

# The Effects of Accuracy Salience and Affective Polarization on Truth Discernment in Online News Sharing

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## Abstract

Why do people spread political misinformation online? Using a novel experimental design, we evaluate the role of both affective polarization (a type of emotion-laden partisan motivation) and the temporary salience of accuracy considerations in evaluating news (a cognitive state). Our results indicate that exogenous variation in affective polarization has no measurable effect on intentions to share true news, false news, or the difference between them (discernment). By contrast, a reminder of accuracy considerations improves discernment among people who report sharing political news and is not measurably affected by the affective polarization manipulation. The accuracy nudge's positive effects are concentrated, however, among people low in "Need for Chaos" who are less likely to share hostile political rumors. These results suggest the need for greater understanding of the role of dispositional and situational factors in news sharing behaviors and for greater attention to the subpopulations for whom intervention effects are strongest.

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Though its prevalence is often overstated, false and untrustworthy news is widely shared online, spreading inaccurate claims about political parties, candidates, and events (e.g., Grinberg et al. 2019; Guess, Nagler, and Tucker 2019). Understanding why people engage in this behavior is an important research topic that can inform efforts to counter the spread of misinformation, which can have harmful consequences on topics ranging from COVID-19 to the 2020 election.

Recent research has highlighted the role of three factors in false news sharing. First, people may share false information because they neglect to consider the accuracy of information they encounter online. Reminding or asking participants about accuracy can make these considerations more salient, increasing truth discernment in sharing intentions and behavior (Pennycook et al. 2020, 2021). Second, people may be expressing the increasingly negative feelings that Americans report toward the other party when they share false information about their political opponents (Osmundsen et al. 2021). Encouraging them to view their opponents more positively might decrease motivations to share hostile rumors and increase the effects of a reminder of accuracy considerations. However, a third line of research argues that people who have high levels of a trait called Need for Chaos share false information out of a desire to promote disorder — a motivation that is likely to be difficult to change (Petersen, Osmundsen, and Arceneaux N.d.). We thus test whether the effectiveness of interventions aimed at reduce the sharing of false information among this group decline for people who are high in Need for Chaos.

We therefore employ a  $2 \times 2$  between-subjects design to estimate the separate and joint effects of accuracy salience and affective polarization in a news sharing task using relevant true and false headlines from the 2020 U.S. election campaign.<sup>1</sup> We also consider how these effects vary by strength of partisan identity and respondent scores on the Need for Chaos scale.

Our results provide no evidence that affective polarization affects the sharing of either false or congenial news headlines. By contrast, making accuracy considerations more salient increases discernment between true and false headlines. These effects are not moderated by affective polarization or strength of partisan identity. However, we find that the effects of the accuracy nudge are greatest for people who have little desire to promote disorder (“Need For Chaos”) and thus have weak dispositional incentives

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<sup>1</sup>Affective polarization is often conceptualized as a system-level measure. However, we follow, e.g., Iyengar and Westwood (2015) who define it as “the tendency of people identifying as Republicans or Democrats to view opposing partisans negatively and copartisans positively” and both measure and manipulate at the individual level.

to share hostile rumors.

## Theoretical expectations

We specifically tested the following preregistered hypotheses and research questions.

First, based on the findings reported in Pennycook et al. (2020, 2021), we expected exposure to an accuracy nudge to reduce the intention to share false news relative to true news (H1).<sup>2</sup>

Second, given the association between negative feelings toward partisan opponents and news sharing behaviors observed by Osmundsen et al. (2021), we expected participants in the positive experience condition of the affective polarization manipulation to express reduced intentions to (a) share false news headlines relative to true news (H2a) and to (b) share news headlines that are congenial to their partisanship regardless of veracity (H2b) when compared to participants in the negative experience condition. We also expected the positive experience condition to increase the effect of exposure to an accuracy nudge on intentions to share false news relative to true news (H3a), especially for congenial false news relative to uncongenial false news (H3b), when compared to the estimated accuracy nudge effect in the negative experience condition.<sup>3</sup>

Finally, we posed two research questions for which we had weaker theoretical expectations. First, based on Osmundsen et al. (2021), we asked if the effects of exposure to an accuracy nudge on intentions to share false news would be reduced among participants who identify strongly with their party. Second, based on Petersen, Osmundsen, and Arceneaux (N.d.), we asked if exposure to an accuracy nudge would have weaker effects on intentions to share false news among participants with a relatively high Need for Chaos.

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<sup>2</sup>Roozenbeek, Freeman, and van der Linden (2021) replicate the accuracy nudge effect for intention to share false news relative to true reported in Pennycook et al. (2020) after expanding their sample size but note the estimated effect size is attenuated by approximately 50% compared to the original study. However, Pennycook and Rand (N.d.) note that the finding holds in a meta-analysis of numerous studies.

<sup>3</sup>After our study was fielded, Broockman, Kalla, and Westwood (N.d.) tested the results of both the positive and negative conditions against a control condition and found that the difference between them is driven by a decrease in affective polarization in the positive experience condition relative to baseline. To express our best understanding of this mechanism, we therefore present our hypotheses and results as estimating the treatment effect of the positive experience condition relative to the negative experience condition. This change alters the wording of these hypotheses from our preregistration ([https://osf.io/snxe2/?view\\_only=8af338addef24785b802c63ca455b1e0](https://osf.io/snxe2/?view_only=8af338addef24785b802c63ca455b1e0)) but the quantities we estimate are identical (i.e., we estimate the treatment effect of being assigned to one experience condition versus the other).

## Methods

### Sample characteristics

Our study was conducted among participants recruited from the Prolific survey platform. After a soft launch with 50 participants who identified as Democrats or Republicans, we recruited a quota sample of 1,000 U.S. adult residents cross-stratified by sex, age, and ethnicity. All respondents provided informed consent to participate in this research, which was approved by (REDACTED FOR PEER REVIEW). To counterbalance the Democratic tilt of this sample (64% identified or leaned Democrat), we then recruited an additional 1,000 participants using qualifications for self-identifying as a Democrat or a Republican but adjusted the sample sizes for each (319 Democrats, 736 Republicans) to target a final sample of approximately 1,000 Democrats and 1,000 Republicans before exclusions. Data was collected from May 7–20, 2021.

To enter the experiment, participants had to pass at least one of two pre-treatment attention checks (Berinsky et al. 2021) and successfully answer two pre-treatment questions demonstrating their understanding of the behavioral game used in the affective polarization manipulation on their first or second try (Broockman, Kalla, and Westwood N.d.). Those who did not were terminated from the survey.

Our study sample also reflects the following exclusions. First, following our preregistration, we exclude participants who indicated they were pure independents — i.e., do not lean towards either party — from the final sample because they would not be affected by the affective polarization manipulation. Second, we include only participants who use Facebook or Twitter and who report sharing political content following Study 1 in Pennycook et al. (2021). We examine the effects of the treatments on this set of participants to maximize comparability with prior research and because we are most interested in their effects on people who actually share political news on social media.<sup>4</sup>

Finally, we make the following additional exclusions that were not specifically noted in our pre-

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<sup>4</sup>This exclusion represents a deviation from our preregistration, which stated that we would exclude participants who do not report using any form of social media and who indicated that they would not share any kind of news with friends or family members electronically. Results using this broader sample, which are fully reported in Online Appendix C, show no effect of the nudge on sharing discernment — a finding that is less consistent with prior research. We attribute this difference to the inclusion of participants who do not share political news under any circumstances and are thus describing hypothetical behaviors. As we show in the exploratory analysis in Table B5, the positive nudge effect on sharing discernment is only significant for respondents who share political news, not other types of content.

registration. We also exclude participants who dropped out of the survey prior to the experimental randomization; those who were ineligible due to taking part in a pretest; and a single participant who dropped out after rating a single news headline (making it impossible to calculate the mean headline ratings we use in our analysis below).

After these exclusions, we are left with a final study sample of 785 participants (slightly smaller than Study 2 from Pennycook et al. 2020, which tests similar manipulations). In total, 45% of our participants are male, 28% identify as nonwhite, and 62% have obtained a bachelor's degree or higher. Their median age is 35–44. Finally, 57% identify with or lean towards the Democratic Party and 43% identify with or lean towards the Republican Party.

## **Experimental design**

We conducted a  $2 \times 2$  between-subjects experiment in which participants were first independently randomized with equal probability to either have a positive ( $p = 0.5$ ) or negative ( $p = 0.5$ ) experience in a trust game manipulating affective polarization (Broockman, Kalla, and Westwood N.d.; Westwood and Peterson 2020). After participants played the trust game for two rounds, they were randomized to either receive a nudge ( $p = 0.5$ ) or not receive a nudge ( $p = 0.5$ ) to consider the accuracy of a single news headline (Pennycook et al. 2020, 2021). Respondents then completed a news-sharing task.

## **Procedures and materials**

Participants completed the study on the Qualtrics online survey platform. All question wording and stimuli are provided in Online Appendix A.

After providing informed consent and completing a pre-treatment questionnaire, participants took part in a modified trust game used in Westwood and Peterson (2020) and Broockman, Kalla, and Westwood (N.d.) to provide exogenous variation in affective polarization by creating positive or negative interactions with members of the opposite party. We follow their design verbatim except participants played two rounds of the game rather than three due to survey time constraints. In the game, participants played as Player 2. They were told that they were playing with a person from the opposite party (Player 1) and that the other player would decide how much money to allocate to them. The amount would be

then tripled, and Player 2 would need to decide how much to give back. The remaining amount would be used to calculate the bonus payments they would receive (with a 0.03 multiplier) in addition to their baseline payment of \$1.50.

In reality, Player 1 was a fiction. The survey was pre-programmed to make allocation decisions based on whether participants were randomized to have a positive or negative experience with an ostensible outpartisan. In the positive experience condition, participants were told that they were allocated \$8 by the Player 1 in both rounds. In the negative experience condition, participants were told that they were allocated \$0 by Player 1 in both rounds. In both versions, participants were told that Player 1's reason for their allocation is Player 2's political party in round 1 and political party and income in round 2. The positive experience condition was expected to mitigate participants' negative feelings toward the opposite party, reducing affective polarization; the negative experience condition was expected to do the opposite (though see Broockman, Kalla, and Westwood N.d., who find the difference in affective polarization between them is driven by the positive experience condition).

Participants were then randomized with probability 0.5 to receive a nudge to consider the accuracy of a news headline. Participants in this condition were shown one of four randomized headlines and asked "To the best of your knowledge, is the above headline accurate?" (the exact manipulation used in Pennycook et al. 2020). Participants in the accuracy nudge condition answered this question following the trust game and before the news-sharing task. Participants who did not receive the accuracy nudge continued to the news-sharing task immediately after the trust game.

In the news sharing task, which mirrors Pennycook et al. (2020), participants were shown six false and six real news headlines in randomized order in a format that mirrored Facebook article previews. Three of each type were selected to be congenial to Democrats and the other three were selected to be congenial to Republicans.

