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TikTok misinformation experiment (1.21.22) (#85853)

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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?
Research Question: Do TikTok misinformation videos increase false belief and can this be remediated by TikTok debunking videos?
Hypothesis 1: Viewing a correction video after the misinformation video will decrease belief in false information.
Hypothesis 2: Watching misinformation videos without corrections increases belief in false information.

3) Describe the key dependent variable(s) specifying how they will be measured.
The dependent variable is the perceived accuracy of subsequent true and false TikTok videos (i.e., following an initial presentation of a misinformation or a debunking TikTok, or both). Participants will rate each video's perceived accuracy, reliability, and unbiasedness/impartiality using a slider scale ranging from zero (Not at all) to 100 (Extremely).

4) How many and which conditions will participants be assigned to?
Participants will be randomly assigned to one of three conditions: Correction Condition, Misinformation-Only Condition, and Correction-Only Condition. Participants will also be assigned to see one of six misinformation topics: COVID-19 Asymptomatic Transmission, Achieving Herd Immunity Without COVID-19 Vaccines, Ivermectin as a treatment for COVID-19, Aspartame Health Effects, Left Brain or Right Brain Personality Tests, and Halyna Hutchins' Death Conspiracy.

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.
We will first combine the three rating scales into a single overall accuracy assessment score.

For hypothesis 1, we will examine if watching a debunking video after a misinformation video improves people's ability to discern between subsequent false and true videos. This will be done using a 2(false vs. true) x 2(Debunking Condition vs. Misinformation-only Condition) Factorial ANOVA.

We will conduct two analyses to examine hypothesis 2. The first analysis will be a 2(false vs. true) x 2(Misinformation-only Condition vs Correction-only Condition) Factorial ANOVA that examines the basic effect of watching a false video versus watching a correction video. Lastly, to test the effect of seeing a false video despite a correction video (v. only seeing the correction), we will conduct a 2(false vs. true) x 2(Debunking Condition vs Correction-only Condition) Factorial ANOVA for this analysis.

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.
Participants will be given three attention checks. The first attention check will come pre-treatment and we will exclude participants who fail this check. The other two will come post-treatment, so we will not remove participants who fail these checks from the primary analysis, but will do so in a robustness check re-analysis.
In addition, people who indicate not having their volume on will be removed from the survey pre-treatment.

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.
To have a sample size of 50 in each of the 18 conditions (noting that we intend to combine the misinformation topic conditions) and prepare for any potential withdrawals, 1200 participants will be recruited through Prolific.

8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)
We will explore differences between the different misinformation topics.
We have included the CTSQ, a measure of thinking styles, and will correlate this with accuracy assessments for the initial videos and the follow up videos (the latter which are the key DVs for the above analyses).
We will also explore differences in the effectiveness of debunking in terms of people's subsequent belief in the stated falsehoods (measured subsequent to the follow-up videos).
We have asked some follow-up questions about TikTok usage, as well as several demographic questions - these will also be explored.