Overall, African American applicants (*M* = , *SD* = ) were perceived as [more/less] hirable than Asian American applicants (*M* = , *SD* = ). While there was no main effect for job type (*F*(\_, \_\_\_) = \_\_\_.\_\_, *p* = \_\_\_), there was a significant interaction between race and job type on ratings of hireability *F*(2, 434) = 11.29, *p* < .001. Specifically, for the American job, African Americans (*M* = 5.42, *SD* = 1.04) were perceived as more hirable than Asian Americans (*M* = 5.13, *SD* = 1.14), *t*(434) = 5.10, *p* < .001, *d* = .36. There were no significant differences in ratings of hireability for applicants in the high-status job (*t*(434) = .685, *p* = .98) or the control job (*t*(434) = 5.10, *p* = .97).

*Cultural Foreignness.* A significant main effect for participant race showed that, across job types, African Americans (*M* = 5.84, *SD* = .98) were rated as having more American qualities relative to Asian Americans (*M* = 4.58, *SD* = 1.13), *F*(1, 143) = 147.81, *p* < .001, *d* = .56. The perceptions of applicant’s cultural foreignness did not vary by job type *F*(\_, \_\_\_) = \_\_\_.\_\_, *p* = \_\_\_. Similarly, there was no interaction between applicant race and job condition *F*(\_, \_\_\_) = \_\_\_.\_\_, *p* = \_\_\_.

*Status*. Ratings of perceived status did not vary as a result of the race of the applicant (*F*(1, 143) = .09, *p* = .76) or job type (*F*(2, 143) = .88, *p* = .40). There was also no interaction between condition and race, *F*(2, 143) = .47, *p* = .62.

*Warmth.* African American (*M* = 5.07, *SD* = 1.04) applicants were rated slightly warmer than Asian American (*M* = 5.02, *SD* = .98) applicants, *F*(1, 431) = 3.49, *p* = .06, *d* = .15. There was not however evidence that perceived warmth varied by job type (*F*(2, 431) = 1.34, *p* = .26). There were similarly no interaction between job type and race on measures of warmth, *F*(\_, \_\_\_) = \_\_\_.\_\_, *p* = \_\_\_.

*Lib/Con.* African Americans (*F*(1, 431) = 12.54, *p* = .008, *d* = 1.52) such that African Americans (*M* = 4.56, *SD* = .89) were perceived as more liberal than Asian Americans (*M* = 4.40, *SD* = .77) there were no main effects for condition (*F*(2, 429) = .56, *p* = .57). There was also no interaction between condition and race on measures of status, *F*(2, 429) = .996, *p* = .37.

﻿ **Do racial stereotypes mediate applicant hireability?** ﻿Mediation analysis was conducted using Andrew Hayes’s PROCESSR Mediation Model for R. Given that the only significant difference in perceived qualification occurred in the American job condition, mediation analysis was only run on data from this condition to avoid error introduced by repeated analysis (see Figure 1).

Mediation model

*Figure 1***.** Unstandardized regression coefficients representing the mediation of cultural foreignness stereotypes on the relationship between the race of the applicant and their perceived qualification. Unstandardized regression coefficient for applicant race and qualification controlling for cultural foreignness stereotypes shown in parentheses. \**p* < .05. \*\**p* < .01. \*\*\**p* < .001.

In the American job condition, compared to African Americans, Asian American applicants were perceived as more culturally foreign (*b =* 1.48, *SE =* .13, *p <* .001) and having increased cultural foreignness predicted lower hireability ratings (*b = -*.46, *SE =* .05, *p <* .001). Applicant race predicted hireability such that Asian Americans were rated as less hirable than their African American counterparts (*b =* .30, *SE =* .13, *p =* .02). However, when controlling for perceptions of cultural foreignness the direction of the relationship reversed suggesting a full mediation (*b = -*.39, *SE =* .14, *p =* .004). The standardized indirect effect was tested using bootstrapping procedures. Unstandardized indirect effects were computed for each of 5,000 bootstrapped samples, and the 95% confidence interval was computed by determining the indirect effects at the 2.5th and 97.5th percentiles. The bootstrapped indirect effect was -.69, and the 95% confidence interval ranged from [.50, .91], *p <* .001.

Appendix

**1. Job Descriptions**

***a***

Job

Program Response Specialist

Job Description

If you are a citizen dedicated to **democracy and happiness for all Americans**, Edge Company Inc. can offer a satisfying opportunity. We are looking for an employee who is **familiar with American customs and traditions.**

Job Requirements

Strong English skills

**American citizenship required**

College education not required

*American Job Description*.

***b***

Job

Program Response Specialist

Job Description

If you are a **skilled, competent,** and **highly-educated**, Edge Company Inc. can offer a prestigious opportunity. We are looking for an employee who can **deliver superior results.**

Job Requirements

Ability to produce high-quality work

**College degree required**

American citizenship not required

*High-Status Job Description*

Job

Program Response Specialist

Job Description

If you are looking for a new job, Edge Company Inc. can offer a satisfying opportunity. We are looking for an employee to be a Program Response Specialist.

Job Requirements

American citizenship not required

College education not required

***c***

*Control Job Description*