nature

Why *Nature* needs to stand up for science and evidence

Political endorsements might not always win hearts and minds, but when candidates threaten a retreat from reason, science must speak out.

n October 2020, this journal endorsed Joe Biden for the next president of the United States (*Nature* **586**, 335; 2020). It was not the first time we had endorsed a candidate for a country's highest elected office – nor were we the only scientific publication to do so. Recognizing that politics is becoming more polarized, we had already published an editorial explaining why *Nature* needs to cover politics – in our journalism, commentary and primary research – when it relates to science, in line with our mission statement (*Nature* **586**, 169–170; 2020).

This week, *Nature Human Behaviour* publishes a study suggesting that *Nature's* 2020 endorsement led many supporters of now former president Donald Trump to lose trust in science and in *Nature* as a source of evidence-based knowledge (F. J. Zhang *Nature Hum. Behav.* https://doi. org/10.1038/s41562-023-01537-5; 2023). The findings are based on a randomized experiment involving 4,260 US adults, carried out in mid-2021, during the COVID-19 pandemic, by Floyd Zhang at Stanford University in California.

Supporters of both Trump and Biden were presented with the author's summary of the messages conveyed in our October 2020 editorial. This highlighted *Nature*'s criticism of the way Trump had handled the pandemic and the journal's expectation that Biden would do better. Participants were also given a screenshot of the title and first paragraph, and a link to the full text. They were then asked various follow-up questions.

Participants who were Trump supporters did not view the summary favourably and, compared with Trump supporters who had been shown text on a different topic, had a lower opinion of *Nature* as an informed and impartial source on science-related issues facing society. The summary's effect on Biden supporters was positive, but smaller. When participants were then prompted to read information from different sources about vaccine efficacy against new COVID-19 variants, Trump supporters who had been shown the summary of *Nature*'s editorial were less likely to trust *Nature*'s information on COVID-19, and also reported more mistrust in US scientists.

This experiment builds on the literature on trust in research among people with different political allegiances.

Influential political voices are eschewing rigorous evidence." This includes the idea of confirmation bias, whereby people on different sides tend to favour evidence that supports the views they already have, while avoiding evidence that does not, and the backfire (or rebound) effect, whereby evidence that challenges a view can have the opposite effect to that intended.

The author acknowledges that it is just one experiment and that it is not clear whether the reported effects will be long-lasting. But the study does question whether research journals should endorse electoral candidates if one implication is falling trust in science. This is an important question, and there are, sadly, no easy answers. The study shows the potential costs of making an endorsement. But inaction has costs, too. Considering the record of Trump's four years in office, this journal judged that silence was not an option.

Nature's October 2020 editorial was an appeal to readers in the United States to consider the dangers that four more years of Trump would pose - not only for science, but also for the health and well-being of US society and the wider world. Trump had laid waste to science and scientific institutions at home on issues from COVID-19 to climate change, and had gutted environmental regulations even in the face of increasing climate risk. At a time when the world needed to unite to deal with these and other global threats, he took an axe to international relationships, pulling the United States out of the 2015 Paris climate agreement and the United Nations science agency, UNESCO. He moved to defund the World Health Organization, and he walked away from a deal (the Joint Comprehensive Plan of Action) that the United States had carefully negotiated with Europe, China and Russia to prevent Iran's government from enriching weapons-grade uranium. It is hard not to think of a worst-case scenario for public health, climate change or nuclear security had Trump remained in office today.

We live in troubling times for research and for societies, and *Nature*'s endorsement for the November 2020 US election – and for Brazil's similarly pivotal election last October – should be viewed in that context. Influential political voices are eschewing rigorous evidence and interfering with or undermining the functioning of independent judicial and regulatory bodies that rely on rigorous science and evidence. This has been noticeable in other countries, too, including Brazil, India, Hungary and the United Kingdom. It's hard to know whether this is a long-term trend or global phenomenon, or something specific to certain places and circumstances. These are questions that researchers are investigating. Scientists are also testing strategies for ways to bridge the political divides, as *Nature* reported in a Feature earlier this month (*Nature* **615**, 26–28; 2023).

Nature doesn't often make political endorsements, and we carefully weigh up the arguments when considering whether to do so. When individuals seeking office have a track record of causing harm, when they are transparently dismissive of facts and integrity, when they threaten scholarly autonomy, and when they are disdainful of cooperation and consensus, it becomes important to speak up. We use our voice sparingly and always offer evidence to back up what we say. And, when the occasion demands it, we will continue to do so.