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1 Introduction

2 Data

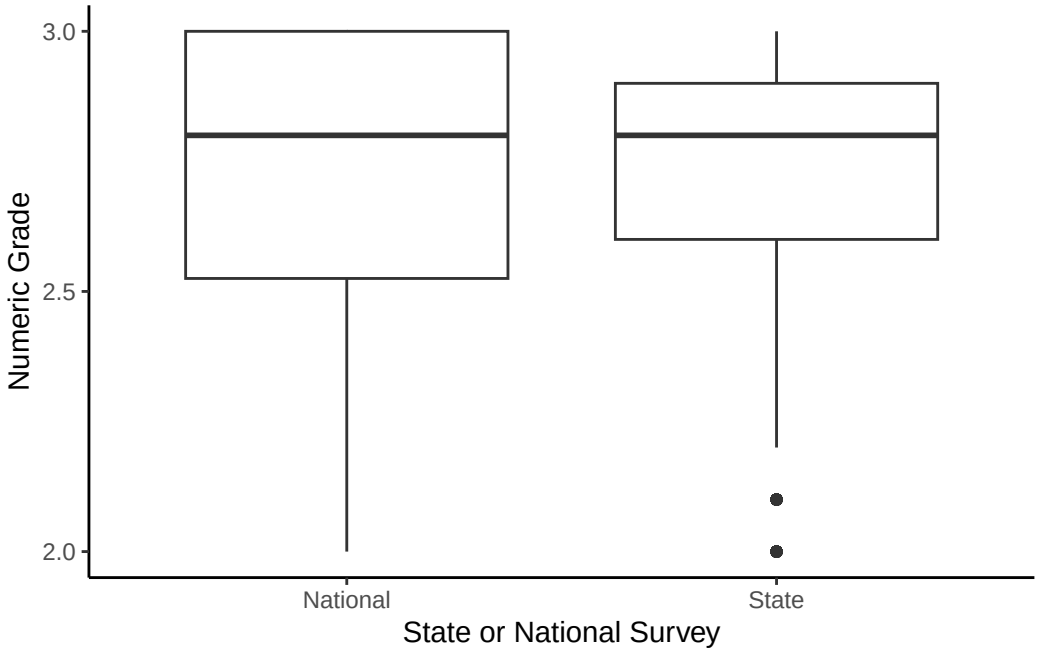

Figure 1: Distribution of Numeric Grades for State and National Surveys

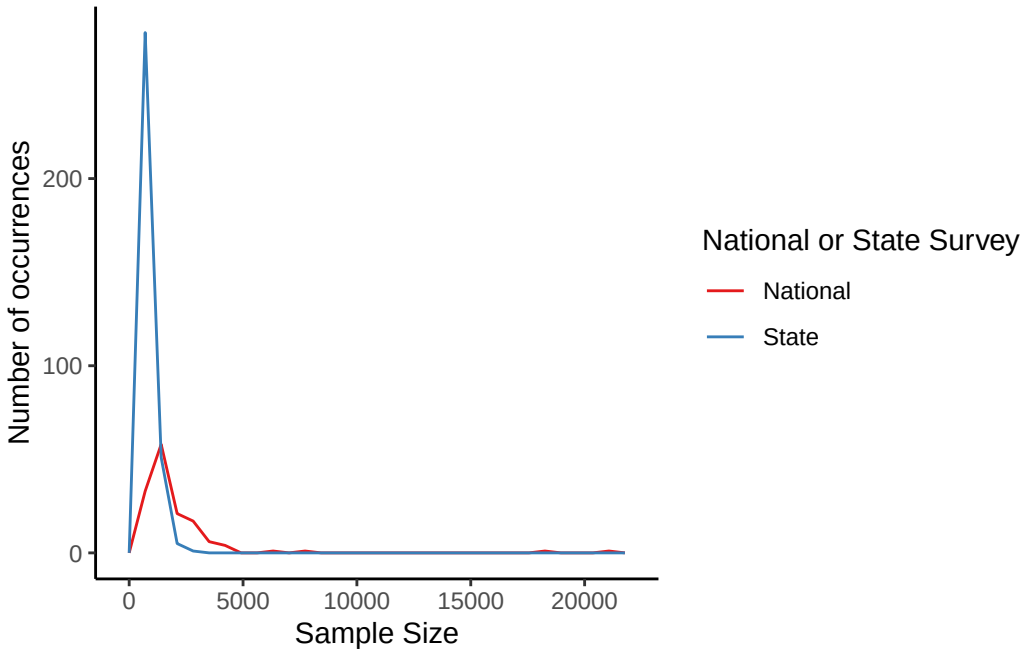

Figure 2: Frequency Distribution of Sample Sizes for State and National Surveys

Table 1: Weighted Average Proportion of Harris Support from National Surveys

Survey	Weighted Average Proportion of Harris Support
National	0.513

Table 2: Weighted Average Proportion of Harris Support from State Surveys

Survey State	Nubmer of Survey	Weighted Average Proportion of Harris Support
Alaska	1	0.448
Arizona	30	0.486
California	4	0.630
Connecticut	1	0.589
Florida	10	0.464
Georgia	31	0.492
Indiana	1	0.413
Iowa	2	0.472
Maine	3	0.552
Maryland	5	0.664
Massachusetts	5	0.653
Michigan	34	0.504
Minnesota	3	0.529
Missouri	2	0.442
Montana	6	0.407
Nebraska	8	0.503
Nevada	16	0.505
New Hampshire	5	0.544
New Mexico	4	0.548