The false headlines were published from June 2020–May 2021 and were largely adapted from Coppock et al. (N.d.), who drew them from the fact-checking website PolitiFact. The true news headlines were selected to mirror the topics and partisan congeniality of the false headlines as closely as possible but to be factually accurate. However, we made two changes to the headlines after filing our preregistration. First, we replaced the false, Democrat-congenial headline, "Report: Trump Responsible for All

Covid Deaths” with “USPS Reported Failed to Deliver 27 Percent of Mail-In Ballots in South Florida” because we could not locate the source of the former headline. Second, we excluded ratings for the headline “Biden: ‘A Black Man Invented the Lightbulb, Not a White Guy Named Edison’ ” from our analysis. We previously coded this headline as false and congenial to Democrats, but Joe Biden did utter the (false) sentence and was accurately quoted in the article shown. In addition, the headline could potentially be interpreted as congenial to either party depending on how a respondent feels about Biden and whether they believe his claim. We therefore concluded that the truth status of the headline and the party for which it is congenial is unclear.<sup>5</sup>

The primary dependent variable is sharing intention. We measure participants’ intention to share each news headline on a six-point Likert scale ranging from “Extremely unlikely” (1) to “Extremely likely” (6). These ratings were then averaged at the participant level to produce mean sharing intentions for true headlines, false headlines, and the difference between them, which we refer to as “sharing discernment” (the same outcome variables used in Pennycook et al. 2020).<sup>6</sup>

All respondents were debriefed about the trust game and the veracity of the news headlines after completing the study.

## Results

We evaluate the results of our experiment using ordinary least squares (OLS) regression with robust standard errors. Unless otherwise noted, the analysis below follows our preregistration (see [https://osf.io/snxe2/?view\\_only=8af338addef24785b802c63ca455b1e0](https://osf.io/snxe2/?view_only=8af338addef24785b802c63ca455b1e0)).

We first consider whether the accuracy nudge and affective polarization manipulations worked as expected using our preregistered manipulation checks.

First, the accuracy nudge manipulation had no measurable effect on the self-reported importance

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<sup>5</sup>Two of our headlines were arguably hyperpartisan rather than false in that they offer hyperbolic and arguably misleading paraphrases of actual news reports (“D.C. Passes Bill to Immunize Children Without Parental Knowledge, Consent” and “Report: Biden Admin May Use Private Firms to Spy on Unsuspecting Americans”). We therefore conduct an exploratory analysis in which we report findings excluding these items in Online Appendix D as a robustness check. Results are generally similar to those reported in the main text, but the effect of the accuracy nudge on discernment becomes positive and significant for respondents in the positive experience condition (Tables 3 and D3) and the nudge  $\times$  high NFC interaction is no longer significant (Tables 4b and D4b).

<sup>6</sup>While participants did not have the opportunity to actually share the news headlines presented to them in the study, Mosleh, Pennycook, and Rand (2020) provides evidence that self-reported willingness to share correlates with actual sharing.

Table 1: Main effects on news sharing intentions

	True news	False news	True – false
Accuracy nudge	0.072 (0.075)	-0.068 (0.080)	0.140* (0.063)
Positive outpartisan experience	0.109 (0.076)	0.117 (0.083)	-0.009 (0.065)
Controls	✓	✓	✓
N	782	783	782

OLS with robust standard errors; \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < .005$  (two-sided). Sharing intentions for true and false news headlines were measured on a six-point scale. Preregistered control variables are Biden approval (four-point scale); party identification (Republican indicator); college degree (bachelor’s degree indicator); gender (male indicator); race (nonwhite indicator); age group (indicators for 35–44, 45–54, 55–64, and 65+); social media use (indicators for self-reported usage of Facebook, Twitter, Snapchat, Instagram, and WhatsApp); and sharing behavior (indicators for self-reported sharing of news about sports, celebrities, science, and business). See Online Appendix A for news headlines and question wording.

of accuracy considerations in sharing (-0.057 on a five-point scale,  $p > .05$ ; see Table B2). This null result mirrors Study 4 in Pennycook et al. (2021), which finds that an accuracy nudge changes sharing intentions (as we find below) despite having no measurable effect on the perceived importance of sharing accurate news online.<sup>7</sup>

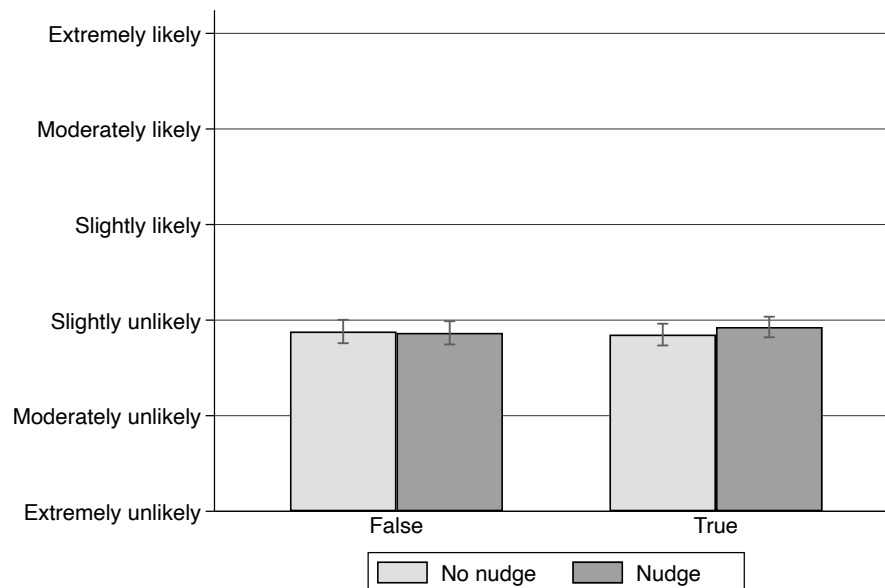
By contrast, the affective polarization manipulation worked as intended. Relative to the negative experience condition, respondents in the positive experience condition reported significantly lower levels of affective polarization when asked about Democrats and Republicans in general and about politicians from the parties (-4.672,  $p < .05$  [ $d=-0.15$  s.d.] and -5.103,  $p < .05$  [ $d=-0.17$  s.d.], respectively; see Table B2).

We now turn to evaluating the results of our hypotheses starting with the main effects of the treatments, which are reported in Table 1. Consistent with H1, exposure to an accuracy nudge significantly increased discernment in sharing real news versus false news. As Figure 1 illustrates, the accuracy nudge led to increased intention to share true and decreased intention to share false news of substantively similar magnitudes (0.072 and -0.068, respectively). Though neither effect was itself significant, we can reject the null of no difference in discernment (0.140,  $p < .05$ ). These results support prior research finding that exposure to an accuracy nudge increases sharing discernment.

<sup>7</sup>Future research should reconsider what manipulation check would be most suitable for this intervention.



Figure 1: News sharing intention by accuracy nudge condition and headline type



Mean sharing intention on a 1–6 scale (“Extremely unlikely” to “Extremely likely”) with 95% confidence intervals. See Online Appendix A for news headlines and question wording.

By contrast, we found no support for our expectation that exposure to the positive experience condition in the affective polarization manipulation would reduce intentions to share false news (H2a). Instead, exposure to the positive experience condition did not measurably change intention to share true or false news relative to the negative experience condition (0.109,  $p > 0.05$  and 0.117,  $p > 0.05$ , respectively; see Table 1). As a result, we could not reject the null of no effect on the difference in sharing intentions between true and false information.

However, we found that the effect of the affective polarization manipulation did vary between congenial and uncongenial information, though not always in the manner predicted by H2b, which expected reduced sharing of congenial versus uncongenial information in the positive experience condition. As Table 2 indicates, the positive experience condition increased the difference in sharing intention between congenial and uncongenial headlines for *true* headlines (0.073, n.s.) and decreased the difference for false headlines (-0.192, n.s.). While neither effect was significant on its own, sharing discernment in-

Table 2: Affective polarization manipulation effects on news sharing by partisan congeniality

	True news	False news	True – false
Congenial headline	0.955*** (0.067)	1.004*** (0.076)	-0.049 (0.080)
Positive outpartisan experience	0.073 (0.080)	0.220* (0.090)	-0.146 (0.081)
Positive outpartisan × congenial	0.073 (0.092)	-0.192 (0.108)	0.264* (0.115)
Accuracy nudge	0.072 (0.075)	-0.071 (0.079)	0.144* (0.061)
Congenial/uncongenial difference: Positive outpartisan	1.028*** (0.063)	0.811*** (0.077)	0.215** (0.083)
N	1564	1564	1563

OLS with standard errors clustered by respondent; \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < .005$  (two-sided). Observations represents average sharing intention for congenial or uncongenial news, which were measured on a six-point scale. Preregistered control variables are Biden approval (four-point scale); party identification (Republican indicator); college completion (bachelor’s degree indicator); gender (male indicator); race (nonwhite indicator); age group (indicators for 35–44, 45–54, 55–64, and 65+); social media use (indicators for self-reported usage of Facebook, Twitter, Snapchat, Instagram, and WhatsApp); and sharing behavior (indicators for self-reported sharing of news about sports, celebrities, science, and business). See Online Appendix A for news headlines and question wording.

creased significantly overall for congenial headlines relative to uncongenial headlines (0.264,  $p < .05$ ).<sup>8</sup>

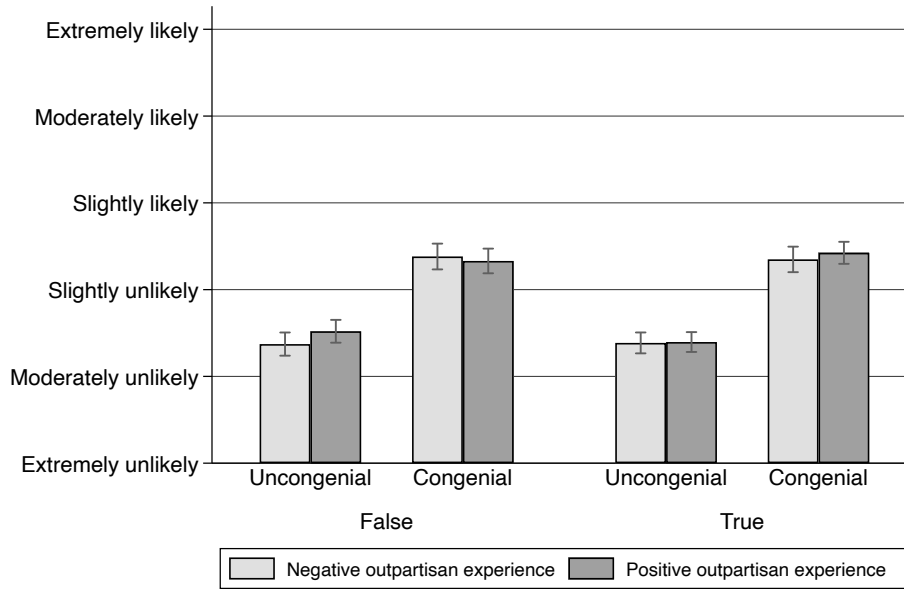
This finding is illustrated in Figure 2.

Finally, contrary to H3a, there was not sufficient evidence to conclude that affective polarization influences the extent to which exposure to an accuracy nudge reduces the intention to share false news. As Table 3 indicates, we are unable to reject the null of no difference for the interaction term for true news headlines, false news headlines, or the difference between them. Results are identical when we disaggregate congenial and uncongenial headlines (see Tables B3 and B4 in Online Appendix B) — we also find no evidence that affective polarization changes the effect of accuracy nudges more for congenial versus uncongenial false news headlines.

