



ILLUSTRATION BY ANTONIO RODRÍGUEZ

WORKPLACE DIVERSITY: GOOD INTENTIONS ARE NOT ENOUGH

Researchers' experiences continue to highlight the gap between inclusive ideals and the reality on campus and in industry. **By Chris Woolston**

Social protest movements such as #MeToo and #BlackInSTEM have shone a light on the need for greater diversity, equity and inclusion at scientific institutions worldwide. And *Nature's* 2021 salary and job satisfaction survey, which drew responses from more than 3,200 working scientists around the world, suggests that there's much more work to do.

Just 40% of respondents felt that their employers were doing enough to promote diversity, down from 51% in 2018, when the

survey last took place. A substantial minority of respondents said they had witnessed colleagues being subjected to discriminatory behaviour, and another sizeable minority said they had experienced such treatment themselves. The self-selected survey (see 'Nature's salary and job survey') included a series of questions that explore attitudes and experiences relating to diversity. Follow-up interviews with selected respondents and free-text comments have helped to fill out the picture.

The respondents reflect the relative

homogeneity in science in some parts of the world. Eighty-two per cent of respondents in the United Kingdom, 81% in Germany and 74% in the United States identified themselves as white.

The free-text comment section exposed conflicting viewpoints on an often polarizing topic. A late-career Asian woman working in geology and environmental sciences at a European university wrote: "Academics like to think of their community as free spirited and innovative, but there is massive systemic

discrimination and power hierarchies that ruin people and careers ... This is suffocating science and discouraging early-career academics.”

But a white male professor of social sciences in the United States offered a different perspective: “When I say I have experienced and seen gender discrimination, it has always been against males. For example, we were directly told during a job search that we could not hire a white male, even though our relative representation of women and minorities is higher than average for our field. White males have long felt there is little likelihood of approval for sabbaticals or positive promotion decisions from the dean and upper administration.”

Some people think that the renewed emphasis on diversity and inclusion in science is overblown and unnecessary, says Zenobia Lewis, an evolutionary ecologist at the University of Liverpool, UK. She’s heard men say that gender-equality initiatives in science, such as the Athena Swan Charter, are no longer necessary because women have made gains. The charter, launched in the United Kingdom in 2005, was introduced in Ireland ten years later, with similar schemes now running in the United States, Canada and Australia. “My response is that it’s about equality for all, not just women,” says Lewis, who identifies as part Persian. “I’m a brown person in ecology, and there aren’t many of us.”

Discrimination

The survey suggests that discrimination remains common in science (see ‘Room for improvement’). Overall, 32% of respondents said they had witnessed discrimination against or harassment of colleagues in their current job. That’s up slightly from the 28%

who reported observing such behaviour in 2018. Twenty-seven per cent of respondents said they had personally experienced discrimination, bullying or harassment in their present position. Again, that’s up compared with 2018, when 21% said they had such first-hand experiences.

Unsurprisingly, some groups are more likely than others to feel targeted. Women reported experiencing mistreatment more often than men: 34% to 21%. Workers in academia were twice as likely as those in industry to report such behaviour: 30% to 15%. A woman who is now a staff scientist at a US biomedical com-

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pany wrote of her experience in academia: “I was bullied and harassed repeatedly at my previous job, and literally nothing there has changed or will ever change. My current job is much nicer, but I will never ever work in an academic setting again. A postdoc in the lab kept touching my hair and the university did absolutely nothing to protect me or stop it.”

Overall, 17% of the women – and 1% of the men – in the survey reported being the target of gender discrimination. Sexism remains rampant, says survey respondent Fiona Simpson, a cancer researcher at the University of Queensland in Brisbane, Australia. “Everybody talks about equality in science, but it doesn’t actually happen,” she says. “There are so many articles, so much discussion, but over my 30 years it’s gotten worse.”

Simpson says that sexism was more outward and obvious in her early career, but in her view, the more subtle discrimination of today can be just as damaging. “I’ve watched female academics get upset over the way they’re being treated, or the instability of their roles. When they’re emotional, they’re written off as unstable or hormonal. It’s changed from an overt thing to a type of gaslighting,” she says, referring to manipulative behaviour that makes someone question their own sanity.

Ethnicity can be an important factor too, especially in countries where the scientific workforce is predominantly white. In the United Kingdom, for example, 27 of the 54 respondents who did not identify as white said they had personally experienced discrimination, bullying or harassment on the job. That’s nearly twice the rate reported by 357 white respondents in the United Kingdom. In the United States, the 221 respondents who did not identify as white were also more likely than white colleagues to report such experiences: 33% to 25%.

Among those reporting personal experience

of mistreatment, the most commonly cited instances fell under the categories of power imbalances (66%) and bullying (51%). The most commonly reported forms of discrimination were related to gender (34%), age (21%) and race (15%).

