

Promise and Pitfalls of a Gender-Blind Faculty Search

CYNTHIA S. JONES AND MARK C. URBAN

The recent study by Moss-Racusin and colleagues (2012) drew national attention to something all of us in science would prefer not to acknowledge: We are *all* intrinsically biased against women as scientists, whether or not we think we are. Professional women scientists are as biased as male scientists, and bias is not age specific: College students are gender biased, as well. This bias could help explain why proportionately more women leave science and why women at every career stage are paid lower salaries (Shen 2013). How can we reduce unconscious bias? We propose that gender-blind searches might help.

Recently, the Ecology and Evolutionary Biology Department at the University of Connecticut conducted a search for an assistant professor. The timely publication by Moss-Racusin and colleagues (2012) revealing intrinsic bias in the hiring process inspired us to design a search that would be less gender biased. Concurrently, we hoped to address biases that might arise from associations between names and race, ethnicity, or national origin (Bertrand and Mullainathan 2004). Here, we share what we learned from our efforts.

Although our committee could not control the biases of letter writers (Trix and Psenka 2003), we could address our own biases. Simply discussing unconscious bias heightened our sensitivity. To further protect our decisions from deeply buried biases that conscious effort could not root out, we decided to try an initial blind review of the applications.

We intended to advertise the position with the request that candidates and references remove all mention of gender or race from their applications. Submitted papers would have author names redacted, curricula vitae would

list initials only, and letter writers would be instructed to refer to “Dr. X.” Our Department of Human Resources would collect the required information on gender, race, and ethnicity before we received the applications.

We envisioned that the evaluation of applications would proceed as a three-tiered process. First, we would diversify the pool by advertising broadly in outlets directly targeting minority-serving institutions and by contacting individual research labs and potential candidates. The second stage would involve ranking candidates without knowledge of gender to produce a short list that was not influenced by gender bias. Our departmental administrative assistant would have access to complete applications and would attend search committee meetings to answer questions regarding the prestige of fellowships or awards with redacted titles. Gender would be revealed during the third stage, before we selected candidates for the shorter interview list. Knowing the applicants’ gender at this stage would allow us to consider mitigating factors such as maternity or paternity leaves and to review papers and Web sites in more detail. At this stage, we would also ensure that, in line with affirmative action goals and all else being equal, we interviewed candidates who were female or came from underserved groups.

Our departmental colleagues were generally enthusiastic. The most commonly expressed concern was that a member of the search committee might know some applicants, so the process would not be entirely gender blind. We countered that not everyone on the committee would know an applicant, and therefore, that candidate’s evaluation would still experience less bias than it would otherwise. Another

thought, from one committee member, was that this procedure would “eliminate the opportunity for compensatory evaluation of letters for female applicants, in full consciousness that letter writers themselves tend to skew their evaluations positively toward males.” This was a more difficult argument to counter. Given the lack of data on compensatory positive bias, the committee still felt that a gender-blind search—although it was not perfect—was a worthwhile goal.

The main impediment was institutional, and for good reason. The University of Connecticut is subject to state hiring regulations, and Connecticut has no guidelines for conducting gender-blind searches. The committee’s intent was to encourage applicants and letter writers to self-redact, but to advertise the search as gender-neutral prior to a full analysis of the potential downstream negative and potential legal consequences was considered to be too risky. Although we could not advertise the position as part of a gender-blind search, we attempted to conduct a gender-blind search internally, by redacting all reference to gender and race from applications prior to their evaluation.

Our redaction involved the removal of names, pronouns, and names of fellowships and awards that might reveal gender or minority status. The redaction involved more than 100 hours of monumental effort by our departmental administrative assistant, but in the end, unfortunately, it failed to conceal gender in many of the applications. Just one overlooked pronoun, or an uncommon gender-revealing word (e.g., *guy*) exposed gender, and with so many redactions needed in each file, it was difficult to detect them all. Some committee members noticed that

just the size of the redacted area in the document revealed gender, because *he* requires fewer character spaces than *she*. In addition, redactions were done on PDFs, but if phrases from the PDFs were copied and pasted into a summary spreadsheet, the PDF redactions were revealed.

