

Driving Positive Impact with CSIC: Opportunity Areas based on Climate Change Understanding

We surveyed $N = 5,355$ people across 8 markets to examine the knowledge, attitudes, and practices of people who did and did not have access to the Climate Science Information Center (CSIC).

TL;DR

Highlights


- 1 - Belief in climate change is high, but people in the US are more skeptical than people in other markets. Perceived personal impact of climate change varies a bit more within and between markets, but people who perceive more personal impact are also more likely to discuss climate change.
- 2 - Climate change knowledge is generally poor on (a) myths, (b) impact of certain everyday behaviors, and (c) effects on various popular food and beverages. However, Facebook is a key place for people to get information related to climate change, so there is opportunity to build knowledge through our platform.
- 3 - People in western markets are less likely than those in other markets to believe that information provided in CSIC would be accurate and trustworthy. In addition, awareness of CSIC is very low for users in western markets, even among those who have visited based on engagement information.

Recommendations

- 1 - Given how many people use Facebook for information about climate change, and the relationship between conversations and perceived personal impact, **providing a designated space for people to productively engage with others about climate change could be a way to increase people's awareness** of the effects of individual behavior on climate and the effects of climate on things people rely on.
- 2 - Climate science myths are a problem across all surveyed markets, but people in non-western markets are more likely to trust information Facebook provides about climate science/change. As a result, **there is more opportunity to positively influence the beliefs and actions of people in non-western markets** and it may be valuable to target content to each that addresses specific opportunity areas.

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**Driving Positive Impact with the CSIC:
Opportunity Areas based on Climate Change Understanding**

 April 2021

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TL;DR

We surveyed N = 5,355 people across 8 markets to examine the knowledge, attitudes, and practices of people who did and did not have access to the Climate Science Information Center (CSIC).

1

Belief in climate change is high, but people in the US are more skeptical than people in other markets. Perceived personal impact of climate change varies a bit more within and between markets, but people who perceive more personal impact are also more likely to discuss climate change.

2

Climate change knowledge is generally poor on (a) myths, (b) impact of certain everyday behaviors, and (c) effects on various popular food and beverages. However, Facebook is a key place for people to get information related to climate change, so there is opportunity to build knowledge through our platform.

3

People in western markets are less likely than those in other markets to believe that information provided in CSIC would be accurate and trustworthy. In addition, awareness of CSIC is very low for users in western markets, even among those who have visited based on engagement information.

Given how many people use Facebook for information about climate change, and the relationship between conversations and perceived personal impact, **providing a designated space for people to productively engage with others about climate change could be a way to increase people's awareness** of the effects of individual behavior on climate and the effects of climate on things people rely on.

Climate science myths are a problem across all surveyed markets, but people in non-western markets are more likely to trust information Facebook provides about climate science/change. As a result, **there is more opportunity to positively influence the beliefs and actions of people in non-western markets** and it may be valuable to target content to each that addresses specific opportunity areas.

Research Motivation

Facebook launched the Climate Science Information Center (CSIC) in the US, DE, UK, and FR in September, 2020 to combat misinformation about climate change. While the team conducted user research before, nothing at scale (e.g., a survey) has been conducted to better understand impressions of the CSIC or knowledge/beliefs about climate change.

This study is the first part of quantitative research program to explore the impact of the CSIC on user knowledge, attitudes, and practices.

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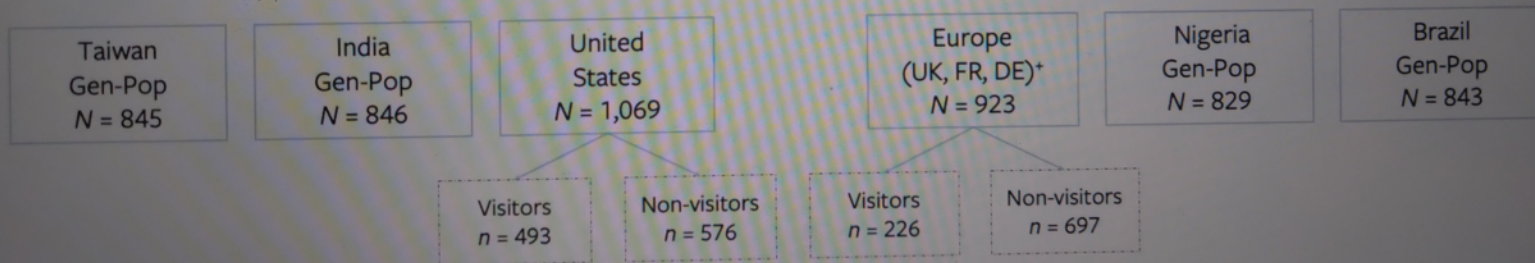
Research Questions

1. Where are the climate change knowledge gaps?
2. What are people's perceptions of the information Facebook does or could provide in the CSIC?
3. Which false claims about climate change are more widely believed?

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Sample

- Survey responses were collected between February 4 and February 17, 2021*, just before the launch of the CSIC in Taiwan, Nigeria, Brazil, and India.
- For the US and Europe (UK, FR, and DE), both visitors and non-visitors were surveyed. "Visitors" were defined as any user who engaged with the hub in some way within 1 month of survey start.



