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Introduction

Some studies have found that there could be a possible link between increasing authoritarianism and climate change threat. For instance, Jackson et al (2019) identified that there is a correlation between climate change threat and prejudiced views. However, there are no studies that link aspects of authoritarian attitudes or values to climate change threat. In response, this pilot study was created to provide further insight into this research topic.

Aims and Objectives

The key aim of the pilot study was to determine whether climate change threat leads to increasing authoritarianism or not. Furthermore, a secondary aim of the study was to clarify the impacts of the ways in which climate change threat is communicated to UK residents and identify possible indicators for the relationship between authoritarianism and climate change threat.

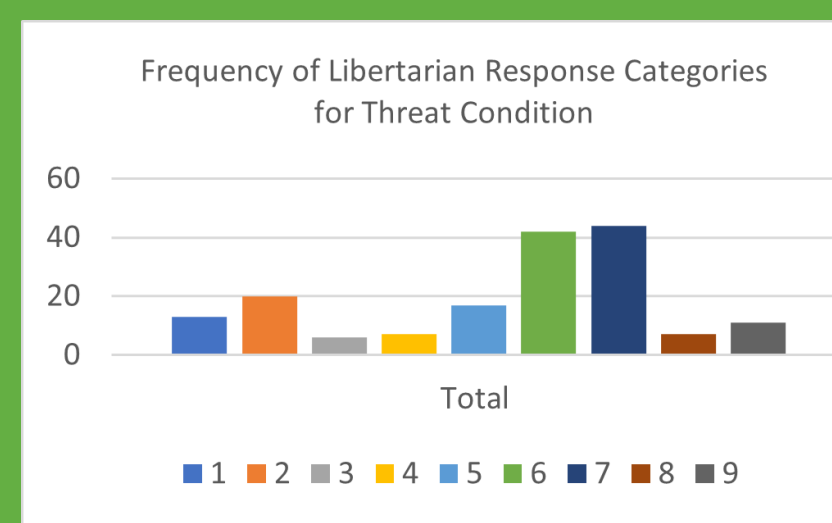
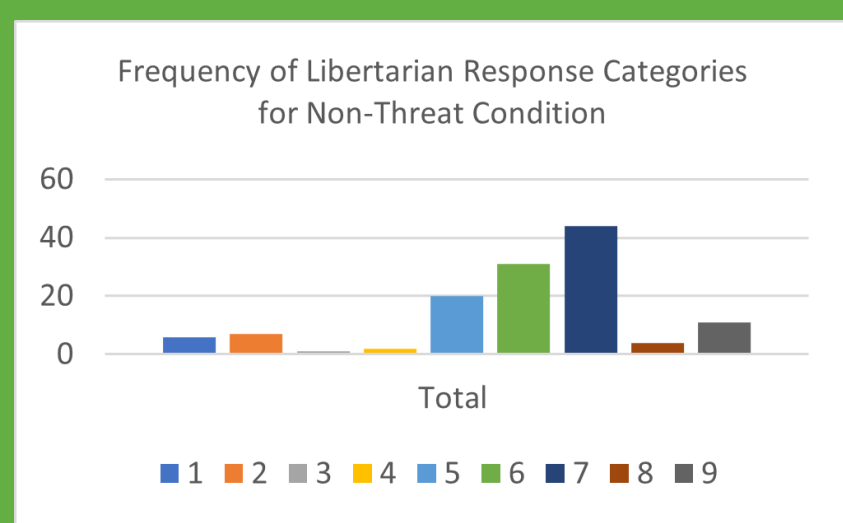
Research Methodology

570 participants were randomly selected via the data collection platform, Prolific, to take part in the pilot study. 286 participants were randomly allocated to the threat condition and 284 participants were randomly allocated to the non-threat condition. Within the threat condition, participants were instructed to watch a video about some UK coastal towns that will be decommissioned due to climate change (5:55 mins). In the the non-threat condition, participants watched a video showcasing the scientific evidence for climate change (5:29 mins). All participants were asked the same set of 30 questions prior to and after the video. These included questions about the individuals' income, age, ethnicity, political views, and attitude to climate change.

