Communicating consensus strengthens beliefs about climate change, finds 27-country study

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Climate scientists have long agreed that humans are largely responsible for climate change. However, people often do not realize how many

scientists share this view. A new 27-country study published in the journal *Nature Human Behaviour* finds that communicating the consensus among scientists can clear up misperceptions and strengthen beliefs about climate change.

The study is co-led by Bojana Većkalov at the University of Amsterdam and Sandra Geiger of the University of Vienna. Kai Ruggeri, professor of health policy and management at Columbia University Mailman School of Public Health, is the corresponding author.

Scientific consensus identifying humans as primarily responsible for climate change is not new and was already forming in the 1980s. Today, 97% to 99.9% of climate scientists agree that climate change is happening and that human activity is the primary cause.

Over the past decade, researchers have begun to study the effects of communicating this overwhelming consensus, with promising results. They found that people in the United States who read a short statement about this scientific consensus perceived the consensus to be higher believed more in human-caused climate change, and worried about it more than those who read an unrelated expert statement.

However, as is the case with many findings in behavioral science, we know little about the effects of communicating this consensus beyond the United States. The new research now provides an answer.

An international research team of 46 collaborators showed different scientific consensus messages to more than 10,500 people across the world and asked them about their opinions on climate change. They observed that previous findings from the United States hold true among 27 countries covering six continents. People across all 27 countries responded similarly to the scientific consensus on climate change.

Co-lead author Geiger further explains, "In response to reading about the 97% consensus, people adjusted their perceptions of the scientific consensus, believed more in climate change, and worried more about it—but they did not support public action on climate change more, though other research has found that support for action can be stimulated indirectly by changing how people think and feel about climate change."

By now, climate scientists agree on much more than the existence and causes of climate change: 88% agree that climate change constitutes a crisis. How do people react when they learn about this additional crisis consensus? Interestingly, this added piece of information did not have any effects.

Co-lead author Većkalov explains, "We believe that the gap between the actual and perceived consensus might have played a role. This gap was much smaller for the crisis consensus than for the 97% consensus. A smaller gap means people already perceived a high crisis consensus before learning about it, which might have prevented any further changes in beliefs about climate change."

These new findings show that it is still important to emphasize the consensus among climate scientists—be it in the media or in our everyday lives when we have conversations about climate change and its impacts.

"Especially in the face of increasing politicization of science and misinformation about climate change, cultivating universal awareness of the scientific consensus will help protect public understanding of the issue," adds senior author, Sander van der Linden.

Beyond climate change communication, these findings also underscore the importance of testing previous findings in behavioral science globally.

"Such endeavors are only possible if we bring together researchers from around the world. What is particularly unique about this work is the involvement of students and early-career researchers from the Junior Researcher Programme (JRP) and the Global Behavioral Science (GLOBES) program at Columbia University," said Ruggeri.

More information: A 27-country test of communicating the scientific consensus on climate change, *Nature Human Behaviour* (2024). DOI: 10.1038/s41562-024-01928-2

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