Age discrimination was a recurring complaint in the comment section. A government employee in South Africa wrote that “job advancement for older people is also now a huge challenge due to pressure to advance young people”. A self-employed US scientist in the field of astronomy and planetary science wrote: “When I lost my previous job as a result of funding cuts, the great majority of people laid off were older than 50, even though that age group did not comprise a majority of employees. Also, I know three people in that age range who were repeatedly rejected for positions, for which they were extremely well qualified, in favour of younger hires. One of them, who has two PhDs, has given up looking and basically retired early.”

Less than 1% of respondents reported experiencing discrimination against people from sexual and gender minorities; that rate is essentially unchanged compared with the 2018 survey. A South African researcher in ecology and evolution wrote: “As a lesbian, I think my job prospects are better than they would have been just ten years ago because of cultural shifts and also legal changes in South Africa regarding employment equity.”

Only 7% of respondents reported a disability, a reflection of a widely acknowledged lack of representation of this community in scientific fields. Disabled people face particular career challenges in science, says Michelle Moram, a London-based materials scientist who is currently working remotely for Victoria University of Wellington, New Zealand. In 2010, Moram was diagnosed with a serious autoimmune disorder which would have qualified her for disability protection under the law. Still, she kept the illness hidden for years for fear of jeopardizing her chances of promotion.

A truly diverse research system would employ people from a range of socioeconomic backgrounds, but Lewis says people from poorer families remain at a distinct disadvantage. She co-wrote a paper exploring how socioeconomic background as well ethnicity can affect early-career progression in the fields of ecology and evolution (K. M. Wanelik *et al. Ecol. Evol.* **10**, 6870–6880; 2020). One finding: early-career researchers from less privileged backgrounds tended to have positions with a teaching component rather than ones solely devoted to research; the latter are often more prestigious for career progression.

Moram, the first member of her family to attend university, says she struggled to find her place in science after moving from University College Cork, Ireland, to take up a PhD at the University of Cambridge, UK, in 2003.

NATURE'S SALARY AND JOB SURVEY

A series of four articles gives a snapshot of the state of science at a pivotal time.

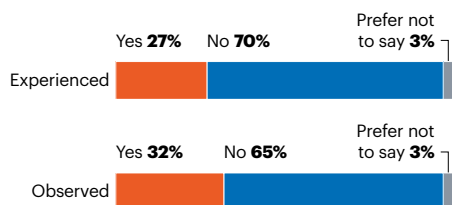
This article is the last of four linked to Nature’s global salary and job satisfaction survey. Previous articles looked at the impact of the COVID-19 pandemic on scientists’ careers; at salary and prospects; and at job satisfaction.

The survey runs every three years and was last conducted in 2018. It was created together with Shift Learning, a market-research company based in London, and advertised on nature.com, in Springer Nature digital products and through e-mail campaigns. It was offered in English, Mandarin Chinese, Spanish, French and Portuguese. The full survey data sets are available at go.nature.com/3eqcpk9.

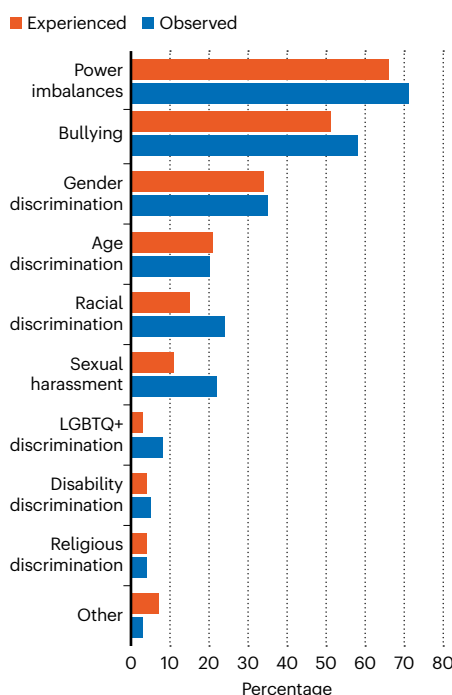
ROOM FOR IMPROVEMENT

Nature's 2021 salary and job satisfaction survey finds that reports of discrimination remain common, despite institutions renewing their focus on diversity and inclusion. Less than half of respondents feel their institution is doing enough to promote a diverse workplace.

