The Association Between Political Beliefs and Support for Climate Change Policies

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Introduction

- Only half of Americans think their actions influence climate change while 70% of those who believe in climate change admit individuals need to make lifestyle changes to impact climate change (AP-NORC, 2022).

- Social identity, i.e, education, race, etc., are believed to be influential in determining a person's value-belief system and thus support for climate change policy (Fielding and Hornsey, 2016).

- While the association has been well established in the literature, less is known about different types of policy support, or which social identities play a key.

- One of the most important determinant factors consistently implicated in the support for climate policy is political affiliation (Bumann, 2021).

- People with higher human capital levels, or higher education levels, are believed to be more forward-looking and thus more considerate of climate change conditions (World Bank, 2023).

Methods

Sample

- Respondents (n = 429) were interviewed and recorded via a telephone survey on landlines and cell phones by the Muhlenberg College Institute of Public Opinion.

- The sample from the National Surveys on Energy and Environment (NSEE) represents the civilian adult population of the United States.

Measures

- Political party was assessed by asking participants to pick a party they identify most with: Democrat, Conservative, Other Party, and Independent.

- Support for climate change policies was evaluated through a questionnaire that asked participants "For each idea that I mention please tell me if you strongly support, somewhat support, somewhat oppose or strongly oppose the proposed [policies]" including ways states can reduce greenhouse gas emissions, requiring automakers to increase the fuel efficiency of their vehicles, increasing taxes on all fossil fuels, allowing cap and trade and requiring a set portion of electricity to come from renewables. This variable was coded into an index from one to sixteen.

- Income and education were asked directly and coded into a categorical variable ranging from less than $20, 000 to over $100, 000 of family income or less than high school to above college, respectively.

Research Questions

- What is the association between political party and support for climate change policies?
- Does the association between political party and support for climate change policies differ when controlling for income and education?

Results

Univariate

- 31% of respondents identified as democratic, 25% as conservative and 35% independent

- A total of 55% attained a college degree or higher, with 14% only having finished high school

- 20% of respondents fall below the poverty line ($40, 000 family income or below), while 33% make over $100, 0000

Bivariate

- An ANOVA analysis showed that among U.S. adults, there appears to be a significant relationship between support for climate change policies among different political parties (P = 7.46e-16). This relationship is visualized in Figure 1.

- A second ANOVA analysis shows that among U.S. adults, education does not affect support for climate change policy.

- A further post-hoc test reveals there is a statistically significant difference between democrats and conservatives (P= 0.000) and conservatives and independents (P=0.0000072).

- A third ANOVA analysis shows that among U.S. adults, gender does affect support for climate change policy (P = 0.00351). (Figure 2).

Multivariate

- There was no statistically significantly differences between any education level in terms of level of support for climate change policies

- There was no statistically significantly differences between any income level in terms of level of support for climate change policies

- There was a statistically significant difference of those who identify as "Other Party" between Male and Females
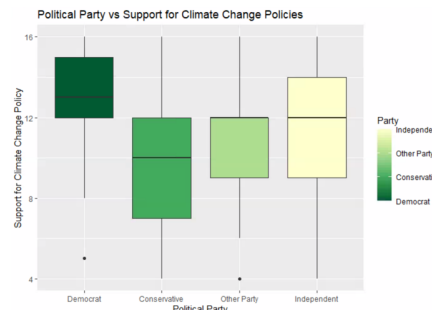

Figure 1. Support for Climate Change Policy by Political Party

Multivariate (cont.)

- In each education level, the predicted number of global warming policies is not different between those who are democrats, conservatives, or independents.

Figure 2: Support for Climate Change Policy by Political Party and Gender

Discussion

- Based on the present analysis, there does not seem to be a significant relationship between education and support for climate change

- Although prior research has suggested there is a significant relationship between income and climate change policy support, this sample may not be accurately representative of the population (refer to univariate analysis).

- When testing for a level of statistical significance for education, there were no representative population for conservatives or other party-identifiers with less than a high school degree.

- Census data shows that 28% of people have a high school degree as their highest level of education. Furthermore, other research shows that only 18% of Americans make more than $100k a year (Census, 21).

- Notably, the present findings reflect a strong difference in policy support between different political groups but does not when considering education or income.

- Further research is needed to determine whether support for climate change policies are associated with education or income levels.

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