

Climate Change in the Brazilian, American and Irish Minds: A comparative report

This appendix reports comparative results from three nationally representative surveys conducted in 2021, in Brazil, the United States, and Ireland by the Yale Program on Climate Change Communication with ITS (Brazil), the George Mason University Center for Climate Change Communication (USA), and the Ireland Environmental Protection Agency (Ireland). Several questions were asked in all three countries, allowing relatively direct comparisons, with slight wording variations.

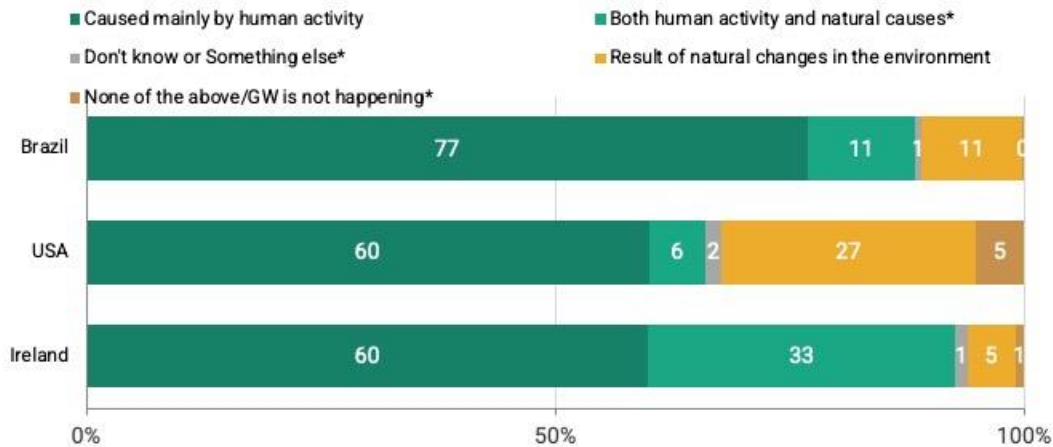
Respondents in all three countries were asked if they think that global warming is happening. Nearly all respondents in Brazil and Ireland said yes (96% respectively) compared to 76% in the United States.



The Intergovernmental Panel on Climate Change’s Sixth Assessment [report](#) (2021), written and reviewed by thousands of climate experts worldwide, states: “It is unequivocal that human influence has warmed the atmosphere, ocean and land.”

A large majority of Brazilians say that global warming is caused mainly by human activity (77%), while relatively few say it is just due to natural changes in the environment (11%) or both human activity and natural causes (11%). By comparison, a smaller majority in the U.S. and Ireland say that global warming is caused mainly by human activity (60%). A sizable minority in the U.S. say that global warming is due to natural changes (27%), while a sizable minority in Ireland (33%) say that it is due to both human activities and natural changes.

Belief that global warming is mostly caused by human activities



In your opinion, is global warming mainly caused by human activity or is it a result of natural changes in the environment?



Brazil: September-November 2021. Base: 2,600 Brazilian adults.

USA: September 2021. Base: 1,006 American adults.

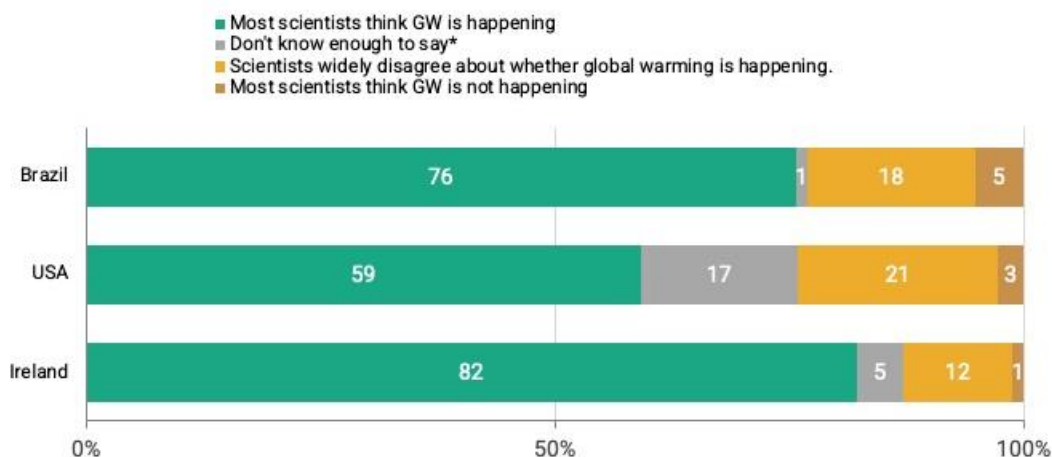
Ireland: May-July 2021. Base: 4,000 Irish adults.

