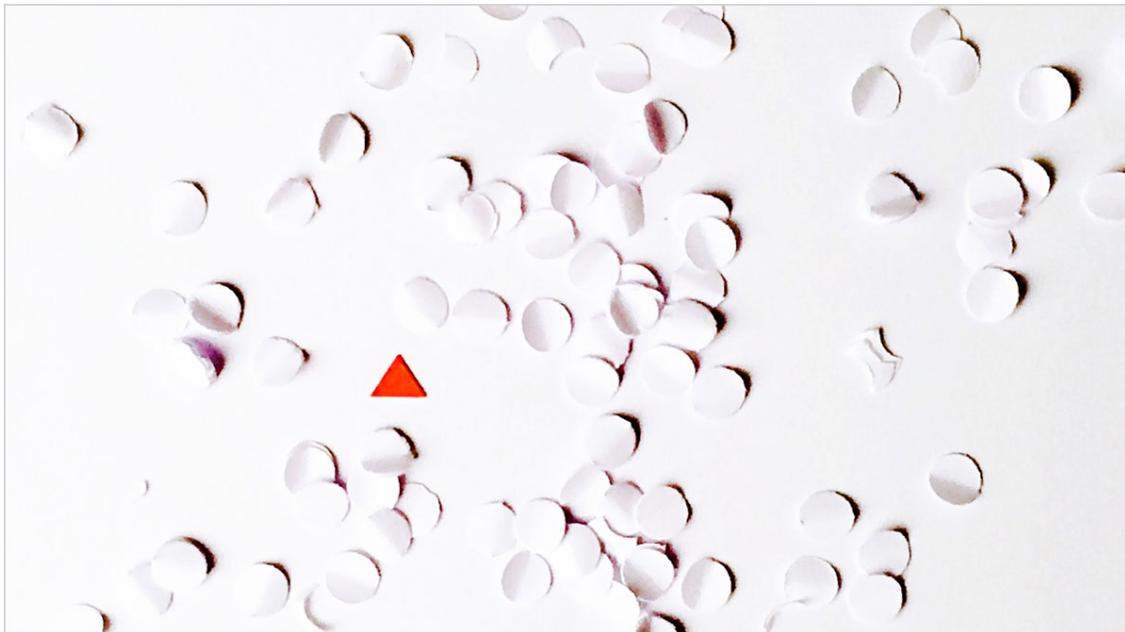**Harvard Business Review**

Gender

If There's Only One Woman in Your Candidate Pool, There's Statistically No Chance She'll Be Hired

by Stefanie K. Johnson, David R. Hekman, and Elsa T. Chan

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There are more CEOs of large U.S. companies who are named David (4.5%) than there are CEOs who are women (4.1%) — and David isn't even the most common first name among CEOs. (That would be John, at 5.3%.)

Despite the ever-growing business case for diversity, roughly 85% of board members and executives are white men. This doesn't mean that companies haven't tried to change. Many have started investing hundreds of millions of dollars on diversity initiatives each year. But the biggest challenge seems to be figuring out how to overcome unconscious biases that get in the way of these well-intentioned programs. We recently conducted research that suggests a potential solution.

It's well known that people have a bias in favor of preserving the status quo; change is uncomfortable. So because 95% of CEOs are white men, the status quo bias can lead board members to unconsciously prefer to hire more white men for leadership roles.

We conducted three studies to examine what happens when you change the status quo among finalists for a job position. In our first study, using an experimental setting, we had 144 undergraduate students review qualifications of three job candidates who made up a finalist pool of applicants. The candidates had the same credentials — the only difference among them was their race. We manipulated this by using names that sound stereotypically black (Dion Smith and Darnell Jones) or white (Connor Van Wagoner and David Jones), and we used a job that has some ambiguity about the racial status quo (athletic director).

Participants indicated the extent to which they agreed that each candidate was the best for the job. Half of them evaluated a finalist pool that had two white candidates and one black candidate, and the other half evaluated a finalist pool that had two black candidates and one white candidate. We found that when a majority of the finalists were white (demonstrating the status quo), participants tended to recommend hiring a white candidate. But when a majority of finalists were black, participants tended to recommend hiring a black candidate ($F = 3.96$, $\eta^2_p = .03$; $p < .05$).

Our second study, of 200 undergraduate students, was similar but focused on gender instead of race — and we found a similar result. We manipulated gender through the names of men and women, and we used the job of nurse manager. In this case, we expected that the status quo would be to hire women, so we looked at the effect of having two men in the pool. We found that when two of the three finalists were men, participants tended to recommend hiring a man, and when two of the three finalists were women, participants tended to recommend hiring a woman ($F = 4.42$, $\eta^2_p = .03$; $p < .05$).

The results from these studies were what we had predicted: When there were two minorities or women in the pool of finalists, the status quo changed, resulting in a woman or minority becoming the favored candidate.

