

Manuscript title

Who trusts in scientific research?:

International surveys of Japan, the United States, and the United Kingdom

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Questionnaire

- English (US and UK) version
- Japanese version

Table S1. Survey Overview and Respondent Information

| | JP | UK | US |
|-------------------------|---|---|---|
| Survey period | 2021/2/5-10 | 2021/3/4-6 | 2021/2/25-27 |
| Survey media | Cross Marketing Inc. | Prolific.co | Prolific.co |
| Questionnaire preview | https://bit.ly/3LjaNRE | https://bit.ly/35OnyDw | https://bit.ly/35SDnJr |
| Respondents(<i>n</i>) | 1280 | 1129 | 1127 |

Table S2. Demographics of respondents

| Variable | | JP | UK | US |
|----------|--|--------------|--------------|--------------|
| Age | Range | 18-70 | 18-83 | 18-80 |
| | Mean(<i>SD</i>) | 42.75(15.44) | 46.56(15.63) | 45.81(16.08) |
| Gender | Female | 50.6% | 51.5% | 51.7% |
| | Elementary School / Middle School | 4.1% | 0.9% | 0.1% |
| | High School | 28.8% | 16.5% | 11.5% |
| | Junior College / Technical College / Vocational School | 20.0% | 18.9% | 20.3% |
| | University / Graduate School | 47.1% | 63.8% | 68.1% |

Table S3. Frequency distribution and mean percentage of correct answers for each item of scientific knowledge. Cells with a grey background indicate the correct answer.

| | JP | | | UK | | | US | | |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | True | False | DK | True | False | DK | True | False | DK |
| The center of the earth is very hot. (True) | 82.4% | 2.9% | 14.7% | 93.1% | 16.8% | 5.2% | 91.2% | 2.5% | 6.3% |
| All radioactive substances are man-made. (False) | 10.7% | 67.2% | 22.1% | 8.1% | 73.1% | 18.9% | 6.9% | 76.7% | 16.4% |
| Plants create the oxygen that we breathe. (True) | 66.3% | 12.2% | 21.6% | 91.2% | 5.7% | 3.1% | 91.3% | 5.0% | 3.7% |
| It is the father's gene that decides whether the baby is a boy or a girl. (True) | 25.1% | 32.4% | 42.5% | 51.3% | 24.9% | 23.8% | 68.2% | 16.0% | 15.8% |
| Lasers work by focusing sound waves. (False) | 14.8% | 27.9% | 57.3% | 10.9% | 53.9% | 32.3% | 15.0% | 55.7% | 29.3% |
| Electrons are smaller than atoms. (True) | 34.4% | 21.4% | 44.2% | 59.4% | 14.3% | 26.2% | 66.3% | 14.8% | 18.9% |
| Antibacterial medicines suppress the proliferation of viruses as well as bacteria. (False) | 21.1% | 34.6% | 44.3% | 19.9% | 57.0% | 23.0% | 23.5% | 59.1% | 17.4% |
| The continents have been moving for a long period, and will continue to move. (True) | 87.8% | 1.3% | 10.9% | 93.6% | 1.4% | 5.0% | 90.5% | 2.6% | 6.9% |
| Human beings, as we know them today, have developed from earlier species of animals. (True) | 71.8% | 8.1% | 20.1% | 83.2% | 10.6% | 6.2% | 71.3% | 17.3% | 11.4% |
| The earliest humans lived at the same as the dinosaurs. (False) | 26.9% | 46.6% | 26.5% | 11.5% | 72.0% | 16.5% | 14.9% | 67.6% | 17.5% |
| Milk that has been contaminated by radiation is safe to drink after being boiled. (False) | 1.6% | 76.6% | 21.8% | 2.0% | 67.2% | 30.7% | 3.0% | 64.7% | 32.3% |
| Mean percentage of correct answers | | 56.4% | | | 72.3% | | | 73.0% | |

Table S4. Percentage of correct answers for each item of research literacy. Cells with a grey background indicate the correct answer.

