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Reporting Summary

Nature Research 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 Research policies, see Authors & Referees 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	We used the Qualtrics survey platform to administer the experimental surveys.
Data analysis	Data were analyzed using R 3.5.2

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/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

The raw data from all our experiments and statistical code for all analyses and figures reported in the paper and the supplementary information are available via the Open Science Framework at: https://osf.io/w4u5q/.

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	All our studies are between-subjects experimental designs and we analyze responses using quantitative analyses (t-tests, ANOVA, and regressions).
Research sample	For Studies 1a, 1b, 2, 3a, and 4, we recruited participants from Amazon Mechanical Turk who were based in the United States. The population is fairly representative of the United States. For study 3b, our participants are alumni of the public policy school at Carnegie Mellon University.
Sampling strategy	Studies 1a-3a and 4: we posted invitations to participate in a survey on decision making on Amazon Mechanical Turk. The invitation remained open until we reached our pre-determined sample size of 100 per condition for testing main effects (studies 1a and 3a) and 200 per condition when we looked at interaction effects (studies 1b and 2). We did not perform power analyses, but relied on our past experience with experiments on the platform. The survey automatically stopped accepting new participants when the number of completes was reached. For study 3b, we contacted the entire alumni database in late September and sent one reminder email in late October. We closed the survey in December, when we observed no further completes.
Data collection	Data for all studies were collected using the Qualtrics survey platform and for Studies 1a-3a using the TurkPrime service for managing Amazon Mechanical Turk postings. Participants were able to complete the study from anywhere with internet access and they were not monitored while participating in the research.
Timing	Data for Studies 1a-3b were collected between June 2017 and December 2017. Study 4 took place October 31 to November 2, 2018.
Data exclusions	For Studies 1a-3b, we used data from all participants who completed the studies. For Study 4, we included an attention check and excluded 156 participants who failed it, as pre-registered.
Non-participation	In total, we had 3,965 participants complete our studies via Amazon Mechanical Turk. An additional 62 participants failed to complete the survey and were not included in the analyses. We do not know why they chose not to complete the survey. In addition to the 641 policy alumni who completed our study, 186 did not complete the survey and were not analyzed. We do not know why they chose to stop participating. The number is likely higher than on Amazon Mechanical Turk because these participants were not paid to participate in the study and may not have had the time to fully participate.
Randomization	Participants were randomly allocated to our experimental conditions using the Qualtrics survey platform.

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
☒	☐ Animals and other organisms
☐	☒ Human research participants
☒	☐ Clinical data

Methods

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

Human research participants

Population characteristics	See above.
Recruitment	For Studies 1a, 1b, 2, 3a, and 4, participants were recruited for a study on decision making via the Amazon Mechanical Turk platform. We did not further disclose the nature of the study to minimize selection bias. For study 3b, alumni of a policy school were recruited via an email sent to all email addresses in the alumni database. The email asked for participation in a "survey dealing with behavioral economics and public policy."
Ethics oversight	Carnegie Mellon University

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