

Letter to the Editors of *Psychological Science*: Meta-Analysis Reveals that Accuracy Nudges Have Little to No Effect for U.S. Conservatives: Regarding Pennycook et al. (2020)

According to recent work, subtly nudging people to think about accuracy can reduce the sharing of COVID-19 misinformation online (Pennycook et al., 2020). The authors argue that inattention to accuracy is a key factor behind the sharing of misinformation. They further argue that “partisanship is not, apparently, the key factor distracting people from considering accuracy on social media” (p. 777). However, our meta-analysis of data from this paper and other similar papers finds that partisanship is indeed a key factor underlying accuracy judgments on social media. Specifically, our meta-analysis suggests that the effectiveness of the accuracy nudge intervention depends on partisanship such that it has little to no effect for U.S. conservatives or Republicans. This changes one of Pennycook and colleague’s (2020) central conclusions by revealing that partisanship matters considerably for the success of this intervention. Further, since U.S. conservatives and Republicans are far more likely to share misinformation than U.S. liberals and Democrats (Guess et al., 2019; Lawson & Kakkar, 2021; Osmundsen, 2021), this intervention may be ineffective for those most likely to spread fake news.

To examine the role of partisanship in accuracy nudges, we meta-analyzed data from Pennycook et al., (2020), a pre-registered replication of that paper (Roozenbeek et al., 2021), and three studies from a highly similar *Nature* paper called “Shifting Attention to Accuracy Can Reduce Misinformation Online” (Pennycook et al., 2021). We first analyzed the data separately for Democrats and Republicans for all five of the studies (see *Table S1*; see <https://osf.io/gqfb4/>). The accuracy nudge significantly improved sharing discernment for Democrats in four of these studies and was marginally significant in one study (all $ps < 0.077$). However, the effect of the

accuracy nudge was not significant for Republicans in any of the five samples (all p s > 0.157). The meta-analyzed effect size for Democrats was $d = 0.32$, 95% CI = [0.23, 0.43], $p < 0.001$, but it was much smaller for Republicans, $d = 0.11$, 95% CI = [-0.00, 0.22], $p = 0.050$.

To test if the effectiveness of the accuracy nudge was moderated by party affiliation, we pooled the data from all five studies to test for an interaction effect between the accuracy nudge treatment and political party. We found a significant interaction such that accuracy nudges were less effective for Republicans than Democrats, $B = -0.15$, $SE = 0.06$, $p < 0.009$, see *Figure S1*. This interaction effect remained significant when measured across six different measures of conservatism (*Table S3 and S4*), indicating that it is highly robust. Moreover, the accuracy nudge was least effective for extreme conservatives (see *Figure S1 and Table S5*). A more detailed description of the results, code, and data are freely available: <https://osf.io/hgd3k/>.

While accuracy nudges have been proposed as a scalable solution to the misinformation problem (Pennycook et al., 2020, 2021), our meta-analysis suggests they may have limited effectiveness for the population most likely to spread misinformation. While the authors argue that their inattention-based account of misinformation sharing challenges accounts based on partisan identity (Pennycook et al., 2020, 2021), our results suggest that inattention to accuracy hinges on partisan identity or ideology. Thus, these data support broader theoretical accounts of misinformation sharing in which inattention, partisan identity, ideology, and other factors interact (Batailler et al., 2021; Gawronski, 2021; Van Bavel et al., 2021).

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