

Reporting Summary

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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 | The data was collected by the survey company, Deltapoll, using their online panel of respondents who completed the survey experiment we designed. Hence, there is no code available for the data collection, but we have made all datafiles from this survey publicly available at Harvard Dataverse here: https://doi.org/10.7910/DVN/XJ4VEH |
| Data analysis | All data analysis was conducted in the R-programming script. We have deposited all replication code for the data analysis (to produce all figures and tables in the main manuscript and the Supplementary Information) at the Harvard Dataverse, at: https://doi.org/10.7910/DVN/XJ4VEH |

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 Research [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 list of figures that have associated raw data
- A description of any restrictions on data availability

Provide your data availability statement here.

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](https://www.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	Quantitative experimental study using a conjoint survey design. Messages were randomly generated based on four different attributes (valence, theme, timeframe, scale). Participants were randomly assigned five pairs of messages and asked to indicate which messages made them more likely to support climate policies. Study conducted in five countries. Marginal means were calculated to measure effects of different attributes in climate messages on support for climate policy.
Research sample	The research sample consisted of representative samples of the adult population from five countries: China, Germany, India, UK, and USA. In Germany, UK, and USA, quota sampling based on age, gender, and region was used to ensure that samples were representative of the adult population in the countries. In China and India, The use of online panels meant that the samples were representative of urban populations (rather than national populations) in the two countries in terms of age, gender, and region. These samples were recruited by the survey company, Deltapoll, for their online survey panels.
Sampling strategy	As noted above, we used a quota sampling strategy based on key demographic characteristics in the five countries to ensure representative samples. To select the sample size, we drew on a standard power calculation for conjoint survey experiments, and ensured our sample size in each of the five countries was higher than this.
Data collection	Participants recruited by survey company, Deltapoll, to online panel. Conjoint survey experiments were conducted online, hence computers used to record data.
Timing	1-31 October, 2020.
Data exclusions	No data excluded from analysis.
Non-participation	No participants dropped out/declined participation.
Randomization	Participants were randomly allocated different climate messages by surveying company, Deltapoll.

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	Involved in the study
☒	☐ Antibodies
☒	☐ Eukaryotic cell lines
☒	☐ Palaeontology and archaeology
☒	☐ Animals and other organisms
☐	☒ Human research participants
☒	☐ Clinical data
☒	☐ Dual use research of concern

Methods

n/a	Involved in the study
☒	☐ ChIP-seq
☒	☐ Flow cytometry
☒	☐ MRI-based neuroimaging

Human research participants

Policy information about [studies involving human research participants](#)

Population characteristics	See above.
Recruitment	See above. Participants were recruited by survey company, Deltapoll, for their online panels in the five countries. As noted above, we used quota sampling to ensure representative samples.
Ethics oversight	University of Birmingham

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