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Twitter Accuracy Nudge - study 3 (#19009)

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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?
Here we test the hypothesis that sending Twitter users a direct message asking them to rate the accuracy of a single non-partisan headline will improve the quality of the news content they subsequently share on Twitter.

3) Describe the key dependent variable(s) specifying how they will be measured.
We will define the quality of a user's tweets using a predefined list of 60 domains which have each been given a quality rating (between 0 and 1) by professional fact-checkers (from Pennycook & Rand 2019). For each user, we will extract all statuses (retweets and tweets) from the user's twitter account over the relevant timeframe that contain links to one of the 60 domains in the list. Our analysis will be conducted at the level of the user, and the average fact-checker quality rating of the domains linked to in tweets by that user in each 24 hr time-period will be our dependent variable.

4) How many and which conditions will participants be assigned to?
Users will be randomly assigned to a date on which to receive the DM, with randomization blocking in quartiles on (i) count of links to one of the 60 sites in our list in the 14 days before the experiment; (ii) average quality of links (re)tweeted in the 14 days prior to the beginning of the experiment; and (iii) political ideology (estimated by the method of Barbera et al 2015). For each 24hr time-period, this stepped-wedge design uses the not-yet DMed users as the control to compare to the users DMed at the beginning of that 24hr time-period.

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.
Our primary analysis will be a linear regression with robust standard errors clustered on user, predicting average link quality as the DV, a treatment dummy (0=pre-DM, 1=24 hrs post DM) as the primary independent variable, centered dummies for each 24 hr time-period, and interactions between the treatment dummy and each time-period dummy. This procedure allows the regression to estimate a different treatment effect size in each time-period, with the coefficient on the treatment dummy representing the overall average treatment effect. We predict that effect to be positive.

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.
None.

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.
Our sample will be the 2,533 users who followed one of our accounts, and tweeted between 5 and 30 links to one of the 60 sites in our list in the two weeks prior to the experiment.

8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)
None

Available at https://aspredicted.org/blind.php?x=fp9x2v

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