

This form documents the artifacts associated with the article (i.e., the data and code supporting the computational findings) and describes how to reproduce the findings.

Part 1: Data

- This paper does not involve analysis of external data (i.e., no data are used or the only data are generated by the authors via simulation in their code).
- I certify that the author(s) of the manuscript have legitimate access to and permission to use the data used in this manuscript.

Abstract

The dataset for the MLP is CleanedDataset.sav and the data dictionary is Codebook.xlsx. Both were downloaded from the MLP OSF website.

Availability

- Data **are** publicly available.
- Data **cannot be made** publicly available.

If the data are publicly available, see the *Publicly available data* section. Otherwise, see the *Non-publicly available data* section, below.

Publicly available data

- Data are available online at:
- Data are available as part of the paper's supplementary material.
- Data are publicly available by request, following the process described here:
- Data are or will be made available through some other mechanism, described here:

Non-publicly available data

Description

File format(s)

- CSV or other plain text.
- Software-specific binary format (.Rda, Python pickle, etc.): .sav
- Standardized binary format (e.g., netCDF, HDF5, etc.):
- Other (please specify):

Data dictionary

- Provided by authors in the following file(s): Codebook.xlsx
- Data file(s) is(are) self-describing (e.g., netCDF files)
- Available at the following URL:

Additional Information (optional)

Part 2: Code

Abstract

The R script `process.data.R` processes the raw data. The R scripts `run.model1.R` and `run.model2.R` fit the models and create the plots corresponding to the principal results and political ideology results respectively for the MLP. They rely on the stan scripts `model1.stan` and `model2.stan` respectively.

Description

Code format(s)

- Script files
 - R
 - Python
 - Matlab
 - Other: Stan
- Package
 - R
 - Python
 - MATLAB toolbox
 - Other:
- Reproducible report
 - R Markdown
 - Jupyter notebook
 - Other:
- Shell script
- Other (please specify):

Supporting software requirements

Version of primary software used

R version 4.0.2

Libraries and dependencies used by the code

ggplot2 version 3.3.2
reshape2 version 1.4.4
abind version 1.4-5
rstan version 2.21.2

Supporting system/hardware requirements (optional)

MacOS 10.15.7

Parallelization used

- No parallel code used
- Multi-core parallelization on a single machine/node
 - Number of cores used: 4
- Multi-machine/multi-node parallelization
 - Number of nodes and cores used:

License

- MIT License (default)
- BSD
- GPL v3.0
- Creative Commons
- Other: (please specify below)

Additional information (optional)

Simply run `run.model1.R` and `run.model2.R` either as a shell script or by cutting and pasting into the R console or RStudio console.

Scope

The provided workflow reproduces:

- Any numbers provided in text in the paper
- All tables and figures in the paper
- Selected tables and figures in the paper, as explained and justified below:

The file reproduces all results figures for the MLP (i.e., Figures 6-10); there are no results tables.

Workflow

Format(s)

- Single master code file
- Wrapper (shell) script(s)
- Self-contained R Markdown file, Jupyter notebook, or other literate programming approach
- Text file (e.g., a readme-style file) that documents workflow
- Makefile
- Other (more detail in *Instructions* below)

Instructions

The R script `process.data.R` processes the raw data. The R scripts `run.model1.R` and `run.model2.R` fit the models and create the plots corresponding to the principal results and political ideology results respectively for the MLP. They rely on the stan scripts `model1.stan` and `model2.stan` respectively.

Expected run-time

Approximate time needed to reproduce the analyses on a standard desktop machine:

- < 1 minute
- 1-10 minutes
- 10-60 minutes
- 1-8 hours
- > 8 hours
- Not feasible to run on a desktop machine, as described here:

Additional information (optional)

Notes (optional)