Replication Documentation for: Legislator Responsiveness to Racialized Constituencies in Mexico

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This README describes how to reproduce all analyses, figures, and tables reported in the manuscript and supplemental appendix. It assumes the user has a working R installation and the required packages installed.

Prerequisites

Before running the replication code:

1. **Ensure all replication files are downloaded.**
2. **Set the working directory** to the main replication folder:

```
setwd("/path/to/replication_files")
```

3. **Install the required R packages**:

```
install.packages(c("readr", "stargazer", "texreg", "pwr", "dplyr", "janitor",
                   "xtable", "sandwich", "lmtest", "ggplot2", "broom", "car"))
```

Files and Functions

Input Files:

- `data.csv` : Main dataset used for all analyses.

Output Files:

Saved to the `output/` folder:

- `descriptive_statistics_table.tex` : Table 1 (Sample Description)
- `balance_test_results.tex` : Appendix D (Chi-squared balance tests)
- `response_proportions_table.tex` : Table 2 (Response proportions)
- `power_analysis.tex` : Table F (Power analysis)
- `main_models_table.tex` : Table 3 (Main regression results)
- `coalition_interaction_models_table.tex` : Table 4
- `indigenous_interaction_models_table.tex` : Table 5
- `loo_results.csv` : LOO stability analysis summary

User-Created Function:

- `loo_summary_by_dv()` : Computes leave-one-out estimates, p-values, and robustness metrics for each model term.

Step-by-Step Instructions

1. Set Up Environment

```
rm(list = ls())
library(...)  # Load all required libraries
setwd("/path/to/replication_files")
data <- read_csv("data.csv")
```

2. Descriptive Statistics

- Compute Table 1 using `dplyr` and `xtable`.
- Output: `output/descriptive_statistics_table.tex`

3. Balance Tests

- Run chi-squared tests on `woman`, `opposition`, and `ind_pop` vs. `treatment`.
- Output: `output/balance_test_results.tex`

4. Response Proportions

- Compute mean response rate by treatment group.
- Output: `output/response_proportions_table.tex`

5. Power Analysis

- Use `pwr.2p.test()` to estimate power for `n = 192` and `n = 207`, `h = 0.20`.
- Output: `output/power_analysis.tex`

6. Main Analysis (Table 3)

- Run 4 regression models on outcome variables.
- Compute robust SEs.
- Output: `output/main_models_table.tex`

7. Linear Hypothesis Test

- Run `linearHypothesis(model_2, ...)` to test if Indigenous = Mestiza effect in greeting.

8. Interaction Analyses

- Run models with interactions:
  - `Treatment x Coalition` (Table 4)
  - `Treatment x Indigenous Population` (Table 5)
- Output: `output/coalition_interaction_models_table.tex`, `output/indigenous_interaction_models_table.tex`

9. Leave-One-Out (LOO) Robustness Checks

- Call `loo_summary_by_dv()` for all models.
- Output: `loo_results.csv`

Notes

- All model tables use robust standard errors via `vcovHC()`.
- All `.tex` files are LaTeX-compatible and can be `\input{}` in your main `.tex` file.
- The function `loo_summary_by_dv()` is modular and can be extended to additional terms or models.