Finally, we investigate our two preregistered research questions. First, given the importance of partisanship to sharing of false information online (Osmundsen et al. 2021), we ask whether the effectiveness of the accuracy nudge varies for strong partisans. Per Table 4a, we cannot reject the null hypothesis that

<sup>8</sup>We also find the positive experience condition increased sharing intentions for uncongenial false news (0.220,  $p < .05$ ), though it did not significantly affect discernment for uncongenial news overall.

Figure 2: News sharing intention by affective polarization condition and headline type



Mean sharing intention on a 1–6 scale (“Extremely unlikely” to “Extremely likely”) with 95% confidence intervals. See Online Appendix A for news headlines and question wording.

Table 3: Joint effects of accuracy nudge and affective polarization manipulation on news sharing

	True news	False news	True – false
Accuracy nudge	-0.013 (0.113)	-0.137 (0.113)	0.124 (0.090)
Positive outpartisan experience	0.025 (0.107)	0.048 (0.114)	-0.024 (0.088)
Nudge × positive outpartisan	0.165 (0.149)	0.133 (0.160)	0.030 (0.128)
Controls	✓	✓	✓
Nudge effect: Positive outpartisan	0.153 (0.099)	-0.003 (0.113)	0.154 (0.089)
N	782	783	782

OLS with robust standard errors; \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < .005$  (two-sided). Sharing intentions for true and false news headlines were measured on a six-point scale. Preregistered control variables are Biden approval (four-point scale); party identification (Republican indicator); college degree (bachelor’s degree indicator); gender (male indicator); race (nonwhite indicator); age group (indicators for 35–44, 45–54, 55–64, and 65+); social media use (indicators for self-reported usage of Facebook, Twitter, Snapchat, Instagram, and WhatsApp); and sharing behavior (indicators for self-reported sharing of news about sports, celebrities, science, and business). See Online Appendix A for news headlines and question wording.

Table 4: Moderators of accuracy nudge effects

(a) Strength of partisanship

	True news	False news	True – false
Accuracy nudge	0.135 (0.224)	0.046 (0.244)	0.090 (0.215)
Not strong partisan	0.409* (0.181)	0.234 (0.207)	0.176 (0.175)
Nudge × not strong partisan	-0.296 (0.260)	-0.288 (0.286)	-0.011 (0.240)
Strong partisan	0.413* (0.168)	0.100 (0.191)	0.313 (0.167)
Nudge × strong partisan	0.053 (0.243)	-0.040 (0.264)	0.092 (0.232)
Positive outpartisan experience	0.115 (0.075)	0.115 (0.083)	-0.001 (0.065)
Controls	✓	✓	✓
Nudge effect: Not strong partisans	-0.161 (0.134)	-0.242 (0.147)	0.079 (0.103)
Nudge effect: Strong partisans	0.188 (0.097)	0.006 (0.104)	0.182* (0.084)
N	782	783	782

(b) Need for Chaos

	True news	False news	True – false
Accuracy nudge	0.074 (0.128)	-0.246 (0.138)	0.319*** (0.107)
Medium Need for Chaos	0.234 (0.135)	0.105 (0.143)	0.129 (0.103)
High Need for Chaos	0.273* (0.129)	0.065 (0.134)	0.208 (0.107)
Nudge × medium NFC	-0.094 (0.189)	0.046 (0.203)	-0.138 (0.158)
Nudge × high NFC	0.052 (0.178)	0.461* (0.186)	-0.409** (0.151)
Positive outpartisan experience	0.090 (0.076)	0.096 (0.083)	-0.007 (0.064)
Controls	✓	✓	✓
Accuracy nudge effect: Medium NFC	-0.020 (0.138)	-0.201 (0.150)	0.181 (0.117)
Accuracy nudge effect: High NFC	0.125 (0.123)	0.214 (0.126)	-0.089 (0.105)
N	782	783	782

OLS with robust standard errors; \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < .005$  (two-sided). Sharing intentions for true and false news headlines were measured on a six-point scale. Partisan leaners are the excluded category for the not strong partisan and strong partisan indicators. Indicators for Need for Chaos refer to the second and third terciles of mean responses on an eight-item scale. Preregistered control variables are Biden approval (four-point scale); party identification (Republican indicator); college degree (bachelor's degree indicator); gender (male indicator); race (nonwhite indicator); age group (indicators for 35–44, 45–54, 55–64, and 65+); social media use (indicators for self-reported usage of Facebook, Twitter, Snapchat, Instagram, and WhatsApp); and sharing behavior (indicators for self-reported sharing of news about sports, celebrities, science, and business). See Online Appendix A for news headlines and question wording.

the effect of the accuracy nudge does not vary between strong partisans and partisan leaners for sharing of true news, false news, or the difference between them (though the marginal effect of the nudge is significant for the difference between true and false news; 0.182,  $p < .05$ ). Mean sharing intentions by nudge condition and partisanship strength are presented in Figure B1 in Online Appendix B.

Before administering the treatments, we also measured respondents' Need For Chaos using an eight-item scale from Petersen, Osmundsen, and Arceneaux (N.d.) and divided them into sample terciles of low, medium, and high NFC. We then estimated how the effects of the accuracy nudge vary by level of Need for Chaos. The results, which are provided in Table 4b, indicate that exposure to an accuracy nudge increased sharing discernment among low-NFC respondents (0.319,  $p < .005$ ) but had no measurable effect on discernment among high-NFC respondents (-0.089,  $p < .05$ ). We can reject the null of no difference in nudge effects between among high- and low-NFC respondents (-0.409,  $p < .01$ ). These results are illustrated in Figure B2 in Online Appendix B.

## Conclusion

Results from an experiment conducted among a large sample of social media users who share political news online indicate that reducing affective polarization does not affect sharing intentions for false or congenial news headlines. By contrast, making accuracy considerations salient does increase discernment in sharing between true and false news headlines. The effects of this accuracy nudge did not vary measurably when affective polarization was exogenously reduced or among strong partisans. However, the nudge's effects were strongest among people who are low in Need for Chaos, a dispositional factor associated with sharing hostile political rumors.

These findings contribute first to the literature on the consequences of affective polarization. Contrary to our expectations, changes in feelings toward the opposition party had no measurable effect on the sharing of false news. This finding underscores the importance of experimentally testing observed correlations between affective polarization and antinormative behaviors like sharing false news, which may be spurious (Broockman, Kalla, and Westwood N.d.; Voelkel et al. N.d.). We build in particular on the finding from Broockman, Kalla, and Westwood (N.d.) that manipulating affective polarization affects interpersonal attitudes but not other types of political attitudes and behavior. In this framework, our

largely null findings suggest that political news-sharing is more of a political act than an interpersonal one, though the online survey environment admittedly cannot fully capture the social context in which news sharing takes place. Future research should seek to replicate our affective polarization findings in environments with greater social context to determine if the null results we observe replicate.

In addition, our findings provide new insights into how the salience of accuracy considerations affects the decision of whether to share false news. The accuracy nudge we implemented from previous research had no measurable effect on the perceived importance of accuracy in news sharing online among participants. Despite this null result, its presence still improved discernment between true and false headlines among respondents. In addition, these effects were not measurably affected by either the affective polarization manipulation or whether the respondent identified as a strong partisan. These results suggest that accuracy nudge effects are largely cognitive — the most important factor is making accuracy salient, not the levels of affective polarization someone felt when accuracy was primed or their level of partisan identification.

However, several limitations should be noted. First, we measured sharing intention in a hypothetical context. Mosleh, Pennycook, and Rand (2020) find such measures correspond well to real-world behavior, but future research should confirm such effects for hostile political rumors, particularly given concerns about trolling in online surveys (Lopez and Hillygus 2018). Second, our results were collected using a non-representative U.S. sample; future replications with a representative sample and/or non-American respondents would be desirable. Finally, future studies should verify that our results generalize to other stimuli beyond the set of headlines that were possible to consider in this study.

Nonetheless, our results provide important new evidence that the effects of affective polarization on the spread of misinformation may be overstated and identify new areas for research on the effects of accuracy nudges. Further research is needed to determine the extent to which dispositional and situational factors like these separately and jointly contribute to false news sharing and to identify interventions that can effectively reduce it among target populations.

## References

- Berinsky, Adam J., Michele F. Margolis, Michael W. Sances, and Christopher Warshaw. 2021. "Using screeners to measure respondent attention on self-administered surveys: Which items and how many?" *Political Science Research and Methods* 9 (2): 430–437.
- Broockman, David, Joshua Kalla, and Sean Westwood. N.d. "Does Affective Polarization Undermine Democratic Norms or Accountability? Maybe Not." Unpublished manuscript. Downloaded May 23, 2021 from <https://osf.io/9btsq/>.
- Coppock, Alexander, Kimberly Gross, Ethan Porter, Emily Thorson, and Thomas J. Wood. N.d. "Factual Corrections and Misinformation During the 2020 U.S. Election: Evidence from Panel Experiments." Unpublished manuscript.
- Grinberg, Nir, Kenneth Joseph, Lisa Friedland, Briony Swire-Thompson, and David Lazer. 2019. "Fake news on Twitter during the 2016 US presidential election." *Science* 363 (6425): 374–378.
- Guess, Andrew, Jonathan Nagler, and Joshua Tucker. 2019. "Less than you think: Prevalence and predictors of fake news dissemination on Facebook." *Science advances* 5 (1): eaau4586.
- Iyengar, Shanto, and Sean J Westwood. 2015. "Fear and loathing across party lines: New evidence on group polarization." *American Journal of Political Science* 59 (3): 690–707.
- Lopez, Jesse, and D. Sunshine Hillygus. 2018. "Why So Serious?: Survey Trolls and Misinformation." Unpublished manuscript. Downloaded September 26, 2021 from [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3131087](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3131087).
- Mosleh, Mohsen, Gordon Pennycook, and David G. Rand. 2020. "Self-reported willingness to share political news articles in online surveys correlates with actual sharing on Twitter." *PLOS One* 15 (2): e0228882.
- Osmundsen, Mathias, Alexander Bor, Peter Bjerregaard Vahlstrup, Anja Bechmann, and Michael Bang Petersen. 2021. "Partisan polarization is the primary psychological motivation behind political fake news sharing on Twitter." *American Political Science Review*.

- Pennycook, Gordon, and David G. Rand. N.d. “Reducing the spread of fake news by shifting attention to accuracy: Meta-analytic evidence of replicability and generalizability.” . Forthcoming. Unpublished manuscript. Downloaded July 15, 2021 from <https://psyarxiv.com/v8ruj>.
- Pennycook, Gordon, Jonathon McPhetres, Yunhao Zhang, Jackson G Lu, and David G Rand. 2020. “Fighting COVID-19 misinformation on social media: Experimental evidence for a scalable accuracy-nudge intervention.” *Psychological Science* 31 (7): 770–780.
- Pennycook, Gordon, Ziv Epstein, Mohsen Mosleh, Antonio A Arechar, Dean Eckles, and David G Rand. 2021. “Shifting attention to accuracy can reduce misinformation online.” *Nature* 592 (7855): 590–595.
- Petersen, Michael Bang, Mathias Osmundsen, and Kevin Arceneaux. N.d. “The “Need for Chaos” and Motivations to Share Hostile Political Rumors.” Unpublished manuscript. Downloaded May 23, 2021 from <https://psyarxiv.com/6m4ts/>.
- Roozenbeek, Jon, Alexandra L. J. Freeman, and Sander van der Linden. 2021. “How Accurate Are Accuracy-Nudge Interventions? A Preregistered Direct Replication of Pennycook et al. (2020).” *Psychological Science* 32 (7): 1169-1178.
- Voelkel, Jan G., James Chu, Michael N. Stagnaro, Joseph S. Mernyk, Chrystal Redekopp, Sophia L. Pink, James N. Druckman, David G. Rand, and Robb Willer. N.d. “Interventions Reducing Affective Polarization Do Not Improve Anti-Democratic Attitudes.” . Forthcoming. Unpublished manuscript. Downloaded July 15, 2021 from <https://osf.io/7evmp/>.
- Westwood, Sean J., and Erik Peterson. 2020. “The Inseparability of Race and Partisanship in the United States.” *Political Behavior*.