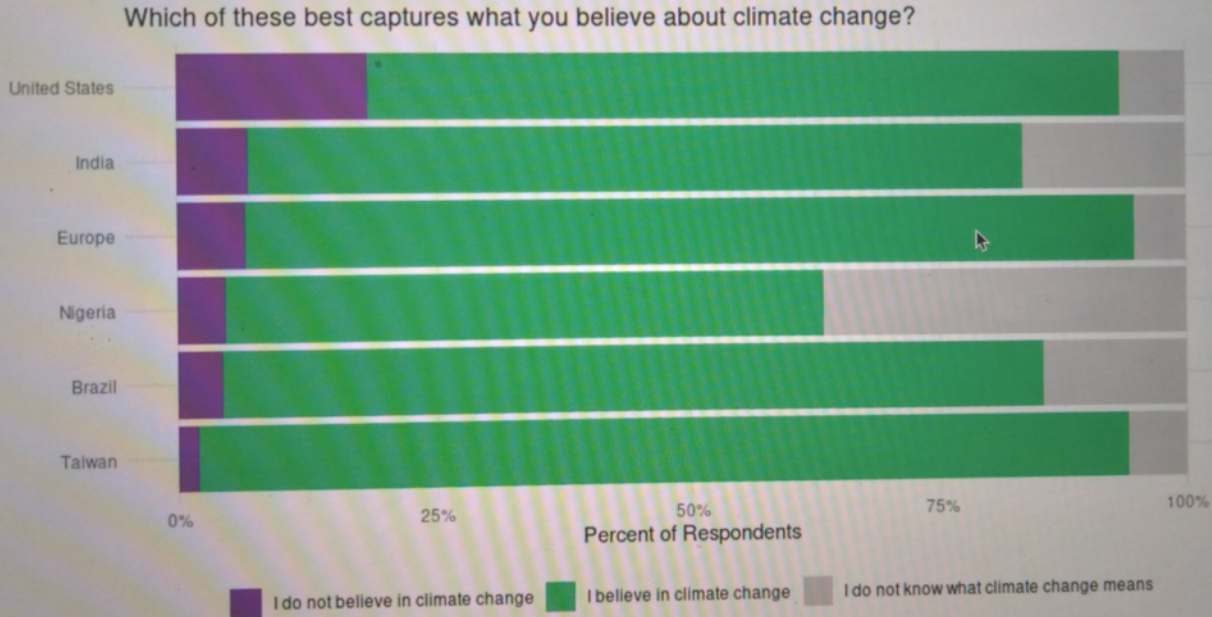
*Survey data collection rate was impacted by Comet diglossia integration point issue that overlapped with this period.

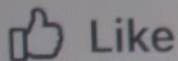
*UK n = 466, FR n = 246, DE n = 211.

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Climate Science:
Beliefs and Behaviors

Notably more people in the United States report not believing in climate change, while a large portion of people in Nigeria (and to a lesser extent India and Brazil) report not knowing what "climate change" means.





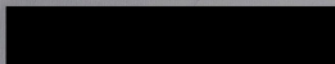
Like



Comment

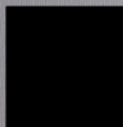


Share



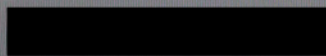
this would be another one that would be nice to slice by CSIC visitors if possible.

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-- the data suggests visitors were less likely to believe in climate change and more likely to not know what climate change is. Grain of salt of course -- sample sizes for these groups are pretty small, especially since we were only had visitor data for European and US participants.

