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Do accuracy and social incentives influence truth discernment? Study 2 (#56349)

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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?
This study is a replication and extension of Study 1. We plan to test the following hypotheses that we found support for in Study 1:

H1: Do accuracy incentives improve people's ability to discern true versus false news?
H2: Do accuracy incentives reduce the political gap in accuracy judgements?
H3: Do accuracy incentives also lead people to report intentions to share more accurate (and less inaccurate) news on social media?

We also plan to replicate these hypotheses based on exploratory analysis from study 1:

H4: Do accuracy incentives specifically increase belief in true news?
H5: Do accuracy incentives specifically increase belief in politically incongruent news?

We are adding two additional conditions to our study: a political motivation condition and a mixed motivations condition.
Regarding the political motivation condition, our hypotheses are:

H6: Does the political motivation condition decrease people's ability to discern true versus false news relative to the control condition and the accuracy incentives condition?
H7: Does the political motivation condition increase the partisan gap in people's accuracy judgements?
H8: Does the political motivation condition decrease sharing discernment (or, in other words, do people share more inaccurate and less accurate articles)?

As with Study 1, we will once again see if the effects of these conditions are strongest with true news and politically incongruent news.
Regarding the mixed motives condition, our hypotheses are less clear. However, we expect that the accuracy, partisan gap, and sharing intentions scores will be closer to control condition, or at least somewhere in between the accuracy incentives condition and the political motivation condition.

3) Describe the key dependent variable(s) specifying how they will be measured.
As with Study 1, we will calculate a truth discernment score, a perceived accuracy of fake news scores, and a perceived accuracy of true news score. The scores will be calculated as follows:

Fake news score: The average perceived accuracy of 8 fake news items (4 Democrat and 4 Republican)
True news score: The average perceived accuracy 8 true news items (4 Democrat and 4 Republican)
Truth discernment score: The true news score minus the fake news score.

We will also calculate similar scores for participants' self-reported likelihood of sharing real and fake news.
We will create a "Political Gap" score, which refers to the average perceived accuracy score of politically-congruent minus the average perceived accuracy score of politically-incongruent headlines. We will create separate political gap scores for true and false news, as well as a total political gap score.

Note: while perceived accuracy is measured on a continuous scale within the survey, we will code it on a dichotomous scale for analysis. We will also report results for the continuous scale as a robustness check.

4) How many and which conditions will participants be assigned to?
Participants will be assigned to an 1) accuracy incentive condition and a 2) control condition, a 3) political motivation condition, and a 4) mixed motivation condition.

In the accuracy incentive condition, participants will receive a bonus of up to $1.00 for correctly identifying true and false news.

In the political motivation condition, participants will receive a bonus of up to $1.00 for correctly identifying politically-consistent versus politically-consistent news.

In the mixed motives condition, participants will receive both incentives – an incentive for identifying accurate articles and an incentive for identifying politically-incongruent articles.

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

Analyses will be performed using t-tests, ANOVA, correlations, and regressions.

Primary Analyses:

1. We will test if there is a main effect of condition on the truth discernment and accuracy scores.
2. We will test if accuracy incentives reduce the partisan gap in accuracy judgements.
3. We will test whether people report sharing more accurate (and less inaccurate) news in the experimental condition as compared to the control condition.

Secondary Analyses:

4. We will also test these hypotheses separately for news type (fake news items and real news items), and probe for interactions between the condition and news type. As with study 1, we mostly expect to see effects for true items.
5. We will test these hypotheses for both politically-consistent and politically-inconsistent headlines, and probe for an interaction between the accuracy incentives and politically-consistency. As with study 1, we mostly expect to see effects for politically-inconsistent items.
6. We will test these hypotheses separately for Republicans participants and Democrat participants, and probe for an interaction between party identification and our main DVs.
7. We will test whether the main effects are moderated by cognitive reflection, political knowledge, education, or feelings toward Republicans and Democrats.

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.

We will exclude participants who fail our bot check, our attention check, or say they were responding randomly.

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.

While many effect sizes were larger, the smallest effect size we found was d = 0.23 (for sharing discernment). A power analysis with G*Power indicates that we need a sample size of 470 to detect this small effect size with a one-tailed t-test. Thus, we plan to collect a total sample size of 1000 participants (250 per condition). Due to people being excluded from attention checks in study 1, we will over-sample and recruit 1100 total participants with the goal of ending up with ~1000 participants after exclusions.

8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)

Since we are replicating the exact same methods in the accuracy incentives condition and control condition, we will also combine these two conditions with those in study 1 and run an integrative data analysis. This will allow us to test our key hypotheses with higher power, as well as the interaction effects with higher power.