

EGU24-9536, updated on 22 May 2024

<https://doi.org/10.5194/egusphere-egu24-9536>

EGU General Assembly 2024

© Author(s) 2024. This work is distributed under the Creative Commons Attribution 4.0 License.



Going Beyond Research: A Large-scale Investigation of Climate Change Engagement by Scientists

Fabian Dablander^{1,2}, Maien Sachisthal³, Viktoria Cologna⁴, Noel Strahm⁵, Anna Bosshard³, Nana-Maria Grüning⁶, Alison Green⁷, Cameron Brick^{3,8}, Adam Aron⁹, and Jonas Haslbeck^{10,11}

¹Institute for Biodiversity and Ecosystem Dynamics, University of Amsterdam, Amsterdam, The Netherlands

(dablander.fabian@gmail.com)

²Institute for Advanced Study, University of Amsterdam, Amsterdam, The Netherlands

³Department of Psychology, University of Amsterdam, Amsterdam, The Netherlands

⁴Department of the History of Science, Harvard University, Cambridge, United States of America

⁵Institute of Sociology, University of Bern, Bern, Switzerland

⁶Institute of Biochemistry, Charité Universitätsmedizin Berlin, Berlin, Germany

⁷Scientists' Warning Foundation, Richmond, United States of America

⁸Department of Psychology, Inland Norway University of Applied Sciences, Hamar, Norway

⁹Department of Psychology, University of California San Diego, San Diego, United States of America

¹⁰Department of Clinical Psychological Science, Maastricht University, Maastricht, The Netherlands

¹¹Department of Psychological Methods, University of Amsterdam, Amsterdam, The Netherlands

Climate change is one of the greatest threats facing humanity. Scientists are well-positioned to help address it beyond conducting academic research, yet little is known about their engagement with the issue. We investigate scientists' engagement with climate change using quantitative and qualitative analyses of a large-scale survey ($N = 9,220$) across 115 countries, all disciplines, and all career stages. We explore their beliefs about the role of scientists and scientific institutions in the context of climate change as well as their engagement in climate actions. These actions include forms of advocacy and activism ranging from signing petitions to engaging in civil disobedience and high-impact lifestyle changes such as reducing flying or adopting a plant-rich diet.

We find, for example, that 91% of surveyed scientists believe that fundamental changes to social, political, and economic systems are needed to address climate change; that a large majority of scientists feel a responsibility as scientists to address climate change; that more scientists agree than disagree that scientists should become more involved in advocacy and protest; and that the proportion of scientists who say they are willing to engage in these actions is substantial, suggesting that there is great potential for increased engagement by scientists on climate change beyond research. We also find that climate researchers engage in considerably more climate advocacy and activism than their peers in other research fields, but that this difference is significantly smaller for high-impact lifestyle changes.

Based on the qualitative and quantitative responses to our survey, we propose a two-stage model of engagement in advocacy and protest: Scientists must first overcome *intellectual* barriers (e.g.,

low levels of worry, lack of efficacy beliefs, lack of identification with activists) and *practical* barriers (e.g., lack of skills, fear of losing credibility, fear of repercussions) to be willing to engage, and then additional barriers (e.g., lack of time, lack of opportunity, not knowing any groups) to actually engage. Based on this model, we provide concrete recommendations for increasing scientists' engagement with climate change.

Paper I: <https://osf.io/preprints/psyarxiv/73w4s>

Paper II: <https://osf.io/preprints/psyarxiv/5fqtr>