CONFIDENTIAL - FOR PEER-REVIEW ONLY
Differential exposure to climate change news (#96993)

Created: 05/12/2022 03:40 PM (PT)

This is an anonymized copy (without author names) of the pre-registration. It was created by the author(s) to use during peer-review.
A non-anonymized version (containing author names) should be made available by the authors when the work it supports is made public.

1) Have any data been collected for this study already?
No, no data have been collected for this study yet.

2) What's the main question being asked or hypothesis being tested in this study?
We are investigating the perception of importance and newsworthiness of high-frequency news, such as "climate change", and we will compare that with the importance and newsworthiness of other news, namely "Johnny Depp-Amber Heard Defamation Trial" and "U.S. Midterm Elections".

3) Describe the key dependent variable(s) specifying how they will be measured.
1. Importance of the news story (How important do you think [issue] (and surrounding issues) is?)
2. Newsworthiness of the news story (How newsworthy do you think [issue] (and surrounding issues) is?)

4) How many and which conditions will participants be assigned to?
Participants will be randomly assigned to either the control or treatment condition.

Control condition: Participants will see 100 news cards and only one out of 100 will be a focal news card related to "Climate Change" (this will be located at the top of the newsfeed so that all participants are aware of the event).

Treatment condition: Participants will see 100 news cards and 33 out of 100 will be focal news cards related to "Climate Change" (with the same headline being located at the top of the newsfeed, as in the control condition-the other 32 headlines will be randomly interspersed).

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.
We will perform independent t-tests to compare whether the importance and newsworthiness ratings for the focal issue (Climate Change) differ between the control and treatment conditions. If the importance and newsworthiness ratings correlate strongly ($r > .7$), we will combine the two ratings (take the mean) and perform a single t-test; otherwise, we will perform two independent t-tests.

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.
We will exclude the following participants:
-those who complete the study several times (based on repeat IP addresses or participant IDs)
-those with non-US IP addresses
-those whose IPs are from potentially suspicious sources
-those who did not answer all attention checks correctly

7) How many observations will be collected or what will determine sample size? No need to justify decision, but be precise about exactly how the number will be determined.
We will recruit participants from MTurk. We will use Bayesian sequential sampling to determine whether we have enough evidence for the null hypothesis or the alternative hypothesis. We will use the sequential design with maximum participant approach (Bayes Factor Design Analysis approach; Schönbrodt, & Wagenmakers, 2018) to recruit additional participants until either (a) the Bayes factor provides strong evidence for the null hypothesis (Bayes factor < 0.1) or alternative hypothesis (Bayes factor > 10), or (b) a total of 1000 participants has been reached (but we will recruit a minimum of 250 participants). Whenever we have recruited 250 additional participants, we will check whether the Bayes factor for the t-test is > 10 or < 0.1.

8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)
We will also explore whether responses to the following questions differ between the control and treatment groups.

1. Exposure frequency (How often have you seen news about [issue]?)
2. Desired exposure frequency (Think about the news that you see on a daily basis, would you like to see: More news about [issue]/Less news about [issue]/The Same amount of news about [issue])
3. Attribution of Climate Change to mankind (Climate is changing as a result of human activities)
4. Concern about Climate Change (How concerned are you about Climate Change?)