## Online Appendix A: Survey instrument and experimental stimuli

[Consent form and Prolific ID]

Thank you for your time. This research survey will take less than fifteen minutes to complete, and your participation is entirely voluntary.

We take your confidentiality extremely seriously, and any answers you provide in this research survey will be completely confidential. The data from the study will be stored securely on password-protected university computers. We know of no risks to you from participation. We cannot and do not guarantee or promise that you will receive any benefits from this study.

The purpose of this survey is to learn about how people process information and how their feelings towards other people affect this information processing.

You may be eligible for a bonus as part of this research.

In order to conduct this research, we are unable to make you fully aware of all the purposes and may provide certain misleading information. At the end of the survey we will provide a full debriefing.

The information collected will be recorded anonymously. Questions about this project may be directed to:

[REDACTED FOR PEER REVIEW]

You may refuse to answer any particular questions. You are free to end your participation at any time by closing this window (although any answers you have already entered may still be submitted).

By clicking the “yes” button below you agree to participate in this confidential research study.

-Yes

-No

[participants who did not provide consent were excluded at this point]

Before you begin, please switch off external distractions so you can focus on the short tasks ahead.

[Participant attributes]

Please enter your Prolific ID below.

How old are you?

-Under 18

-18–24

-25–34

-35–44

-45–54

-55–64

- 65–74
- 75–84
- 85 or older

[participants who indicated they are under 18 were excluded at this point]

First, we have a few questions about you.

Which of these types of content would you consider sharing on social media? (Please select all that apply.)

- Political news
- Sports news
- Celebrity news
- Science/technology news
- Business news
- Other (please specify)
- None

What type of social media accounts do you use?

- Facebook
- Twitter
- Snapchat
- Instagram
- WhatsApp
- Other (please indicate)
- None

Which of these types of content would you consider sharing through text or email? (Please select all that apply.)

- Political news
- Sports news
- Celebrity news
- Science/technology news
- Business news
- Other (please specify)
- None

[participants who indicated they do not use any social media platform and would not consider sharing any type of news through text or email were excluded from data analysis per our preregistration]

In what state do you currently reside?

What is your gender?

- Male
- Female
- Nonbinary/Two spirit

- Other
- Prefer not to say

Please check one or more categories below to indicate what race(s) you consider yourself to be.

- White
- Black or African American
- American Indian or Alaska Native
- Asian/Pacific Islander
- Multi-racial
- Other

Are you of Spanish or Hispanic origin or descent?

- Yes
- No

What is the highest degree or level of school you have completed?

- Did not graduate from high school
- High school diploma or the equivalent (GED)
- Some college
- Associate's degree
- Bachelor's degree
- Master's degree
- Professional or doctorate degree

Please indicate the answer that includes your annual income in 2020 before taxes.

- Less than \$10,000
- \$10,000 to \$19,999
- \$20,000 to \$29,999
- \$30,000 to \$39,999
- \$40,000 to \$49,999
- \$50,000 to \$59,999
- \$60,000 to \$69,999
- \$70,000 to \$79,999
- \$80,000 to \$89,999
- \$90,000 to \$99,999
- \$100,000 to \$149,999
- \$150,000 or more

Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or something else?

- Republican
- Democrat
- Independent
- Something else

[if participant selected Independent or Something else]

Do you think of yourself as closer to the Republican Party or to the Democratic Party?

- Closer to the Republican Party
- Closer to the Democratic Party
- Neither

[if participant selected Democrat]

Would you call yourself a strong Democrat or a not very strong Democrat?

- Strong Democrat
- Not very strong Democrat

[if participant selected Republican]

Would you call yourself a strong Republican or not a very strong Republican?

- Strong Republican
- Not very strong Republican

Generally, how interested are you in politics?

- Extremely interested
- Very interested
- Somewhat interested
- Not very interested
- Not at all interested

Do you approve or disapprove of how Joe Biden is handling his job as president?

- Strongly approve
- Somewhat approve
- Neither approve nor disapprove
- Somewhat disapprove
- Strongly disapprove

Please indicate whether you agree or disagree with each statement below.

- People convicted of murder should be given the death penalty
- World War I came after World War II
- Gays and lesbians should have the right to legally marry
- In order to reduce the budget deficit, the federal government should raise taxes on people that make more than \$250,000 per year
- The Affordable Care Act passed by Congress in 2010 should be repealed

Response options:

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Please indicate whether you agree or disagree with each statement below.

- I get a kick when natural disasters strike in foreign countries.

- I fantasize about a natural disaster wiping out most of humanity such that a small group of people can start all over.
- I think society should be burned to the ground.
- When I think about our political and social institutions, I cannot help thinking just let them all burn.
- We cannot fix the problems in our social institutions, we need to tear them down and start over.
- I need chaos around me — it is too boring if nothing is going on.
- Sometimes I just feel like destroying beautiful things.
- There is no right and wrong in the world.
- The number two is greater than the number one.

Response options:

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

[participants who failed both attention check questions above were excluded at this point]

[participants who do not lean toward either party skipped the behavioral game below and were excluded from the data per our preregistration]

[Affective polarization manipulation]

For our next study, we are going to ask you to play games with other survey participants.

You will participate in two economic tasks called “games” over the next few minutes.

You will be assigned to a different partner (someone else completing this survey) for each game.

You will receive some basic demographic information on each partner, but you will not be able to identify this person, nor will he or she be able to identify who you are (not now, nor after the survey is over - the game is strictly anonymous throughout). You will work with money for each game. We will pay you an amount based on your final total.

### **Instructions**

This game is played by pairs of individuals. Each pair is made up of a Player 1 and a Player 2.

#### *Game steps*

We will give \$10 to each Player 1. Player 1 then has the opportunity to give a portion of his or her \$10 to Player 2. Player 1 could give some, all, or none of the \$10. Whatever amount Player 1 decides to give to Player 2 will be tripled before it is passed on to Player 2. Player 2 then has the option of returning any portion of this tripled amount to Player 1. Each Player has 20 seconds to act.

#### *Payment*

Player 1 receives whatever he or she kept from their original \$10, plus anything returned to him or her by Player 2. Player 2 receives whatever was given to him or her by Player 1, tripled, but then minus whatever they returned to Player 1.

Note: We will multiply the final totals by 0.03 and give you a bonus for this survey of that amount. For example, if you win \$20, we would pay you a bonus of  $\$20 * 0.03 = \$0.60$ . Please pay careful attention to these instructions. We will ask practice questions to ensure you understand.

We will now run through 3 examples to show you how the game might be played.

**Example 1** As always, Player 1 starts with \$10. Imagine that Player 1 then gives \$4 to Player 2. We triple this amount, so Player 2 gets \$12 (3 times \$4 equals \$12). At this point, Player 1 has \$6 and Player 2 has \$12. Then Player 2 has to decide whether to give anything back to Player 1, and if so, how much. Suppose Player 2 decides to return \$3 to Player 1. At the end of the game Player 1 will have \$9 and Player 2 will have \$9.

**Example 2** Imagine that Player 1 gives all \$10 to Player 2. We triple this amount, so Player 2 gets \$30 (3 times \$10 equals \$30). At this point, Player 1 has \$0 and Player 2 has \$30. Then Player 2 has to decide whether to give anything back to Player 1, and if so, how much. Suppose Player 2 decides to return \$15 to Player 1. At the end of the game Player 1 will have \$15 and Player 2 will have \$15.

**Example 3** Imagine that Player 1 gives \$3 to Player 2. We triple this amount, so Player 2 gets \$9 (3 times \$3 equals \$9). At this point, Player 1 has \$7 and Player 2 has \$9. Then Player 2 has to decide whether to give anything back to Player 1, and if so, how much. Suppose Player 2 decides to return \$0 to Player 1. At the end of the game Player 1 will have \$7 and Player 2 will have \$9.

### **Practice questions**

**(You have two attempts to get both questions right.)**

Question 1: Player 1 starts with \$10. Suppose that Player 1 gives \$7 to Player 2. How much money will Player 2 get?

- \$7
- \$14
- \$21

Question 2: After getting the money, what can Player 2 do with the money?

- Keep all the money
- Give some of the money to Player 1
- Give all of the money to Player 1
- All of the above

[practice questions repeated if prior questions not both answered correctly]

Please try again. You must answer all questions correctly before you can continue.

Question 3: Player 1 starts with \$10. Suppose that Player 1 gives \$2 to Player 2. How much money will Player 2 get? -\$0 -\$2 -\$6

Question 4: After getting the money, what can Player 2 do with the money?

- Keep all the money
- Give some of the money to Player 1
- Give all of the money to Player 1
- All of the above

[participants who failed to answer both questions measuring their understanding of the game correctly for a second time are excluded]

You have been randomly assigned to play as Player 2. You will play as Player 2 for two rounds.

Each Player 1 will see the following information about you. They will use it to decide how trustworthy you are.

Age: [the response option for age previously selected by participant]

Gender: [the response option for gender previously selected by participant]

Income: [the response option for income previously selected by participant]

Political party: [the party that the participant indicated supporting (including leaners)]

[Positive experience condition; randomized ( $p=.5$ )]

### **Round 1**

You are Player 2.

Player 1 can give you some, all, or none of the \$10. We will triple any amount Player 1 allocates to you. You are under no obligation to give anything back.

Information about who you are playing with (Player 1):

Age: [randomized integer from 25–54]

Gender: [randomized as male or female]

Income: [randomized as \$30,000-\$39,999, \$40,000-\$49,999, \$50,000-\$59,999, or \$60,000-\$69,999]

Political party: [opposite party from participant]

Please wait while Player 1 decides your allocation. Player 1 has 20 seconds to act.

*Results.* Player 1 allocated you \$8. We have tripled this to \$24. You can now return some, all or none of this money to Player 1. Put the number of dollars you wish to keep in the box labeled “Player 2.” Put the dollars you wish to go to Player 1 in the box labeled “Player 1.”

Player 1 is awaiting your decision. You have 20 seconds to act.

Player 1: [text box; numeric entry]

Player 2: [text box; numeric entry]

Total: [sum of allocations]

[results must add up to \$24; participants were given up to three attempts]

You gave \$[X] back to Player 1. Which factors, if any, were part of your decision making process?

- Age
- Gender
- Income
- Political party
- Something else

Player 1's reason for their allocation to you: Political party

## Round 2

You are Player 2.

Player 1 can give you some, all, or none of the \$10. We will triple any amount Player 1 allocates to you. You are under no obligation to give anything back.

