

Environmental Regulation and Public Opinion: A Multivariate Regression Analysis of Religious Variables

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Introduction

Despite modest drops in religious affiliation in the United States, religion is still an important part of millions of American’s lives (Wormald, 2018). The literature regarding the relationship between religion, environmentalism, and climate change belief is ongoing (Shao, 2016). In Faith and Preston (2019), their survey research findings suggested that Christians who had stewardship beliefs -- that God commands humans to care for the Earth and foster its resources -- were associated with greater concern for climate change as a moral imperative. **According to my findings from secondary data, biblical literalism is the strongest predictor of one’s feelings toward environmental regulation, however, religious variables such as religious importance, religious guidance, and religious/church attendance are not as strong contrasted to political variables like party identification and party ideology.**

Data

The dataset is comprised of over 4000 survey responses from the American National Election Studies Time Series Study conducted by the University of Michigan and Stanford University in 2016. **Item:** 7pt scale environment-jobs tradeoff self-placement **Question:** Where would you place yourself on this scale, or haven’t you thought much about this?

- 1 – Regulate Business to protect the environment and create jobs
- 7 – No regulation because it will not work and will cost jobs
- Mean Item Response : 3.15

Method

To determine if religious variables are a predictor of feelings towards environmental regulations, this project uses a multivariate regression analysis using step-wise regression modeling with control variables. With each additional religious variable added, in theory, you should see a larger r^2 value if there is a stronger relationship. The religious variables were chosen based on their availability in the ANES Time Series Study as well as a theoretical argument based on Olsen and Warber (2008) claim’s that belonging, behaving, and believing are integral to understanding religion.

Table 1: Summary of Political and Religious Variables

Independent Variable	Average Response*	SD	Corr.
Party Identification			0.438
Strong Democrat	2.20	1.49	
Strong Republican)	4.46	1.76	
Political Ideology			0.520
Strong Liberal	1.40	1.08	
Strong Conservative	4.55	1.99	
Religious Importance			0.173
Important	3.38	1.84	
Not Important	2.72	1.68	
Religious Guidance			0.168
Great Deal	3.44	1.90	
Quite a Bit	3.40	1.77	
Not at all	3.21	1.78	
Religious Service Attendance			0.153
Attends	3.38	1.76	
Does not attend	2.81	1.81	
Born Again			0.096
Born Again Christian	3.54	1.87	
Not Born Again Christian	3.19	1.78	
Biblical Literalism			0.231
Actual Word of God	3.61	1.92	
Word of God, not all literal	3.27	1.71	
Written by Man, Not Word of God	2.47	1.63	

7 = No Regulation ; 1 = Most Regulation

Main Findings

The main finding from the summary of political and religious variables in Table 1 (above) and the multivariate regression analysis in Table 2 (to the right) is that the religious variables such as religious importance, religious guidance, and religious attendance are not strongly correlated towards feelings to environmental regulation. This is contrasted from political variables such as party identification and political ideology that are strongly correlated in the summary and in the regression models.

Table 2: Step Wise Regression Model of Feelings Regarding Environmental Regulation

Independent Variables	Model 1	Model 2	Model 3
(Intercept)	0.967*** (0.220)	0.943*** (0.009)	1.092*** (0.300)
Age Group	0.036*** (0.009)	0.036*** (0.009)	0.027* (0.011)
Gender (1, female; 0, male)	-0.139* (0.059)	-0.148* (0.060)	-0.216** (0.752)
Income (1-6)	-0.001 (0.004)	-0.001 (0.004)	0.001 (0.005)
Education (1-7)	-0.031* (0.014)	-0.338* (0.014)	-0.030 (0.018)
Race			
Black (1,0)	0.0001 (0.014)	-0.021 (0.142)	-0.010 (0.183)
Hispanic (1,0)	-0.202 (0.011)	-0.216 (0.111)	-0.048** (0.146)
White (1,0)	0.134 (0.020)	0.135 (0.108)	0.154 (0.150)
Party Identification (1 -7)	0.178*** (0.020)	0.175*** (0.020)	0.188*** (0.251)
Political Ideology (1-7)	0.372*** (0.373)	0.363*** (0.028)	0.314*** (0.373)
Religious Importance (1, 0)		0.237 (0.125)	0.221 (0.156)
Religious Guidance (1-0)		-0.304* (0.146)	-0.462* (0.183)
Religious Service Attendance (1, 0)		0.185* (0.074)	0.145 (0.935)
Born Again (1, 0)			0.073 (0.090)
Biblical Literalism (1-0)			0.255 (0.150)
N	2686	2671	1788
R ²	0.298	0.302	0.260

*p <0.05; **p <0.01; ***p < 0.001.

Discussion

There are a few limitations to note in this project. The main limitation being that 709 individuals did not answer the question because “they did not think about it.” Lastly, it is difficult to determine if the average response score were higher for religious individuals due to their own political affiliation. Nonetheless, the study of religion in political science should be investigated further, especially in relation to climate change and environmental concerns.

References

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