Members of the search committee either knew or could guess the gender of 42% of the applicants on average (range: 22%–66%) during the first screening of the applications. If we could not tell the gender of the applicant because the redaction worked, individual search committee members tried to guess the gender of the applicant after ranking them. Excluding redaction errors, the search committee members guessed gender correctly 67% of the time (range: 59%–85%) on average. Three of the four search committee members did not guess gender significantly better than would be expected from random chance. The fourth guessed gender significantly more than would be expected from random chance after recognizing telling variations in pronoun lengths in the redacted letters.

These results are promising. When the redactions worked, we were no better at guessing than random chance would have implied. Even with redaction errors, close to 60% of the applicants were evaluated blindly. Had we received gender-neutral applications, we believe that our chances of a successful gender-blind screening would have increased. In addition, we now know how to improve the redaction process to eliminate some of the problems that revealed gender: by recognizing a broader range of search terms, by searching for revealing terms in supplemental information, such as student evaluations; and by addressing software issues associated with PDFs.

The question remains: Would it matter? We had an initial short list

of 24 applicants, all of whom were highly accomplished, and several of whom met most of the preferred qualifications. What elevated candidates to the interview list were qualities such as how directly the candidates' work aligned with the area of expertise described in the job advertisement or whether they had a demonstrably strong background in statistics. Did we really eliminate intrinsic gender bias? We cannot know, but we did not immediately know the gender of a majority of applicants, and the process made us more cognizant of potential biases.

We are not proposing that gender-blind searches are the only answer. We see these as one piece of a larger effort that also involves bias-avoidance training, gender-blind reviews, salary equity adjustments, and a clear examination of bias in the promotion of female professionals (see Raymond 2013). Nor are we proposing that gender bias is the only explanation for the leaky pipeline of women to scientific professional positions. Other explanations, such as the effect of families on careers and the fact that the timing of greatest competition for coveted academic positions and tenure coincides with prime childbearing years (Adamo 2013), are significant factors as well.

Even if institutions make concerted efforts to address family issues, such as with on-campus child care and adjusted tenure clocks, none of these changes will fully compensate for the gender biases that we all share and that systemically devalue the contributions of female students and colleagues. Therefore, we are continuing to work with the University of Connecticut to develop guidelines for conducting gender-blind searches in the future. We hope that this idea will inspire similar efforts at other institutions and in other states. The large slate

of complex biological, environmental, and medical issues that we face requires that we tap into the entire pool of global intelligence, not just the more limited subset of nonminority males.

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References cited

- Adamo SA. 2013. Attrition of women in the biological sciences: Workload, motherhood, and other explanations revisited. *BioScience* 63: 43–48.
- Bertrand M, Mullainathan S. 2004. Are Emily and Greg more employable than Lakisha and Jamal? A field experiment on labor market discrimination. *American Economic Review* 94: 991–1013.
- Moss-Racusin CA, Dovidio JF, Brescoll VL, Graham MJ, Handelsman J. 2012. Science faculty's subtle gender biases favor male students. *Proceedings of the National Academy of Sciences* 109: 16474–16479.
- Raymond J. 2013. Sexist attitudes: Most of us are biased. *Nature* 495: 33–34.
- Shen H. 2013. Inequality quantified: Mind the gender gap. *Nature* 495: 22–24.
- Trix F, Psenka C. 2003. Exploring the color of glass: Letters of recommendation for female and male medical faculty. *Discourse and Society* 14: 191–220.

Cynthia S. Jones (cynthia.s.jones@uconn.edu) is a professor and Mark C. Urban is an assistant professor at the University of Connecticut, in Storrs.

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