Information about who you are playing with (Player 1):

Age: [randomized integer from 25–54]

Gender: [randomized as male or female]

Income: [randomized as \$30,000-\$39,999, \$40,000-\$49,999, \$50,000-\$59,999, or \$60,000-\$69,999]

Political party: [opposite party from participant]

Please wait while Player 1 decides your allocation. Player 1 has 20 seconds to act.

*Results.* Player 1 allocated you \$8. We have tripled this to \$24. You can now return some, all or none of this money to Player 1. Put the number of dollars you wish to keep in the box labeled "Player 2." Put the dollars you wish to go to Player 1 in the box labeled "Player 1."

Player 1 is awaiting your decision. You have 20 seconds to act.

Player 1: [text box; numeric entry]

Player 2: [text box; numeric entry]

Total: [sum of allocations]

[results must add up to \$24; participants were given up to three attempts]

You gave \$[X] back to Player 1. Which factors, if any, were part of your decision making process?

- Age
- Gender
- Income
- Political party
- Something else

Player 1's reason for their allocation to you: Political party, Income

*Game Summary.*

Round 1: Earnings: \$[X].



Factors about you that Player 1 used when deciding how much money to give: Political party.

Round 2: Earnings:  $\$[Y]$ .

Factors about you that Player 1 used when deciding how much money to give: Political party, Income.

Your total earnings:  $\$[X] + \$[Y]$

[Negative experience condition; randomized ( $p=.5$ )]

### **Round 1**

You are Player 2.

Player 1 can give you some, all, or none of the \$10. We will triple any amount Player 1 allocates to you. You are under no obligation to give anything back.

Information about who you are playing with (Player 1):

Age: [randomized integer from 25–54]

Gender: [randomized as male or female]

Income: [randomized as \$30,000-\$39,999, \$40,000-\$49,999, \$50,000-\$59,999, or \$60,000-\$69,999]

Political party: [opposite party from participant]

Please wait while Player 1 decides your allocation. Player 1 has 20 seconds to act.

*Results.* Player 1 allocated you \$0. We are unable to triple this amount.

Player 1's reason for their allocation to you: Political party

### **Round 1**

You are Player 2.

Player 1 can give you some, all, or none of the \$10. We will triple any amount Player 1 allocates to you. You are under no obligation to give anything back.

Information about who you are playing with (Player 1):

Age: [randomized integer from 25–54]

Gender: [randomized as male or female]

Income: [randomized as \$30,000-\$39,999, \$40,000-\$49,999, \$50,000-\$59,999, or \$60,000-\$69,999]

Political party: [opposite party from participant]

Please wait while Player 1 decides your allocation. Player 1 has 20 seconds to act.

*Results.* Player 1 allocated you \$0. We are unable to triple this amount.

Player 1's reason for their allocation to you: Political party, Income

*Game Summary.*

Round 1: Earnings: \$0

Factors about you that Player 1 used when deciding how much money to give: Political party.

Round 2: Earnings \$0

Factors about you that Player 1 used when deciding how much money to give: Political party, Income.

Your total earnings: \$0

[Accuracy nudge; randomized (p=.5)]

We would like to pretest an actual news headline for future studies. We are interested in whether people think it is accurate or not.

We only need you to give your opinion about the accuracy of a single headline. We will then continue on to the primary task.

Note: The image may take a moment to load.

[one of four images shown; randomized (p=.25 for each)]



To the best of your knowledge, is the above headline accurate?

-No

-Yes



ABCNEWS.GO.COM

### 'Seinfeld' is officially coming to Netflix

"Seinfeld" will begin streaming worldwide on Netflix in 2021.

To the best of your knowledge, is the above headline accurate?

-No

-Yes



CNN.COM

### Social media use may harm teens' mental health by disrupting positive activities, study says

To the best of your knowledge, is the above headline accurate?

-No

-Yes



NBCNEWS.COM

**Hit YouTube channel Ryan ToysReview accused of deceiving kids into watching sponsored content**

To the best of your knowledge, is the above headline accurate?

-No

-Yes

[News headline sharing task]

For this study, you will be presented with a set of news headlines and from social media (12 in total).

We are interested in the extent to which you would consider sharing them on social media if you had seen them there.

Note: The images may take a moment to load.

[headline order randomized]



[congenial to Democrats; true]

If you were to see the above on social media, how likely would you be to share it?

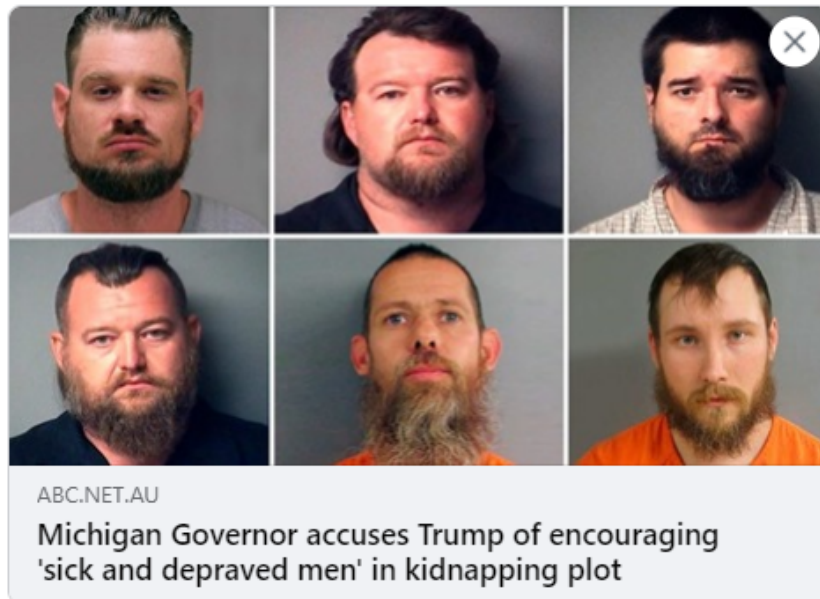
- Extremely likely
- Moderately likely
- Slightly likely
- Slightly unlikely
- Moderately unlikely
- Extremely unlikely



[congenial to Democrats; true]

If you were to see the above on social media, how likely would you be to share it?

- Extremely likely
- Moderately likely
- Slightly likely
- Slightly unlikely
- Moderately unlikely
- Extremely unlikely



[congenial to Democrats; true]

If you were to see the above on social media, how likely would you be to share it?

- Extremely likely
- Moderately likely
- Slightly likely
- Slightly unlikely
- Moderately unlikely
- Extremely unlikely





[congenial to Republicans; true]

If you were to see the above on social media, how likely would you be to share it?

- Extremely likely
- Moderately likely
- Slightly likely
- Slightly unlikely
- Moderately unlikely
- Extremely unlikely



[congenial to Republicans; true]

If you were to see the above on social media, how likely would you be to share it?

- Extremely likely
- Moderately likely
- Slightly likely
- Slightly unlikely
- Moderately unlikely
- Extremely unlikely



[congenial to Republicans; true]

If you were to see the above on social media, how likely would you be to share it?

- Extremely likely
- Moderately likely
- Slightly likely
- Slightly unlikely
- Moderately unlikely
- Extremely unlikely





HILLREPORTER.COM

**Trump Holds Bible Upside Down And Backwards  
During Press Conference, Enraging Bishop And The...**

[congenial to Democrats; false]

If you were to see the above on social media, how likely would you be to share it?

- Extremely likely
- Moderately likely
- Slightly likely
- Slightly unlikely
- Moderately unlikely
- Extremely unlikely



CNSNEWS.COM

**Biden: 'A Black Man Invented the Lightbulb, Not a  
White Guy Named Edison'**

[congenial to Democrats; false]

If you were to see the above on social media, how likely would you be to share it?

- Extremely likely
- Moderately likely
- Slightly likely
- Slightly unlikely
- Moderately unlikely
- Extremely unlikely



[congenial to Democrats; false]

If you were to see the above on social media, how likely would you be to share it?

- Extremely likely
- Moderately likely
- Slightly likely
- Slightly unlikely
- Moderately unlikely
- Extremely unlikely



[congenial to Republicans; false]

If you were to see the above on social media, how likely would you be to share it?

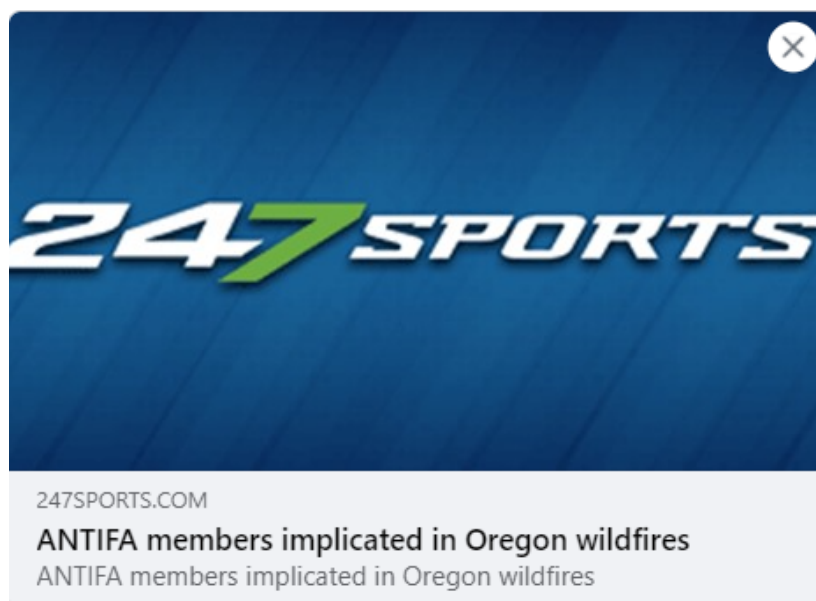
- Extremely likely
- Moderately likely
- Slightly likely
- Slightly unlikely
- Moderately unlikely
- Extremely unlikely



[congenial to Republicans; false]

If you were to see the above on social media, how likely would you be to share it?

- Extremely likely
- Moderately likely
- Slightly likely
- Slightly unlikely
- Moderately unlikely
- Extremely unlikely



[congenial to Republicans; false]

If you were to see the above on social media, how likely would you be to share it?

- Extremely likely
- Moderately likely
- Slightly likely
- Slightly unlikely
- Moderately unlikely
- Extremely unlikely

[Manipulation checks]

How important is it to you that you only share news articles on social media (such as Facebook and Twitter) if they are accurate?

- Not important at all
- Slightly important
- Moderately important
- Very important
- Extremely important

Would you say that you were treated fairly or unfairly when playing the game earlier?

- Very fairly
- Fairly
- Unfairly
- Very unfairly

We'd like you to rate how you feel towards some groups on a scale of 0 to 100. Zero means very unfavorable and 100 means very favorable. Fifty means you do not feel favorable or unfavorable. How would you rate your feeling toward each of the following?

- People who are Democrats/Republicans [outparty]
- People who are Democrats/Republicans [inparty]
- Democrat/Republican politicians and elected officials [outparty]
- Democrat/Republican politicians and elected officials [inparty]

Any bonus will be paid within 14 business days, subject to a multiplier of 0.03 as noted.

Our records show that you earned a \$[X] bonus. (This is \$[X] won in game \* the multiplier of 0.03.)

We sometimes find people don't always take surveys seriously, instead providing humorous, or insincere responses to questions. How often do you do this?

