



Harassment should count as scientific misconduct

Scientific integrity needs to apply to how researchers treat people, not just to how they handle data, says Erika Marín-Spiotta.

In the past year, allegations of egregious sexual harassment and even assault have emerged across the spectrum of science. *Nature* has already run several stories on the topic just this quarter.

When I talk to senior scientists, many view harassment as an injustice that happens somewhere else, not in their field or at their institution. But data suggest that the problem is ubiquitous. In separate surveys of tens of thousands of university students across Australia, the United Kingdom and the United States, upwards of 40% of respondents say that they have experienced sexual harassment. A survey last year by the US National Postdoctoral Association found that 28% of respondents reported experiencing at least one instance of harassment while they were trainees; offenders were predominantly reported as being faculty or staff members (go.nature.com/2ju83ox). Neither are faculty members safe from mistreatment by colleagues.

Research culture and policies are quick to denounce plagiarism, data fabrication and mismanagement of funds, yet we have too long ignored the mistreatment of people.

Science is a social endeavour; ignoring harassment perpetuates a culture in which people who experience or witness hostile behaviours are afraid to speak up, cannot do their best work, or leave science altogether. Last September, the American Geophysical Union (AGU) defined harassment, bullying and discrimination as scientific misconduct, and outlined consequences. The greater scientific community should do the same.

My colleagues and I are developing a programme to reduce harassment in the geosciences — one of the least diverse scientific disciplines — supported by the US National Science Foundation (NSF). The project, ADVANCEGeo, equips bystanders to respond to and prevent harassment in the field, lab, office and at conferences, and advocates for inclusion of the subject in courses on ethical research conduct.

Our efforts are part of a growing movement. Just this year, both the US NSF and the UK Wellcome Trust put forward policies targeting harassment by grant recipients. Many scientific societies have codes of conduct that specifically prohibit harassment at meetings, and some, such as the American Astronomical Society and the Geological Society of America, address the professional treatment of others in their general codes of ethics.

Harassment, bullying and discrimination damage science at the individual, community, institutional and societal levels. The behaviours cause health problems, fear, mistrust, depression and trauma. That results in decreased productivity and the exclusion of people who might have led highly satisfying scientific careers and made important contributions.

Less-represented populations are disproportionately affected. A 2017 study in astronomy and planetary science found that women of colour were more likely than other groups to report skipping professional

events because they felt unsafe (K. B. H. Clancy *et al.* *J. Geophys. Res. Planets* **122**, 1610–1623; 2017). In a 2016 survey of physicists identifying as lesbian, gay, bisexual, transgender or queer (LGBTQ), one-third of respondents reported that they had considered leaving their institutions; this group was also more likely to have experienced or witnessed hostile behaviours (see go.nature.com/2wczfih). Other groups are also likely to be vulnerable, but data are sparse.

Why aren't the laws already in place against harassment sufficient? People cannot count on their enforcement, especially given that imbalances of power in academia favour the perpetrators. Fear of retaliation also keeps people from reporting to employers in the first place.

Defining harassment as misconduct provides more ways of deterring it. For example, the AGU has developed processes for investigating allegations, including for addressing concerns that might not rise to the level of a formal complaint. Sanctions might include being barred from meetings or publishing in society journals, or the denial of an award. To be clear, when talking about harassment, I am not referring to socially awkward interactions but to well-defined and documented behaviours — such as unwanted groping and requests for sexual favours — that create a hostile work environment.

A better sense of how and how often harassment happens in science would help to convince the community of its pervasiveness, and counter mistaken beliefs that it is not common in the workplace. We also need more data on the experiences of people from under-represented groups, and on how hostile climates affect efforts to maintain diversity.

We must craft effective interventions. Courses in responsible research conduct, currently a requirement for trainees, should cover how to prevent and respond to harassment and bullying. Institutions should offer in-person training, including discipline-specific scenarios that people can relate to. Departments should communicate their workplace values publicly. This is starting to happen. For example, the geosciences department at Middle Tennessee State University in Murfreesboro has crafted a code of conduct that describes principles and practices for professional behaviour, adapted from the AGU's. Scientific societies have also made plans to offer bystander-intervention training at their conferences.

Improved ethics training across career levels should draw from the social and behavioural sciences to lay bare the power dynamics and behaviours that allow harassment, bullying, racism and sexism to persist in the sciences. The integrity of the scientific enterprise demands that we stop tolerating such behaviours. ■

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