

Reporting Summary

Nature Portfolio wishes to improve the reproducibility of the work that we publish. This form provides structure for consistency and transparency in reporting. For further information on Nature Portfolio policies, see our [Editorial Policies](#) and the [Editorial Policy Checklist](#).

Statistics

For all statistical analyses, confirm that the following items are present in the figure legend, table legend, main text, or Methods section.

n/a Confirmed

- The exact sample size (n) for each experimental group/condition, given as a discrete number and unit of measurement
- A statement on whether measurements were taken from distinct samples or whether the same sample was measured repeatedly
- The statistical test(s) used AND whether they are one- or two-sided
Only common tests should be described solely by name; describe more complex techniques in the Methods section.
- A description of all covariates tested
- A description of any assumptions or corrections, such as tests of normality and adjustment for multiple comparisons
- A full description of the statistical parameters including central tendency (e.g. means) or other basic estimates (e.g. regression coefficient) AND variation (e.g. standard deviation) or associated estimates of uncertainty (e.g. confidence intervals)
- For null hypothesis testing, the test statistic (e.g. F , t , r) with confidence intervals, effect sizes, degrees of freedom and P value noted
Give P values as exact values whenever suitable.
- For Bayesian analysis, information on the choice of priors and Markov chain Monte Carlo settings
- For hierarchical and complex designs, identification of the appropriate level for tests and full reporting of outcomes
- Estimates of effect sizes (e.g. Cohen's d , Pearson's r), indicating how they were calculated

Our web collection on [statistics for biologists](#) contains articles on many of the points above.

Software and code

Policy information about [availability of computer code](#)

Data collection

Data analysis

Code availability

The code and all materials are available on the Open Science Framework using this link: https://osf.io/nz27y/?view_only=bc5dd7d9a5f64edfb8bac652ee593337.

For manuscripts utilizing custom algorithms or software that are central to the research but not yet described in published literature, software must be made available to editors and reviewers. We strongly encourage code deposition in a community repository (e.g. GitHub). See the Nature Portfolio [guidelines for submitting code & software](#) for further information.

Data

Policy information about [availability of data](#)

All manuscripts must include a [data availability statement](#). This statement should provide the following information, where applicable:

- Accession codes, unique identifiers, or web links for publicly available datasets
- A description of any restrictions on data availability
- For clinical datasets or third party data, please ensure that the statement adheres to our [policy](#)

Data availability

We used the Scopus database (www.scopus.com/standard/marketing.uri#basic) to identify scientists and academics who were subsequently invited to participate in the survey.

[UPDATE ONCE LINK IS UPDATED] The anonymized data are available on the Open Science Framework using this link: https://osf.io/nz27y/?view_only=bc5dd7d9a5f64edfb8bac652ee593337.

Research involving human participants, their data, or biological material

Policy information about studies with [human participants or human data](#). See also policy information about [sex, gender \(identity/presentation\), and sexual orientation](#) and [race, ethnicity and racism](#).

Reporting on sex and gender

We only use the term gender, which was derived via a self-reported item with the following answer options: Male, Female, Non-binary, Self-described, Non-disclosed. Findings therefore only apply to gender. Consent has been obtained for sharing of non-anonymous data; individual-level data is provided in the anonymized data set.

Gender (female vs. male; other vs. male) was used as a predictor in the Bayesian analyses investigating predictors of different forms of climate change engagement.

Reporting on race, ethnicity, or other socially relevant groupings

No data was collected on respondents' race or ethnicity. Respondents did report the country they currently reside in; no inferences on their race or ethnicity were made based on their country of residence. To ensure anonymity, we derived the continent of residence for all respondents based on the country variable and only report the country variable of respondents residing in countries in which $n > 10$ in the present sample.

Population characteristics

Respondents were from 115 countries, all scientific disciplines, and all career stages. 61% were male, 36% female and 3% identified as non-binary, self-described their gender or did not disclose their gender. 18% of the respondents reported being between 25-34 years old, 35% between 35-44 years old, 23% being between 45-54 years old, 15% between 55-64 years old and 9% reported being above 65 years of age. Concerning their career stage, many respondents were full professors (27%), associate (18%) or assistant professors (15%), around 18% reported being scientists outside of academia, and fewer respondents reported being postdocs (12%) or PhD students (6%). Most respondents were residing in European countries (51%), followed by Northern American countries (28%), and Asian countries (11%), with fewer respondents residing in Oceania (5%), South America (3%) or Africa (1%).

Recruitment

We used the Scopus database to identify scientists and academics who published a peer-reviewed article between 2020 and 2022. Specifically, we selected the top 1.2% journals per broad subject area specified in Scopus (e.g., Arts and Humanities, Earth and Planetary Sciences), which led to the inclusion of 545 journals. The corresponding authors of publications in those journals were then invited to participate in our survey via personalized email. In total, 249,876 authors were sent invitations and two reminders.

Survey participants were compared to all invited authors in terms of h-index, number of published articles, year of first publication, citations, and citing authors. Survey respondents were reasonably similar in all characteristics compared to all invited researchers. A comparison of their current affiliations' continents shows that European-based scientists are overrepresented in our survey, whereas Asian-based scientists are underrepresented (see Extended Data Table 1 and Extended Data Figure 2 for details).

Ethics oversight

The study was approved by the local ethics committee of the Faculty of Social and Behavioral Sciences of the University of Amsterdam (Protocol number FMG-925).

Note that full information on the approval of the study protocol must also be provided in the manuscript.

Field-specific reporting

Please select the one below that is the best fit for your research. If you are not sure, read the appropriate sections before making your selection.