- Never
- Rarely
- Some of the time
- Most of the time
- Always

It is essential for the validity of this study that we know whether participants looked up any information online during the study. Did you make an effort to look up information during the study? Please be honest; you will still be paid and you will not be penalized in any way if you did.

- Yes, I looked up information
- No, I did not look up information

Do you have any comments on the survey? Please let us know about any problems you had or aspects of the survey that were confusing.

[text box]

Thank you for answering these questions. The purpose of this study is to understand how effective accuracy nudges are at countering misinformation.

Throughout the game you were told that you were playing with other players. This was not true. All data in the game, such as how much money the other player chose to give you, were randomly generated.

If you earned a bonus, you will still receive it.

Participants were then exposed to both true and false claims surrounding US political parties and figures.

The following news headlines are FALSE:

- D.C. Passes Bill to Immunize Children Without Parental Knowledge, Consent
- Report: Biden Admin May Use Private Firms to Spy on Unsuspecting Americans
- ANTIFA members implicated in Oregon wildfires
- Trump Holds Bible Upside Down And Backwards During Press Conference, Enraging Bishop And The Nation
- Biden: 'A Black Man Invented the Lightbulb, Not a White Guy Named Edison'
- USPS Reportedly Failed to Deliver 27 Percent of Mail-In Ballots in South Florida

The following headlines are TRUE:

- EXCLUSIVE: Fox News Passed on Hunter Biden Laptop Story Over Credibility Concerns
- Federal judges increase oversight of USPS to ensure ballots delivered on time
- Michigan Governor accuses Trump of encouraging 'sick and depraved men' in kidnapping plot
- Democrats, trying everything, fail to derail Amy Coney Barrett confirmation
- GOP Congressman: We Need The Senate To Investigate Hunter Biden
- Trump's gains among Latino voters shouldn't come as a surprise. Here's why.

If you have any questions regarding the content or intent of this research, please contact [REDACTED FOR PEER REVIEW].

Thank you again for your participation. Please do not share any information about the nature of this study with other potential participants. This research is not intended to support or oppose any political candidate or office. This research has no affiliation with any political candidate or campaign and has received no financial support from any political candidate or campaign.

Once you have read the above, please click the next button below to complete the survey!

## Online Appendix B: Additional results

Table B1: Participant attributes by condition (proportions)

	Baseline	Nudge	Positive outpartisan	Nudge × positive	Total
<i>Gender</i>					
Male	0.55	0.55	0.56	0.54	0.55
Female/other	0.45	0.45	0.44	0.46	0.45
<i>Education</i>					
Less than a bachelor's	0.41	0.43	0.33	0.35	0.38
College graduate	0.59	0.57	0.67	0.65	0.62
<i>Race/ethnicity</i>					
White	0.73	0.68	0.74	0.74	0.72
Non-white	0.27	0.32	0.26	0.26	0.28
<i>Age</i>					
18-34	0.46	0.46	0.46	0.49	0.49
35-44	0.25	0.21	0.24	0.20	0.20
45-54	0.12	0.13	0.12	0.18	0.18
55-64	0.13	0.14	0.10	0.09	0.09
65+	0.04	0.05	0.07	0.04	0.04
<i>Party</i>					
Democrat	0.58	0.52	0.63	0.56	0.57
Republican	0.42	0.48	0.37	0.44	0.43
N	179	201	203	202	785

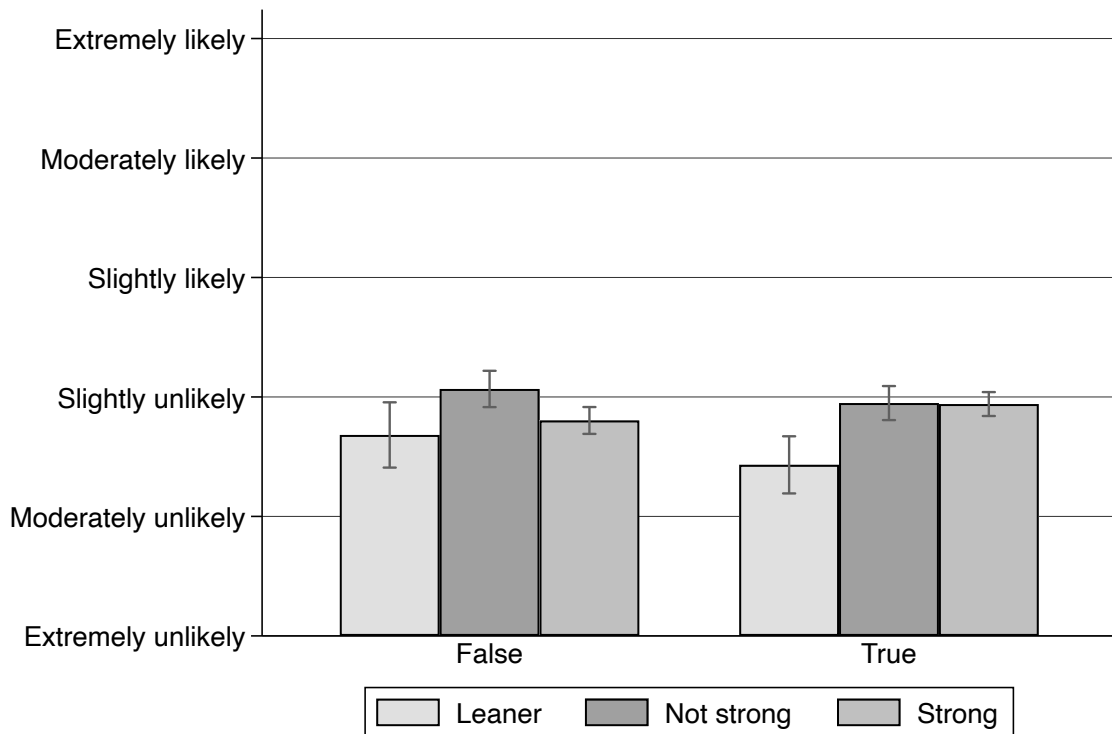
Party identifiers include leaners.

Table B2: Manipulation checks

	Accuracy importance in sharing	Partisan feelings difference (people)	Partisan feelings difference (politicians)
Accuracy nudge	-0.057 (0.076)	2.795 (2.139)	3.165 (2.068)
Positive outpartisan experience	-0.158* (0.076)	-4.672* (2.145)	-5.103* (2.085)
Controls	✓	✓	✓
N	781	781	781

OLS with robust standard errors; \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < .005$  (two-sided). Accuracy importance in sharing is a five-point scale. Affective polarization measures are calculated as the difference between participant’s ratings on a 0–100 feeling thermometer of the party that the participant supports and the other party. Preregistered control variables are Biden approval (four-point scale); party identification (Republican indicator); college degree (bachelor’s degree indicator); gender (male indicator); race (nonwhite indicator); age group (indicators for 35–44, 45–54, 55–64, and 65+); social media use (indicators for self-reported usage of Facebook, Twitter, Snapchat, Instagram, and WhatsApp); and sharing behavior (indicators for self-reported sharing of news about sports, celebrities, science, and business). See Online Appendix A for news headlines and question wording.

Figure B1: News sharing intention by accuracy nudge condition and strength of partisanship



Mean sharing intention on a 1–6 scale (“Extremely unlikely” to “Extremely likely”) with 95% confidence intervals. See Online Appendix A for news headlines and question wording.



Table B3: Effects of accuracy nudge and affective polarization manipulation on news sharing by partisan congeniality

(a) Uncongenial headlines			
	True news	False news	True – false
Accuracy nudge	0.002 (0.113)	-0.072 (0.123)	0.074 (0.115)
Positive outpartisan experience	0.051 (0.110)	0.232 (0.130)	-0.182 (0.114)
Nudge × positive outpartisan	0.033 (0.155)	-0.008 (0.176)	0.044 (0.159)
Controls	✓	✓	✓
Nudge effect: Polarized	0.036 (0.109)	-0.080 (0.125)	0.118 (0.110)
N	782	782	781

(b) Congenial headlines			
	True news	False news	True – false
Accuracy nudge	-0.028 (0.146)	-0.180 (0.146)	0.153 (0.122)
Positive outpartisan experience	-0.001 (0.137)	-0.094 (0.142)	0.093 (0.121)
Nudge × positive outpartisan	0.297 (0.191)	0.221 (0.205)	0.076 (0.180)
Controls	✓	✓	✓
Nudge effect: Positive outpartisan experience	0.270* (0.124)	0.041 (0.145)	0.229 (0.130)
N	782	782	782

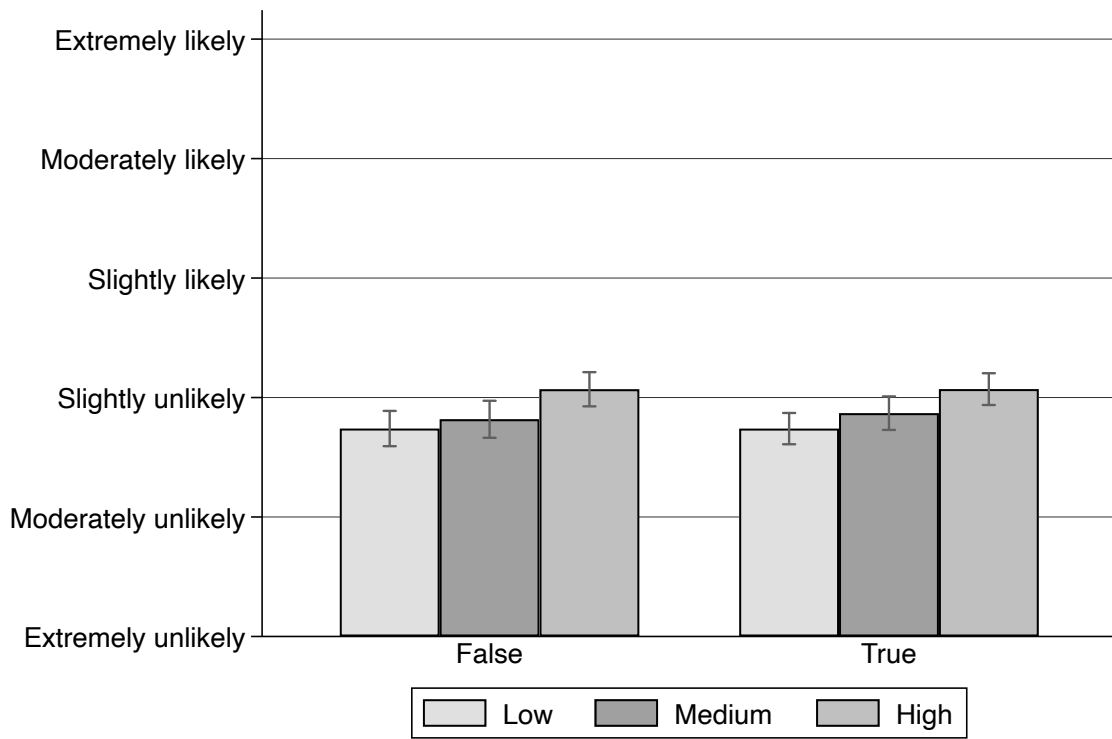
OLS with robust standard errors; \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < .005$  (two-sided). Sharing intentions for true and false news headlines were measured on a six-point scale. Preregistered control variables are Biden approval (four-point scale); party identification (Republican indicator); college degree (bachelor's degree indicator); gender (male indicator); race (nonwhite indicator); age group (indicators for 35–44, 45–54, 55–64, and 65+); social media use (indicators for self-reported usage of Facebook, Twitter, Snapchat, Instagram, and WhatsApp); and sharing behavior (indicators for self-reported sharing of news about sports, celebrities, science, and business). See Online Appendix A for news headlines and question wording.

