

Science & Society

A kinder approach to science

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To be kind is to protect and promote the well-being of others. We borrow this definition from the philosophical literature to formulate a simple and powerful principle to make scientific communities and institutions healthier, fairer, and more inclusive.

Modern science relies on collaborations that extend beyond formal cooperation within and between research groups. The fate of research projects and the future of young researchers are directly impacted by interpersonal relationships within their institutions and by the 'collaboration' of a wider community. From feedback at departmental meetings and conferences to the quality of the peer review process and follow-up studies, we are given opportunities to impact our colleagues either negatively or positively.

Despite their importance, relationships within these collaboration networks are frequently combative, disrespectful, and counterproductive [1,2]. The all-too-frequent stories of abusive behaviour in research institutions [3] and the high prevalence of mental health issues among early career scientists, heightened by the coronavirus disease 2019 (COVID-19) pandemic [4,5], are clear illustrations of these issues. High profile cases of bullying in scientific institutions have been reported in the newsⁱ, which in times of growing scientific scepticism, damage the credibility of scientific findings and provide an excuse to ignore them as a guiding principle for public policies. We cannot expect society to respect and trust science if

scientists do not respect each other. The issue of trust among scientists and between scientists and societies has been extensively discussed in the philosophical literature. For a deeper analysis, see [6,7].

In an effort to tackle this issue, institutions have made significant efforts to define rules, codes of conduct, and human resources (HR) processes^{ii,iii}. While these actions should be praised for representing steps in the right direction, they run the risk of not getting the proper attention among the pile of other rules, regulations, and processes one has to deal with within an institution. In addition, these rules often focus on what we should not do and they do not offer us any general principle that would guide us in a more positive fashion in all of our interactions in the workplace. What would such a general principle look like? We would like to make a simple suggestion: act with kindness. We believe that the use of this single overarching principle offers a powerful way to establish a healthy culture in communities, with the ultimate goal of making science a better place for all of us.

To their credit, scientists have already enriched scientific culture with a focus on kindness, such as in New Zealand's 'kindness in science' initiative^{iv} [8]. However, people understand kindness in a variety of ways and some may worry that there is a fundamental tension between the value of kindness and that of scientific rigour. As scientists, we need to rely on well-defined terms and concepts to guide our professional lives. For this reason, here we would like to provide a definition of kindness and some guidance concerning how it should shape our research cultures. To be kind, we propose, and drawing from work on the topic by philosophers [9,10], is to act in ways that protect and promote the well-being of others. Well-being encompasses professional, psychological, epistemic, and physical health. What does

this mean in practice? When we are fulfilling the demands of our professional roles, we should be guided by the goals of protecting and promoting the well-being of those we interact with.

For example, when serving as an academic advisor, we should ensure that the content and manner of feedback will promote and protect an advisee's epistemic, professional, and psychological well-being. Has our feedback helped an advisee to grow intellectually? Or has it been so unclear that they remain stuck academically? Or has it been so harshly delivered that they feel demeaned or demoralized, feelings which, in turn negatively impact their ability to pursue their academic goals?

Similarly, in serving as head of an academic programme or research institute, one should ask whether the research culture marginalizes some members of the group, negatively impacting their well-being, and whether prevailing institutional norms and rules protect and promote well-being in all of its forms for all members of the community^v [1,11].

Although what kindness will require of us differs from role to role, and from one institutional context to another, it provides us with important standards by reference to which we can evaluate our own professional performance. We propose that each of us comes to see our professional contributions as evaluable in ways that outstrip the narrow demands of scientific excellence; we must ask whether we promote and protect the well-being of others in our professional lives.

It may be odd to think of our institutional settings as spheres in which kindness is required of us. But kindness, as it is understood here, does not demand highly personal relationships, nor does it require specific cultural or institutional settings. The goal of promoting and protecting well-being is a highly general and inclusive

one. An organisational culture based on kindness requires acting in accordance with the principle of protecting and promoting others' well-being at all levels and in any situation, such as private lab conversations, seminars, thesis committees, and also during peer review. Kindness should be insensitive to hierarchy and encouraged as a top-down, side-to-side, and bottom-up culture.

