Race, Age, and Hiring Discrimination

By Joanna N. Lahey

The unemployment rate for black high school graduates is almost twice the unemployment rate for white high school graduates. The racial unemployment gap is largest at younger ages and decreases into middle age. Hiring discrimination on the basis of race is one potential explanation for this discrepancy.

Indeed, multiple studies have found strong evidence of racial discrimination in hiring. Bertrand and Mullainathan (2004), perhaps the most prominent of these, sent out resumes of recent graduates in response to actual job postings and found that those with white-sounding names were 50 percent more likely to receive a callback than graduates with black-sounding names. Other field experiments and laboratory experiments have confirmed the finding of racial discrimination in hiring practices. The bulk of these experiments focus on racial discrimination against early-career job applicants and do not explore what happens throughout their professional lives, which are usually filled with several different jobs.

But not all job applicants are starting their careers. As people get older, they continue applying for new positions. By age 30, they’ve had about eight jobs. When they reach 50, they’ve worked in a dozen different positions, according to calculations I made based on data from the Bureau of Labor Statistics.

Although resume studies provide strong evidence of racial discrimination in hiring for younger or entry-level applicants, they cannot tell us about the mechanics of hiring discrimination. Do screeners come across a black-sounding...
name and immediately discard the resume? Or do they instead spend longer on that resume looking for items that could counteract a negative stereotype?

If the former, then there is not much that a job seeker can do, aside from changing his or her name. But if screeners do read the entire resume, then demonstrating skills, such as computer literacy, on the resume can improve a black applicant’s chances of being called in for an interview.

To incorporate more fair hiring practices, companies could pursue other screening policies based on how screeners process resumes differently. For example, names can be removed from resumes, a structured ranking system could be used, or specific information could be requested from all applicants.

**A Closer Look at Race and Age**

A recent study of mine, conducted with Douglas Oxley and funded by the Alfred P. Sloan Foundation, explores how race discrimination in employment situations changes as job applicants get older (Lahey and Oxley 2016a). It also delves into the mechanics of how people read resumes—by tracking their eyes as they view and rate them. The eye-tracking device is a small camera under the computer monitor that can see where on a resume a screener is looking and for how long the screener views each resume (Lahey and Oxley 2016b).

We find that the screeners in our sample do treat resumes submitted by black applicants differently from those submitted by whites. However, while screeners prefer the resumes submitted by white applicants younger than 45, the preference disappears as applicants reach that marker of middle age. Once applicants get closer to 65, resumes of white applicants are again preferred over those for black applicants.

We find that screeners—regardless of their own race—do view the entire resume for both black and white applicants, and they view them in approximately the same way. However, screeners spend significantly less time on resumes for young black applicants compared with those for young white applicants.

It does not appear that screeners immediately look for anything specific on the resume after seeing a black name and a young age. But if a resume from a young black applicant contains additional computer skills, there’s a positive shift: Then the screeners spend much more time on the rest of the resume, particularly the employment history.

No such effect is found for resumes coming from young white applicants. These findings suggest that there are things that job seekers from discriminated groups can do to differentially increase the attractiveness of their resumes.

**The Experiment**

One hundred forty-nine MBA, MPA, HR, and business students participated in the study. Each participant rated 40 resumes for an administrative assistant position. Thus the study consists of 5,960 unique resumes. Each resume was created from a database of actual resumes or from previous studies on discrimination. Because the inputs were random, the average quality of the resumes with “black” names should be indistinguishable from the average quality of resumes with “white” names.

Race was indicated by name, while age was indicated by date of high school graduation. Ages indicated on the resumes ranged from 36 to 76. Additional sources of variation included work experience, address, up to a year of post-high school education, a computer certificate, volunteer work, and military experience. It should be stressed that all of the fictional applicants were high school
graduates and did not have an additional degree. Additionally, all resumes listed only the 10 most recent years of experience.

Participants—who were white, Asian, and black—were told that the purpose of the research was to study how hiring managers make job interview decisions. They were given the description of a clerical position and asked to evaluate applicants for that position in terms of “hireability.” While they rated the resumes, an eye-tracking device tracked what parts of the resume they viewed and for how long.