Like · Reply · 1w

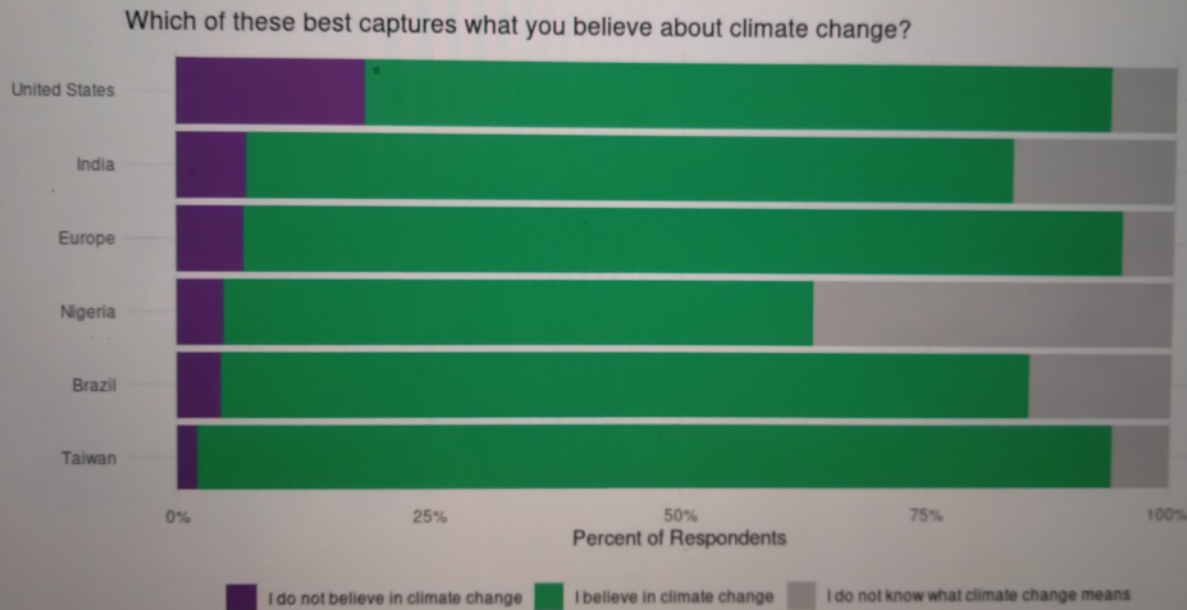


Oh right, survey was before wave 2 launch.

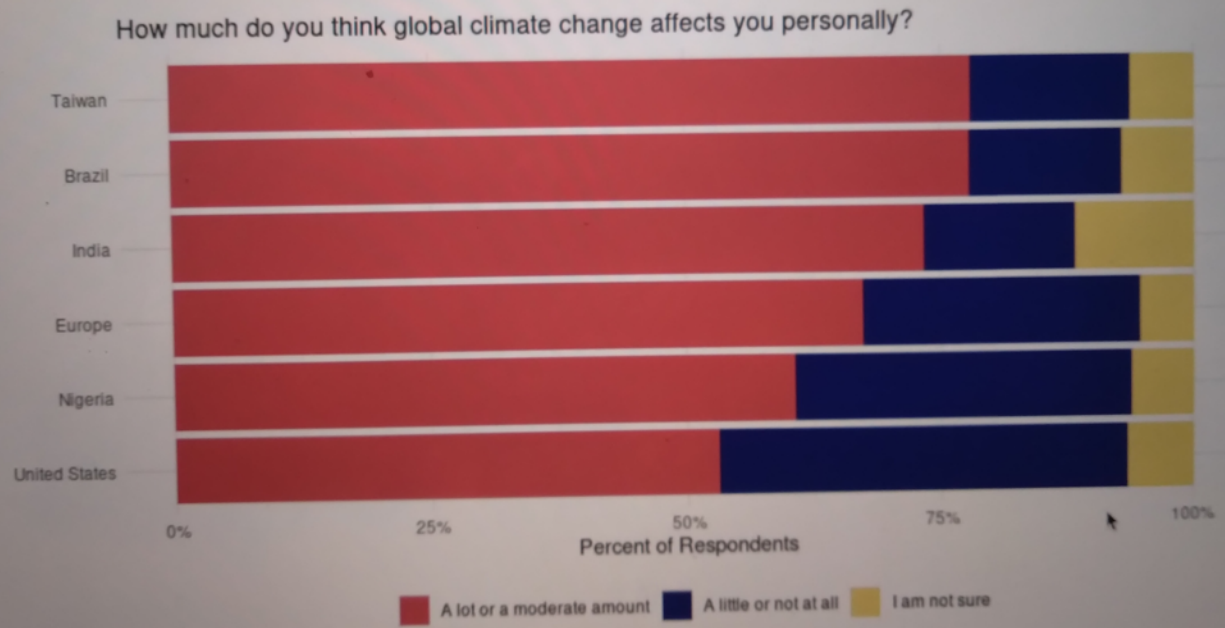
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Notably more people in the United States report not believing in climate change, while a large portion of people in Nigeria (and to a lesser extent India and Brazil) report not knowing what “climate change” means.

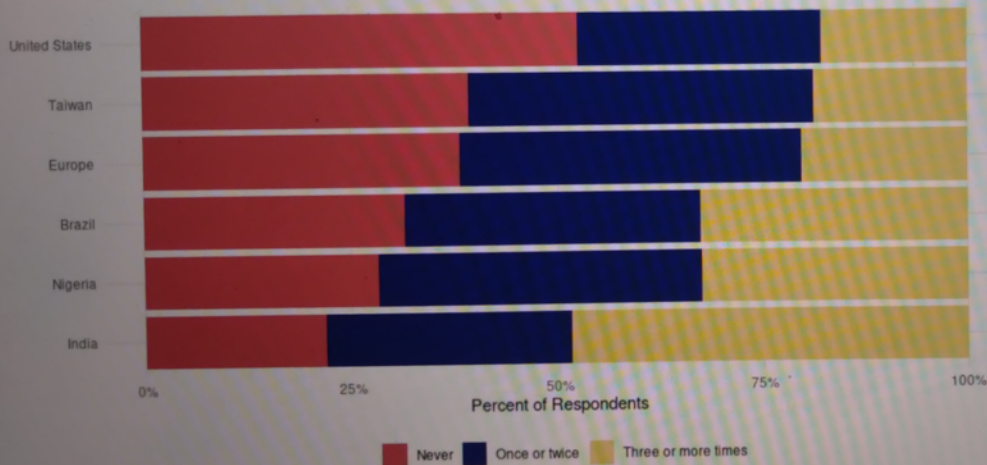


Over half of the people in each market think climate change affects them personally at least a moderate amount. There is wide variation across markets though, with the US again presenting itself as the most conflicted market.