In both studies we were also able to measure each participant's unconscious racism and sexism using implicit association tests (IATs) — reaction-time tests that measure unconscious bias. We saw that the status quo effect was particularly strong among participants who had scored high in unconscious racism or sexism on the IAT. So when hiring a black candidate was perceived to be the status quo (i.e., the pool was two black candidates and one white candidate), individuals scoring average in unconscious racism tended to rate the black candidate 10% better than the white candidate; individuals scoring one standard deviation above average in unconscious racism tended to rate the black candidate 23% better than the white candidate ($\beta = .24$, $p < .05$). We found a similar effect for gender.
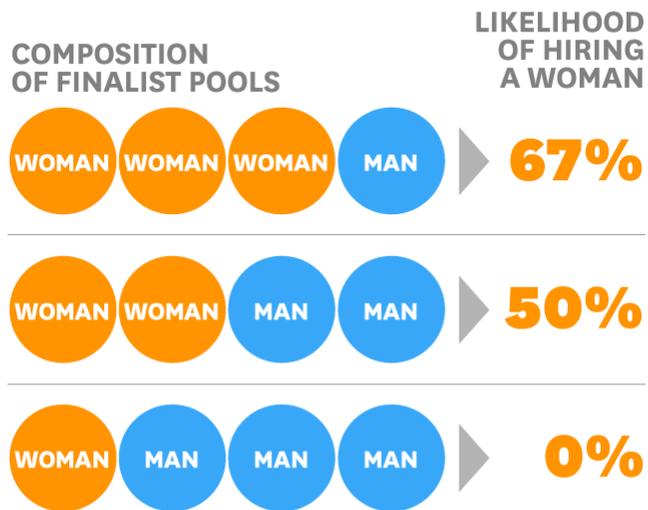
In a third study we validated these laboratory findings by examining a university's hiring decisions of white and nonwhite women and men for academic positions. Our sample was 598 job finalists, 174 of whom received job offers over a three-year period. Finalist pools ranged from three to 11 candidates (the average was four).

We wanted to see whether having more than one woman or minority in the finalist pool would increase the likelihood of hiring a woman or minority — beyond the increase you'd expect simply due to probability. We found that when there were two female finalists, women had a significantly higher chance of being hired (β = 4.37, p < .001). The odds of hiring a woman were 79.14 times greater if there were at least two women in the finalist pool (controlling for the number of other men and women finalists). There was also a significant effect for race (β = 5.27, p < .001). The odds of hiring a minority were 193.72 times greater if there were at least two minority candidates in the finalist pool (controlling for the number of other minority and white finalists). This effect held no matter the size of the pool (six finalists, eight finalists, etc.), and these analyses excluded all cases in which there were no women or minority applicants.

The graph below depicts the likelihood of hiring a woman with one, two, or three women in a pool of four job finalists. The results show a statistical deviation in expected probability (χ^2 = 7.40, p < .05). When there is only one woman, she does not stand a chance of being hired, but that changes dramatically when there is more than one. Each added woman in the pool does not increase the probability of hiring a woman, however — the difference between having one and two women seems to be what matters. There were similar results for race when we looked at a pool of four candidates (χ^2 = 14.00, p < .001).

The Relationship Between Finalist Pools and Actual Hiring Decisions

According to one study of 598 finalists for university teaching positions.

COMPOSITION OF FINALIST POOLS

LIKELIHOOD OF HIRING A WOMAN

WOMAN WOMAN WOMAN MAN ▶ **67%**

WOMAN WOMAN MAN MAN ▶ **50%**

WOMAN MAN MAN MAN ▶ **0%**

Basically, our results suggest that we can use bias in favor of the status quo to actually change the status quo. When there was only one woman or minority candidate in a pool of four finalists, their odds of being hired were statistically zero. But when we created a new status quo among the finalist candidates by adding just one more woman or minority candidate, the decision makers actually considered hiring a woman or minority candidate.

Why does being the only woman in a pool of finalists matter? For one thing, it highlights how different she is from the norm. And deviating from the norm can be risky for decision makers, as people tend to ostracize people who are different from the group. For women and minorities, having your differences made salient can also lead to inferences of incompetence.

Managers need to know that working to get one woman or minority considered for a position might be futile, because the odds are likely slim if they are the lone woman or nonwhite candidate. But if managers can change the status quo of the finalist pool by including two women, then the women have a fighting chance.

To be sure, our findings would need to be replicated in order to see how these effects play out in other contexts, and we should note that the study results have not appeared in a peer-reviewed

journal. However, we think these results are a great foundation for future research to build on. As a society, we have spent a lot of time talking about our diversity problem but have been slow to provide solutions. We believe this "get two in the pool effect" represents an important first step for overcoming unconscious biases and ushering in the racial and gender balance that we want in organizations.

Some might argue that adding a second minority or woman candidate to the finalist pool is a type of affirmative action or reverse discrimination against white men. This argument implies that there are fewer qualified women or nonwhite candidates than white male candidates. However, nonwhite employees and women outnumber white men in the U.S. workplace by a margin greater than two to one, and women are now more likely than men to graduate from college. Plus, it has been found that when employers use a blind audition to hire their programmers and engineers, women tend to be hired at a higher rate than men. The same is true in blind auditions for professional orchestras.

And the evidence simply does not support concerns surrounding the myth of reverse racism. It is difficult to find studies that show subtle preferences for women over men, and for minorities over whites. But the data does support one idea: When it is apparent that an individual is female or nonwhite, they are rated worse than when their sex or race is obscured.

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