**Race Discrimination by Age**

With the age of the fictional applicant on the X axis and the resume rating for that resume (with 7 as the best and 1 as the worst) on the Y axis, we fit the plot shown in Figure 1.

The first thing to notice is that age discrimination is nonlinear for whites. Ratings decrease with age and then sometime in the 60s they increase again. This apparent increase at older ages may be just by chance; however, with a previous field experiment (Lahey 2008) in which I sent out resumes to actual firms, I found a similar increase for older white women.

The second—and more striking—finding is the pattern for ratings of applications from black candidates. The ratings for these resumes start at a much lower level, 4.1 out of 7 rather than 4.8, which is where the ratings begin for white candidates. However, as the age on the resume as indicated by date of high school graduation increases, ratings also increase. In fact, in this sample the ratings for the resumes of middle-aged blacks actually surpass those for whites.
although this difference is not significant in all specifications. Ratings for black resumes with applicants in their mid-50s again get lower ratings with applicant age.

Understanding why these patterns exist would require further study.

**Do People Review the Entire Resume?**

Screeners do not spend much time looking at entry-level resumes. Again, the race of the screener does not affect how they view the resumes. In our sample, they spent about 16 seconds on average looking at each one-page resume, which is about a second more than the 15-second estimate we got from speaking with HR professionals prior to the study.

Nonetheless, they do spend some time looking at every part of the resume, and they do look at all parts of the resumes, even for younger black applicants. But as Figure 2 shows, screeners spend less time on resumes for younger black applicants compared with younger white applicants. As with the resume rating shown in Figure 1, Figure 2 demonstrates that screeners spend somewhat less time on white resumes as the age of the applicant increases, and then they spend more time on resumes for the oldest applicants.

Similarly, they start out spending less time on resumes of younger black applicants compared with younger white applicants, but they spend more time on resumes for black applicants as the applicant ages. Unlike with the results for resume ratings, screeners spend more time on resumes for the oldest black applicants.

*Figure 2*
**Time Spent on Resumes by Race and Age**

Stanford University • June 2016

*continued on flap*
This increased time spent on resumes that indicate older ages occurs both for resumes with white names and with black names.

One finding that may be of interest to applicants and to policy researchers is that having computer training on a resume helps young black applicants more than it helps young white applicants in terms of rating. Screeners also spend more time looking at such resumes, and they specifically spend more time looking at the applicant’s employment history.

In other words, adding computer training to the resume of a younger black applicant leads employers to take the employment history more seriously.

**Caveats and Policy Recommendations**

It is important to note that this research is applicable only to job applicants with high school degrees who are applying for an entry-level position. It is likely that jobs requiring more education or experience would show different patterns by age and by race. These patterns of decreased racial discrimination into middle age may be relevant only for high school graduates applying to entry-level jobs.

The fact that screeners view the entire resume even for discriminated against groups provides hope for job seekers that they can craft their resumes to somewhat mitigate the effects of hiring discrimination. For example, when younger black applicants demonstrate their computer skills on a resume, screeners pay more attention to the rest of the resume as well and give the resume higher ratings, treating the resume much more like they treat the resume of a similar white applicant.

Employers interested in fair hiring practices have several options for mitigating bias based on the results of this study.

First, they can remove indicators for race and age from the resumes before sending them to screeners. If that is not feasible, then they can be sure to request that all candidates list skills such as computer experience instead of assuming those skills for one group and not for another if the skill is not listed.

Finally, another possibility that aligns with current best-hiring practices is for screeners to put required and preferred items into a spreadsheet grid while screening the resumes. This action necessitates that screeners spend time noticing each relevant part of the resume regardless of the group characteristics of the applicant.

**References**


About SIEPR
The Stanford Institute for Economic Policy Research (SIEPR) conducts research on important economic policy issues facing the United States and other countries. SIEPR’s goal is to inform policymakers and to influence their decisions with long-term policy solutions.

Policy Briefs
SIEPR policy briefs are meant to inform and summarize important research by SIEPR faculty. Selecting a different economic topic each month, SIEPR will bring you up-to-date information and analysis on the issues involved.

SIEPR policy briefs reflect the views of the author. SIEPR is a non-partisan institute and does not take a stand on any issue.

For Additional Copies
Please see SIEPR website at http://SIEPR.stanford.edu.