Climate change is a relatively rare conversation topic, popping up around twice a week or less. People in markets like India and Nigeria report it comes up more often in their conversations, while — considerably more people in the US report climate change “never” coming up.

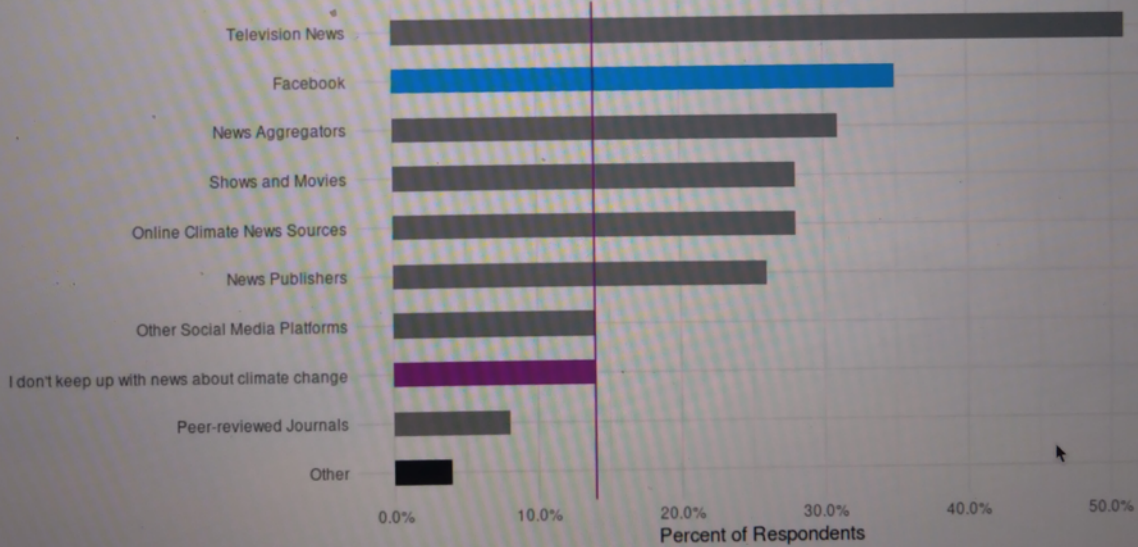
In the past week, how many times did climate change come up in your conversations with other people?



There was a positive correlation ($r = .321, p < .001$) between personal impact (excluding “not sure”) and conversations. This isn’t predictive, but it does suggest that enabling conversations could be one way to get people to recognize the personal impact of climate change.

Facebook is the second most common source for news related to climate change, with people in Taiwan, Brazil, and Nigeria indicating more reliance, and the US and Europe indicating less reliance. Of those who say they do not keep up with climate change news, 41% are from the US.

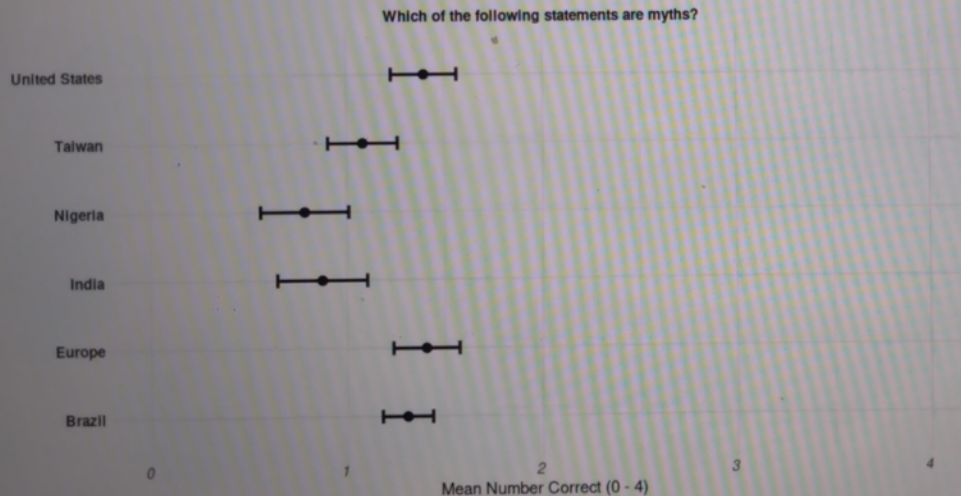
How do you currently keep up with news or information related to climate change? (Select all that apply.)



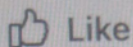


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Despite a large proportion believing in climate change, people are largely unaware of myths related to it, thus presenting an opportunity to expand knowledge of both scientific rigor behind and validity — of climate science research/data.



| Statement | Selected (%) |
|--|--------------|
| "Many scientists are lying about the severity of climate change." | 33 |
| "There is no scientific consensus about climate change." | 28 |
| "Climate models that predict changes in temperature are unreliable." | 26 |
| "Nature will find a way to deal with climate change." | 41 |
| None of the above statements are myths. | 16 |
| I don't know. | 19 |
| <i>All statements are considered myths.</i> | |



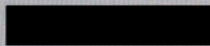
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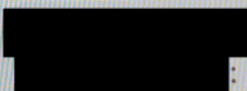


Since none of these things appear to be obviously myths to the vast majority of the sample I think this supports pre-bunking especially during times of high climate activity on the platform. E.g., proactively surfacing warnings of the common myths, and, second, refute arguments that are made by the misleading information.