Table 2: Weighted Average Proportion of Harris Support from State Surveys

Survey State	Nubmer of Survey	Weighted Average Proportion of Harris Support
New York	3	0.568
North Carolina	40	0.500
Ohio	10	0.466
Pennsylvania	44	0.507
Rhode Island	3	0.579
South Carolina	1	0.449
Texas	13	0.471
Utah	4	0.416
Virginia	10	0.549
Washington	1	0.620
Wisconsin	35	0.510

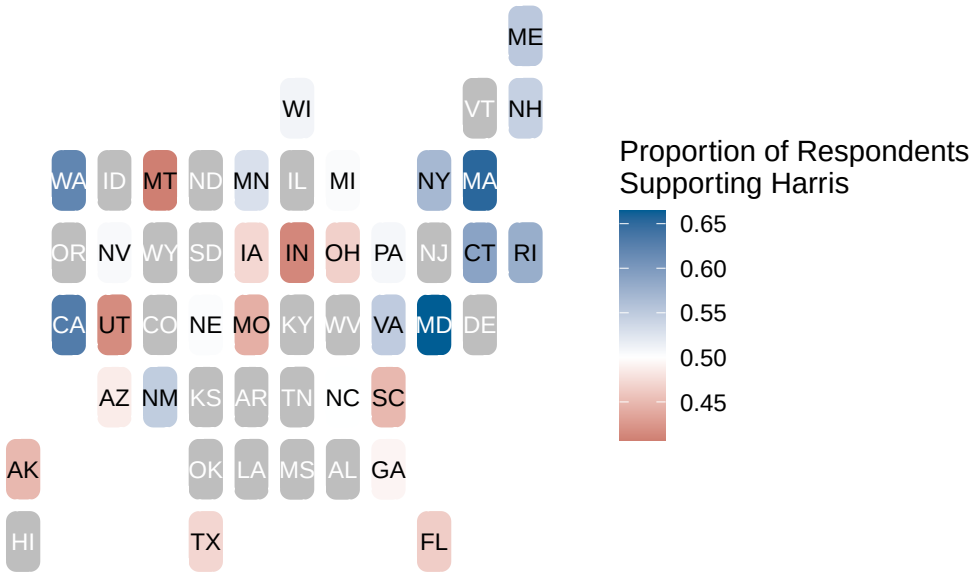

Figure 3: Proportion of Harris Support by State from State Surveys

3 Model

$$
\begin{aligned}
y_i|\mu_i &\sim \text{Normal}(\mu_i, \sigma) \\
\mu_i &= \beta_0 + \beta_1 \times \text{Pollster}_i + \beta_2 \times \text{Numeric Grade}_i + \beta_3 \times \text{Days Since End}_i + \beta_4 \times \text{Population}_i \\
\beta_0 &\sim \text{Normal}(0, 2.5) \\
\beta_1 &\sim \text{Normal}(0, 2.5) \\
\beta_2 &\sim \text{Normal}(0, 2.5) \\
\beta_3 &\sim \text{Normal}(0, 2.5) \\
\beta_4 &\sim \text{Normal}(0, 2.5) \\
\sigma &\sim \text{Exponential}(1)
\end{aligned}
$$

where:

