

A prospective employer receives two resumes: a resume from a white job applicant and a similar resume from an African American applicant. Is the employer more likely to call back the white applicant to arrange an interview? Marianne Bertrand and Sendhil Mullainathan carried out a randomized controlled experiment to answer this question. Because race is not typically included on a resume, they differentiated resumes on the basis of “white-sounding names” (such as Emily Walsh or Gregory Baker) and “African American-sounding names” (such as Lakisha Washington or Jamal Jones). A large collection of fictitious resumes was created, and the presupposed “race” (based on the “sound” of the name) was randomly assigned to each resume. These resumes were sent to prospective employers to see which resumes generated a phone call (a callback) from the prospective employer. Data from the experiment and a detailed data description are in the files **Names** and **Names\_Description**.

- a. Define the *callback rate* as the fraction of resumes that generate a phone call from the prospective employer. What was the callback rate for whites? For African Americans? Construct a 95% confidence interval for the difference in the callback rates. Is the difference statistically significant? Is it large in a real-world sense?
- b. Is the African American/white callback rate differential different for men than for women?
- c. What is the difference in callback rates for high-quality versus low-quality resumes? What is the high-quality/low-quality difference for white applicants? For African American applicants? Is there a significant difference in this high-quality/low-quality difference for whites versus African Americans?
- d. The authors of the study claim that race was assigned randomly to the resumes. Is there any evidence of nonrandom assignment?