

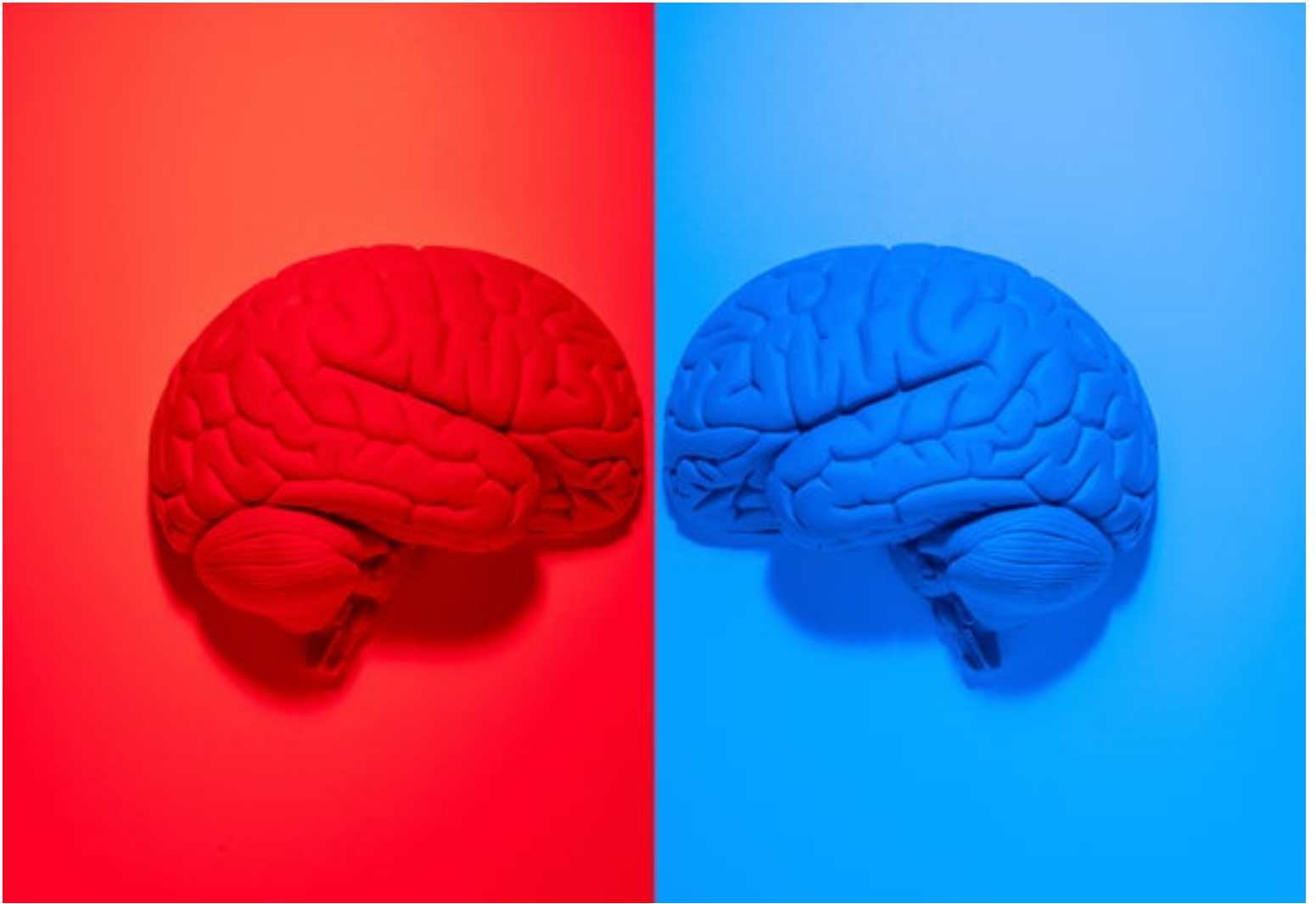
BEHAVIOR & SOCIETY

Researchers' Politics Don't Undermine Their Scientific Results

A new study finds no serious evidence of a liberal (or conservative) bias with respect to replicability, quality or impact of research



By Diego Reinero, Jay Van Bavel on November 1, 2020



Credit: Getty Images

Our need for credible science has never been more urgent. An extraordinary pandemic grips the world, racial tensions are surging, and political polarization is at historically high levels. Solving these social problems is a matter of life and death and the public needs to trust that scientists are trying to get it right.

