Replication instructions for

What would delegates do? When and how the delegate paradox affects estimates of ideological congruence

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Study 1: Simulation evidence

Overview

Study 1 is comprised of an original simulation.

Replication instructions

The simulation is conducted in a single R script called “Study_1_analysis.R.”

This script requires the following R packages: mirtCAT, ggplot2, rstan.

About the scripts

Study_1_analysis.R

Purpose: Produces Figure 2 in the manuscript and Figures A.1, A.2, and A.3 in the appendix.

Depends on: No dependencies.

Study 2: Four national surveys

Overview

Study 2 is an original analysis of survey data from Pew and CCES.

Replication instructions

The data analysis is conducted in two R scripts. The first, “Study_2_MCMC.R” uses the survey data to produce ideal point estimates using additive scores and IRT modeling. The Pew and CCES sections of this script can be run independently of each other. The IRT based estimates are saved in four RData files with names starting “Study_2_MCMC_output.” The main analysis can be replicated using just these output files and the second R script, “Study_2_analysis.R.”

About the scripts

Study_2_MCMC.R

Purpose: Generates Study 2 MCMC output and Appendix Tables A.6 and A.7.

Depends on: Pew_2014_public.sav, Pew_2015_public.sav, Pew_2014_coding.csv, Pew_2015_coding.csv, cces_2014_public.RData, cces_2016_public.RData, cces_coding.csv

Study_2_analysis.R

Purpose: Produces Study 2 results, including Figures 3 and 4 in the manuscript and appendix Table A.5.

Depends on: Study_2_MCMC_output_cces2014.RData, Study_2_MCMC_output_cces2016.RData, Study_2_MCMC_output_pew2015.RData, and Study_2_MCMC_output_pew2014.RData.

Study 3: Replication and Extension of Hill and Tausanovitch (2015)

Overview

Study 3 replicates and extends Seth Hill and Chris Tausanovitch's "A Disconnect in Representation? Comparison of Trends in Public and Congressional Polarization." The enclosed files are a close modification of a subset of the original authors' replication file. Each R script clearly flags our modifications to the original authors' code.

The original Hill and Tausanovitch replication file can be found at https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/NJRZXP.

Replication instructions

The data analysis is conducted in five R scripts. The three file names beginning in numbers (01, 02, and 07) match the original authors' scripts, with the tag "mod_" to indicate that it is a modified version.

The scripts require the following R packages: car, foreign, rjags, dplyr, and magrittr. The first three packages appear in the original replication code and the latter two are needed to run our modifications to the script. For help with rjags, visit http://mcmc-jags.sourceforge.net/.

All of the scripts can be run independently of one another.

About the scripts

Study_3_figure.R

Purpose: Produces Figure 5 in the manuscript.

Depends on: Study_3_MCMC_output.RData, anes_cdf_extra_50s60s.RData.

Study_3_appendix_table.R

Purpose: Produces Table A.8 in the appendix.

Depends on: Study_3_MCMC_output.RData.

07_mod_RunJointMultinomialFull.R

Purpose: Produces "Study_3_MCMC_output.RData," which contains the ideal point estimates.

Depends on: allyearsMultinomialFull.RData, Study_3_weights.csv, multinomial.jags.

01_mod_createANESData.R

Purpose: Produces anes_cdf.RData, a part of the original replication file that is needed to run 02_mod_mergeCrossSectionalItems.R. The only reason for modifying the 01 and 02 scripts is to produce Study_3_weights.csv. These scripts are not essential to reproducing the main analysis.

Depends on: ANES_Cum_Vars_ToUse.csv, anes_timeseries_cdf.sav.

02_mod_mergeCrossSectionalItems.R

Purpose: Produces Study_3_weights.csv and anes_cdf_extra_50s60s.RData. The only reason for modifying the 01 and 02 scripts is to produce Study_3_weights.csv. These scripts are not essential to reproducing the main analysis.

Depends on: anes_cdf.RData, crossSecVarMap.csv, NES1952.dta to NES1966.dta (external).

Instructions for obtaining external data files: Visit the ANES data center at https://electionstudies.org/data-center/. For each of 1952, 1954, 1956, 1958, 1960, 1962, 1964, and 1966, download the Stata (.dta) version of the Time Series Study. Save the files as NES1952.dta, etc., and place them in the directory containing the rest of the Study 3 files.

Study 4: Replication and Extension of Bafumi and Herron (2015)

Overview

Study 4 replicates and extends Joseph Bafumi and Michael Herron's "Leapfrog Representation." This study does not have its own public replication file. Our replication and extension is based on the original data file, provided by the authors, and a close reading of the paper.

Replication instructions

The data analysis occurs in two R scripts. "Study_4_MCMC.R" generates ideal point estimates and saves them in "Study_4_results.RData." Using this RData, "Study_4_analysis.R" produces reported results.

The scripts require the following R packages: tidyverse, MCMCpack, coda.

The scripts can be run independently of one another.

About the scripts

Study_4_MCMC.R

Purpose: Generate Study_4_results.RData, which contains all of the results for Study 4.

Depends on: Study_4_BHdata.csv.

Study_4_analysis.R

Purpose: Generate all of the figures, tables, and summary statistics that appear in the main text and the appendix.

Depends on: Study_4_results.RData.