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3



: do you have this data sliced by CSIC visitors? Ideally we could get cohort analysis of before/after seeing CSIC to adjust for self-selection biases among people who visit, but not sure if that's feasible. Maybe we have other techniques? cc [redacted]

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Also, I believe this survey was run right before we launched the Mythbusters unit, which addresses a couple of these myths directly - would be nice to do a followup survey and see the impact. cc

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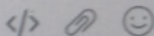


yes it would be great to do a followup on these, especially given they're so closely addressed by the unit content.

Like · Reply · 2w



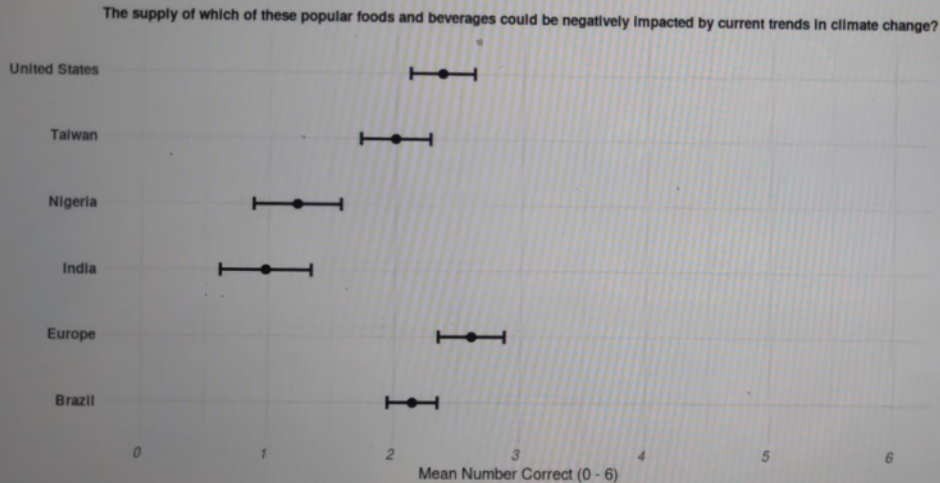
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I saw a note in your source doc for one question that the CSIC viewer/non-viewer split was not stat-sig - was that true for all the questions? Any idea how large the survey pool would need to be to get stat-sig?

...

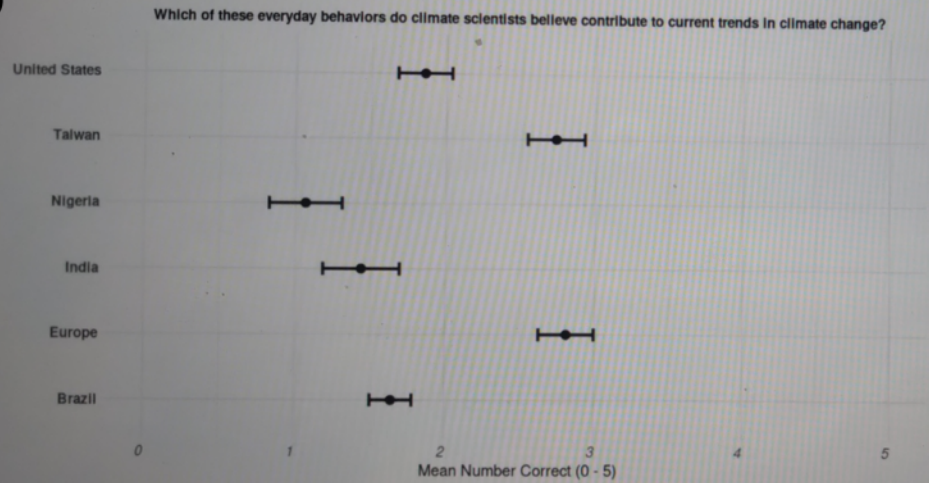
Across all markets, there is an opportunity to expand awareness of how climate change impacts various food and beverage products that people commonly rely on, since overall knowledge does not reach even half the possible number correct.



| Food/Beverage | Selected (%) |
|-------------------|--------------|
| Chocolate | 29 |
| Coffee | 38 |
| Avocado | 29 |
| Potato | 30 |
| Wine | 34 |
| Fish | 51 |
| None of the above | 12 |

All items may be negatively impacted.

