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Project Title: Climate Change: Anthropogenic or Natural?
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Climate Change: Anthropogenic or Natural?

Introduction: Climate change has become a prevalent topic of conversation in the modern era of science as its effects are becoming noticeably apparent. As greenhouse gas continually rise, polluting the atmosphere, Earth's global temperature equally increases subjecting catastrophic changes to its environment with consequences such as rising sea levels, higher levels of carbon dioxide in the oceans, intensified storms, flooding and droughts.

While there is little to no evidence to dispute climate change, the reason for this steading problem have fallen under scrutiny. The common and most relevant debate is whether climate change is due to anthropogenic causes, or simply a naturally occurring event that humanity had no control over. The research presented here elaborates on individual's opinions for the driving force behind climate change. Incorporated into these findings are multiple variables as to why subjects may believe climate change is happening and a control variable that states education is the factor for their opinions.



Literature Review: Academic sources weigh heavily on the side of anthropogenic actions being the route of climate change. Many articles elaborate on fluctuating seasonal changes such as lengthening winters and drought seasons while others delve into toll that extreme temperature spikes and drops are having on agriculture and economies. Overall, it is a rarity to find a source that vocalizes climate change being nothing more than a natural occurrence and not influenced by the actions of humans.

Hypothesis: *In a comparison of individuals, people with a higher education are more likely to believe that climate change is a result of anthropogenic actions as opposed to naturally occurring.*

Methods of Research: This research project was conducted using R, an open-source programming language and software environment for statistical computing and graphics. To test the hypothesis presented, data was gathered from the American National Election Survey (NES). No other data sets were used to gather statistics on the software platform.

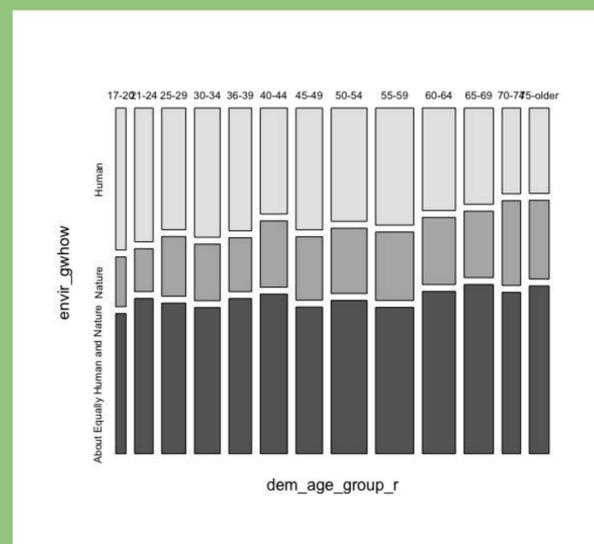
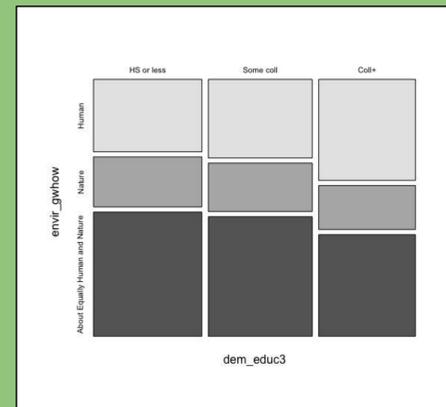
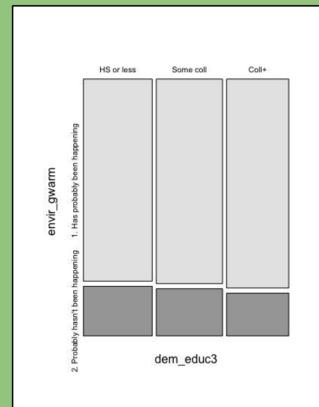
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Surveys & Methods:

American National Election Survey: This data set is comprised of eligible voters through a selection process of face-to-face (2,054) samples and internet (3,860) samples. ANES Time Series conducted the study most recently in 2012. Within the data set there are three (3) weights: FTF sample: weight_ftf, Web sample: weight_web, and Full sample: weight_full.

Variables Examined:

- Environment: Anthropogenic climate change
- Demographic: Education
- Demographic: Age group
- Demographic: Respondent race and ethnicity group
- Feeling thermometer: Democratic party
- Feeling thermometer: Republican party



Findings: Upon studying the data produced by R Studio's, the opinions on climate change's origins remain relatively the same regardless of the variable inputted with the constant variable (envir_gwhow). Education does seem to make a difference on whether or not people do believe climate change is real and if it is naturally occurring or through anthropogenic causes. Even when education is substituted with age, the findings remain relatively the same which is that most people's opinions are that climate change is influenced by both nature and anthropogenic causes.



Conclusion: Individuals opinions on climate change a varied, some believing that climate change is simply a naturally occurring cycle that mankind has no control over while others believe that mankind's actions have led to the warming of Earth's atmosphere and extensive damage that has followed suit. Others still believe that climate change is a contribution of both naturally occurring instances and anthropogenic causes. This theory is what has been believed by most, as depicted through my research. It would appear that age, education, or party affiliation do play a small role in individuals beliefs for why climate change is happening but it is a recurring theme that regardless of the variable, climate change is neither solely influenced by nature or man but by a combination of both.

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