And being kind is not in direct conflict with the goal of pursuing the truth in science. Rather, a culture of kindness is one in which, we suspect, intellectual creativity is fostered and we are more effective in reaching our scientific goals. Kindness reduces the risk of epistemic injustices [12], where potentially valuable ideas are dismissed because they come from those who are more junior, or from a social class that is different from that of their audience. A healthier work environment where bullying and harassment are uncommon fosters creativity by enhancing employees' motivation and self-worth [13]. Moreover, organisations with a strong culture of fairness tend to encourage peers to support and protect each other [14], ultimately resulting in a virtuous cycle where community members feel empowered. Therefore, we believe that kindness can boost knowledge creation and maximise resources by helping communities to take full advantage of their most important asset, their people. Far from there being a conflict between the goal of kindness and the goals of science, kindness and science make a mutually reinforcing partnership.

It is true that creating a culture of kindness will require making efforts such as encouraging and engaging in trainings that are devised to promote peaceful communication, co-operation, and conflict resolution (e.g., implicit bias training). These are

not just tools of political correctness, nor mere institutional requirements, but ways to enhance our capacity to be kind. In addition, we must support the establishment, or strengthening, of institutional actions and offices aimed at the well-being of our communities such as HR, PhD and postdoc associations, psychological support services, and well-being committees to name a few. Above all, we should take every opportunity to be explicit about the importance and value of kindness and to use this concept when rethinking and revising existing training and policies. In applying the concept of kindness in institutional discussions and in lectures, one of us has been pleasantly surprised by how eager people are to embrace this idea. We believe this receptivity lies in the power and disarming simplicity of the principle of kindness in a time where the whole world is rethinking their relationship with work and well-being^{vi} [15].

Our wish is that kindness becomes a habit. In fact, it may become a very enjoyable habit that gets easier and easier, particularly when it is echoed in the community as a whole.

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Declaration of interests

The authors declare no competing interests.

Resources

ⁱwww.theguardian.com/higher-education-network/2018/jan/26/we-need-a-bigger-conversation-about-bullying-in-academia

ⁱⁱwww.navexglobal.com/blog/article/why-colleges-universities-should-update-codes-of-conduct/

ⁱⁱⁱwww.presence.io/blog/why-institutions-are-using-the-well-being-model-to-empower-and-support-students/

^{iv}www.kindnessinscience.org/

^v<https://blogs.scientificamerican.com/voices/diversity-in-stem-what-it-is-and-why-it-matters/>

^{vi}www.bbc.com/worklife/article/20210629-the-great-resignation-how-employers-drove-workers-to-quit

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References

- Osier, F.H.A. and Murungi, L.M. (2021) Smashing stereotypes: mutual respect, key to embracing diversity. *Trends Parasitol.* 37, 265–267
- Casadevall, A. and Fang, F.C. (2012) Winner takes all. *Sci. Am.* 307, 13
- Else, H. (2018) Does science have a bullying problem? *Nature* 563, 616–618
- Duffy, M.A. et al. (2021) Supporting mental health and productivity within labs. *Neuron* 109, 3206–3210
- Satinsky, E.N. et al. (2021) Systematic review and meta-analysis of depression, anxiety, and suicidal ideation among Ph.D. students. *Sci. Reports* 11, 14370
- Frost-Arnold, K. (2013) Moral trust & scientific collaboration. *Stud. Hist. Philos. Sci. A* 44, 301–310
- Rolin, K. (2020) Trust in science. In *The Routledge Handbook of Trust and Philosophy* (Simon, J., ed.), pp. 354–366, Routledge
- Powell, K. (2018) Should we steer clear of the winner-takes-all approach? *Nature* 553, 367–369
- Cullity, G. (1994) International aid and the scope of kindness. *Ethics* 105, 99–127
- Wilson, A.T. (2016) Modesty as kindness. *Ratio* 29, 73–88
- Forrester, N. (2020) Diversity in science: next steps for research group leaders. *Nature* 585, S65–S67
- Fricker, M. (2007) *Epistemic Injustice*, Oxford University Press
- Ronen, S. and Doria, M.B.L. (2020) Stifling my fire: the impact of abusive supervision on employees' motivation and ensuing outcomes at work. *Rev. Psicol. del Trab. y las Organ.* 36, 205–214
- Priesemuth, M. and Schminke, M. (2019) Helping thy neighbor? Prosocial reactions to observed abusive supervision in the workplace. *J. Manage.* 45, 1225–1251
- Poe, G.R. and Cai, D.J. (2020) The lab on lockdown: thinking back and looking ahead. *Nat. Rev. Neurosci.* 21, 447–448