Compared to myths and foods, there is more variation in knowledge between markets for behaviors that impact climate change. People in Taiwan and Europe seem a bit more knowledgeable than those in other markets.



| Behavior | Selected (%) |
|------------------------------------|--------------|
| Eating beef | 32 |
| Smoking tobacco | 35 |
| Driving a car | 69 |
| Not turning the lights off at home | 42 |
| Discarding food | 34 |
| None of the above | 10 |

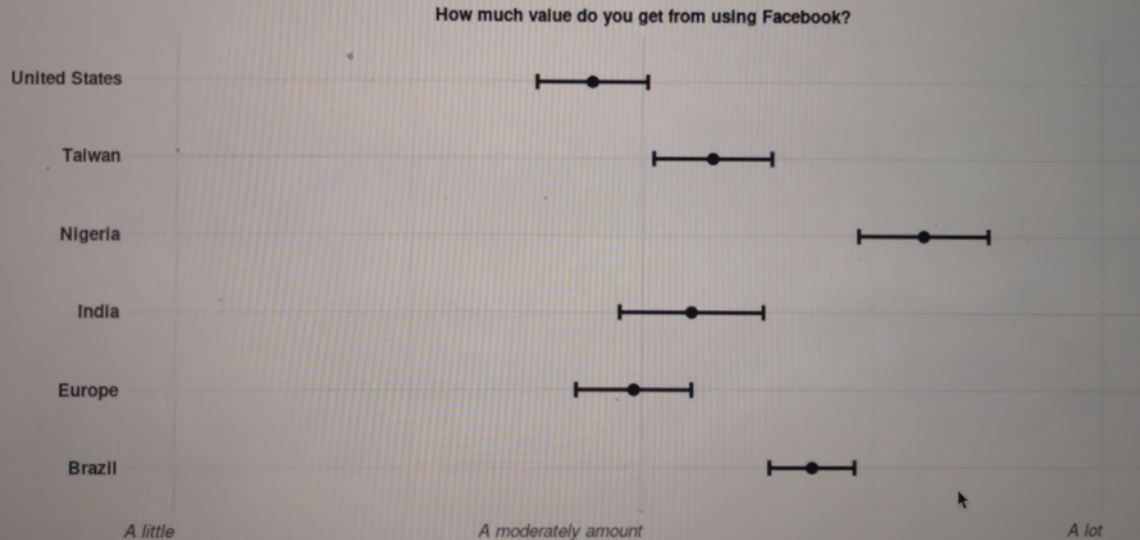
All behaviors are considered contributions.

Facebook for Climate Science



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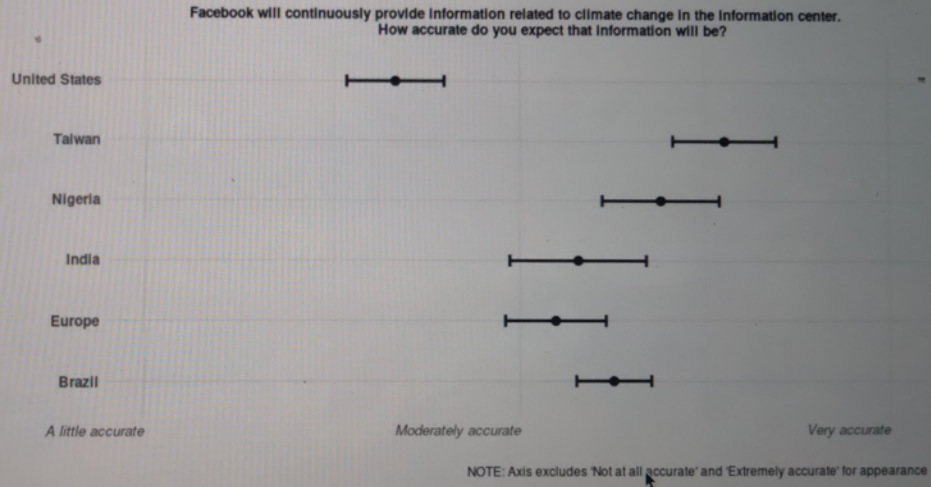
Overall Facebook App value (FAV) follows a pattern consistent with reliance on Facebook for climate change news: Nigerian and Brazilian perceptions of Facebook suggest a better chance of having a positive influence on people in those markets.



NOTE: Axis excludes 'None at all' and 'A great deal' for appearance

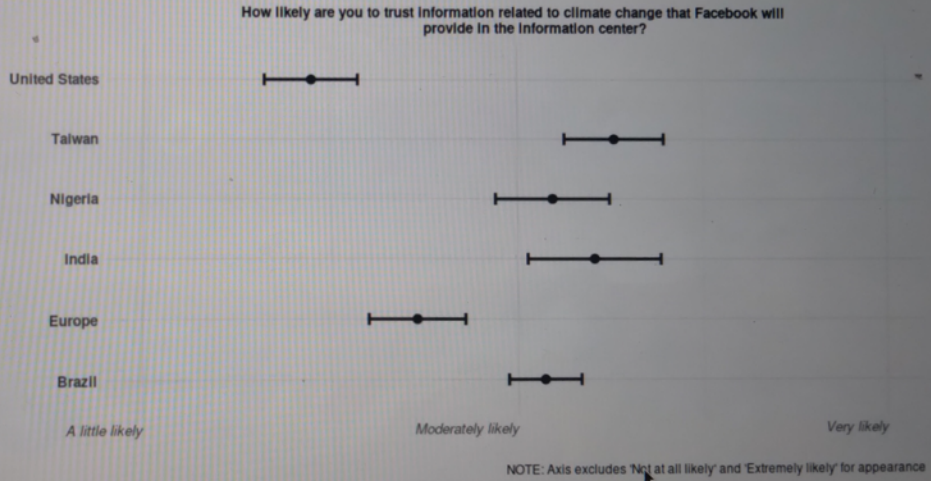
People from most countries generally believe that information about climate change that is presented in CSIC will be at least *moderately accurate*. The US is the only country that stands out negatively here.

