

# Global Ranking of U.S. Adults Concerned About Climate Change

Eric A. Marek, Tyler Junior College, Tyler, Texas  
James T. Hooten, Center for Earth and Space Science Education

## Introduction

The research question explored in this study is: Where does the United States stand in relation to other countries on the topic of climate change?

As defined by the Environmental Protection Agency (EPA) (2017), global warming is “the recent and ongoing rise in global average temperature near Earth's surface. It is caused mostly by increasing concentrations of greenhouse gases in the atmosphere.” Similarly, climate change is “any significant change in the measures of climate lasting for an extended period of time. In other words, climate change includes major changes in temperature, precipitation, or wind patterns, among other effects, that occur over several decades or longer” (EPA, 2017). The history of global warming can be traced back to 1824 when Joseph Fourier discovered the greenhouse effect (Bell, 2016). Despite the vast majority of climate scientists agreeing that our planet's atmosphere is warming and humans are the main contributor, there remains denial among the public. There are many factors that affect public perception of climate change including science literacy and pseudoscience beliefs. Along with the many negative effects that are happening to our planet as a result of climate change, there have been actions taken to combat climate change both by individuals and governments. Carl Sagan (1995), in his book *The Demon-Haunted World: Science as a Candle in the Dark*, said

We've arranged a global civilization in which most crucial elements - transportation, communications, and all other industries; agriculture, medicine, education, entertainment, protecting the environment; and even the key democratic institution of voting - profoundly depend on science and technology. We have also arranged things so that almost no one understands science and technology. This is a prescription for disaster. We might get away with it for a while, but sooner or later this combustible mixture of ignorance and power is going to blow up in our faces. (p. 28)

## Methods and Procedures

This study utilized survey data collected by the Pew Research Center for the Spring 2015 Global Attitudes Survey. The survey identified the level of concern of adults from 40 countries on the topic of global climate change. The dataset included 45,435 face-to-face and telephone interviews in 40 countries conducted from March 25th to May 27th, 2015. Subjects of the study were adults aged 18 and older.

The survey question used for this study was: “Please tell me how concerned you are, if at all, about global climate change” (Mitchell, 2015). The dataset categorized responses into four categories: very concerned, somewhat concerned, not too concerned, or not at all concerned.

This study disregarded the subjects that did not know or refused to answer the question. The data were transferred to an Excel file and grouped into two categories. The categories “very concerned” and “somewhat concerned” were grouped together and the percentages of each group were totaled to form a new category, labeled as “concerned”. The categories “not too concerned” and “not at all concerned” were also grouped together and the percentages of each group were totaled to form a new category which was labeled as “not concerned”. The 40 countries were then ranked for the percentage of citizens who were “concerned” and “not concerned”. The data were then organized into Figure 1 and Figure 2. The average level “concerned” and the average level “not concerned” were also calculated and graphed in the figures.

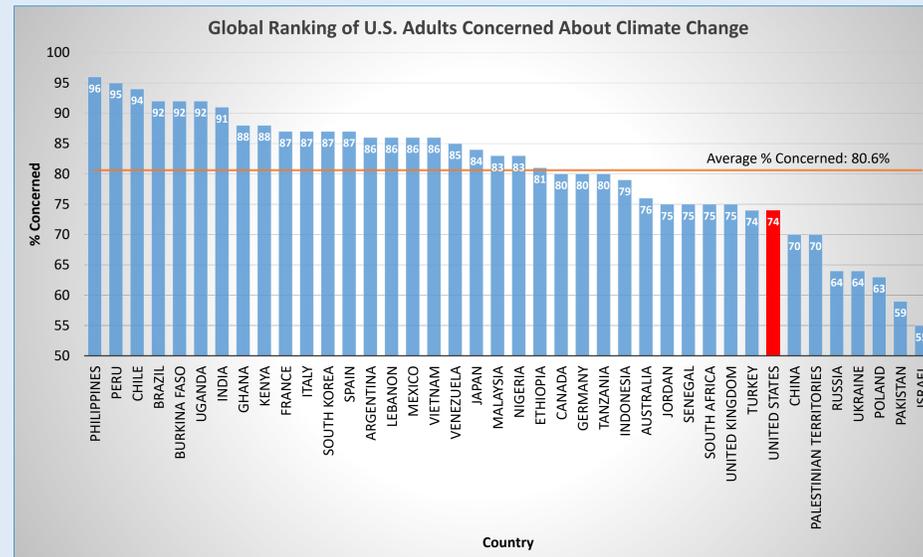


Figure 1.

