Replication Package for "Dishonesty is linked with the spread of infectious diseases"

Overview

The code in this replication package constructs the analysis from Martini, Bos, Drupp, Meya, and Quaas (2024) using R and Stata. The files in this replication package run all of the code to generate the figures and tables in the paper. A replicator should expect the code to run for about 2 minutes.

Data Availability and Provenance Statements

The paper uses data obtained from an online experiment. The experimental instructions are provided in the Appendix of the paper.

We provide the survey responses that are necessary to reproduce the analyses as part of this replication package.

For the cross-country analysis we use the following data:

(1) We used data on dishonesty from an experiment from: Cohn, A., Maréchal, M. A., Tannenbaum, D., & Zünd, C. L. (2019). Civic honesty around the globe. *Science*, *365*(6448), 70–73. https://doi.org/10.1126/science.aau8712

(2) We also use data on excess deaths from: Msemburi, W., Karlinsky, A., Knutson, V., Aleshin-Guendel, S., Chatterji, S., & Wakefield, J. (2023). The WHO estimates of excess mortality associated with the COVID-19 pandemic. *Nature*, *613*(7942), 130–137. https://doi.org/10.1038/s41586-022-05522-2. The data can be downloaded here: https://github.com/WHOexcessc19/Codebase

(3) We use population estimates from: Mathieu, E., Ritchie, H., Ortiz-Ospina, E. *et al.* A global database of COVID-19 vaccinations. *Nat Hum Behav* 5, 947–953 (2021). https://doi.org/10.1038/s41562-021-01122-8. The data can be downloaded here: https://github.com/owid/covid-19-data/tree/master/public/data

(4) We use data on COVID-19 containment policies and the proportion of vaccinated population from: Hale, T., Angrist, N., Goldszmidt, R. *et al.* A global panel database of pandemic policies (Oxford COVID-19 Government Response Tracker). *Nat Hum Behav* **5**, 529–538 (2021). https://doi.org/10.1038/s41562-021-01079-8. The data can be downloaded here: https://github.com/OxCGRT/covid-policy-tracker

Dataset List

All data files are provided in `1_Data/`. The provided data has been cleaned and processed to facilitate replication. The code to clean and process it can be made available upon request.

Name	Description	File	Replicable with provided code
Survey and experimental data	Experimental data on toin cosses and survey data of each participant	master_data	Upon request
Secondary data	Cross country data on COVID-19 excess deaths, policies and population	cross_country_data_wC	Upon request

Computational requirements

Software Requirements

The following list indicates the software requirements.

- Stata (code was last run with version 17)
  - `estout` (as of 2024-11-07)
- R 4.4.0
  - `tidyverse` (2.0.0)
  - `here` (1.0.1)
  - `latex2exp` (0.9.6)
  - `cowplot` (1.1.3)
  - `stargazer` (5.2.3)
  - `sandwich` (3.1-0)
  - `lmtest` (0.9-40)
  - `margins` (0.3.28)
  - `modelsummary` (2.2.0)
  - `broom` (1.0.6)

- `dplyr` (1.1.4)
- `purrr` (1.0.2)
- `broom` (1.0.6)
- `magrittr` (2.0.3)
- `ggplot2` (3.5.1)
- `gt` (0.11.1)
- `ggrepel` (0.9.5)

Memory and Runtime Requirements

The code was last run on an Apple M2 MacBook Air (2020) with MacOS version 14.6. Computations to reproduce the Figures and Tables took **around 2 minutes**.

Description of programs/code

- `Analysis.do` generates all tables of the paper, except for Table A2, which is generated by `Table_A2.R`.
- `Figures.qmd` generates all Figures of the paper.

List of tables and programs

The provided code reproduces: All tables and figures in the paper.

Figure #	Program	Output file
Figure 1: Dishonesty in our experiment, COVID-19 infections and personal traits.	`Figures.qmd`	`Fig_1.pdf`
Figure 2: Civic honesty and COVID-19 excess deaths in OECD countries.	`Figures.qmd`	`Fig_2`

Table #	Program	Output file
Table 1: COVID-19 infection, ten tail tosses, and likelihood of reported tails.	`Analysis.do`	`Tab_1.tex`
Table A1: Main specification including control variables.	`Analysis.do`	`Tab_A1.tex`
Table A2: Reported behavior and personal traits of participants who reported ten tails.	`Table_A2.R`	`Table_A2.tex`
Table A3: Positive corona test and high number of tail tosses.	`Analysis.do`	`TabA3.tex`
Table A4: Positive corona test, truth-telling probability, ten tail tosses and treatments.	`Analysis.do`	`TabA4.tex`