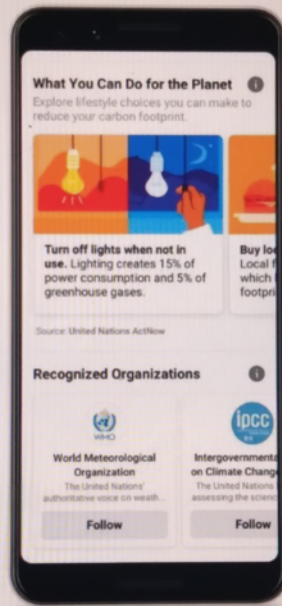
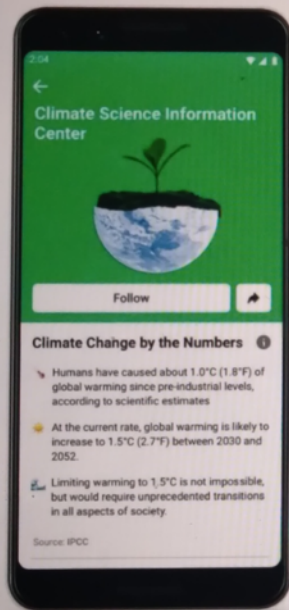
Perceived accuracy was positive related to FAV ($r = .421, p < .001$) of information, so higher FAV indicated higher accuracy.



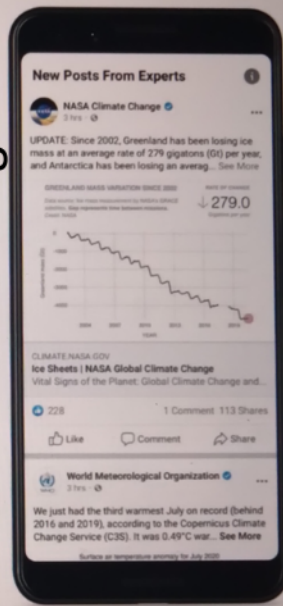
Overall, trust in information related to climate change in CSIC was a bit lower than perceived accuracy of that information, with European countries and the US exhibiting much less trust than the other countries surveyed.

Trust was positively related to both FAV ($r = .475, p < .001$) and even more strongly related to accuracy ($r = .686, p < .001$), so higher trust suggested higher FAV and accuracy.





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Climate Science Information Center

Awareness of the Climate Science Information Center (CSIC)

Overall awareness of CSIC is very low for both visitors (*based on engagement data*) and non-visitors:

- **66% of visitors** say they **are not aware of CSIC**
- An additional **19% of visitors** say they **are aware but did not visit**
- **86% of non-visitors** say they **are unaware of CSIC**

| Europe (FR, UK, and DE) | Non-visitor (n = 697) | Visitor (n = 226) |
|--|--------------------------|----------------------|
| Yes, I'm aware and I've visited it several times | 2% | 5% |
| Yes, I'm aware and I visited once | 1% | 9% |
| Yes, I'm aware but I have not visited it | 8% | 15% |
| No, I'm not aware of it | 89% | 71% |
| United States | Non-visitor (n = 576) | Visitor (n = 493) |
| Yes, I'm aware and I've visited it several times | 2% | 6% |
| Yes, I'm aware and I visited once | 3% | 10% |
| Yes, I'm aware but I have not visited it | 11% | 21% |
| No, I'm not aware of it | 83% | 64% |

