My title*

My subtitle if needed

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

1 Introduction

We are becoming more aware of the effects that humans have on the environment. In the past _____ years, we have done _____ to negatively impact the environment. To prevent this on a large scale, it is up to the governments of countries. One of the leading causes of pollution is the burning of fossil fuels to generate electricity. To prevent this, a shift towards renewable energy sources has been on the rise. Harnessing renewable energy sources such as wind, solar, and hydroelectric will be needed if we are to reduce the harmful air pollution from sources such as coal, oil, natural gas, and nuclear energy. Most of these non-renewable sources come from the past so the infrastructure has been in place for a long time. We need to build new infrastructure for renewable energy sources such as building dams, wind turbines, and solar panels. This will come at a financial cost which will have to ultimately come from the citizens in the form of increased taxes or increased electricity payments.

From the CES 2020 dataset, we will analyze whether political preference, education level, and type of area a person is living in (family income?) affects their stance on reducing pollution and climate change prevention.

The scenario that was proposed in the survey was: Require that each state use a minimum amount of renewable fuels (wind, solar, and hydroelectric) in the generation of electricity even if electricity prices increase a little. And the possible responses were: support or oppose. We can consider this support of or opposition of this scenario as their stance on the necessity of reducing pollution and climate change prevention.

There will always be a cost associated with climate change. Thus it is important to recognize that certain sacrifices have to be made in order to benefit our earth.

*Code and data are available at: https://github.com/RenfrewA/us-pop-env-stance

2 Data

3 Model

We want to model an American's stance on climate change, specifically their position on requiring that each state use a minimum amount of renewable fuels in the generation of electricity even in electricity prices increase a little. In our model, we consider a person's political preference, education level, and type of area they are living in to predict their stance on this topic.

$$y_i|\pi_i \sim \text{Bern}(\pi_i) \tag{1}$$
$$\text{logit}(\pi_i) = \alpha + \beta \times \text{politicalPref}_i + \gamma \times \text{education}_i + \delta \times \text{livingArea}_i \tag{2}$$
$$\alpha \sim \text{Normal}(0, 2.5) \tag{3}$$
$$\beta \sim \text{Normal}(0, 2.5) \tag{4}$$
$$\gamma \sim \text{Normal}(0, 2.5) \tag{5}$$
$$\delta \sim \text{Normal}(0, 2.5) \tag{6}$$

Where:

- y_i is the binary outcome variable, representing
- π_i is the probability that respondent
- $politicalPref_i$ is a predictor variable, representing the political preference of respondent i,
- $education_i$ is a predictor variable, representing the education level of the respondent
- $livingArea_i$ is a predictor variable, the residential area that the respondent is living in (urban, rural, suburban, etc.) i.

3.1 Model set-up

3.1.1 Model justification

4 Results

We performed logistic regression analysis on _____ observations of the total _____ observations in the cleaned dataset. We are interested in whether or not a person's political preference, household income, education, or area where they are living in will impact their stance towards preventing climate change.

5 Discussion

5.1 First discussion point

If my paper were 10 pages, then should be 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

5.3 Third discussion point

5.4 Weaknesses and next steps

Weakness in the question. It states "... even if electricity prices increase a little" but this is can mean something different to everyone. The wording leaves it up to the reader for interpretation on how much the price will increase. Thus, a person's decision may be different depending on if this question had a more concrete wording with a price range or percent.

Appendix

A Additional data details

B References