Results

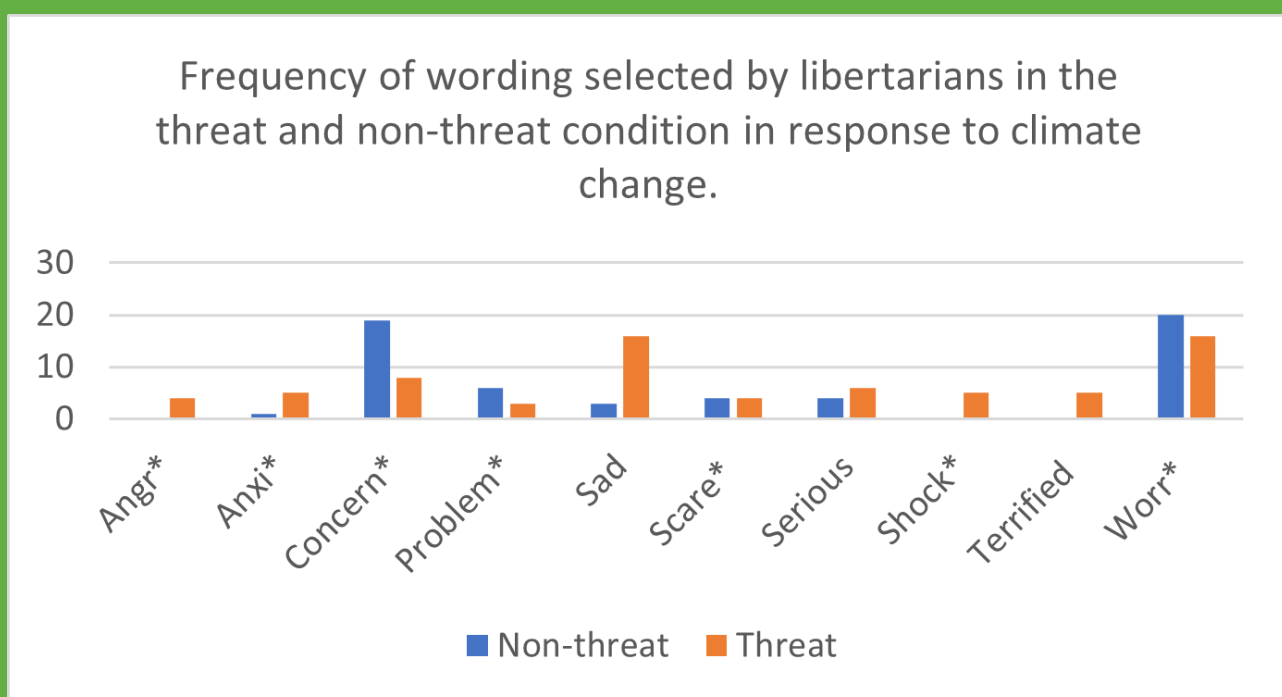
After the data collection, a quantitative analysis was conducted with the data analysis software, Stata. Overall, it was found that there was no link between increasing climate change threat and authoritarian attitudes, as the p-value was 0.870, thus indicating that the responses and attitudes of the individuals in the threat condition did not differ significantly to those in the non-threat condition. The analysis identified 313 neutral respondents, 59 authoritarian respondents, and 198 libertarian respondents in the sample. The analysis also allowed relationships to be identified for example the greater the extent to which an individual is authoritarian, the less they are likely to engage in behaviours that prevent climate change. These results are preliminary, as statistical analyses of the collected data are still ongoing.

Furthermore, all responses were analysed for wording choice and tone as this corresponded to their attitude towards climate change in response to the question "In your own words, how do you feel about climate change after having watched the video?". The code used for the analysis was 1. Frightened, 2. Sad, 3. Angry, 4. Anxious, 5. More informed/ aware of climate change, 6. Action is needed to prevent climate change, 7. Worried, 8. Frustrated and 9. No change in view. I compared the number of codes allocated to libertarian responses both in the threat and the non-threat condition. From this analysis, it was found 167 codes were allocated to respondents in the threat condition and 126 to those in the non-threat condition, demonstrating those in the threat condition had a more extreme emotional response. Libertarians in the threat condition were more frightened, sad, angry, anxious, more likely to believe that action is needed to prevent climate change and frustrated by climate change than libertarians in the non-threat condition. However, this coding analysis did not support any relationship between an increase in authoritarianism and climate change threat.



Bar charts to show the frequency of the codes used to analyse the language and tone of all survey responses for libertarians in the threat and non-threat conditions.

Another analysis I performed on the survey responses was a descriptive wording analysis. I undertook this by recording the frequency of 52 words identified in the responses from participants. This list of words was compiled using the sentiment dictionary from SentiStrength, which provided a score for each word dependent on the level of emotion associated with it. For libertarian participants, the responses did vary between the threat and the non-threat condition, with the total emotion intensity score for the respondents in the threat condition being -365 and the score for the respondents in the non-threat condition being -197.



Next Steps

Going forward, there are still further data analyses that need to be completed as the research is ongoing. After the results from the pilot study are fully analysed, further research hypotheses will be considered for investigating authoritarian attitudes and climate change threat. These hypotheses may include the analysis of the longitudinal impact of media materials displaying climate change threat on levels of authoritarian attitudes.

Reference: Jackson, J.C., van Egmond, M. Choi, V.K., Ember, C.R., Halberstadt, J. Balanovic, J. Basker, I.N., Boehnke, K. Buki, N. Fischer, R. Fulop, M. Fulmer, A. Homan, A.C., van Kleef, G.A., Kreemers, L. Schei, V. Szabo, E. Ward, C. Gelfand, M.J. 2019. Ecological and cultural factors underlying the global distribution of prejudice. PLOS ONE. 14 (9), pp. 1-17.

A bar chart to show the variation between the libertarian respondents in the threat and non-threat condition for 10 words identified within the language analysis. This demonstrates that those in the threat condition are more likely to feel angry, anxious, sad, serious, shocked, and terrified than those in the non-threat condition in response to climate change.