* The response options that were presented to respondents varied slightly by country. The response option "Both human activity and natural causes" was presented to respondents in Ireland, but in Brazil and the United States, this response was not presented to respondents but could be offered spontaneously by respondents. The response option "Don't know" was presented to respondents in the United States but was not presented in Brazil or Ireland. The option "None of the above" was presented to respondents in the United States and Ireland but not presented in Brazil.

A 2016 [review](#) by John Cook and colleagues found that six independent, peer-reviewed studies examining the extent of the scientific consensus about global warming have concluded that between 90% and 100% of climate scientists are convinced that human-caused global warming is happening. Two more recent studies ([study 1](#), [study 2](#)) found that more than 99% of climate scientists are convinced that global warming is happening and human-caused.

Larger majorities of people in Brazil (76%) and Ireland (82%) than in the U.S. (59%) say that most scientists think global warming is happening. Relatively small proportions of the public in each country believe scientists widely disagree about whether global warming is happening.

Perception of scientific consensus on global warming



Which of these three sentences read next is closer to your opinion about what scientists think about global warming?

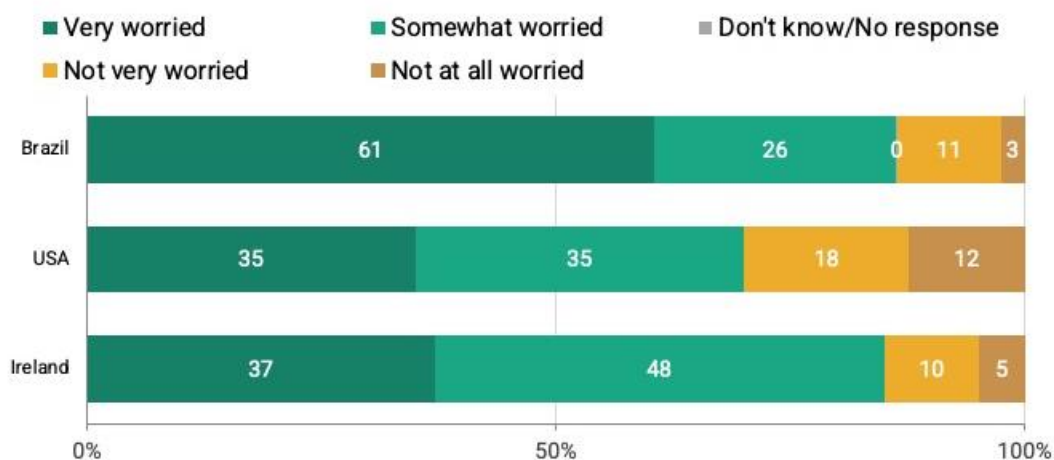
Brazil: September-November 2021. Base: 2,600 Brazilian adults.
 USA: September 2021. Base: 1,006 American adults.
 Ireland: May-July 2021. Base: 4,000 Irish adults.



*This option was only presented to respondents in Ireland and the USA. It was not presented to respondents in Brazil.

More than eight in ten Brazilians (86%) and people in Ireland (85%) say they are at least “somewhat worried” about global warming, compared to seven in ten Americans (70%). Brazilians, however, are more likely to say they are “very worried” than either Americans or people in Ireland.

Level of worry about global warming



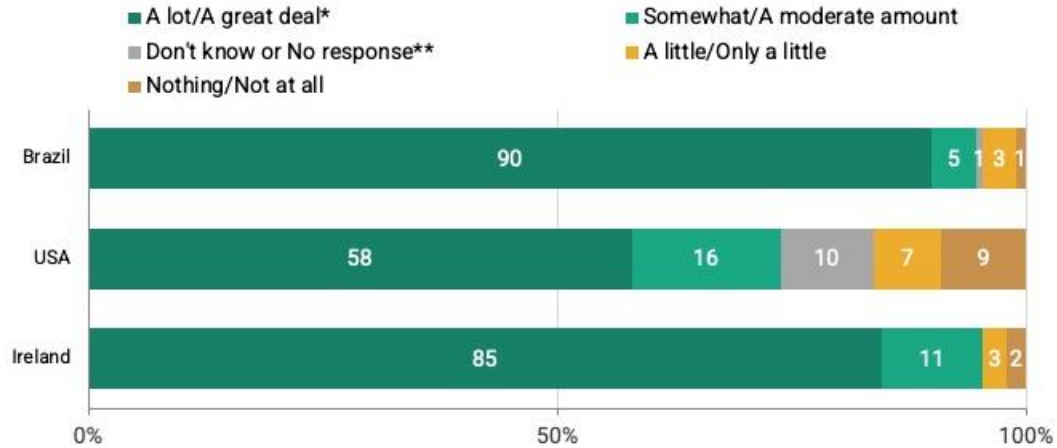
How worried are you about Global Warming? You are:

Brazil: September-November 2021. Base: 2,600 Brazilian adults.
 USA: September 2021. Base: 1,006 American adults.
 Ireland: May-July 2021. Base: 4,000 Irish adults.



