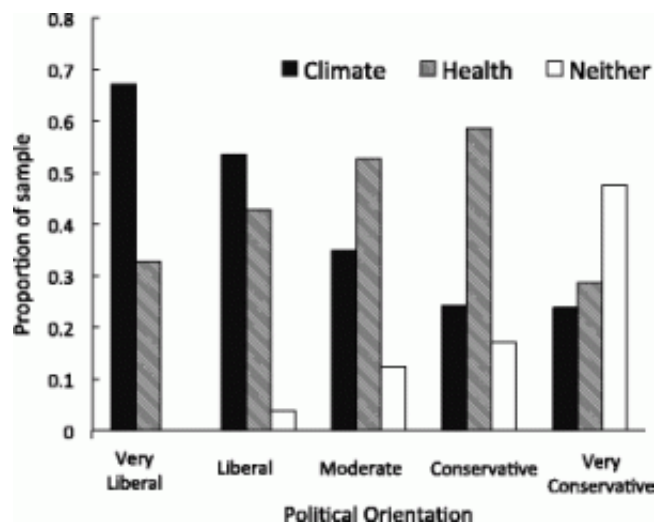


Climate change or public health: Which matters more?

August 4 2014, by David Funkhouser



This chart shows the effect of political orientation on selecting health vs. climate as a compelling reason for fossil fuel reduction. Source: N. Petrovic et al., Climatic Change, July 2014

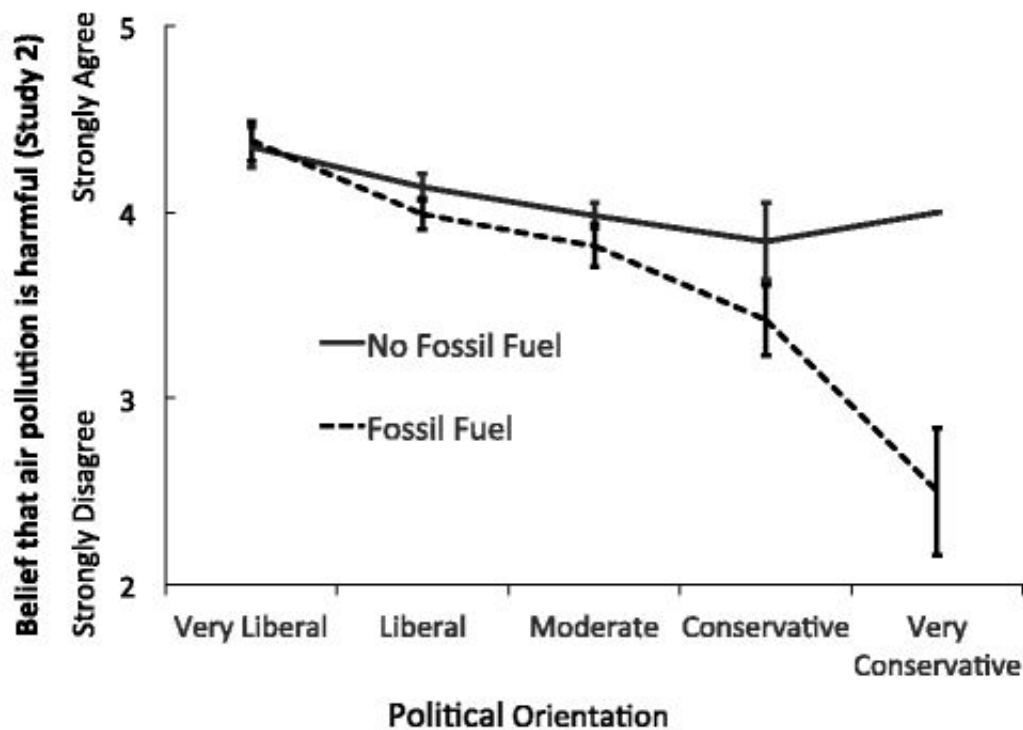
Political leanings unquestionably influence how many people hear the conversation over climate change. The political polarization of the discussion has made it difficult to reach agreement on changes in environmental policy.

Might more people be persuaded to act if the issue was framed in terms of public health?

A new study by Earth Institute researchers suggests that talking about the human health impacts of air pollution related to burning fossil fuels might make a more convincing argument for action among conservatives, who are generally more skeptical of the scientific evidence for climate change.

In a series of surveys, the researchers asked people in the United States a series of questions about their beliefs and level of concern about the burning of fossil fuels, as well as air pollution more generally, and their willingness to take action to mitigate the effects. They tried to assess how political orientation – from very liberal to very conservative – affected the outcome.

The researchers found that people who identified themselves as conservative find public health to be a more compelling reason for supporting fossil fuel reduction compared to climate change.



Effect of fossil fuel terminology on belief in harmful health effects in public health frame (Study 2). US conservatives are less likely to agree that air pollution is harmful, but only when fossil fuels are mentioned. Source: N. Petrovic et al., *Climatic Change*, July 2014

For randomly selected groups, the surveys phrased questions about air pollution in different ways, focusing on climate change or [public health](#), to test the effects of that differing language on responses. The survey results "provide the first experimental evidence that health is a stronger motivator of attitude change than climate change among conservative individuals," the authors wrote. "While we hypothesized that liberals would be equally supportive regardless of frame, we find instead that climate change is a stronger motivator for liberals."

The study was published online this week in the journal *Climatic Change*. In separate surveys, the researchers also varied the questions for some respondents to eliminate references to fossil fuels – words that can perhaps trigger associations with the [climate change](#) debate – and instead used the term "air pollution" to refer to emissions from the burning of [fossil fuels](#).

The survey results indicated that conservative individuals were more likely to agree that emissions are harmful to human health when they are referred to as "[air pollution](#)" in the absence of fossil fuel terminology – suggesting that the term "fossil fuel" may have become politicized enough to reinforce respondents' political identities.

The researchers also found responses were dependent on the type of solution being proposed – for instance, more communal approaches such as environmental regulation, versus actions that involve personal responsibility. That finding "suggests that including a broader set of

policy options, such as incentives for business and technology development, may provide opportunities for political agreement and should be considered in future research," the authors said.

The authors noted the limits of their study and suggested that further research with broader, more representative sampling of the population would be helpful to corroborate their findings.

More information: "Motivating mitigation: when health matters more than climate change." Nada Petrovic, Jaime Madrigano, Lisa Zaval. *Climatic Change*, July 2014, [DOI: 10.1007/s10584-014-1192-2](https://doi.org/10.1007/s10584-014-1192-2)

Provided by Columbia University

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