- y_i is the dependent variable, representing the proportion of respondents who support Harris
- β_0 is the intercept term, representing the expected Harris support ratio when all predictors are zero. It follows a prior distribution that is normal with a mean of 0 and a standard deviation of 2.5.
- β_1, β_2, β_3, and β_4 are the coefficients corresponding to the predictor variables **Pollster**, **Numeric Grade**, **Days Since End**, and **Population**, respectively. **Days Since End** ranges from 0 to 1, showing how recent the survey ended, with 0 meaning the most recent. Each of these coefficients follows a prior distribution that is normal with a mean of 0 and a standard deviation of 2.5.
- The residual standard deviation, σ, follows an exponential prior with a rate of 1.

4 Results

Table 3: Predicted Proportion of Harris Support Based on National Surveys

National	Predicted Proportion of Support For Harris
National	0.5084224

Table 4: Predicted Proportion of Harris Support Based on State Surveys

State	Predicted Proportion of Support For Harris
Alaska	0.5004071
Arizona	0.4983438
California	0.5946496
Connecticut	0.5697155
Florida	0.4925384
Georgia	0.4982837
Indiana	0.5088246
Iowa	0.4857333
Maine	0.5521297
Maryland	0.6365772
Massachusetts	0.5873168
Michigan	0.5000780
Minnesota	0.5065353
Missouri	0.4812367
Montana	0.4845132
Nebraska	0.4998111
Nevada	0.4968197
New Hampshire	0.5520701
New Mexico	0.5202038
New York	0.5460566
North Carolina	0.4985390
Ohio	0.4915805
Pennsylvania	0.5020801
Rhode Island	0.5814881
South Carolina	0.4488876
Texas	0.4968950
Utah	0.4769712
Virginia	0.5465990

Table 4: Predicted Proportion of Harris Support Based on State Surveys

State	Predicted Proportion of Support For Harris
Washington	0.5043389
Wisconsin	0.5070940