Yet science has become politicized, and some worry that the liberal leanings of many academics biases research and makes it untrustworthy. In fact, an opinion article in the *New York Times* suggested that such liberal groupthink might help explain why scientific results sometimes don't replicate.

The worry is that a politically homogenous group of scientists are prone to produce biased research and would overlook flawed results simply because the findings align with their own political worldview. With nobody to catch blind spots, such political bias could result in the publishing of shoddy science that is not replicable.



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We decided to put this theory to the test within our own field of psychology—a field whose findings can have direct political implications. At a time when an understanding of human social behavior (e.g., mask-wearing, physical distancing) is sorely needed, does partisan groupthink trump truth?

In a recent paper in the journal *Perspectives on Psychological Science*, we analyzed nearly 200 studies in psychology (which included over 1.3 million participants) to see if politics might have influenced the research. Each study in our analysis had been conducted by one group of scientists and replicated several years later by a different research team to see if they produced the same result—the gold standard of science. This allowed us to see if liberal (or conservative) findings in psychology were more or less likely to replicate.

To determine the political slant of each study, we asked people to read the abstract from the original research and judge which political side (if any) the findings seemed to support. For example, for some, a study reporting racial discrimination against Black Americans might be deemed consistent with a liberal worldview, whereas a study finding that prayer is beneficial for family unity might be deemed consistent with a conservative worldview. Importantly, we asked a politically diverse group of experts and layfolk to code each study, including liberals, moderates and conservatives. This allowed us to see if people with different political backgrounds were seeing the same science differently. We then analyzed whether the political slant of the original research was related to whether the results were successfully replicated.

Of course, we expected that our own work could be subject to accusations of bias. We knew that no matter how the results turned out, someone would call foul. After all, that is how political bias works. Thankfully, modern science offers a solution for this problem: we preregistered our analysis plan before we ever touched the data and put together a team of scientific rivals who had different expectations about what we might find. This would increase our transparency and help avoid groupthink ourselves.

To the surprise of many of our colleagues, we did not find evidence of political bias.



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Liberal-leaning findings were just as likely to replicate as moderate or conservative-leaning findings. They were also just as strong when we looked at more objective measures of research quality, like the sample size and effect size observed in the original research.

In addition, while some research suggests a bias in how scientists cite papers, our large scale and systematic analysis found that liberal-leaning findings were as likely to be cited in the scientific literature as well as discussed online or in the media as conservative-leaning findings (providing evidence against claims of liberal bias in the media).

In other words, we found no serious evidence of a liberal (or conservative) bias with respect to replicability, quality or impact of the research.