Table B4: Joint effects of accuracy nudge and affective polarization manipulation on news sharing intentions by partisan congeniality

	True news	False news	True – false
Accuracy nudge	-0.007 (0.114)	-0.075 (0.124)	0.067 (0.114)
Positive outpartisan experience	0.049 (0.111)	0.225 (0.129)	-0.176 (0.113)
Congenial headline	0.961*** (0.094)	1.058*** (0.108)	-0.097 (0.109)
Nudge × congenial	-0.011 (0.134)	-0.103 (0.152)	0.092 (0.158)
Nudge × positive outpartisan	0.043 (0.157)	-0.010 (0.176)	0.056 (0.159)
Affective polarization × congenial	-0.049 (0.128)	-0.312* (0.155)	0.262 (0.158)
Nudge × positive outpartisan × congenial	0.245 (0.183)	0.234 (0.216)	0.008 (0.229)
Controls	✓	✓	✓
N	1564	1564	1563

OLS with standard errors clustered by respondent; \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < .005$  (two-sided). Sharing intentions for true and false news headlines were measured separately for congenial and uncongenial news on a six-point scale. Preregistered control variables are Biden approval (four-point scale); party identification (Republican indicator); college degree (bachelor's degree indicator); gender (male indicator); race (nonwhite indicator); age group (indicators for 35–44, 45–54, 55–64, and 65+); social media use (indicators for self-reported usage of Facebook, Twitter, Snapchat, Instagram, and WhatsApp); and sharing behavior (indicators for self-reported sharing of news about sports, celebrities, science, and business). See Online Appendix A for news headlines and question wording.

Figure B2: News sharing intention by accuracy nudge condition and Need for Chaos



Mean sharing intention on a 1–6 scale (“Extremely unlikely” to “Extremely likely”) with 95% confidence intervals. Need for Chaos groups refer to the first, second, and third terciles of mean responses on an eight-item scale. See Online Appendix A for news headlines and question wording.

Table B5: Main effects on true/false difference in news sharing intentions by self-reported type of news shared

	Political	Sports	Celebrity	Science/tech	Business
Accuracy nudge	0.140* (0.063)	0.061 (0.072)	0.154 (0.088)	0.050 (0.050)	0.095 (0.076)
Affective polarization	-0.009 (0.065)	0.052 (0.073)	0.040 (0.089)	0.054 (0.051)	0.019 (0.076)
Controls	✓	✓	✓	✓	✓
N	782	570	405	1091	583

OLS with robust standard errors; \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < .005$  (two-sided). Outcome variable is difference in sharing intentions for true and false news headlines as measured on a six-point scale. Preregistered control variables are Biden approval (four-point scale); party identification (Republican indicator); college degree (bachelor's degree indicator); gender (male indicator); race (nonwhite indicator); age group (indicators for 35–44, 45–54, 55–64, and 65+); social media use (indicators for self-reported usage of Facebook, Twitter, Snapchat, Instagram, and WhatsApp); and sharing behavior (indicators for self-reported sharing of news about politics, sports, celebrities, science, and business [outcome measure excluded]). See Online Appendix A for news headlines and question wording.

## Online Appendix C: Results with preregistered social media use exclusions

Table C1: Main effects on news sharing intentions (preregistered social media use exclusions)

	True news	False news	True – false
Accuracy nudge	0.145*** (0.049)	0.097 (0.053)	0.048 (0.036)
Positive outpartisan experience	0.104* (0.049)	0.095 (0.053)	0.009 (0.036)
Controls	✓	✓	✓
N	1904	1905	1904

OLS with robust standard errors; \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < .005$  (two-sided). Sharing intentions for true and false news headlines were measured on a six-point scale. Preregistered control variables are Biden approval (four-point scale); party identification (Republican indicator); college degree (bachelor's degree indicator); gender (male indicator); race (nonwhite indicator); age group (indicators for 35–44, 45–54, 55–64, and 65+); social media use (indicators for self-reported usage of Facebook, Twitter, Snapchat, Instagram, and WhatsApp); and sharing behavior (indicators for self-reported sharing of news about sports, celebrities, science, and business). See Online Appendix A for news headlines and question wording.

Table C2: Affective polarization manipulation effects on news sharing by partisan congeniality (preregistered social media use exclusions)

	True news	False news	True – false
Congenial headline	0.594*** (0.037)	0.634*** (0.042)	-0.039 (0.042)
Positive outpartisan experience	0.047 (0.050)	0.130* (0.055)	-0.082 (0.044)
Positive outpartisan × congenial	0.109* (0.053)	-0.056 (0.061)	0.164* (0.064)
Accuracy nudge	0.148*** (0.049)	0.094 (0.052)	0.054 (0.035)
Congenial/uncongenial difference: Positive outpartisan	0.703*** (0.037) (0.037)	0.577*** (0.044) (0.042)	0.125** (0.048) (0.042)
N	3806	3806	3805

OLS with standard errors clustered by respondent; \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < .005$  (two-sided). Observations represents average sharing intention for congenial or uncongenial news, which were measured on a six-point scale. Preregistered control variables are Biden approval (four-point scale); party identification (Republican indicator); college completion (bachelor's degree indicator); gender (male indicator); race (nonwhite indicator); age group (indicators for 35–44, 45–54, 55–64, and 65+); social media use (indicators for self-reported usage of Facebook, Twitter, Snapchat, Instagram, and WhatsApp); and sharing behavior (indicators for self-reported sharing of news about sports, celebrities, science, and business). See Online Appendix A for news headlines and question wording.

Table C3: Joint effects of accuracy nudge and affective polarization manipulation on news sharing intentions (preregistered social media use exclusions)

	True news	False news	True – false
Accuracy nudge	0.067 (0.070)	0.036 (0.074)	0.031 (0.050)
Positive outpartisan	0.025 (0.067)	0.034 (0.072)	-0.008 (0.048)
Nudge × affective polarization	0.158 (0.099)	0.123 (0.105)	0.034 (0.072)
Controls	✓	✓	✓
Nudge effect: Positive outpartisan	0.224*** (0.069)	0.159* (0.075)	0.065 (0.052)
N	1904	1905	1904

OLS with robust standard errors; \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < .005$  (two-sided). Sharing intentions for true and false news headlines were measured on a six-point scale. Preregistered control variables are Biden approval (four-point scale); party identification (Republican indicator); college degree (bachelor's degree indicator); gender (male indicator); race (nonwhite indicator); age group (indicators for 35–44, 45–54, 55–64, and 65+); social media use (indicators for self-reported usage of Facebook, Twitter, Snapchat, Instagram, and WhatsApp); and sharing behavior (indicators for self-reported sharing of news about sports, celebrities, science, and business). See Online Appendix A for news headlines and question wording.

Table C4: Moderators of accuracy nudge effects (preregistered social media use exclusions)

(a) Strength of partisanship

	True news	False news	True – false
Accuracy nudge	0.072 (0.134)	0.099 (0.148)	-0.027 (0.116)
Not strong partisan	0.190 (0.107)	0.041 (0.119)	0.149 (0.094)
Nudge × not strong partisan	-0.008 (0.154)	-0.014 (0.169)	0.006 (0.128)
Strong partisan	0.328*** (0.103)	0.128 (0.116)	0.200* (0.094)
Nudge × strong partisan	0.155 (0.152)	0.007 (0.167)	0.148 (0.128)
Positive outpartisan experience	0.111* (0.049)	0.098 (0.053)	0.013 (0.036)
Controls	✓	✓	✓
Nudge effect: Not strong partisans	0.064 (0.076)	0.085 (0.082)	-0.02 (0.052)
Nudge effect: Strong partisans	0.227*** (0.072)	0.106 (0.077)	0.121* (0.054)
N	1904	1905	1904

(b) Need for Chaos

	True news	False news	True – false
Accuracy nudge	0.145 (0.078)	0.022 (0.080)	0.123* (0.058)
Medium Need for Chaos	0.125 (0.079)	0.125 (0.087)	-0.000 (0.057)
High Need for Chaos	0.365*** (0.086)	0.292*** (0.090)	0.073 (0.061)
Nudge × medium NFC	-0.058 (0.115)	-0.036 (0.124)	-0.023 (0.088)
Nudge × high NFC	0.034 (0.119)	0.251* (0.126)	-0.217* (0.086)
Affective polarization	0.092 (0.049)	0.083 (0.052)	0.009 (0.036)
Controls	✓	✓	✓
Accuracy nudge effect: Medium NFC	0.087 (0.085)	-0.013 (0.094)	0.100 (0.066)
Accuracy nudge effect: High NFC	0.179* (0.091)	0.274*** (0.097)	-0.094 (0.064)
N	1904	1905	1904

OLS with robust standard errors; \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < .005$  (two-sided). Sharing intentions for true and false news headlines were measured on a six-point scale. Partisan leaners are the excluded category for the not strong partisan and strong partisan indicators. Indicators for Need for Chaos refer to the second and third terciles of mean responses on an eight-item scale. Preregistered control variables are Biden approval (four-point scale); party identification (Republican indicator); college degree (bachelor's degree indicator); gender (male indicator); race (nonwhite indicator); age group (indicators for 35–44, 45–54, 55–64, and 65+); social media use (indicators for self-reported usage of Facebook, Twitter, Snapchat, Instagram, and WhatsApp); and sharing behavior (indicators for self-reported sharing of news about sports, celebrities, science, and business). See Online Appendix A for news headlines and question wording.



Table C5: Effects of accuracy nudge and affective polarization manipulation on news sharing by partisan congeniality (preregistered social media use exclusions)

(a) Uncongenial headlines			
	True news	False news	True – false
Accuracy nudge	0.043 (0.070)	0.031 (0.076)	0.012 (0.062)
Positive outpartisan experience	0.002 (0.066)	0.107 (0.076)	-0.105 (0.059)
Nudge × positive outpartisan	0.107 (0.098)	0.068 (0.110)	0.041 (0.089)
Controls	✓	✓	✓
Nudge effect: Positive outpartisan	0.150* (0.069)	0.099 (0.079)	0.053 (0.064)
N	1904	1904	1903

(b) Congenial headlines			
	True news	False news	True – false
Accuracy nudge	0.091 (0.086)	0.056 (0.091)	0.035 (0.067)
Positive outpartisan experience	0.049 (0.084)	0.001 (0.088)	0.048 (0.069)
Nudge × positive outpartisan	0.208 (0.122)	0.130 (0.129)	0.078 (0.102)
Controls	✓	✓	✓
Nudge effect: Positive outpartisan experience	0.299*** (0.086)	0.186* (0.091)	0.113 (0.076)
N	1904	1904	1904

OLS with robust standard errors; \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < .005$  (two-sided). Sharing intentions for true and false news headlines were measured on a six-point scale. Preregistered control variables are Biden approval (four-point scale); party identification (Republican indicator); college degree (bachelor's degree indicator); gender (male indicator); race (nonwhite indicator); age group (indicators for 35–44, 45–54, 55–64, and 65+); social media use (indicators for self-reported usage of Facebook, Twitter, Snapchat, Instagram, and WhatsApp); and sharing behavior (indicators for self-reported sharing of news about sports, celebrities, science, and business). See Online Appendix A for news headlines and question wording.

