

# Higher Information and Higher Trust in Government ...\*

My subtitle if needed

Talia Fabregas

December 1, 2024

First sentence. Second sentence. Third sentence. Fourth sentence.

## 1 Introduction

Overview paragraph

Estimand paragraph

Results paragraph

Why it matters paragraph In the 2024 election, Democratic Senate candidates (both incumbent and non-incumbent) were elected in states that President-Elect Trump carried: Michigan, Wisconsin, Nevada, and Arizona. In Nevada and Wisconsin, Senators Jackie Rosen and Tammy Baldwin

Telegraphing paragraph: The remainder of this paper is structured as follows. Section 2....

## 2 Data

### 2.1 Overview

We use the statistical programming language R (R Core Team 2023).... Our data (Schaffner, Ansolabehere, and Shih 2023).... Following Alexander (2023), we consider...

Overview text

---

\*Code and data are available at: <https://github.com/taliafabs/US-Midterms-2022.git>.

## 2.2 Measurement

Some paragraphs about how we go from a phenomena in the world to an entry in the dataset.

## 2.3 Outcome variables

Add graphs, tables and text. Use sub-sub-headings for each outcome variable or update the subheading to be singular.

Some of our data is of penguins ([?@fig-fig1](#)), from ...

Talk more about it.

Talk way more about it.

## 2.4 Predictor variables

Add graphs, tables and text.

Use sub-sub-headings for each outcome variable and feel free to combine a few into one if they go together naturally.

# 3 Model

The goal of my modeling strategy is twofold. Firstly, I want to The goal of our modelling strategy is twofold. Firstly,...

Here we briefly describe the Bayesian analysis model used to investigate... Background details and diagnostics are included in [Appendix C](#).

## 3.1 Model set-up

Define  $y_i$  as the number of seconds that the plane remained aloft. Then  $\beta_i$  is the wing width and  $\gamma_i$  is the wing length, both measured in millimeters.

$$y_i | \pi_i \sim \text{Bern}(\pi_i) \quad (1)$$

$$\text{logit}(\pi_i) = \beta_0 + \beta_1 \times \text{presvote2020}_i + \beta_2 \times \text{educ}_i + \beta_3 \times \text{trust}_i + \beta_4 \times \text{know\_us\_house}_i \quad (2)$$

$$+ \beta_5 \times \text{know\_us\_senate}_i + \beta_6 \times \text{political\_interest}_i \quad (3)$$

$$\beta_0 \sim \text{Normal}(0, 2.5) \quad (4)$$

$$\beta_1 \sim \text{Normal}(0, 2.5) \quad (5)$$

$$\beta_2 \sim \text{Normal}(0, 2.5) \quad (6)$$

$$\beta_3 \sim \text{Normal}(0, 2.5) \quad (7)$$

$$\beta_4 \sim \text{Normal}(0, 2.5) \quad (8)$$

$$\beta_5 \sim \text{Normal}(0, 2.5) \quad (9)$$

$$\beta_6 \sim \text{Normal}(0, 2.5) \quad (10)$$

$$(11)$$

We run the model in R (R Core Team 2023) using the `rstanarm` package of Goodrich et al. (2022). We use the default priors from `rstanarm`.

### 3.1.1 Model justification

We expect a positive relationship between the size of the wings and time spent aloft. In particular...

We can use maths by including latex between dollar signs, for instance  $\theta$ .

## 3.2 Model Weaknesses and Limitations

Trained using a random subset of the data. Refer to codebook about the risks of that.

## 4 Results

The results are summarized in Appendix [C.1](#).

#### **4.1 Low Propensity Trump Voters are Less Likely to Vote in Midterms**

#### **4.2 Voters with Little Interest in Politics are Less Likely to Vote in Midterms**

#### **4.3 College Education is Associated with Higher Support for the Democratic Party and Higher Likelihood to Vote in Midterms**

### **5 Discussion**

#### **5.1 First discussion point**

If my paper were 10 pages, then should be at least 2.5 pages. The discussion is a chance to show off what you know and what you learnt from all this.

#### **5.2 Second discussion point**

Please don't use these as sub-heading labels - change them to be what your point actually is.

#### **5.3 Polling Misses and Trump's Unique Appeal to Low Propensity Voters**

#### **5.4 Weaknesses and next steps**

Weaknesses and next steps should also be included.

## Appendix

### A Surveys, Sampling, and Observational Data

#### A.1 Deep Dive into CES Methodology

##### A.1.1 Sampling Method

##### A.1.2 Weighting

##### A.1.3 Verification

##### A.1.4 Weaknesses and Limitations

#### A.2 Second Point: Idealized Survey Methodology to Study 2024 Down-Ballot Voter Attrition

#### A.3 Social Desirability Bias and Identifying Non-Voters

### B Additional data details

#### B.1 Data cleaning

### C Model details

#### C.1 Model Results

The model summary is shown in Table [1](#).

#### C.2 Posterior predictive check

In [?@fig-ppcheckandposteriorvsprior-1](#) we implement a posterior predictive check. This shows the comparison of the outcome variable *vote\_2022*, with simulations from the posterior distribution (Alexander 2023).

In [?@fig-ppcheckandposteriorvsprior-2](#) we compare the posterior with the prior. This shows...

Examining how the model fits, and is affected  
by, the data

Table 1: Explanatory model of voter turnout in 2022 U.S. midterm elections based on ...