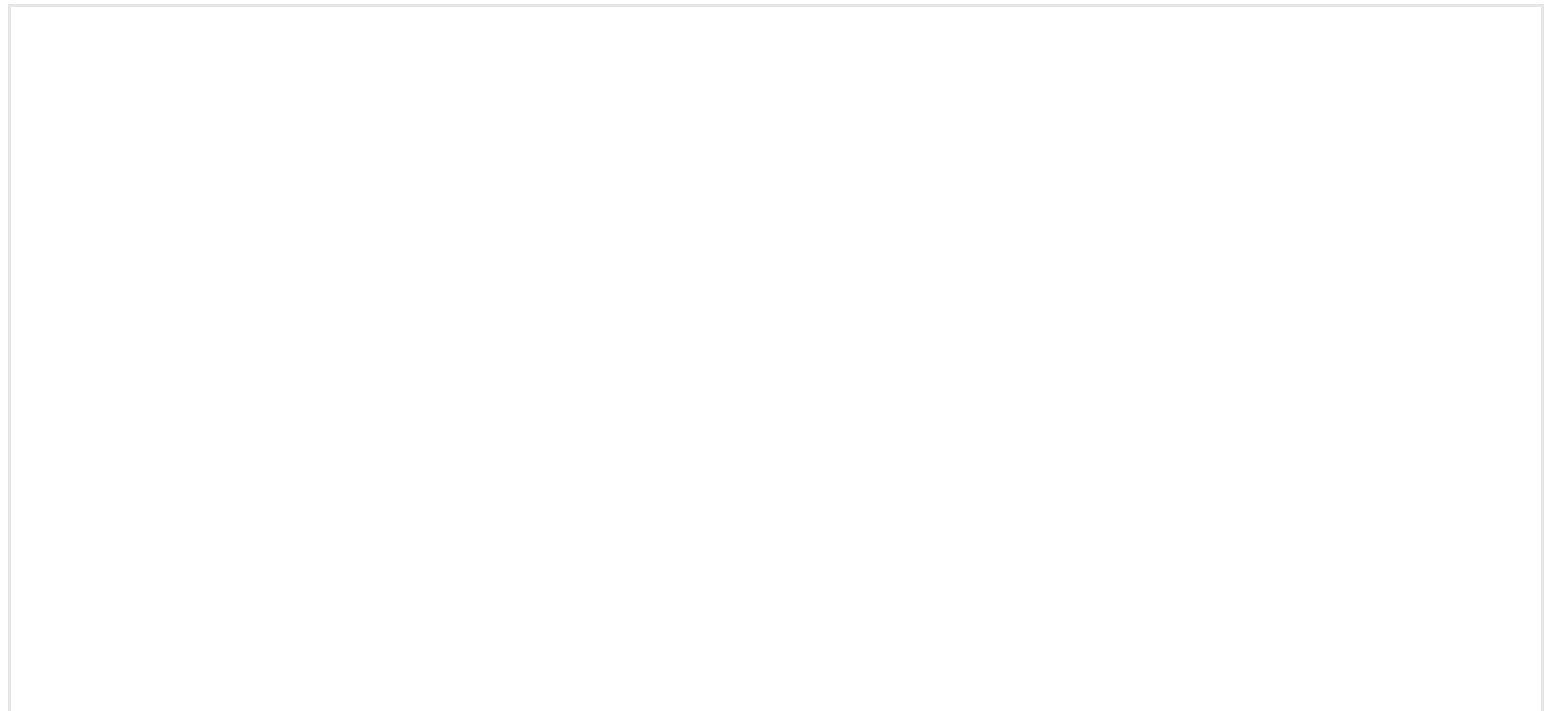


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Of course, this doesn't mean that science is completely bias-free—few human endeavors are, and it might depend on how one defines “bias”. But our study suggest that political bias may not plague psychological science to the extent that it dominates many other domains of society.

In a world full of partisan bias, why didn't we see the same pattern in psychology research? We think there are a few important aspects of science that might provide valuable lessons for other organizations that are trying to root out bias. First, many scientists are more focused on seeking out new discoveries, or testing theories at work, than on advancing an explicit political agenda. That's often why they got into science in the first place.