Table C6: Joint effects of accuracy nudge and affective polarization manipulation on news sharing intentions by partisan congeniality (preregistered social media use exclusions)

	True news	False news	True – false
Accuracy nudge	0.036 (0.071)	0.039 (0.077)	-0.003 (0.062)
Positive outpartisan experience	-0.012 (0.067)	0.105 (0.076)	-0.118* (0.059)
Congenial headline	0.562*** (0.051)	0.629*** (0.058)	-0.067 (0.059)
Nudge × congenial	0.063 (0.074)	0.010 (0.083)	0.053 (0.085)
Nudge × positive outpartisan	0.116 (0.100)	0.047 (0.111)	0.070 (0.089)
Positive outpartisan × congenial	0.067 (0.072)	-0.109 (0.084)	0.176* (0.087)
Nudge × positive outpartisan × congenial	0.091 (0.105)	0.109 (0.122)	-0.020 (0.128)
Controls	✓	✓	✓
N	3806	3806	3805

OLS with standard errors clustered by respondent; \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < .005$  (two-sided). Sharing intentions for true and false news headlines were measured separately for congenial and uncongenial news on a six-point scale. Preregistered control variables are Biden approval (four-point scale); party identification (Republican indicator); college degree (bachelor's degree indicator); gender (male indicator); race (nonwhite indicator); age group (indicators for 35–44, 45–54, 55–64, and 65+); social media use (indicators for self-reported usage of Facebook, Twitter, Snapchat, Instagram, and WhatsApp); and sharing behavior (indicators for self-reported sharing of news about sports, celebrities, science, and business). See Online Appendix A for news headlines and question wording.

## Online Appendix D: Results excluding two false headlines

Table D1: Main effects on news sharing intentions (headline exclusions)

	True news	False news	True – false
Accuracy nudge	0.072 (0.075)	-0.105 (0.082)	0.178** (0.065)
Affective polarization	0.109 (0.076)	0.163 (0.083)	-0.053 (0.067)
Controls	✓	✓	✓
N	782	782	781

OLS with robust standard errors; \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < .005$  (two-sided). Sharing intentions for true and false news headlines were measured on a six-point scale. Preregistered control variables are Biden approval (four-point scale); party identification (Republican indicator); college degree (bachelor's degree indicator); gender (male indicator); race (nonwhite indicator); age group (indicators for 35–44, 45–54, 55–64, and 65+); social media use (indicators for self-reported usage of Facebook, Twitter, Snapchat, Instagram, and WhatsApp); and sharing behavior (indicators for self-reported sharing of news about sports, celebrities, science, and business). See Online Appendix A for news headlines and question wording.

Table D2: Affective polarization manipulation effects on news sharing by partisan congeniality (headline exclusions)

	True news	False news	True – false
Congenial headline	0.955*** (0.067)	0.931*** (0.088)	0.024 (0.090)
Positive outpartisan experience	0.073 (0.080)	0.232* (0.096)	-0.158 (0.088)
Positive outpartisan × congenial	0.073 (0.092)	-0.131 (0.124)	0.204 (0.130)
Accuracy nudge	0.072 (0.075)	-0.113 (0.082)	0.187*** (0.066)
Congenial/uncongenial difference: Positive outpartisan experience	1.028*** (0.063)	0.800*** (0.088)	0.228* (0.094)
N	1564	1563	1562

OLS with standard errors clustered by respondent; \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < .005$  (two-sided). Observations represents average sharing intention for congenial or uncongenial news, which were measured on a six-point scale. Preregistered control variables are Biden approval (four-point scale); party identification (Republican indicator); college completion (bachelor's degree indicator); gender (male indicator); race (nonwhite indicator); age group (indicators for 35–44, 45–54, 55–64, and 65+); social media use (indicators for self-reported usage of Facebook, Twitter, Snapchat, Instagram, and WhatsApp); and sharing behavior (indicators for self-reported sharing of news about sports, celebrities, science, and business). See Online Appendix A for news headlines and question wording.

Table D3: Joint effects of accuracy nudge and affective polarization manipulation on news sharing intentions (headline exclusions)

	True news	False news	True – false
Accuracy nudge	-0.013 (0.113)	-0.116 (0.115)	0.103 (0.092)
Positive outpartisan experience	0.025 (0.107)	0.152 (0.115)	-0.128 (0.093)
Nudge × positive outpartisan	0.165 (0.149)	0.021 (0.163)	0.146 (0.133)
Controls	✓	✓	✓
Nudge effect: Positive outpartisan	0.153 (0.099)	-0.094 (0.116)	0.249** (0.095)
N	782	782	781

OLS with robust standard errors; \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < .005$  (two-sided). Sharing intentions for true and false news headlines were measured on a six-point scale. Preregistered control variables are Biden approval (four-point scale); party identification (Republican indicator); college degree (bachelor's degree indicator); gender (male indicator); race (nonwhite indicator); age group (indicators for 35–44, 45–54, 55–64, and 65+); social media use (indicators for self-reported usage of Facebook, Twitter, Snapchat, Instagram, and WhatsApp); and sharing behavior (indicators for self-reported sharing of news about sports, celebrities, science, and business). See Online Appendix A for news headlines and question wording.

Table D4: Moderators of accuracy nudge effects (headline exclusions)

(a) Strength of partisanship			
	True news	False news	True – false
Accuracy nudge	0.135 (0.224)	-0.026 (0.233)	0.160 (0.187)
Not strong partisan	0.409* (0.181)	0.364 (0.190)	0.044 (0.158)
Nudge × not strong partisan	-0.296 (0.260)	-0.234 (0.277)	-0.058 (0.216)
Strong partisan	0.413* (0.168)	0.261 (0.176)	0.152 (0.149)
Nudge × strong partisan	0.053 (0.243)	-0.008 (0.256)	0.062 (0.208)
Positive outpartisan experience	0.115 (0.075)	0.161 (0.084)	-0.045 (0.068)
Controls	✓	✓	✓
Nudge effect: Not strong partisans	-0.161 (0.134)	-0.260 (0.147)	0.102 (0.106)
Nudge effect: Strong partisans	0.188 (0.097)	-0.033 (0.109)	0.222* (0.091)
N	782	782	781

(b) Need for Chaos			
	True news	False news	True – false
Accuracy nudge	0.074 (0.128)	-0.199 (0.143)	0.272* (0.111)
Medium Need for Chaos	0.234 (0.135)	0.164 (0.144)	0.070 (0.112)
High Need for Chaos	0.273* (0.129)	0.054 (0.137)	0.220* (0.109)
Nudge × medium NFC	-0.094 (0.189)	-0.091 (0.209)	-0.003 (0.166)
Nudge × high NFC	0.052 (0.178)	0.341 (0.190)	-0.284 (0.155)
Positive outpartisan experience	0.090 (0.076)	0.147 (0.084)	-0.057 (0.067)
Controls	✓	✓	✓
Accuracy nudge effect: Medium NFC	-0.020 (0.138)	-0.290 (0.154)	0.270* (0.124)
Accuracy nudge effect: High NFC	0.125 (0.123)	0.142 (0.127)	-0.012 (0.108)
N	782	782	781

OLS with robust standard errors; \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < .005$  (two-sided). Sharing intentions for true and false news headlines were measured on a six-point scale. Partisan leaners are the excluded category for the not strong partisan and strong partisan indicators. Indicators for Need for Chaos refer to the second and third terciles of mean responses on an eight-item scale. Preregistered control variables are Biden approval (four-point scale); party identification (Republican indicator); college degree (bachelor's degree indicator); gender (male indicator); race (nonwhite indicator); age group (indicators for 35–44, 45–54, 55–64, and 65+); social media use (indicators for self-reported usage of Facebook, Twitter, Snapchat, Instagram, and WhatsApp); and sharing behavior (indicators for self-reported sharing of news about sports, celebrities, science, and business). See Online Appendix A for news headlines and question wording.

Table D5: Effects of accuracy nudge and affective polarization manipulation on news sharing by partisan congeniality (headline exclusions)

(a) Uncongenial headlines			
	True news	False news	True – false
Accuracy nudge	0.002 (0.113)	-0.136 (0.129)	0.138 (0.122)
Positive outpartisan experience	0.051 (0.110)	0.256 (0.143)	-0.206 (0.129)
Nudge × positive outpartisan	0.033 (0.155)	-0.016 (0.188)	0.053 (0.176)
Controls	✓	✓	✓
Nudge effect: Positive outpartisan experience	0.036 (0.109)	-0.152 (0.135)	0.191 (0.125)
N	782	782	781
(b) Congenial headlines			
	True news	False news	True – false
Accuracy nudge	-0.028 (0.146)	-0.139 (0.154)	0.110 (0.132)
Positive outpartisan experience	-0.001 (0.137)	0.028 (0.151)	-0.029 (0.132)
Nudge × positive outpartisan	0.297 (0.191)	0.110 (0.219)	0.191 (0.195)
Controls	✓	✓	✓
Nudge effect: Positive outpartisan experience	0.270* (0.124)	-0.029 (0.156)	0.301* (0.141)
N	782	781	781

OLS with robust standard errors; \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < .005$  (two-sided). Sharing intentions for true and false news headlines were measured on a six-point scale. Preregistered control variables are Biden approval (four-point scale); party identification (Republican indicator); college degree (bachelor's degree indicator); gender (male indicator); race (nonwhite indicator); age group (indicators for 35–44, 45–54, 55–64, and 65+); social media use (indicators for self-reported usage of Facebook, Twitter, Snapchat, Instagram, and WhatsApp); and sharing behavior (indicators for self-reported sharing of news about sports, celebrities, science, and business). See Online Appendix A for news headlines and question wording.

Table D6: Joint effects of accuracy nudge and affective polarization manipulation on news sharing intentions by partisan congeniality (headline exclusions)

	True news	False news	True – false
Accuracy nudge	-0.007 (0.114)	-0.126 (0.132)	0.118 (0.122)
Positive outpartisan	0.049 (0.111)	0.246 (0.143)	-0.197 (0.129)
Congenial headline	0.961*** (0.094)	0.944*** (0.127)	0.017 (0.126)
Nudge × congenial	-0.011 (0.134)	-0.024 (0.176)	0.013 (0.180)
Nudge × positive outpartisan	0.043 (0.157)	-0.028 (0.189)	0.075 (0.177)
Positive outpartisan × congenial	-0.049 (0.128)	-0.207 (0.183)	0.158 (0.182)
Nudge × positive outpartisan × congenial	0.245 (0.183)	0.152 (0.249)	0.094 (0.261)
Controls	✓	✓	✓
N	1564	1563	1562

OLS with standard errors clustered by respondent; \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < .005$  (two-sided). Sharing intentions for true and false news headlines were measured separately for congenial and uncongenial news on a six-point scale. Preregistered control variables are Biden approval (four-point scale); party identification (Republican indicator); college degree (bachelor's degree indicator); gender (male indicator); race (nonwhite indicator); age group (indicators for 35–44, 45–54, 55–64, and 65+); social media use (indicators for self-reported usage of Facebook, Twitter, Snapchat, Instagram, and WhatsApp); and sharing behavior (indicators for self-reported sharing of news about sports, celebrities, science, and business). See Online Appendix A for news headlines and question wording.