This is a data dictionary explaining what files are present on the BRI survey of beliefs dataverse dataset.

1) “Survey of Beliefs Parse Data.R”

This script parses the individual excel files for each survey version generated from Survey Monkey, aggregating them. Raw data cannot be shared as data must remain anonymized, but we provide the script to illustrate what steps were performed during parsing.

2) "BRI_parsed_survey_data.csv"

This file contains data from the Survey of Beliefs parsed using the “Survey of Beliefs Parse Data.R” script. Below we provide a brief explanation for columns in the Survey Data and/or the original question in quotes.

Replication_probability: "In your opinion, what is the probability that the replication will obtain an effect significantly different from 0 ($p < 0.05$) in the same direction as the original? (0-100%)"

Replication_factors: Open field to describe factors that were considered when answering the Replication_probability question. "What factors did you take into account to estimate the probability of a significant effect?"

Replication_rel_effect_size: "How large would you expect the effect size to be in the replication, relative to the original effect size? (in % of the original unstandardized effect size; 0 indicates no effect, while negative numbers indicate effects in the opposite direction)"

Effect_size_factors: Open field to describe factors that were considered when answering the Replication_rel_effect_size question. "What factors did you take into account to estimate the probability of a significant effect?"

Difficulty: "How logistically and technically challenging to replicate this experiment seems to be (relative to other laboratory experiments using _technique_)?"

Difficulty_factors: "What factors did you take into account in your assessment of logistical/technical difficulty?"

Used_paper: "If you were given the link to the original paper, did you open the paper and used this information for your predictions?"

Technique: Technique that was forecasted. Either "EPM", "MTT" or "PCR".

Version: Survey version. Different versions had different sets of studies with access to the original paper, along with information on publication venue, authors and affiliations

Study: Number of the study from 1-20 for each technique.

Institutional_position: "What is your position in this institution?" Options were Professor, Research Associate, Technician, Post-doctoral researcher, PhD student, Master's student, Undergraduate student and Other (please specify)

Institutional_position_other: Open field to describe answers corresponding to "Other (please specify)"

Years_in_position: "For how many years have you been in this position?"

Highest_title: "What is the highest academic title you have obtained?" High School Diploma, Bachelor, Master's, PhD and Other (please specify)

Highest_title_other: Open field to describe answers corresponding to "Other (please specify)"

Knowledge_area1-13: "What is/are the main area(s) of knowledge of your degrees?" Participants could answer multiple areas, so the total is larger than the number of participants

Years_in_research: "During your life, for how many years have you been involved in experimental research?"

Research_area1-12: "In what areas of knowledge have you been involved in experimental research?". Participants could answer multiple areas, so the total is larger than the number of participants

Main_research_topic: "What are the main research topics that you have worked on within this/these area(s)?"

BRI_member: "Are you a member of the Brazilian Reproducibility Initiative replication team?"

sReplication_concept: "What is your concept of a successful direct replication of a published finding?"

General_rep_rate: "According to this criterion, what is your estimate of the general reproducibility rate of published findings in the biomedical sciences? (in a scale of 0-100%)"

Theoretical_knowledge_technique: "How would you rate your theoretical knowledge of the ___ technique?"

Practical_knowledge_technique: "How much practical experience do you have with the ___ technique?"

Statistical_knowledge: "How would you rate your knowledge on basic statistics and research methodology"

AnonymousID: Anonymous ID assigned to each participant.

3) "Survey_version_masks.csv"

This file contains information on which survey versions provided full information and access to the original paper (Info and Link) and which blinded participants to the paper, authors and publication venue (Blinded, no link) for each of the 20 studies. Survey versions for BRI members predicting their own techniques had study combinations that were removed, as they were involved in replicating these experiments and blinded to original results.

4) Reference materials

We provide the reference material PDF files that were made available to prediction market participants after completing the survey:
"Reference Material EPM - Prediction Markets.pdf"
"Reference Material MTT - Prediction Markets.pdf"
"Reference Material PCR - Prediction Markets.pdf"

These contain abstracts for each experiment and original results, along with links to the original paper. They correspond to the same information that was provided when filling in the survey, for studies that contained full information (not blinded to the original paper). When participants received partial information, the lines above the "Experiment Description" were removed. For participants that were members of BRI replicating labs, similar files were provided but that excluded all data for experiments they were involved in replicating.

5) "BRI Study number and experimental code correspondence.tab"

This file links study numbers used in the survey of beliefs (1-20 for each technique) with experimental codes used in the rest of the BRI. It also contains the study DOI.