5 Discussions

6 Appendix

6.1 Data Cleaning

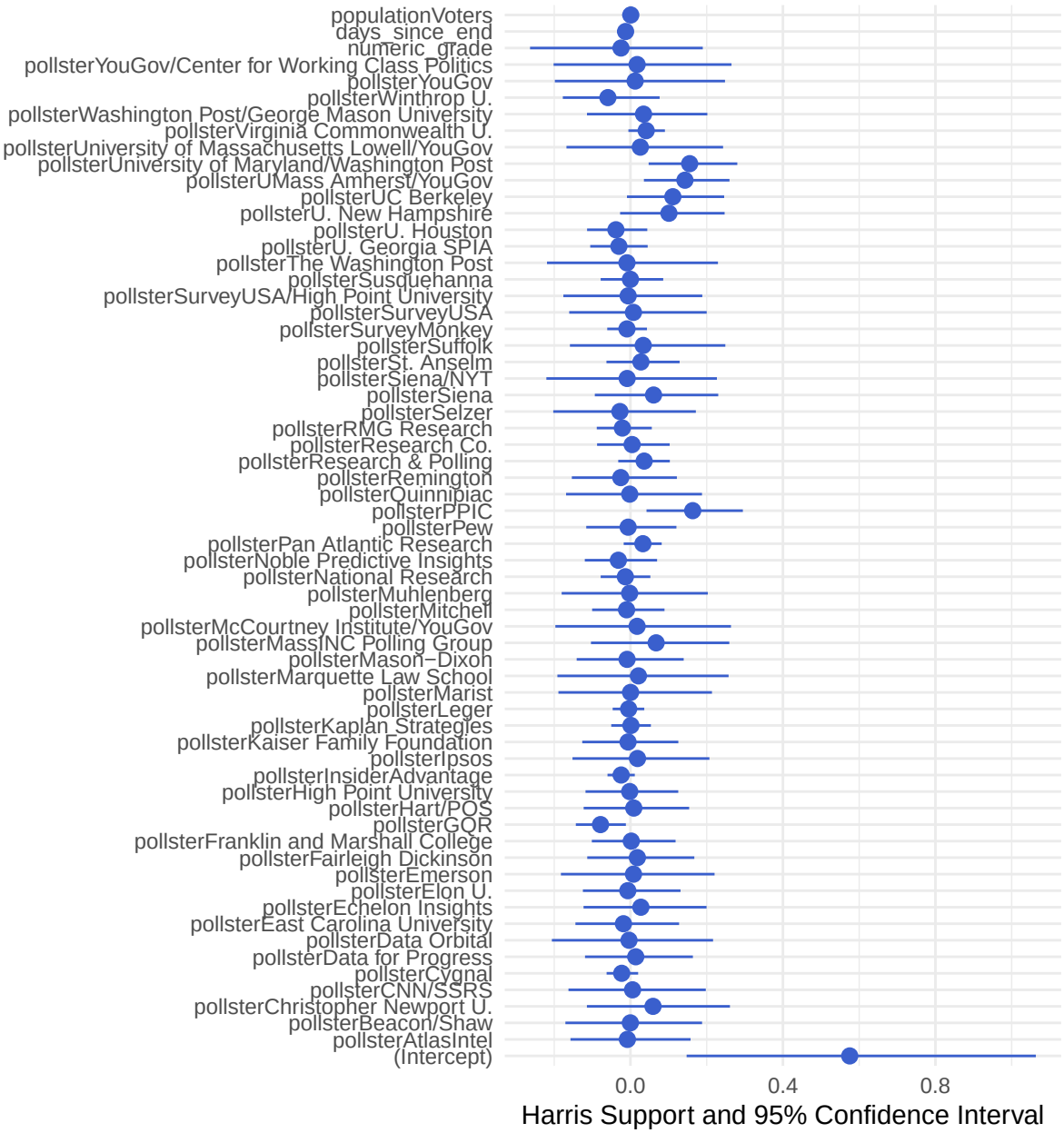

Figure 4: Model Results for Harris Support Based on Pollster, Pollster Quality, Survey Recency, and Survey Population

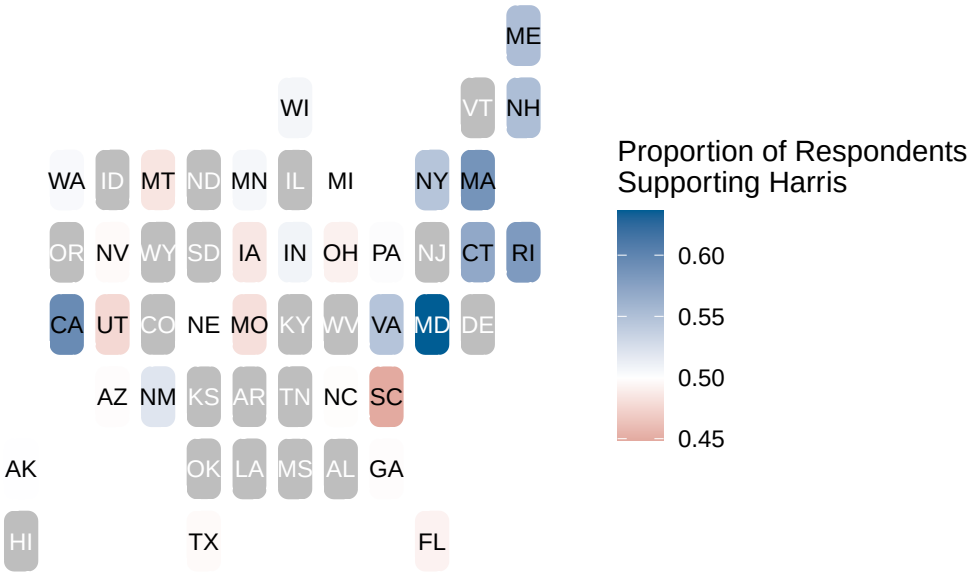

Figure 5: Predicted Proportion of Harris Support by State from State Surveys

7 References