

# Climate Change Denial and Skepticism: A Topic Prevalence Analysis from Open-Ended Survey Questions in China and the United States

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## Introduction

The importance of global climate change in society cannot be overstated. China and the United States share prominent roles in the development of international climate change mitigation strategies.

Citizen support is crucial for climate change mitigation policy action to occur. However, due to the complexity of the issue, public views are diverse and can be uninformed or misinformed. There is evidence that American opinions on climate change are influenced by sources advocating denial and skepticism. To better understand public views on climate change, we analyzed responses to the open-ended survey question “What comes to mind when you hear the words ‘climate change’?”

Surveys were conducted of Chinese and American citizens from May – October 2015 (N=7,556). We investigated the frequency that words/topics associated with climate change realities appeared in American and Chinese responses respectively. We also examined the frequency that words/topics associated with climate change denial, skepticism and misunderstanding occurred among respondents in both countries.



## Open-Ended Question

This research contributes to a more detailed understanding of public views on climate change and to knowledge needed by policymakers by analyzing responses to a specific open-ended question. This question appeared at the very beginning of the survey to avoid any contamination or biases.

You are being asked to participate in a survey examining public views regarding the environment.

您将会参加一个关于大众对气候变暖认知的社会调查。

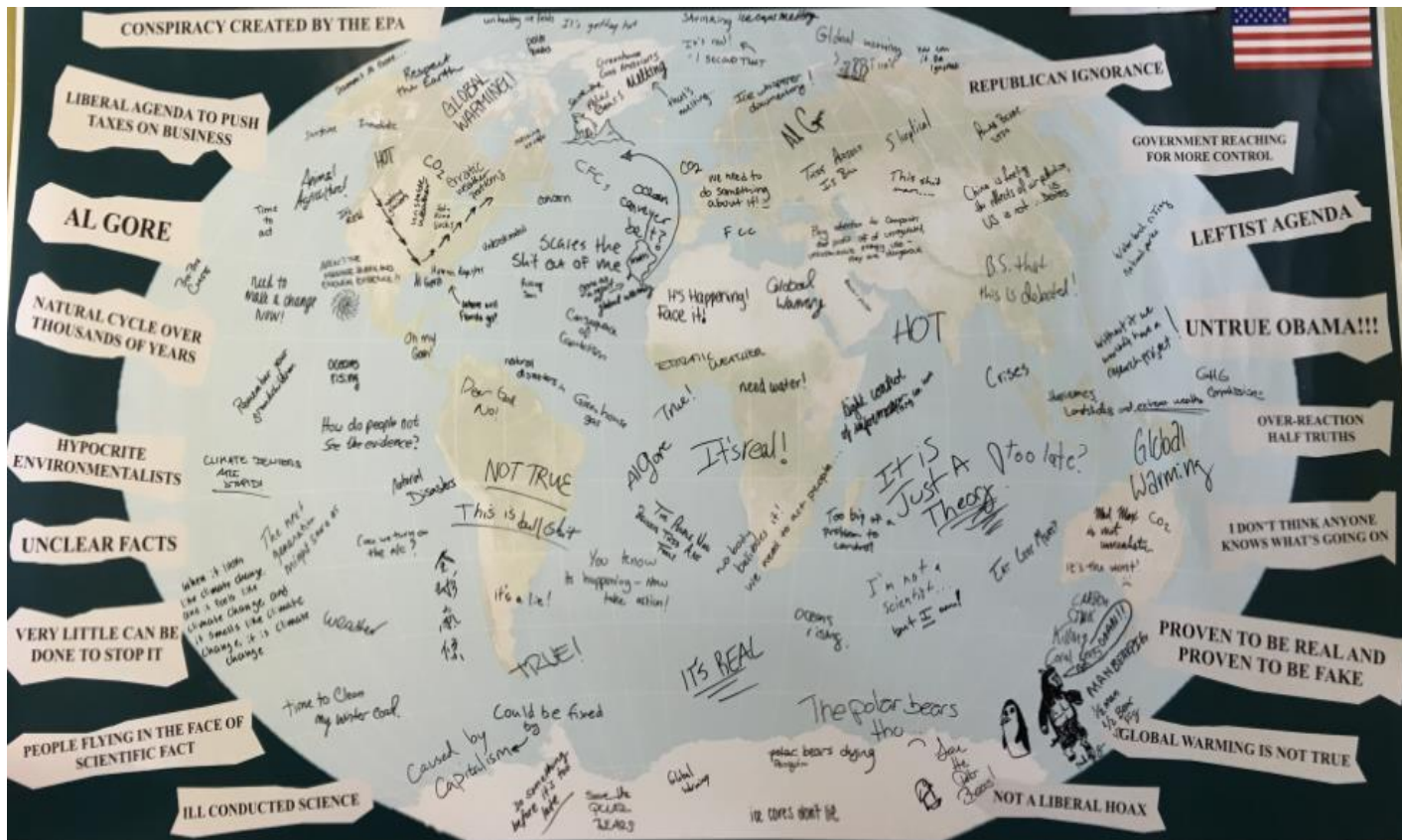
Write down the first words that come to mind when you hear or read the words climate change? We welcome all answers, from a few sentences to a few words.

请写出当您听到或者看到“气候变暖”时，脑海中的第一个词汇。(我们接受任何词句或短语在内的答案)

# Word/Topic Prevalence

Open-Ended Response Frequency				
Topic/Word	US (N=2,459)		CH (N=1,298)	
Hot/Heat/Warm	253	10.3%	171	13.2%
Ice Melt	267	10.9%	136	10.5%
Carbon Dioxide	79	3.2%	135	10.4%
Sea Rise	81	3.3%	110	8.5%
Greenhouse Gas/Effect	120	4.9%	80	6.2%
Environment	120	4.9%	61	4.7%
Global Warming	719	29.2%	45	3.5%
Extreme Weather	81	3.3%	7	0.5%
Drought/Flood	53	2.2%	5	0.4%
Pollution/Smog/Haze	146	5.9%	120	9.2%
Ozone	97	3.9%	27	2.1%
Natural	72	2.9%	6	0.5%
Hoax/Lie	17	0.7%	1	0.1%
Crap/BS	29	1.2%	0	0.0%
Politics	36	1.5%	0	0.0%
Al Gore	66	2.7%	0	0.0%

## Tell Us....What Do You Think About Climate Change?



## **Conclusion & Discussion**

Our results reflect a variety of thoughts and opinions from respondents in both China and the U.S., which for the most part reflect the realities of human-caused climate change. However, there are many words and topics also mentioned by respondents in both countries that reflect misinformation and misunderstanding of climate change.

Finally, there are a non-trivial number of comments from U.S. respondents reflecting climate change skepticism and denial as well as partisan political references. In contrast there was only one such comment in the Chinese sample.

In short, denial, skepticism, controversy, partisan politics and disrespect of science are U.S. phenomena.

The presence of climate change skepticism, denial, controversy and political debate in U.S. responses is consistent with the significantly lower acceptance of climate change realities and weaker support for international policy action found in our other survey results compared to Chinese respondents.

Our goal is to raise awareness regarding public views on climate change to facilitate discussion related to policy and action in China and the U.S. We hope to provide information, stimulate discussion and increase awareness among the general public and policymakers regarding the importance of climate change as a local, national and global issue.

Finally, our work serves as a model of excellence in student/faculty collaborative research and international partnerships that should be recognized, celebrated, and shared with the entire University of Wisconsin-Eau Claire community and beyond.