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Last updated by author(s): May 2, 2022

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 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 was collected using the survey software Qualtrics
Data analysis	The statistical analysis was performed using Stata/SE version 15.0

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 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

The preregistration documents have been uploaded to Open Science Framework (IT: https://osf.io/372j6/; UK: https://osf.io/nd2vy/).
Datasets and analysis code have been deposited in Harvard Dataverse (https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/Y3WAJL)

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	Quantitative cross-sectional study
Research sample	Respondents were aged 18 or older, located in Italy/UK. In Italy 61% of respondents were female, with median age 37. In the UK, 53% of respondents were female, with median age 40. The quota-based sampling matched the population's age, gender, geographical area, and education. Adults were selected as their opinion on childhood vaccination was under investigation.
Sampling strategy	Participants were sampled from the Lucid panels, representative of the State populations. A quota-based sampling matching the population's age, gender, geographical area and education was implemented. No sample size calculation was performed as there was no hypothesis a priori on the direction and size of the treatment effects.
Data collection	Respondents answered via computer. Assignment to experimental condition was computer-based. The researcher was blind, but not present.
Timing	June-July 2021
Data exclusions	Pre-established exclusion criterion: participants who didn't correctly answer the screening comprehension question. This corresponds to 3447 respondents in Italy and 3021 in the UK. Further, 109 respondents in Italy and 248 respondents in the UK did not answer the question of interest (propensity to vaccinate children), hence they were excluded from the statistical analysis.
Non-participation	374 respondents in Italy and 242 in the UK did not consent to participate (refused or didn't answer).
Randomization	At the subject level, respondents were randomized to the three groups at equal rates.

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	Participants were recruited via Lucid, an international panel. A quota-based sampling matching the population's age, gender, geographical area and education was implemented.
Ethics oversight	Bocconi Research Ethics Committee

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