How Political Differences Relate to the Association Between Region and Support for Clean Energy Policies

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Introduction

- Data from the US Environmental Protection Agency projects that without new national energy policies in the next decade, infrastructure and habitable land will erode faster than it can be sustained (United States EPA, 2018).
- Within the United States, political party affiliation and leadership has a large impact on the support or disapproval of renewable energy innovations. The connected statements from political leaders can shift the fringe supporters for/against these policies. (Stokes & Warshaw, 2017).
- There is no clear connection on how different regions of the United States perceive the dangers of climate change or the best solutions to it.
- Prior studies indicate that designs for climate change policies are most effective and well-received when issued at the state level. (Hess et. al., 2016).

Research Questions

1. Is there a connection between region residence and public support for climate change policy?
2. Does the association between region and average support for climate change policies vary differ by a respondent's political affiliation?

Methods

Sample

- Respondents (n = 929) were/are adult (18 years or older) residents of the United States between October 4th and November 19th, 2017.
- Data was drawn the 2017 National Survey on Energy and the Environment (NSEE), a nationally representative sample of non-institutionalized adults in the U.S.

Measures

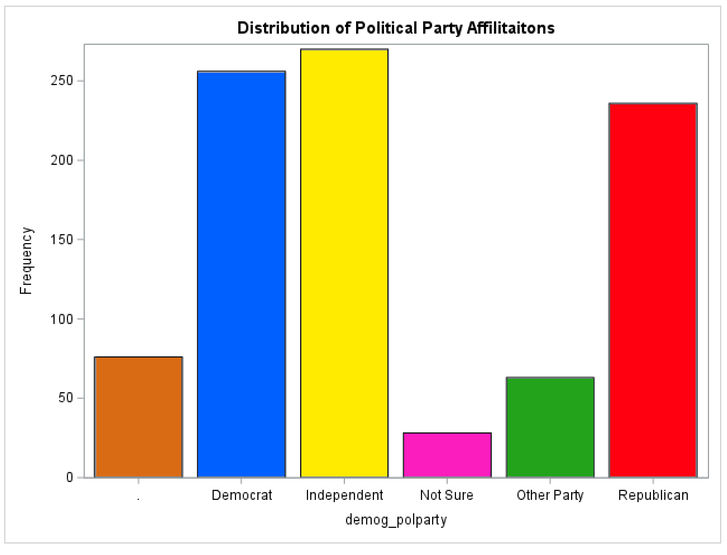
- Regional residency was assessed by reorganizing responses to state residency ("What state do you currently reside in?").
- Political party affiliation was assessed through categorical choice (Republican, Democrat, Independent, Unregistered, Not Sure, N/A).
- Average support for renewable energy and energy efficient policies (RE3) was measured using seven questions around state-mandated policies changes. Each response was coded on a five-point scale from 1 (strongly agree) to 5 (strongly disagree). These responses were summed and into an average ranging from 1 (High Support) to 5 (Low Support) average.

Results

Univariate

- The majority (38%) of adult respondents lived the South. The other regions rank as follows from greatest to smallest percentages: West (23%), Midwest (22%), Northeast (17%).
- Most respondents aligned themselves with the Independent party (29.06%) compared to the Democratic and Republican party (Figure 1).

Figure 1. Political Party Affiliation for United States Adults (NSEE 2017)



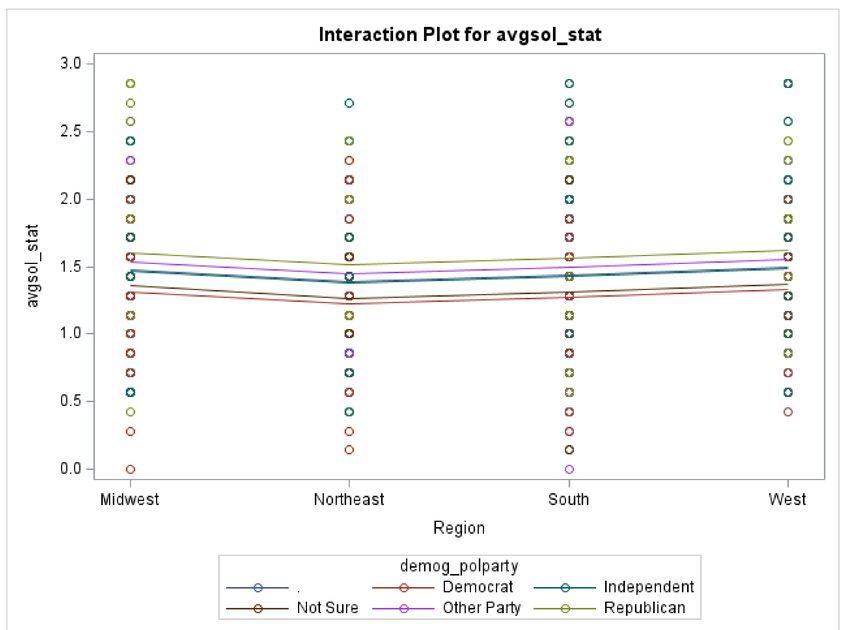
Bivariate

- Analysis of Variance (ANOVA) revealed that among United States adults **each individual region (Northeast, Midwest, West, South) had varying associations**, (Means=1.42 [South], 1.35 [Northeast], 1.47 [Midwest], s.d. ±0.53), F(1, 919) = 2.15, df = 3, p= 0.09
- The Midwest (p-value = 0.8063) and South (p-value = 0.2555) are not significantly associated with average state RE3 support. In contrast**, the Northeast (p-value = 0.02) region *is* significantly associated with stronger support for RE3 policies**. That is, on average **someone who lives in the Northeast is expected to have an average RE3 score 0.13 points lower** than those from the West**.**

Multivariate

- In contrast, **the interaction between region residency and average support for RE3 policies was not statistically significant when controlling for political party affiliation** (Figure 2)**.**
- Race and religious affiliation do not appear to moderate the relationship between region and average RE3 support either.

Figure 2. Average Renewable Energy and Energy Efficient Policy Support by Region across Political Parties



Discussion

- Citizens (and thus, potential voters) in the Northeast may hold slightly stronger support for renewable energy and energy efficient policies that others. In general, support for state-led climate change policies are high across the United States.
- Notably, the present findings provide no insight into which specific solutions are preferred over others.
- Further research is needed to determine whether the major political parties are associated with support for climate change and other renewable energy efficient policies alone.

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