Understanding Mechanisms of Persistence in Prosocial Behavior: Evidence from a large-scale Field Experiment

Data and Code

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This file explains how to replicate empirical work and simulations shown in the paper *Understanding Mechanisms of Persistence in Prosocial Behavior: Evidence from a large-scale Field Experiment* and its appendix.

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1 Folder Structure and Files

1.1 data

The data folder contains data sets on blood donations, weather, and simulations

1.1.1 blood_donation

blood_donation.dta contains donor-level data from the main experimental study that took place in 2015-2016

donation.dta contains donor-level data from the quasi-experiment that took place between 2012 and 2014

1.1.2 rainfall

rainfallZH.dta contains daily weather data from the Zurich Fluntern weather station for the years 1864 - 2018. Data in csv format is provided by the Swiss National Basic Climatological Network (NBCN) of MeteoSwiss and publicly available at https://opendata.swiss/en/dataset/klimamessnetz-tageswerte

1.1.3 simulations

Intermediate simulation data for quick replication of simulated figures. Can also be re-generated from scratch with the provided matlab codes below.

1.2 Code

- *runall.do*
  - Stata .do file used to run all other stata do files and create all Stata tables and figures.

1. Figures
   - *figure3a.do*
     - Stata .do file used in constructing the descriptive evidence for the persistent effects of the intervention conditional on past donation, see "*Figure 3(a): Donation rates by past donation*".
   - *figure3b.do*
     - Stata .do file used in constructing the descriptive evidence for the persistent effects of the intervention by experimental conditions, see "*Figure 3(b): Donation rates by experimental conditions*".
   - *figure4.do*
     - Stata .do file used in conducting the grid search of the parameter γ, see "*Figure 4: Grid search of the parameter γ*".
   - *figureE1.do*
     - Stata .do file used in conducting the grid search of the parameter γ (ITT version in Appendix), see "*Figure E.1: Grid search of the parameter γ*".
   - *figF1_simulation_experimentalsample.m, figF1_simulationplot_experimentalsample.m*
     - MATLAB files used in assessing the statistical power of out overidentification test. The first file simulates a data set of the same dimensions as our experimental data and carries out the relevant statistical tests. The second file plots the results. See "*Figure F.1: Field Experiment Sample, Panel (a) – Share of cases with Sargan p-value < 0.942 and Panel (b) – Share of cases with Sargan p-value < 0.05*".
   - *figF2_simulation_replicationsample.m, figF2_simulationplot_replicationsample.m*
     - MATLAB files used in assessing the statistical power of out overidentification test. The first file simulates a data set of the same dimensions as our experimental data and carries out the relevant statistical tests. The second file plots the results. See "*Figure F.2: Replication Sample, Panel (a) – Share of cases with Sargan p-value < 0.263 and Panel (b) – Share of cases with Sargan p-value < 0.05*".
   - *figF3_simulationplot_utilcostdistributions.m*
     - MATLAB files used in plotting the utility and cost distribution of our simulated dataset, see "*Figure F.3: Utility/Cost Distribution*".
   - *figF4_simulation_conditional_v_cyclical.m*

  - MATLAB file used in simulating a data set of donors with cyclical change in baseline motivation and plotting the donation rates conditional on the donors' donation status in the preceding period, see "*Figure F.4: Persistency in Donors with Cyclical Change in Baseline Motivation*".

2. Tables

- *table2.do*
  - Stata .do file used in creating randomization checks of the intervention, see "*Table 2: Randomization checks*".
- *table3.do*
  - Stata .do file used in calculating donation rates by different adverse weather conditions, see "*Table 3: Adverse Weather Conditions and Donation Rate*".
- *table4.do*
  - Stata .do file used in estimating main reduced-form results, see "*Table 4: Reduced-Form Results*".
- *table5.do*
  - Stata .do file used in discriminating between action-based and motivation-based persistence, see "*Table 5: Action-based vs motivation-based persistence*".
- *tableB1.do*
  - Stata .do file used in estimating first stages of reduced form LATE results, see "*Table B1: LATE First stages*".
- *tableC1.do*
  - Stata .do file used in conducting balance checks on the weather instruments, see "*Table C1: Balance Checks of Covariates*".
- *tableD1.do*
  - Stata .do file used discriminating between action-based and motivation-based persistence in the replication study, see "*Table D1: Action-based vs motivation-based persistence (replication study)*".

Requirements

The following programs were used to run the above code and generate the results in the paper

- Stata MP version 18.0
  - packages: reghdfe, ivreghdfe, outreg2, balancetable
  - programs were run on a Mac computer, macOS Ventura version 14.2.1 with a Apple M2 Pro chip and 16 GB memory.

- MATLAB 2023a
  - packages: Panel Data Toolbox for MATLAB version 2.1
  - programs were run on a Mac computer, macOS Ventura version 14.2.1 with a Apple M2 Pro chip and 16 GB memory.