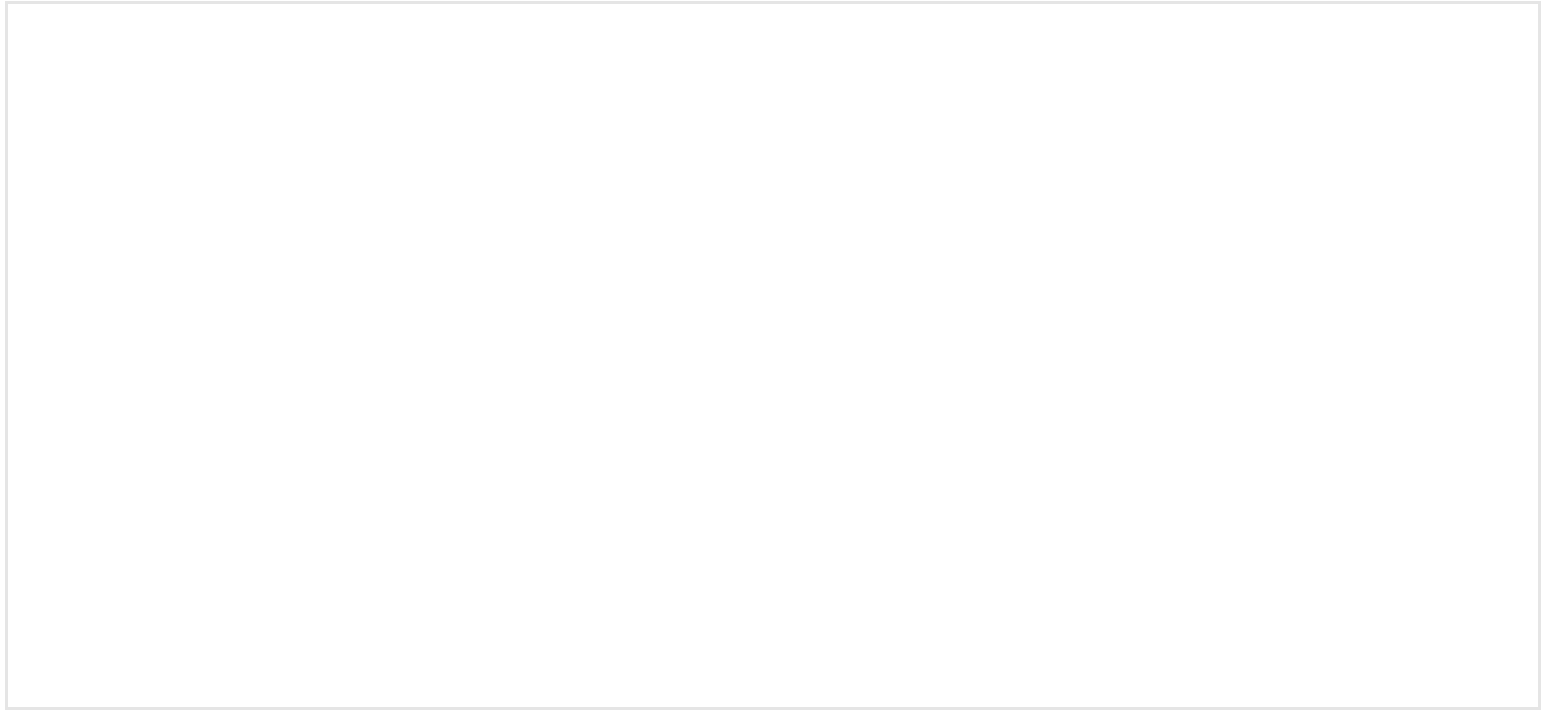
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It's also possible that scientists are motivated more by the opportunity to publish their work and earn tenure, promotion and reputational benefits. The old saying “publish or perish” likely motivates scientists more in their day-to-day work than the partisan debates that dominate the headlines.

But more importantly, the peer-review process that pervades science is almost perfectly engineered to root out groupthink. Groupthink tends to occur when people are sitting in a room under pressure to go along with a powerful or charismatic leader. But publication requires an impartial editor to send the paper to several different experts who anonymously review the paper and who are free to submit their own opinions without any pressure from the authors or the editor. In fact, they often don't even know who the authors are—a process known as double-blind review. Moreover, these independent reviewers often highlight different strengths and weaknesses of a paper, suggesting a diversity of views among reviewers.

Peer review is often mocked by scientists because the reviewers see different strengths and weakness. One reviewer might love the paper, another sees a fatal flaw, and yet a third wants you to run another study. This lack of coherence is often seen as a bug in the process. But in terms of rooting out groupthink it's a key feature.

These are the exact kinds of practices that many organizations or companies could implement to help ensure that partisan groupthink doesn't penetrate collective decision making. Psychological science—and perhaps research organizations in other fields—should focus far more on good research practices and reward structures than on the politics of researchers. That might be the best strategy for rooting out bias, ensuring the strength of our scientific research.



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