Voter Turnout Model		
(Intercept)		−0.79 (0.21)
presvote2020Joe Biden		0.24 (0.08)
age_bracket30-44		0.55 (0.10)
age_bracket45-59		1.16 (0.11)
age_bracket60+		1.79 (0.11)
educ4-year college degree		0.36 (0.11)
educHigh school graduate		−0.27 (0.12)
educNo HS		−1.01 (0.17)
educPost-grad		0.42 (0.13)
educSome college		0.10 (0.12)
trustfedA great deal		−0.86 (0.13)
trustfedNone at all		0.35 (0.11)
trustfedNot very much		0.39 (0.08)
truststateA great deal		−0.07 (0.11)
truststateNone at all		0.15 (0.10)
truststateNot very much		−0.07 (0.08)
know_us_houseYes		0.36 (0.07)
know_us_senateYes		0.02 (0.06)
political_interestMost of the time		0.28 (0.15)
political_interestNo		−1.07 (1.12)
political_interestOnly now and then		−0.32 (0.17)
political_interestSome of the time		0.00 (0.16)
Num.Obs.	6	7500
R2		0.134
Log.Lik.		−3270.706
WAIC		6606.0
RMSE		0.42

### C.3 Credibility Intervals

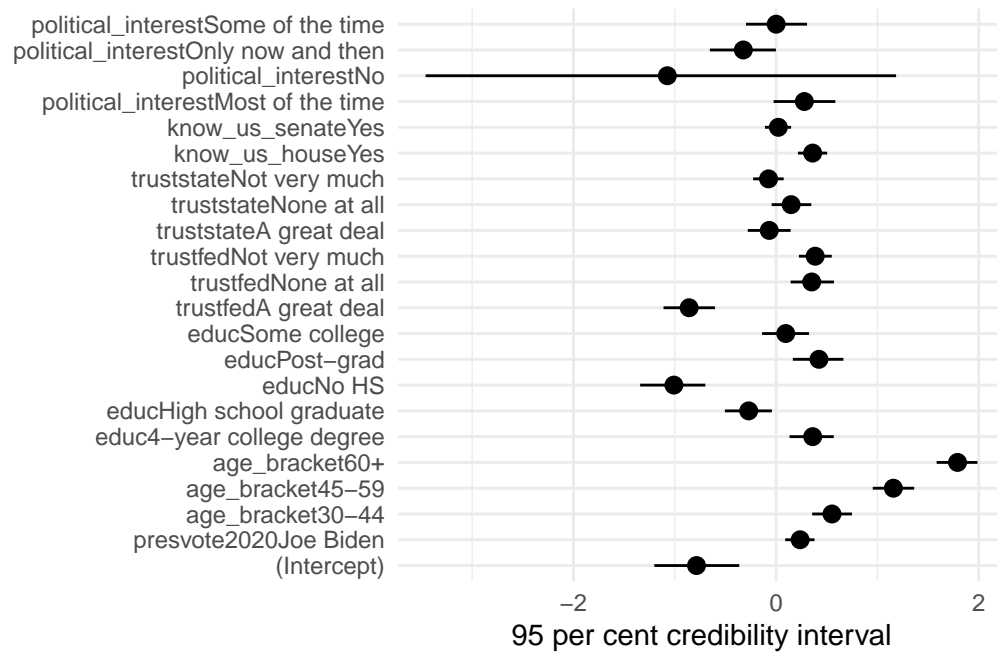


Figure 1: Credible intervals for predictors of voter turnout in the 2022 U.S. midterm elections

### C.4 Diagnostics

Figure 2a is a trace plot. It shows... This suggests...

Figure 2b is a Rhat plot. It shows... This suggests...

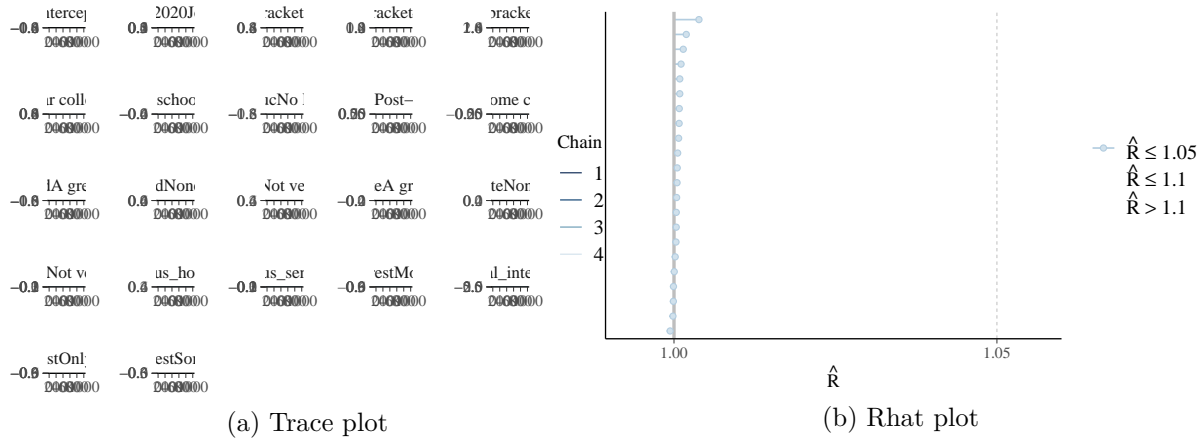


Figure 2: Checking the convergence of the MCMC algorithm

## References

- Alexander, Rohan. 2023. *Telling Stories with Data*. Chapman; Hall/CRC. <https://tellingstorieswithdata.com/>.
- Goodrich, Ben, Jonah Gabry, Imad Ali, and Sam Brilleman. 2022. “rstanarm: Bayesian applied regression modeling via Stan.” <https://mc-stan.org/rstanarm/>.
- R Core Team. 2023. *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing. <https://www.R-project.org/>.
- Schaffner, Brian, Stephen Ansolabehere, and Marissa Shih. 2023. “Cooperative Election Study Common Content, 2022.” Harvard Dataverse. <https://doi.org/10.7910/DVN/PR4L8P>.