

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](#).

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

We replicated 21 original studies using the software of the original study whenever possible; in the replications where we used other software this is stated in the SI and the Replication Report for each replication (the Replication Reports and all the softwares used in the replications are available at OSF at <https://osf.io/pfdyw/>).

Data analysis

We have posted code for all data analyses carried out in the Replication Reports for each replication and for all the analyses in the manuscript and SI at OSF (<https://osf.io/pfdyw/>).

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 for the 21 replications have been posted at OSF (<https://osf.io/pfdyw/>).

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

For a reference copy of the document with all sections, see 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	Replications of 21 experimental studies in the social sciences (with pre-registration of all the replications).
Research sample	The research samples are similar to the ones used in the original studies (students or other easily accessible adult subject pools in line with our inclusion criteria for studies to replicate) and are described in the Replication Reports for each replication posted at OSF (https://osf.io/pfdyw/).
Sampling strategy	The sampling strategy is similar to the one used in the original studies (students or other easily accessible adult subject pools) and are described in the Replication Reports for each replication posted at OSF (https://osf.io/pfdyw/). For sample sizes we used a two-stage procedure with 90% power to detect 75% of the original effect size at the 5% level (two-sided test) in Stage 1; if the effect was not significant in the original direction in Stage 1 a second data-collection was carried out with 90% power to detect 50% of the original effect size at the 5% level (two-sided test) in the pooled first and second stage data collection.
Data collection	The data collection for all replications was done as similarly as possible to the data collection in the original studies and are described in detail in the Replication Report for each replication posted at OSF (https://osf.io/pfdyw/).
Timing	The data collections for the replications were done between September 2016 and September 2017, and the data collection for the prediction markets were done in November 2016.
Data exclusions	We used the same criteria for data exclusions as in the original studies and any deviations from this are stated in the Replication Reports for each replication posted at OSF (https://osf.io/pfdyw/).
Non-participation	Any non-participation is detailed in the Replication Reports for each replication posted at OSF (https://osf.io/pfdyw/).
Randomization	The experimental procedures, including the randomization, follow the original studies and are detailed in the Replication Reports for each replication posted at OSF (https://osf.io/pfdyw/).