June 13, 2024

The Role of State & National Institutional Evaluations in Fostering Collective Accountability Across the U.S. States

Replication Read-Me

This document outlines the description of the replication scripts and materials to replicate the manuscript analysis in the following article:

⋆ Algara, Carlos & Alexander Specht. 2024. "The Role of State & National Institutional Evaluations in Fostering Collective Accountability Across the U.S. States." *Forthcoming at Political Research Quarterly.*

Note: Each R script denotes which R packages are required to replicate the analysis of each respective scripts. Please install these packages for successful replication of each script. Please store all the files in the same directory and set the appropriate working directory as noted at the beginning of each R script for successful replication.

Study #1: Aggregate Tests of State Legislative Collective Accountability

Replication Process Workflow

1. Download the `clean_aggregate_data_state_legislatve.Rdata` source data and place in a working directory folder that can be used to call the data and save aggregate-level manuscript outputs.

2. Install packages in the R script as needed.

3. Set the working directory for each R script to be the folder containing the source data file. Note that the outputs of the forthcoming R script files saves figures and tables in this working directory.

4. Run the given R script for replication of manuscript aggregate-level outputs in the form of manuscript figures and appendix tables replicating the results in tabular form.

Source Data files

⋆ `clean_aggregate_data_state_legislatve.Rdata`: Original data, compiled by the authors, that contains three data frames in the R environment.

  – The first, `jars_legislative_election_years_merge`, contains a merged dataset used to conduct the manuscript analysis using the *U.S. Officials Job Approval Ratings (JARS)* data.

- The second dataframe, `mrp_estimates` contains the state-level estimates of institutional approval estimated from a *Bayesian dynamic multi-level regression and post-stratification (MRP) model* described in the manuscript from 2006-2020.
- Lastly, the fourth dataframe, `state_leg_seats`, contains originally collected data measuring seat turnover data for state legislative elections from 1862 to 2020. Note that this dataframe is the source data for our aggregate outcome variables measuring seat turnover.

R Script Files

⋆ `1_Aggregate_Models_Figures.R`: This R script contains the code to replicate the aggregate-level analysis articulated in the manuscript figures using the `aggregate_data_state_legislatve.Rdata`. Specifically, this code replicates the following manuscript figure outputs:

- Figure 1: Distribution of State Legislative Seat Turnover, 2006-2020
- Figure 2: Distribution of National & State Institutional Job Approval, 2006-2020
- Figure 3: Relationship Between Institutional Evaluations & State Legislative Seat Turnover
- Figure 4: Job Approval Ratings Database Robustness Check of Institutional Evaluations
- Figure 5: Temporal Heterogeneity Relationship Between Presidential Approval & Seat Turnover: (a) By Presidential Administration
- Figure 5: Temporal Heterogeneity Relationship Between Presidential Approval & Seat Turnover: (b) By Year

⋆ `2_Aggregate_Models_Tables.R`: This R script contains the code to replicate the aggregate-level analysis articulated in the manuscript figures using the `aggregate_data_state_legislatve.Rdata`. Specifically, this code replicates the appendix manuscript tables that also articulates the aggregate-level model results in the following appendix outputs:

- Appendix Table 3: JARS OLS Models Predicting Party State Legislative Seat Change: Pooled Chambers
- Appendix Table 4: JARS OLS Models Predicting Party State Legislative Seat Change: Lower Chambers
- Appendix Table 5: JARS OLS Models Predicting Party State Legislative Seat Change: Upper Chambers
- Appendix Table 8: MRP OLS Models Predicting Party State Legislative Seat Change: Pooled Chambers
- Appendix Table 9: MRP OLS Models Predicting Party State Legislative Seat Change: Lower Chambers
- Appendix Table 10: MRP OLS Models Predicting Party State Legislative Seat Change: Upper Chambers

– Appendix Table 11: MRP OLS Models Predicting Party State Legislative Seat Change Over Time, 2006-2020
– Appendix Table 12: MRP OLS Models Predicting Party State Legislative Seat Change Over Time, 2006-2020

Study #2: Voter-Level Tests of State Legislative Collective Accountability

Replication Process Workflow

1. Unzip the `Survey Data Files.zip` folder containing all the source data files described below.
2. Install packages in the R script as needed.
3. Set the working directory for each R script to be the folder containing the source data files. Note that the outputs of the forthcoming R script files saves figures and tables in this working directory.
4. Run the given R script for replication of manuscript survey-level outputs in the form of manuscript figures and appendix tables replicating the results in tabular form.

Source Data files

⋆ `Survey Data Files.zip`: This `zip` file contains all of the data used to estimate survey-level models in the following fashion:

- 15 `dta` files labeled `CCES2006` to `CCES2020` that contains each cross-sectional survey from the *Cooperative Election Study* used in the manuscript.
- `cces_contextuals_2006_2020.dta`: Original data compiled by the authors that contains contextual data for each congressional district from 2006 to 2020 that codes the partisan composition of each institution (i.e., Governor, state lower chamber majority party, state upper chamber majority party).
- `cces_variables_individual_level.csv`: CSV file containing the specific variables taken from each *Cooperative Election Study* survey used in the voter-level model estimations in the manuscript.
- `cumulative_2006-2020.dta`: 2006-2020 *Cooperative Election Study* used for certain standardized household income control variable cross-sectionally. This dataset is merged by cross-sectional year and cross-sectional respondent case ID, with this merging being necessary given variation in household income reporting across cross-sectional surveys.

R Script Files

- `1_Survey_Models_Figures.R`: This R script contains the code to replicate the survey-level analysis articulated in the manuscript figures using all the survey data files. Specifically, this code replicates the following manuscript figures:
  - Figure 6: Relationship Between Institutional Evaluations & State Legislative Choice: (a) Presidential Approval

  - Figure 6: Relationship Between Institutional Evaluations & State Legislative Choice: (b) Gubernatorial Approval
  - Figure 6: Relationship Between Institutional Evaluations & State Legislative Choice: (c) Congressional Approval
  - Figure 6: Relationship Between Institutional Evaluations & State Legislative Choice: (d) State Legislative Approval
  - Figure 7: Distribution of Significant Executive Effects on State Legislative Vote

`2_Survey_Models_Tables.R`: This R script contains the code to replicate the survey-level analysis articulated in the manuscript appendix using all the survey data files. Specifically, this code replicates the following appendix tables replicating the results of the manuscript figures:

- Appendix Table 13: LPM Voter-Level Models Predicting State Legislative Democratic Vote: Pooled Chambers
- Appendix Table 14: LPM Voter-Level Models Predicting State Legislative Democratic Vote: Lower Chambers
- Appendix Table 15: LPM Voter-Level Models Predicting State Legislative Democratic Vote: Upper Chambers