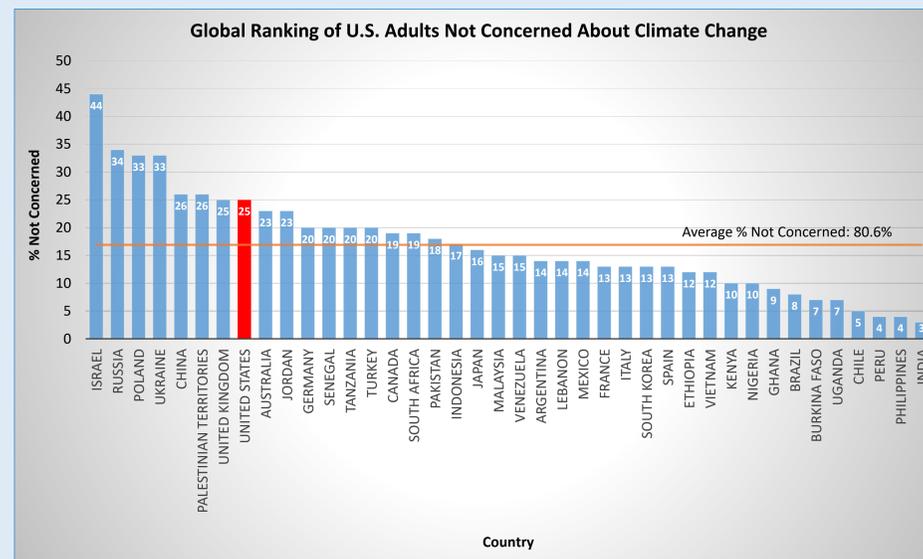


Figure 2.

## Analysis

Of the 40 countries that are a part of this study, the average percentage of adults “concerned” (Figure 1) is 80.6%, with 22 countries above and 18 countries below this average. The average percentage of adults “not concerned” (Figure 2) is 16.9%, with 18 countries above and 22 countries below this average. The data show that the percentage of adults in the United States that are concerned about global climate change (74%) is below the average level “concerned” (80.6%) and ranks 32<sup>nd</sup> out of the 40 countries used in this study. The data also show that the percentage of adults in the United States that are not concerned about global climate change (25%) is above the average level “not concerned” (16.9%) and ranks 7<sup>th</sup> out of the 40 countries.

## Conclusion

Even with the abundance of scientific evidence, climate change denial is still prominent in the United States, as well as globally. This shows that climate change denial among the public is not based on science, but something else. In order to seriously and sternly address climate change, more people, individuals and those in governmental positions, need to be concerned and speak out about the effects of climate change on our planet. In the famous words of Neil deGrasse Tyson, “The good thing about science is that it's true whether or not you believe in it.” The effects of climate change are inevitable, and whether people agree with the clear majority of climate scientists or not, humans are the main contributor.

There appears to be a relationship between a country's vulnerability to global climate change (Maplecroft, 2014) and the percentage of adults who are concerned about global climate change. This is not surprising given that people in the most affected countries see the effects first-hand. People need to take actions to combat climate change before the effects of climate change surpass the ability of science to discover solutions for consequences that could be irreversible.

As said by Bill Nye,

Science is the key to our future, and if you don't believe in science, then you're holding everybody back. And it's fine if you as an adult want to run around pretending or claiming that you don't believe in evolution, but if we educate a generation of people who don't believe in science, that's a recipe for disaster. ... The main idea in all of biology is evolution. To not teach it to our young people is wrong. (Fecht, 2011)

In order to mitigate the lack of concern among adults about climate change, climate change should be taught more in schools and not thought of, or taught as, being “debatable.” Denial of climate change appears to be more political than anything else.

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