- Life sciences Behavioural & social sciences Ecological, evolutionary & environmental sciences

For a reference copy of the document with all sections, see nature.com/documents/nr-reporting-summary-flat.pdf

Behavioural & social sciences study design

All studies must disclose on these points even when the disclosure is negative.

Study description	The study is a cross-sectional survey study with both quantitative (self-reported questionnaire items) and qualitative (open-text responses) data.
Research sample	<p>The sample consists of 9,220 scientists and academics from 115 countries, all scientific disciplines, and all career stages. The sample is not representative, but represents the population it was drawn from reasonably well.</p> <p>The study focuses on scientists and academics given unique position in society to understand the risks of climate change, and to act as potential sources of information on climate change for the general public as well as policy makers.</p> <p>Respondents were from 115 countries, all scientific disciplines, and all career stages. 61% were male, 36% female and 3% identified as non-binary, self-described their gender or did not disclose their gender. 18% of the respondents reported being between 25-34 years old, 35% between 35-44 years old, 23% being between 45-54 years old, 15% between 55-64 years old and 9% reported being above 65 years of age. Concerning their career stage, many respondents were full professors (27%), associate (18%) or assistant professors (15%), around 18% reported being scientists outside of academia, and fewer respondents reported being postdocs (12%) or PhD students (6%). Most respondents were residing in European countries (51%), followed by Northern American countries (28%), and Asian countries (11%), with fewer respondents residing in Oceania (5%), South America (3%) or Africa (1%).</p>
Sampling strategy	<p>We used the Scopus database to identify scientists and academics who published a peer-reviewed article between 2020 and 2022. Specifically, we selected the top 1.2% journals per broad subject area specified in Scopus (e.g., Arts and Humanities, Earth and Planetary Sciences), which led to the inclusion of 545 journals. (We selected the top 1.2% because this yielded 100 journals in the social sciences.) The corresponding authors of publications in those journals were then invited to participate in our survey via personalized email. In total, 249,876 authors were sent invitations and two reminders. Email invites were distributed between 23.05.2023 and 03.07.2023, with reminders being sent out one and two weeks after the initial invitation.</p> <p>For the qualitative data, we did not consider data saturation given that (1) the sampling strategy was aimed at maximizing the sample size, (2) we were primarily interested in relatively common additional barriers to engagement that we had not included in the multiple choice questions, we therefore (3) quantified the qualitative data to derive relatively frequent barriers to engagement.</p>
Data collection	Data collection was done online: The survey was administered via Qualtrics. Respondents were invited to participate via a personalized link to the Qualtrics survey, which they received via e-mail. The researcher was not present during respondents filling in the survey. No experimental conditions were used, so blinding of experimental condition of the researcher was not required.
Timing	Email invites were distributed between 23.05.2023 and 03.07.2023, with reminders being sent out one and two weeks after the initial invitation. Only responses up until 11.08.2023 were included in the analysis.
Data exclusions	11,430 participants participated in the survey, of which 2,210 were removed step-wise as they (1) used a different distribution link (n = 259; 2.3%), (2) did not consent to participate in the study (n = 142; 1.3%), or (3) did not finish the survey (n = 1,447; 13.1%). Of the remaining 9,582 participants, 361 (3.7%) indicated that they did not agree that climate change is caused by human activity; for them the survey then ended. Lastly, one participant was excluded because they participated after August 11, 2023. The analyses were performed based on the remaining 9,220 participants.
Non-participation	The response rate for starting the survey was 4.5% (n = 11,171) and for finishing the survey 3.7% (n = 9,220).
Randomization	Participants were not allocated into experimental groups.

Reporting for specific materials, systems and methods

We require information from authors about some types of materials, experimental systems and methods used in many studies. Here, indicate whether each material, system or method listed is relevant to your study. If you are not sure if a list item applies to your research, read the appropriate section before selecting a response.

Materials & experimental systems

n/a	Included in the study
<input checked="" type="checkbox"/>	<input type="checkbox"/> Antibodies
<input checked="" type="checkbox"/>	<input type="checkbox"/> Eukaryotic cell lines
<input checked="" type="checkbox"/>	<input type="checkbox"/> Palaeontology and archaeology
<input checked="" type="checkbox"/>	<input type="checkbox"/> Animals and other organisms
<input checked="" type="checkbox"/>	<input type="checkbox"/> Clinical data
<input checked="" type="checkbox"/>	<input type="checkbox"/> Dual use research of concern
<input checked="" type="checkbox"/>	<input type="checkbox"/> Plants

Methods

n/a	Included in the study
<input checked="" type="checkbox"/>	<input type="checkbox"/> ChIP-seq
<input checked="" type="checkbox"/>	<input type="checkbox"/> Flow cytometry
<input checked="" type="checkbox"/>	<input type="checkbox"/> MRI-based neuroimaging

Seed stocks	<i>Report on the source of all seed stocks or other plant material used. If applicable, state the seed stock centre and catalogue number. If plant specimens were collected from the field, describe the collection location, date and sampling procedures.</i>
Novel plant genotypes	<i>Describe the methods by which all novel plant genotypes were produced. This includes those generated by transgenic approaches, gene editing, chemical/radiation-based mutagenesis and hybridization. For transgenic lines, describe the transformation method, the number of independent lines analyzed and the generation upon which experiments were performed. For gene-edited lines, describe the editor used, the endogenous sequence targeted for editing, the targeting guide RNA sequence (if applicable) and how the editor was applied.</i>
Authentication	<i>Describe any authentication procedures for each seed stock used or novel genotype generated. Describe any experiments used to assess the effect of a mutation and, where applicable, how potential secondary effects (e.g. second site T-DNA insertions, mosaicism, off-target gene editing) were examined.</i>