Fake news - Accuracy v. Sharing (36 items) (8.13.2019) (#26788)

This pre-registration is not yet public. This anonymized copy (without author names) was created by the author(s) to use during peer-review. A non-anonymized version (containing author names) will become publicly available only if an author makes it public. Until that happens the contents of this pre-registration are confidential.

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?
Is the difference between false and true news (discernment) larger for perceived accuracy than it is for social media sharing (among individuals with a willingness to share political news on social media)?

3) Describe the key dependent variable(s) specifying how they will be measured.
Participants will be presented with false and true (mainstream) news headlines. Half of the participants will be asked if they think the claim in the headline is accurate. The other half of the participants will be asked if they would consider sharing the story online through social media. In both cases, response options will be "yes" and "no" (the order of which will be counterbalanced across participants).

4) How many and which conditions will participants be assigned to?
Participants will be randomly assigned to one of two conditions: they will either be asked about accuracy or sharing (as above).

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.
Our main analysis will be performed at the level of the individual rating (i.e. one data point per item per subject) using linear regression with robust standard errors clustered on subject. We will predict rating using a condition dummy (-0.5=accuracy, 0.5=sharing), a news type dummy (-0.5=false, 0.5=true), a political concordance dummy (-0.5=discordant, 0.5=concordant), and all 2-way and 3–way interactions. [Political concordance is defined based on the match between content and ideology. Specifically, political concordant = Pro-Democratic [Pro-Republican] news (based on a pretest) for American individuals who prefer the Democratic [Republican] party over the Republican [Democratic]. Politically discordant is the opposite.] Our key prediction is that there will be a negative interaction between condition and news type, such that the difference between false and true is smaller in the sharing condition than the accuracy condition. As secondary analyses, we will investigate whether there is a positive interaction between condition and concordance, such that the difference between concordant and discordant is larger in the sharing condition than the accuracy condition; check for a 3-way interaction; and use a Wald test of the relevant net coefficients to test how sharing likelihood of false concordant headlines compares to true discordant headlines.

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.
Only American participants will be allowed to complete the study (via Mechanical Turk's selection). Participants are excluded from study at the very beginning if they report that they do not have a Facebook or Twitter account, or indicate that they are not willing to ever share political news on social media.

Participants will be asked if they responded randomly at any point during the survey or searched for any of the headlines online (e.g., via Google). We do not intend on excluding these individuals, but these items were included because reviewers may ask us to do so.

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.
1000 participants from Mechanical Turk (any participants who complete the study over the 1000 quota will be retained).

8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)
We will repeat the same analyses using logistic regression instead of linear regression. We will re-run the main analysis, but using ratings that are z-scored within condition.

Finally, for a separate study, we are including the cognitive reflection test and the PANAS measure of positive and negative emotions at the end of the experiment. We will create an overall emotionality score by averaging all PANAS items, as well as separate positive and negative emotional scores by averaging just the positive items / negative items. Separately for the Accuracy and Sharing conditions, we will conduct regressions including a dummy for news type (0=false, 1=true), z-scored CRT, and z-scored emotionality, as well as all interactions. We predict a positive coefficient on news type (real-> more accurate/shared), a negative coefficient on CRT (higher CRT -> less belief/sharing in false headlines), a positive interaction between CRT and news type (higher CRT -> greater discernment), a positive coefficient on emotionality (more emotion -> more belief/sharing of false headlines), a negative interaction between CRT and emotionality (higher CRT -> less of the positive relationship between emotionality and

belief/sharing of fake news), a negative interaction between news type and emotionality (positive association is not evident for emotionality and true news), and a positive 3-way interaction between news type, CRT, and emotionality (such that the CRTxemotionality interaction goes away for real news). We will do separate models for the overall emotionality measure, for positive emotionality, and for negative emotionality. We predict a similar pattern across all 3 measures.