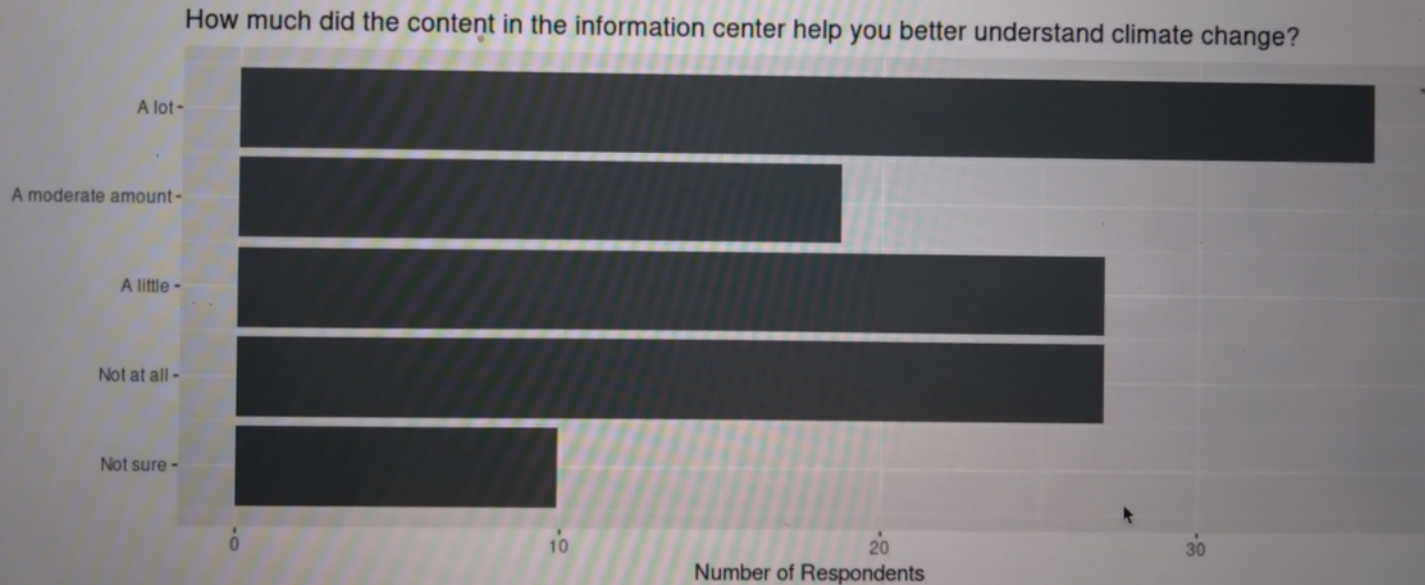
Of the people who recall visiting, interest in CSIC content varies quite a bit; however, it trends toward the high end (i.e., “a lot”) and more than half of this small subsample considered the content at least moderately interesting.

How much did the content in the information center interest you?



Since most visitors from the US and Europe did not recall visiting the CSIC, the response rate for this question was very low. Results should be taken with a grain of salt. 21

Unlike with interest, people are more split on how helpful CSIC content is to better understand climate change.



Since most visitors from the US and Europe did not recall visiting the CSIC, the response rate for this question was very low. Results should be taken with a grain of salt. 22

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This is incredibly interesting and helpful. So much good work to be done.



Like · Reply · 6w

"....but people in non-western markets are *more* likely to trust information Facebook provides about climate science/change."

Like · Reply · 6w

Wow lots of CC's! - this is great, thanks so much for pulling together. Would you be interested in sharing with the team in an upcoming standup?



Like · Reply · 6w



Like · Reply · 6w

This probably holds true not just on climate but other topics? Trust in FB is higher outside US/UK/EU



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January 26 · 🌐

I searched 'climate change' in Watch on my FB app & portal and found some prominent results of apparent misinformation - is there a better place to flag this?

The #2 video in my search results was climate misinfo from Turning Point USA, posted Jan 17 & already with 6.6M views:

<https://fb.watch/3fg8C6Cj70/>

In app:

- Turning Point USA video appears 3 times in my search results (2 uploads to their page, one from Jan 17 with 6.6M views, the other from Charlie Kirk's page)

- Media Bias Fact Check rate them a 'questionable source'

<https://mediabiasfactcheck.com/turning-point-usa/>

"Overall, we rate Turning Point USA, Questionable based on the promotion of propaganda and numerous failed fact checks. Note: on 4/10/2019 Turning Points USA failed their fifth fact check, which moves them from Right Biased to the Questionable category."

On my search of FB Watch Jon Stossell appeared prominently in search. Greenpeace have previously flagged frequent misinfo in his climate focused content:

<https://www.greenpeace.org/.../john-stossells.../>

There was additional questionable misinformation style content from [REDACTED] present in both search results

Cc [REDACTED]

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INDEPENDENT
THOUGHT

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■ ■ ■ ■ ■
Hmm, also looks like the Neutral Inform Treatments (NITs) we're working on to push people towards authoritative [climate](#) info might not apply to watch posts/videos. ■ ■ ■ ■ ■ is this a known issue or just a config problem? For example, I'm pretty sure this video should have had a NIT applied with our current pipeline in testing, but it's not showing up: <https://www.facebook.com/watch/?v=407282140373534>



Like · Reply · 15w

■ ■ ■ ■ ■
Not showing up in the scuba table at all:
https://fburl.com/.../election_integrity_keyword.../u1tpohzm

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■ ■ ■ ■ ■
(not showing up for any other pipeline, either)

Like · Reply · 15w

■ ■ ■ ■ ■ who's going to look into watch videos 😊



Like · Reply · 15w

■ ■ ■ ■ ■ I don't believe CIRD covers Watch, though if someone sees the video in their NF, it should have the treatment there.



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Like · Reply · 15w

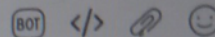
Is there a reason watch isn't included? Seems like a big hole.

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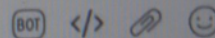
It's a limit on the CIRD side, afaik. We can manually apply to watch content.

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Reply to



Reply to



sounds like the general search was ok and brought up CSIC but the video search didn't look so good?



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Discussion in post reshare:

<https://fb.workplace.com/groups/684334745102019/permalink/1677788562423294/>

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Stassel with more misinformation using #EarthDay here:

<https://fb.watch/4WFn0PVrqB/>

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