

The Association Between Age and Climate Change Beliefs Among Religious Individuals in The United States

Introduction

- Despite carbon dioxide levels having risen by over 50% since the industrial revolution (NOAA, 2022), there is still a lack of institutional action toward reducing the effects of climate change.
- Religion often correlates with political conservatism, which is linked to lower belief in climate change (Furnham and Robinson, 2022).
- Evidence on **age differences** in climate beliefs is mixed (Juszczak, 2015).
- Gap in literature: There is little research on within-religion differences (e.g., how Catholics differ by age).

Research Question

- Does age influence opinions about climate change among religious individuals?

Methods

Sample

- Data source: National Survey on Energy and the Environment (NSEE), 2017.
- Sample: 929 U.S. adults (phone survey).
- Focused religious groups: Protestants (n = 339) and Catholics (n = 189) . There were the only groups with adequate sample sizes.

Measures

- Age (categorical: 18–29, 30–44, 45–64, 65+)
- Religion (self-reported)
- Climate change threat: How much of a threat is climate change?
- The climate change threat variable was originally measured on a 1–5 scale (1 = entirely natural causes; 5 = entirely human-caused). For analysis, this was condensed into a binary variable, where 0 represents responses 1–3 and 1 represents responses 4–5.

Results

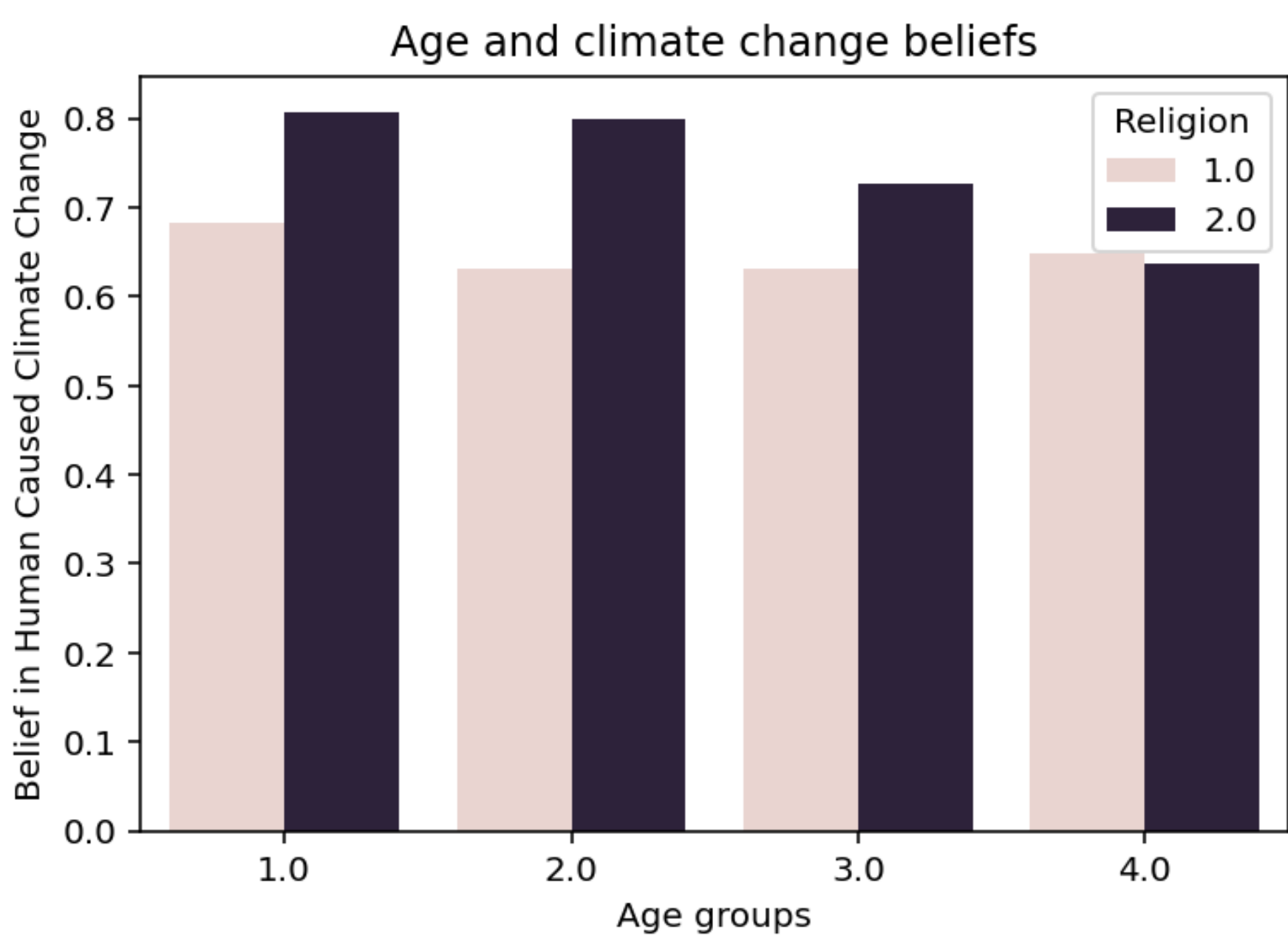
Univariate

- Of the Catholics and Protestants interviewed, 15% were 18-29, 19% were 30-44, 36% were 45-64, and 30% were 65+ years old.
- 33% of the Catholics and Protestants Interviewed believe climate change is not a threat and 67% of the participants believed it is a threat.

Bivariate

- A Chi-squared test showed that among Protestants, there is little association between age and Climate change belief (Chi-sq: .4, P-stat: .92).
- Similarly, a Chi-squared test showed that among Catholics there is little association between age and Climate change belief (Chi-sq: 3.7, P-stat: .28).
- Figure 1 shows a downward trends between age and climate change beliefs among Both Catholics and Protestants.

Figure 1



- Logistic Regression shows a negative relationship between age and climate change beliefs among Protestants. However, these results are not statistically significant (p=0.79).
- These results are very similar for Catholics with a negative coefficient but statistically insignificant results (p= 0.06).

Multivariate

- Multivariate regression results examining different age groups beliefs in climate change while including religion yields insignificant results.
- The coefficients are all negative except for religion, and none are statistically significant (p>0.05).

Discussion

- The results suggest that age does not meaningfully predict climate change beliefs within Catholic or Protestant groups, as shown by insignificant Chi-squared tests and nonsignificant regression results.
- The lack of significance across both the bivariate and regression models indicates that within-group religious identity may be more unifying than age differences in terms of climate change beliefs.
- The finding that 67% of religious participants view climate change as a threat is unexpected, given prior literature linking religious affiliation with lower levels of concern about climate change.
- It is possible that the wording of the climate-change-threat question may have been leading, potentially prompting respondents to report higher levels of concern than they had.
- If there were enough respondents for more religions we may have at least seen some differing results within the age groups.

References

"Carbon dioxide now more than 50% higher than pre-industrial levels." 2022. NOAA. <https://www.noaa.gov/news-release/carbon-dioxide-now-more-than-50-higher-than-pre-industrial-levels>.Furnham, Adrian, and Charlotte Robinson. 2022. "Correlates of belief in climate change: Demographics, ideology and belief systems." Science Direct. <https://www.sciencedirect.com/science/article/pii/S0001691822002906>.Juszczak, Lindsey. 2015. "Age Is Just a Number: Using Economic and Social Models in the Millennial Generation to Predict Policy Support and Political Beliefs." Eastern Illinois University. <https://thekeep.eiu.edu/cgi/viewcontent.cgi?article=3362&context=theses>.