Task 2: Multiple Regression

Introduction

A team of researchers were interested to know the effect of negative emotions about the impact of global warming on support for government climate change policy. Their hypothesis was that participants who reported higher negative emotions would report higher support for climate change policy. They reasoned, though, that negative emotions perhaps arise because of certain cultural worldviews that people hold and therefore this variable should be controlled in analyses. Accordingly, they also measured the extent to which participants considered themselves to be egalitarian or individualistic. Your task is to address these questions from their dataset. In your answer, please provide details about:

1) The data analysis methodology and justification (5%)
   ➢ How the student intends to analyze the data and why this approach is chosen.
2) The preliminary analyses (25%)
   ➢ Data screening and distributions
3) The primary analyses (50%)
   ➢ The primary data analysis with findings supplemented using relevant Tables and Figures
4) The interpretations for each research question (20%)
   ➢ What do the analyses reveal in terms of each of the research questions?

Research Questions

1) Do negative emotions about the impact of global warming correlate with support for government climate change policy?
2) Can negative emotions about the impact of global warming be used to make predictions about support for government climate change policy?
3)
   a. Does the effect of negative emotions on government support remain in a multiple regression model controlling for egalitarian and individualism?
   b. When age and gender is added to the multiple regression model in 3a, what is the most important predictor of government support (i.e., age, gender, negative emotions, egalitarianism, or individualism)?

Participants

- 214 students at a British University
- Mean age of 23.57 (SD = 1.26)
- 169 men and 45 women

Completed a number of items relating to the variables of interest

- Respondents were asked to indicate their support for a variety of different government policies to mitigate global warming. The items are coded in the data set as:

STEM – "It is my belief that Government should.."

GovSupport1 – "Fund more research into renewable energy sources, such as solar and wind power"
GovSupport2 – "Regulate carbon dioxide"
GovSupport3 – "Establish a special fund to help make buildings more energy efficient"

➢ Participants indicate the extent to which they agree with each item on a 7-point Likert-type scale ranging from 1 (do *not at all agree*) to 7 (*agree very much*).

NOTE: The items together measure government support for climate change policy so the items were averaged and saved as the variable 'gov_support' in the dataset..

- Respondents were asked to rate the intensity of negative emotions felt when thinking about global warming. The items in are coded in the data set as:

STEM – "When thinking about global warming I feel.."

NegEmot1 – "Distressed"
NegEmot2 – "Angry"
NegEmot3 – "Afraid"

➢ Participants indicate the extent to which they believed each of the items to be true on a 7-point Likert-type scale ranging from 1 (*not at all true*) to 7 (*very true*).

NOTE: The items together measure negative emotions about global warming so the items were averaged and saved as the variable 'neg_emotion' in the dataset.

- Respondents were asked to rate the extent of their cultural worldviews for egalitarianism and individualism. The items in are coded in the data set as:

STEM – "It is my deep held belief that.."

Egal1 – "The world would be a more peaceful place if its wealth were divided more equally among nations."
Egal2 – "In my ideal society, all basic needs (food, housing, healthcare, education) would be guaranteed by the government for everyone."
Egal3 – "I support government programs to get rid of poverty."
Ind1 – "The government interferes too much in our everyday lives."
Ind2 – "If the government spent less time trying to fix everyone's problems, we would all be a lot better off."
Ind3 – "Government regulation of business usually does more harm than good."

➢ Participants indicate the extent to which they believed each of the items to be true on a 7-point Likert-type scale ranging from 1 (*not at all true*) to 7 (*very true*).

NOTE: The "Egal" items together measure egalitarianism and the "Ind" items together measure individualism so the items were averaged and saved as the variables 'egal' and 'indv' in the dataset.

Writing structure

Please structure your writing using the following headings:

[TITLE]

[RESEARCH QUESTIONS AND HYPOTHESES]

[DATA ANALYSIS METHOD AND JUSTIFICAITON]

[PRELIMINARY ANALYSES]

[PRIMARY ANALYSES]

[INTERPRETATIONS]