| | JP | | UK | | US | |
|--|----------|--------------|----------|--------------|----------|--------------|
| | Selected | Not selected | Selected | Not selected | Selected | Not selected |
| The more data (e.g., number of people or animals included in a study), the better. (Incorrect)* | 63.0% | 37.0% | 87.9% | 12.1% | 84.7% | 15.3% |
| Scientific data is more reliable when repeatedly showing the same result(s). (Correct) | 75.9% | 24.1% | 83.8% | 16.2% | 87.6% | 12.4% |
| Some phenomena may have more than one cause. (Correct) | 78.1% | 21.9% | 86.5% | 13.5% | 87.7% | 12.3% |
| Research data on the same subject may differ if the researcher conducting the research or the method of measurement differs. (Correct) | 77.2% | 22.8% | 82.1% | 17.9% | 79.0% | 21.0% |
| Comparing groups in which a cause is present with those in which it is absent will tell us whether or not the cause has an effect. (Correct) | 50.4% | 49.6% | 50.8% | 49.2% | 47.1% | 52.9% |
| Articles published in academic journals are always credible. (Incorrect) | 3.7% | 96.3% | 13.8% | 86.2% | 9.8% | 90.2% |
| Once discovered and established, scientific facts are fixed. (Incorrect) | 2.6% | 97.4% | 6.0% | 94.0% | 8.9% | 91.1% |

*This item was excluded from the analysis because it was considered to be impairing uni-dimensionality.

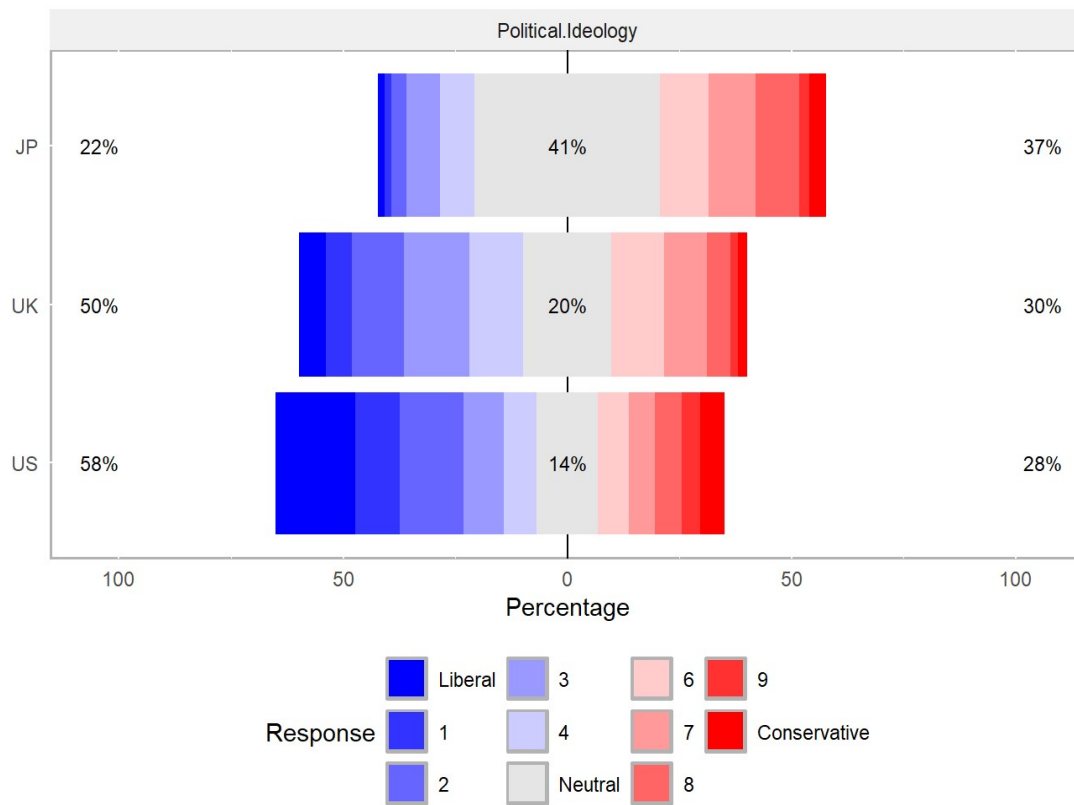


Figure S1. Frequency distribution of political ideology