

Things seem to be getting worse.

Respondents to our latest survey of 6,300 graduate students from around the world, published this week (see page 403), revealed that 71% are generally satisfied with their experience of research, but that some 36% had sought help for anxiety or depression related to their PhD.

These findings echo those of a survey of 50,000 graduate students in the United Kingdom also released this week. Respondents to this survey, carried out by Advance HE, a higher-education management-training organization based in York, UK, were similarly positive about their research experiences, but 86% report marked levels of anxiety – a much higher percentage than in the general population. Similar data helped to prompt the first global conference dedicated to the mental health and well-being of early-career researchers in May. Tellingly, the event sold out.

How can graduate students be both broadly satisfied, but also – and increasingly – unwell? One clue can be found elsewhere in our survey. One-fifth of respondents reported being bullied; and one-fifth also reported experiencing harassment or discrimination.

Could universities be taking more effective action? Undoubtedly. Are they? Not enough. Of the respondents who reported concerns, one-quarter said that their institution had provided support, but one-third said that they had had to seek help elsewhere.

There's another reason for otherwise satisfied students to be stressed to the point of ill health. Increasingly, in many countries, career success is gauged by a spectrum of measurements that include publications, citations, funding and impact. Early-career jobs tend to be precarious. To progress, a researcher needs to be hitting the right notes in regard to the measures listed above in addition to learning the nuts and bolts of their research topics.

Most students embark on a PhD as the foundation of an academic career. They choose such careers partly because of the freedom and autonomy to discover and invent. But problems can arise when autonomy in such matters is reduced or removed – which is what happens when targets for funding, impact and publications become part of universities' formal monitoring and evaluation systems. Moreover, when a student's supervisor also gets to judge their success or failure, it's no surprise that many feel unable to open up about vulnerabilities or mental-health concerns.

The solutions are not solely in institutions doing more to provide on-campus mental-health support – as essential as such actions are. They also lie in recognizing that mental ill-health is a consequence of an excessive focus on measuring performance – something that funders, institutions, journals and publishers must all take responsibility for.

Much has been written about how to overhaul the system and find a better way to define success in research, including promoting the many non-academic careers that are open to researchers. But on the ground, the truth is that the system is making young people ill and they need our help. The research community needs to be protecting and empowering the next generation of researchers. Without systemic change to research cultures, we will otherwise drive them away.



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South Africa's rooibos restitution

Indigenous groups must be compensated for their knowledge and made equals in research.

Nine years. That's how long it took representatives of South Africa's rooibos tea industry to agree to compensate the Indigenous San and Khoi communities for their contribution to the development of the 500-million-rand (US\$33.6-million) industry.

It is a landmark agreement, but it should not have taken so long to complete. One important lesson researchers should take from it is that there are more harmonious ways to collaborate with Indigenous communities.

San community representatives first wrote to South Africa's government in 2010 arguing that, under the law, they are entitled to a share in the tea industry's profits because it had used their traditional knowledge.

The communities felt they had a good case: the rooibos plant (*Aspalathus linearis*) is endemic to South Africa's Cederberg region, which was inhabited by San and Khoi communities long before settlers from Europe forcibly took their lands. The government commissioned a review of the historical and ethnobotanical literature, which concluded that there is a strong probability that rooibos tea had Indigenous origins (see go.nature.com/2rqjei3).

The industry argued that there is little published scientific evidence that explicitly states that the ancestors of today's San and Khoi communities were the first to brew rooibos teas. It commissioned its own study (see go.nature.com/2q0poyk), which supported its side of the argument.

Two studies reviewing essentially the same historical literature and coming to different conclusions is not unusual. But however the research is interpreted, there's a moral case to compensate long-mistreated groups. The government advised the tea industry that it needs to pay the communities, which will receive 1.5% of the 'farm gate price' – that paid by agribusinesses for unprocessed rooibos.

What Indigenous communities are most concerned about is the fact that research and industry have the ability to access traditional knowledge without sharing the credit or the potential benefits with those who generated it. That was the motivation, two years ago, for the San communities' production of a code of research ethics (see go.nature.com/32v0xom). The code urges scientists to follow through on promises to share publication credit and, where possible, to build capacity for Indigenous groups to do their own studies.

The ethics code and the rooibos agreement are small steps towards a bigger demand: that Indigenous people, especially those whose ancestors lost lives, land and livelihoods during more than a century of exploitation, are treated fairly and as equals by research and industry.