

Public may overestimate pushback against controversial research findings

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Controversial research can put people on the defensive and may even lead to calls to censor findings that conflict with a particular ideological perspective. However, a pair of studies published in *Psychological Science*, by authors Cory J. Clark (University of Pennsylvania), Maja Graso (University of Groningen), Ilana Redstone (University of Illinois Urbana-Champaign), and Philip E. Tetlock (University of Pennsylvania),

suggest a tendency to overestimate the risk that research findings will fuel public support for harmful actions.

Harmful actions related to research findings, according to the authors, can include censoring research, defunding related programs, and promoting bias against a community of people. Conversely, helpful reactions could include behaviors such as funding additional research, investing in programs, and offering educational resources.

"With this set of studies, we learned that expectations about scientific consequences might have a negativity bias," Clark told APS in an interview. "We found that participants consistently overestimated support for harmful behavioral reactions and consistently underestimated support for helpful behavioral reactions. And those more likely to overestimate harms tended to be more supportive of censoring scientific research."

In their first study, Clark and colleagues had 983 online participants read an excerpt from the discussion sections of five real studies with findings that some people might perceive as controversial. Two of these excerpts highlighted findings that the researchers expected would be counter to the expectations of people with liberal views ("female protégés benefit more when they have male than female mentors," and "there is an absence of evidence of racial discrimination against ethnic minorities in police shootings").

Two excerpts were expected to be surprising to more conservative people ("activating Christian concepts increases racial prejudice," and "children with same-sex parents are no worse off than children with opposite-sex parents"). The fifth excerpt was intended to be more ideologically neutral ("experiencing child sexual abuse does not cause severe and long-lasting psychological harm for all victims"). The researchers also included two versions of an excerpt from a fictitious

study about ideological intolerance suggesting that either liberals or conservatives were less tolerant of ideological differences.

After reading each excerpt, one third of participants were asked to self-report which of 10 actions they would support taking in response to each study's findings. After reading about the mentorship study, for example, participants in the self-report group were asked if they would support discouraging early-career female researchers from approaching female mentors, conducting more research on the subject, and investing in mentorship development programs, among other reactions. The remaining two thirds of participants were asked to estimate what percentage of U.S. adults they thought would support the various actions.

Participants in the estimation group were found to consistently underestimate the percentage of people who would support helpful actions—for example, funding additional research and interventions designed to reduce child [sexual abuse](#) and political intolerance. They also overestimated the percentage of adults who would support harmful actions like withdrawing support from a community or blocking groups of people from leadership positions. These harm estimations did not vary based on findings' perceived offensiveness, but participants were more likely to describe findings that they found more offensive as less comprehensible.

There was some evidence that participants who were more conservative had a greater tendency to overestimate the percentage of people who would support harmful actions. In addition, more conservative and younger participants were more likely to support censoring research. Participants' responses to the political intolerance study did not vary based on their own ideology, however.

Clark and colleagues further tested the honesty of these responses through a study of 882 participants. This time, participants in the self-

report group were asked to identify which initiatives they would like the researchers to donate \$100 to in response to three scientific findings. To encourage honesty, researchers informed participants that \$100 would be donated to each cause that a majority of participants supported. Meanwhile, participants in the estimation group were told that the five participants with the most accurate estimates would receive \$100 gift cards.

Despite this additional financial motivation, participants' responses largely mirrored those in the first study. A notable exception was that women were found to support censorship at a higher rate than men.

"Although people accurately predicted that helpful reactions were more supported than harmful ones, their deviation from accuracy was consistently in the negative direction: People overpredicted the costs and underpredicted the benefits," Clark and colleagues wrote.

Given that some [academic journals](#) have added harm-based criteria to their editorial guidelines, Clark would like to further explore how these findings may apply to editors' and reviewers' perceptions of scientific risk, as well as how harm risks can be estimated more accurately.

"Our results suggest the possibility that these intuitions may be systematically biased toward overestimating harms," Clark told APS. "Intuitions alone may be untrustworthy and lead to the unnecessary suppression of science."

More information: Cory J. Clark et al, Harm Hypervigilance in Public Reactions to Scientific Evidence, *Psychological Science* (2023). [DOI: 10.1177/09567976231168777](https://doi.org/10.1177/09567976231168777)

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