

Ryan, M. K. (2022). To advance equality for women, use the evidence. *Nature* **604**, 403 (2022). doi: <https://doi.org/10.1038/d41586-022-01045-y>

I'm an academic who studies women in leadership roles and also heads an institute devoted to this topic at the Australian National University in Canberra. So I spend a lot of time thinking about what it takes to achieve gender equity in workplaces. By now, the vast majority of universities, research institutions and funding bodies have some sort of initiative aimed at gender parity. In 2005, the Athena Swan accreditation programme to promote gender equity at universities was launched in the United Kingdom and later adopted in North America, Australia and elsewhere. In 2011, China's ministry of science and technology issued a policy to help advance women in science and technology careers. In 2020, ambitious programmes began in the European Research Area and India.

Yet the most recent European Commission data show that women make up about half of doctoral graduates and only about one-quarter of senior academics and people in decision-making positions. In North America and Western Europe, only 33% of those employed in research and development are women; this drops to 24% in east Asia and the Pacific area, and to 18.5% in south and west Asia. Why this inertia? In my view, progress could be faster if institutions that trumpet efforts to promote equity applied established research in their initiatives.

Here are three common missteps.

First, an overemphasis on quantity. Yes, metrics such as the proportion of female professors and grant winners are important. But simple tallies erase disparities in quality. Any tracking must capture the experiences and influence that awards and positions bestow. Do those given to women bring the same visibility, recognition and resources as those given to men? The proportion of women achieving authorships and professorships matters less if these are concentrated in sub-optimal, low-influence or temporary roles.

Consider the 'glass-cliff' phenomenon. Fifteen years ago, my colleagues and I reported that women are more likely than men to be given leadership roles that are risky, precarious and even doomed to failure ([M. K. Ryan and S. A. Haslam \*Acad. Mgmt Rev.\* 32, 549–572; 2007](#)). Archival, experimental and qualitative research provided evidence for this 'poisoned chalice', which holds from firms in the FTSE

100, the main UK share index, to chief librarians and heads of state. As institutions try to navigate a pandemic, as well as rising costs and increasing societal divisions, such considerations matter more than ever. The crucial question is, are women getting the same quality of promotions as men?

A second mistake is emphasizing training for individuals, instead of overhauling systems and cultures. Again and again, I see women offered extra coaching to encourage them to take career risks, overcome 'impostor syndrome' and boost their skills in leadership and grant writing. But the evidence is clear: it is not women who need fixing, but entrenched systems of inequality.

Our research demonstrates that women's confidence and ambition are not inherently lower than men's, but are eroded by experiences in unequal workplace cultures — not having role models, and being treated differently from male counterparts. Similarly, women are not inherently risk-averse; they operate within systems that reward men for risk-taking, but punish women for the same behaviour. Individually targeted interventions, at best, provide a short-term fix for a few already privileged women, and, at worst, reinforce the assumptions of success and leadership that underlie systemic gender inequality. Indeed, training programmes for women can have perverse effects by becoming yet another unrewarding demand on their time.

And the third mistake undermines all sorts of efforts: over-optimism. Yes, improvements are real and should be celebrated. Still, surveys of representation in boardrooms, films and various professions show that men and women consistently overestimate women's representation.

In [one of our studies](#), we found that veterinary surgeons who felt that sexism is no longer a problem in their profession were the most likely to pay a female member of staff less than a male member and to give her fewer career opportunities. [In another study](#), men who overestimated the proportion of women in the medical profession were the least likely to support gender-equality initiatives. What's needed are interventions that genuinely address gender inequality in all its complexity and nuance.

There are good examples of concrete things that can be done: (1) systematic changes that improve the visibility and voice of women, such as prohibiting 'manels' (all-male panels), or requiring conference organizers to report proportions of women who are keynote speakers and panel members; (2) making senior leaders

accountable for progress towards gender equality, as the Australian Champions for Change programme does, in which members track factors such as pay, promotions and employment experiences; and (3) making research funding contingent on having a transparent and appropriately resourced gender-equality plan in place, as happens in the European Union's research and innovation strategy. Downgrading such requirements, as Britain announced in 2020 that it would do, exemplifies the sorts of backsliding on women's progress that is happening all too often now times are tough.

Good intentions are not enough to bring about change; nor are simple tallies, training programmes or unwarranted rosy views. Change requires sustained investment, appropriate incentives and evidence-backed interventions.