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Ground truths

Nature survey shows most scientists are happy at work, but that a significant number still face discrimination — an unacceptable situation.

here is a tendency when drawing conclusions from survey data to look for specific landmarks that instil confidence in the results. Some are defined by cold mathematics: 71% can be presented as "most people" without much controversy. But many others are subject to interpretation. Do 14 of 16 people constitute "almost everybody", or does that take 15?

Perhaps most important is how to handle the lower reaches. Can a single voice from 100 be written off as an outlier? What about two or three? How big does a minority have to become before it gets a bullet point in a report? The data — the numbers that surveys produce — usually tell the full story to those who are willing to look, but most (that word again) of us rely on a more human narrative to make sense of the results. And here, care is needed.

This week, *Nature* publishes the results of our biennial survey of the income and career satisfaction of scientists across the world. And one narrative that emerges is heartening. Most — 68% — said they were satisfied or very satisfied with their careers. And just over half — 51% — had received a pay rise in the past year.

The majority may rule, but it hardly tells the whole story. Nobody should take any comfort, for example, from the fact that most scientists (72%) told the survey they have not witnessed any instances of harassment or discrimination. The corollary of that figure is clear: 28% have. Nobody can be satisfied with that. The problem of harassment has received some much-needed attention in recent years, but, as these figures show, there remains much work to be done, and attitudes and behaviours still need to change.

The survey has limitations. The results are based on the anonymous responses of 4,334 (self-selected) people who have pursued science beyond an undergraduate degree. Three-quarters of them are based in North America or Europe. Still, many of the figures do mirror those of other surveys — high levels of job satisfaction among scientists working across academia and industry, for instance. Researchers are generally a content and motivated bunch. But look in the margins and there remains much room for improvement.

Poor mental health continues to be a huge concern, with more than one-third (36%) of respondents saying they needed or were receiving help for depression or anxiety. Attitudes from colleagues were not always supportive. "I had a mental health crisis and instead of helping I was suspended from work and threatened with potential dismissal," wrote one. Many universities are aware of this issue and are working to improve care and support. But not all are succeeding.

The survey reveals other institutional failings, too. Sadly, only half of university scientists said their institution was doing enough to promote diversity. And 21% said they had personally experienced harassment or discrimination. This was most commonly based on gender, but the list also included discrimination based on race, religion, sexuality and age. One respondent wrote: "Co-workers have scheduled important meetings on religious holidays and when I object or do not attend, I'm viewed as someone who doesn't take their job

seriously." Another said: "A liberal faculty will shun and even harass conservative Christians, mocking them openly."

Some 23% of people who replied to the survey reported discrimination based on age. One respondent complained of "Pressure to retire as I approach age 60. Not explicit or stated, but moral pressure and looks." And about the same number (22%) said they had suffered racial bias.

This is unacceptable. Science must do better on these issues, as individuals and institutions. The survey holds up a mirror to the research community, and if the community does not like what it sees

— and it should not — then all of us must do more to change the picture.

"The survey holds up a mirror to the research community."

Science should be a rewarding career. Most scientists say they do enjoy their work and — at least according to this survey — most get through the day without being made to feel that they don't belong, or that

they have to do more to prove themselves because of their gender or geographical origin. But "most scientists" here is not enough. Individuals and groups who do experience such abhorrent discrimination must know they are not an overlooked interest. It is everybody's responsibility to condemn such behaviour when they see it. And, where they feel comfortable to do so, everybody should speak out when injustice occurs.

Capital thinking

Political attention to human capital must be backed up with solid research.

he surprise 2014 global bestseller *Capital in the Twenty-First Century*, written by French economist Thomas Picketty, highlighted the role of wealth — rather than earnings — in the way that money makes the world go around. But Picketty chose to play down an important part of the system: human capital, the economic value derived from the knowledge, skills and abilities that enable people to perform paid work.

How to include human capital in analyses is as much a political as an economic problem: critics argue that the concept creates a false equivalence between having skills and having money, which plays down financial inequality. Supporters insist that it's a genuine measure of the potential of individuals, populations and nations, and so a way to indicate their intrinsic value.

The World Bank has now reignited the debate. Earlier this month, it released its much-anticipated Human Capital Index (see go.nature.