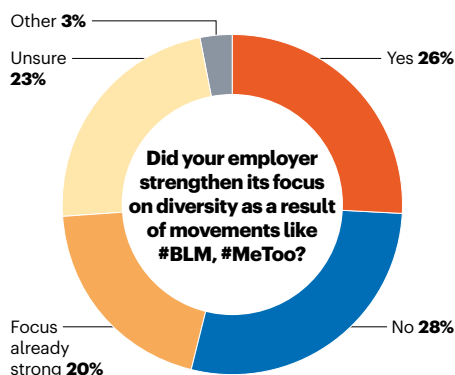
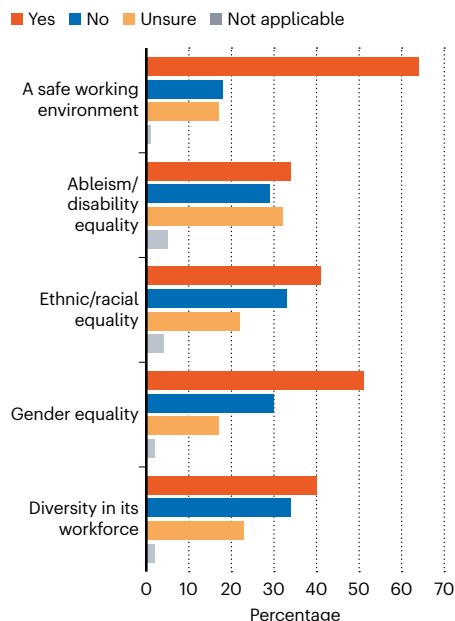
Have you experienced or observed bullying, discrimination or harassment in your current job?



If you answered 'yes', which of the following have you experienced/observed?



Do you believe that your workplace is doing enough to promote...



"My family is what they call 'underclass' in the United Kingdom. Part of my journey was learning to pass as a middle-class person. I had to change my accent, learn different vocabulary, wear different clothes – just fake it to be a different person."

Moram says her background helped motivate her to study especially hard. "I had no idea how anything in the system worked at all. I just decided to work hard at whatever I could," she says. "It was important for me to get out of home. I was terrified of having to go back home and work in a shop."

Falling short

A slim majority of survey respondents (51%) felt that their institutions were doing enough to promote gender equity, down from 58% in 2018. Forty-one per cent thought that their place of employment was doing enough to promote ethnic or racial equality, down from 52% in 2018.

It's not surprising that the number of people

who are underwhelmed by their employer's approach to diversity is growing, says Maria Miriti, a plant ecologist at Ohio State University in Columbus. Miriti wrote a paper (M. N. Miriti *BioScience* 70, 237–242; 2020) exploring strategies to boost the recruitment and retention of people from minority groups in science, technology, engineering and mathematics (STEM).

"People's awareness of the breadth of inequality has become more focused in the pandemic," she says. "There's pressure to respond. But really getting into the trenches to change the system to promote greater equality and inclusion is hard." Miriti says that fundamental changes are needed to improve equity in STEM, starting with rethinking how scientists are evaluated and promoted. "We value 'grantsmanship' [the ability to secure grants], publications and citations. All three of those factors can be affected by racial and gender discrimination. [Scientists] act like it's a level playing field. It's hard for us to accept that recognition can be tied to gender and race."

Just over one-quarter of respondents felt that their institutions had increased their focus on diversity in response to social justice movements such as #BlackLivesMatter and #MeToo. The former gained momentum following the murder, in May 2020, of George Floyd, an unarmed Black man, by a police officer in Minneapolis, Minnesota. #MeToo protests accelerated in 2017 in response to sexual-abuse allegations relating to film producer Harvey Weinstein.

Lewis is underwhelmed by institutions' responses. "There was suddenly this wave of organizations and institutions putting out statements of solidarity," she says. "It's about a year on, and I'm still waiting to see how much impact it's actually going to have, or whether it's just paying lip service."

Many universities and companies have established diversity committees to improve the recruitment and retention of members of under-represented groups, but their reach remains limited. Just over 12% of respondents said that they had participated in an institution-wide diversity committee, and 21% weren't sure if such committees even existed at their place of work. Women were more likely than men to participate in such committees: 14% to 9%.

Miriti thinks that diversity committees can be important drivers for change, especially in academia. "Universities should absolutely have diversity committees," she says. "There's too much change that needs to happen if we're serious about increasing broad participation in our scientific disciplines." However, she warns that involvement in such committees isn't always highly valued when it comes to promotion and tenure. Still, she says, the investment in time and energy can pay off by bringing new people to the table. "Women and minorities should be motivated to do this work, no matter what."

Miriti adds that more people from majority groups – for example, white men in countries such as the United States and the United Kingdom – should participate in diversity committees, but only if they're willing to invest the time to truly address the issues. "It's important to avoid what some refer to as 'performative allyship,'" she says.

Some researchers have given up fighting bias. A biomedical postdoctoral researcher of Iranian descent in Canada wrote: "I've actually identified some perks to being discriminated against. For one, I don't have to deal with the responsibilities that come with a more senior title. As long as I stay productive, I will likely have a job and have more time for research. I can walk away with the knowledge that I earned every penny and at times gave more than I took. There is comfort in that."

Chris Woolston is a freelance writer in Billings, Montana.