Larger majorities of Brazilians (90%) and people in Ireland (85%) than Americans (58%) say that global warming will harm future generations ‘a lot’ or ‘a great deal.’

Perception that global warming will harm future generations



How much do you think global warming will harm future generations?

Brazil: September-November 2021. Base: 2,600 Brazilian adults.

USA: September 2021. Base: 1,006 American adults.

Ireland: May-July 2021. Base: 4,000 Irish adults.

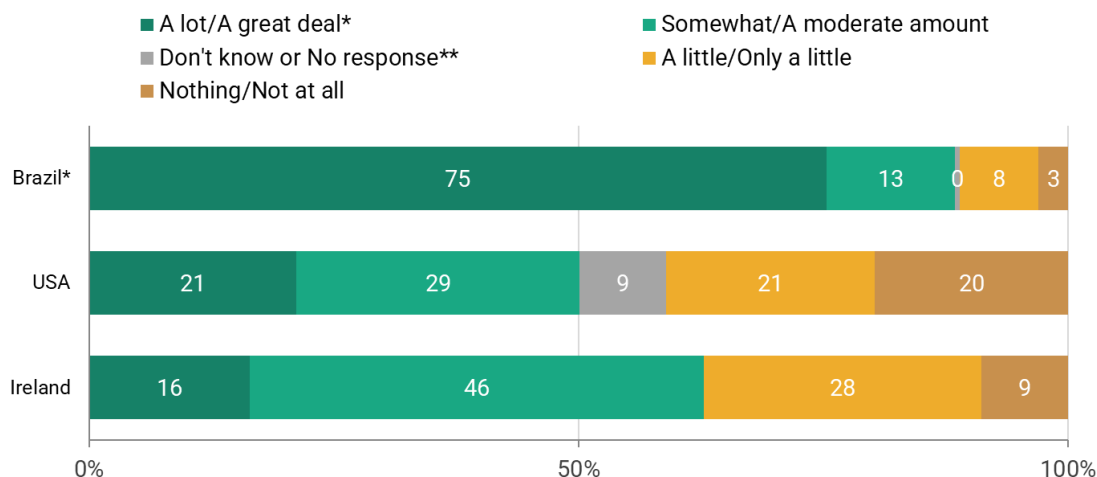


* The translation of the response options offered in Brazil slightly differs from the response options offered in the USA and Ireland. The Brazilian version of each response option is on the left in the legend; the Irish and USA versions are on the right.

** This response option was only presented to respondents in the USA. It was not presented to respondents in Brazil and Ireland.

A large majority of Brazilians (75%) think that global warming will harm them personally or their family ‘a lot.’ By contrast, fewer Americans (21%) or people in Ireland (16%) think that global warming will harm them personally, although the question in these countries did not include one’s family, which likely affected their responses.

Perception that global warming will be personally harmful



In your opinion, how much harm do you believe global warming can cause to you and your family?*



Brazil: September-November 2021. Base: 2,600 Brazilian adults.

USA: September 2021. Base: 1,006 American adults.

Ireland: May-July 2021. Base: 4,000 Irish adults.

* Note that question wording in USA and Ireland excluded the text "and your family." The translation of the response options offered in Brazil also slightly differs from the response options offered in the USA and Ireland. The Brazilian version of each response option is on the left in the legend; the Irish and USA versions are on the right.

** This response option was only presented to respondents in the USA. It was not presented to respondents in Brazil and Ireland.

Methodology Notes

- The Brazil version of survey questions were administered in Portuguese and are translated in English for reporting only. The question and response option text sometimes differed slightly in Brazil compared with Ireland and USA due to translations between English and Portuguese. The Brazil version of the question text is presented throughout except where noted.
- The Brazil and Ireland surveys were administered by phone, while the USA survey was administered online.
- Question wording in Ireland used "climate change" in place of "global warming."
- For tabulation purposes, percentage points are rounded to the nearest whole number. As a result, percentages in a given chart may total slightly higher or lower than 100%. Summed response categories (e.g., "strongly agree" + "somewhat agree") are rounded after sums are calculated. For example, in some cases, the sum of 25% + 25% might be reported as 51% (e.g., 25.3% + 25.3% = 50.6%, which, after rounding, would be reported as 25% + 25% = 51%).
- More details about the survey methodology used can be found in the [United States](#) and [Ireland](#) reports.