

Reporting Summary

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Statistical parameters

When statistical analyses are reported, confirm that the following items are present in the relevant location (e.g. 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
- ☐ ☒ An indication of 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 statistics 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
- ☐ ☒ Clearly defined error bars
State explicitly what error bars represent (e.g. SD, SE, CI)

Our web collection on [statistics for biologists](#) may be useful.

Software and code

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

Data collection

Data was collected using the Zurich Toolbox for Research in Experimental Economics (zTree) v. 3.3.8

Data analysis

All statistical analysis was conducted with Stata version 13.1. Figures in main text and supplemental information were made using R for Mac version 3.2.0.

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 upon request. 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

All data that support the findings of this study are publicly available in Dataverse with identifier DVN/CBFAON_2018.

Field-specific reporting

Please select 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/authors/policies/ReportingSummary-flat.pdf](https://www.nature.com/authors/policies/ReportingSummary-flat.pdf)

Behavioural & social sciences study design

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

Study description	All data was experimental quantitative. Participants were recruited to our study either through the Center for Behavioral Political Economy at Stony Brook University ("U.S. sample") or the Smith Experimental Economics Research Center Shanghai Jiao Tong University (Chinese sample) and randomly assigned to experimental conditions. They participated in an incentivized experiment, and we collected their contribution decisions as well as demographic information.
Research sample	The "US sample" consists of Stony Brook University undergraduate students; the "Chinese sample consists of Shanghai Jiao Tong University undergraduate students. THE Stony Brook University sample was 46.9% male (134/286, 2 missing). In the Shanghai Jiao Tong University sample, participants were 61.1% male (88/144). Age was not recorded.
Sampling strategy	Using the recruitment software ORSEE, invitations to participate in a given session were sent to a randomly selected subset of the subject pool of approximately 2,000 subjects for the US sample, and an unknown number in the Chinese sample. Within each session, each of the 12 subjects were randomly and anonymously assigned to one of two 6-person groups. Each group independently played using a customized interface that was also programmed to randomly assign the early/late development status in the differentiated condition. Previous similar studies using the collective risk social dilemma have uncovered significant treatment effects using 10 groups of 6 players per condition refs #3 and #13. We use 12 groups of 6 per condition, and also leverage some of the individual level data by using clustered standard errors. Thus, we could reasonably assume to uncover effect sizes as large as what had been observed in previous studies using similar designs.
Data collection	Subjects were provided with hard copies of written instructions, and to aid in comprehension, the instructions were read aloud by an experimenter. In each session, along with the participants, the experimenter and one or two assistants were also present. Data collection and analysis were not performed blind to the conditions of the experiments. All of the experimental treatments, when described to the participants, were framed in the context of climate change and its mitigation. Participants interacted anonymously through the customized zTree interface at computer terminals that were physically separated by dividers. After each period in each phase, all players were shown a screen which summarized the behavior of each of their group members, which were indexed by numbers to ensure anonymity while also being able to track the behavior of any given player. Data were recorded with the customized zTree program based on the participants' behavior.
Timing	The initial experimental sessions were conducted April 29, 2013. The final sessions were conducted May 19, 2014.
Data exclusions	No subjects or data points were excluded from the analysis for any reason.
Non-participation	No participants dropped out or declined participation.
Randomization	ORSEE was used to randomly assign a subset of the subject pool to receive invitations to participate in a session in a given condition. Within each session, each of the 12 subjects were randomly and anonymously assigned to one of two 6-person groups. Each group independently played using a customized interface that was also programmed to randomly assign the early/late development status in the differentiated condition.

Reporting for specific materials, systems and methods

Materials & experimental systems

n/a	Involved in the study
☒	☐ Unique biological materials
☒	☐ Antibodies
☒	☐ Eukaryotic cell lines
☒	☐ Palaeontology
☒	☐ Animals and other organisms
☐	☒ Human research participants

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	After registering for the subject pool, participants were randomly assigned to receive an email invitation. The email informed them that they could choose to participate in exactly one session (within a the given condition--the between subjects design necessitated that subjects participate in no more than one condition). Though we have no evidence of such bias, it is possible that subjects could have selected into certain sessions times. If the preferences for such times were correlated with their potential behavior within the treatments, then bias is possible.