**Inoculation Can Reduce the Perceived Reliability of Polarizing Social Media Content**

**SUPPLEMENTARY INFORMATION**

**Supplement S1: Sample Information**

*Study 1*

Participants were recruited via the *Bad News* game’s website ([www.getbadnews.com](http://www.getbadnews.com)). Visitors to the website who started playing the game were asked to participate in a voluntary scientific study. We activated the in-game survey between 27 September and 29 October 2021. Over the course of this period, we collected a total of 472 completed pre-post responses. Our sample was 44.9% male (43.2% female, 11.9% other), with 66.1% of participants reporting being between 18 and 29 years old. Participants were slightly left-leaning (*M* = 3.70, *SD* = 1.65 on a 7-point scale), and 29.0% reported having obtained a higher degree. 79.4% reported using social media regularly or daily. 11.0% had played the *Bad News* game before (83.5% had not, 5.5% did not remember). Participants were not financially compensated for their participation. See Table S1.

*Study 2*

Participants were recruited via Prolific Academic (Peer et al., 2017) and were from the United States. As per our preregistration, we sought to collect a sample of *n* = 200, based on sample sizes from previous research using the *Bad News* game (Basol et al., 2020; Maertens et al., 2021). Because several participants in the treatment group did not enter the correct password post-gameplay or failed an attention check and were therefore excluded as per our preregistration, we ended up with a final sample of *n* = 193 (110 control, 83 treatment). Our final sample was 72.5% female (24.9% male, 2.1% other, 0.5% prefer not to say), with a mean age of 26.0 (SD = 9.09). Participants were somewhat left-leaning (*M* = 3.09, *SD* = 1.62 on a 7-point scale), and 47.2% reported having obtained at least a bachelor’s degree. Participants were paid GBP 2.25 for their participation. See Table S1.

*Study 3*

Participants were recruited via Respondi. We aimed to recruit a sample that was representative of the US for age and gender. As per our preregistration, we sought to collect a sample of *n* = 600, or 200 participants per condition. However, due to several problems with the implementation, we did not manage to collect enough in-quota responses. In addition, several participants in the treatment group did not provide the correct password post-gameplay or failed an attention check and were therefore excluded as per our preregistration. Because participants in the full *Bad News* condition failed these attention checks disproportionately more than the other two conditions, we slightly oversampled to have at least 200 participants in each condition. Finally, upon inspection of the data, we noticed that a large number of completed responses (245) exhibited highly repetitive response patterns; for example, several participants responded 7/7 to the reliability, confidence, as well as the sharing willingness questions for each of the social media posts in the post-test. Although not preregistered as an exclusion criterion, we report the results for participants who did not give repetitive or otherwise suspicious responses to the survey questions in the main body; the results with these participants included are similar in terms of significance; we report these in Tables S10-S11.

We thus ended up with a sample of *n* = 772 (203 for the full *Bad News* condition, 256 for the short *Bad News* condition, and 319 for the control group). Our final sample was 63.6% female (36.2% male, 1% non-binary). 56.3% reported being 45 years or older. Participants were balanced ideologically (*M* = 4.04, *SD* = 1.70 on a 7-point scale), and 61.6% reported having obtained at least a bachelor’s degree. Participants were paid GBP 5.00 for their participation. See Table S1.

**Supplement S2: Study 2 Results**

We present the results for preregistered hypotheses **H1-H4** and our exploratory analyses in this order below.

**In-game choices and congruence with political beliefs.** To test hypothesis **H1**, we conduct a logistic regression with political ideology (1 being “very left-wing” and 7 being “very right-wing”) predicting the choice of topic that people reported choosing to spread misinformation about in the game (0 being a predominantly left-wing topic of discussion, i.e., large corporations or police brutality, 1 being a predominantly right-wing topic, i.e., the government or rising crime rates). As in Study 1, we find no significant effect of political ideology on the topic of the misinformation that people choose to spread (*OR* = 0.99, 95% CI [0.69, 1.38], *p* = .970). As a supplementary analysis, we run the same logistic regression with a dichotomized 7-point political ideology scale where 1-3 = left-wing and 5-7 = right-wing, with moderates (4) excluded from the analysis. We again find no significant effect of political ideology on news topic type (*OR* = 1.03, 95% CI [0.20, 4.30], *p* = .966). Our results thus fail to support **H1**.

**Perceived reliability of polarizing social media content.** To test hypothesis **H2**, we conduct a one-way Welch’s ANOVA on the averaged pre-post difference score in the perceived reliability of items making use of the “polarization” technique, by condition (treatment – control)[[1]](#footnote-1). We find that although treatment group participants see polarizing news content as descriptively less reliable post-gameplay compared to before playing, in comparison with the control group, this difference is not significant (*F*(1, 143.98) = 3.3, *Mdiff* = .16, 95% CI [-.33, .01], *p* = .071, *d* = .29). See also Table S7 for the item-level ANOVAs. However, a TOST equivalence test with a SESOI (smallest effect size of interest) of *d* = ± 0.30 and α = 0.05 fails to confirm statistical equivalence to 0, *t*(143.98) = -.20, *p* = .419, indicating the possible presence of a meaningful effect. Thus, while our findings fail to support **H2**, we cannot statistically rule out that a meaningful effect nonetheless exists.

**Perceived reliability of polarizing social media content across the political spectrum.** To test hypothesis **H3**, we first conduct a two-way ANOVA to determine the effect of condition (treatment – control) and political ideology (1 being “very left-wing” and 7 being “very right-wing”) on the pre-post difference score of the perceived reliability of polarizing social media content. We find no significant interaction between political ideology and condition (*F*(1, 189) = .020, *p* = .886). We also conduct one-way Welch’s ANOVAs on the pre-post reliability scores of polarizing social media content, separately for both left-wing and right-wing participants[[2]](#footnote-2). We find no significant difference in the pre-post reliability scores of polarizing content for both left-wing (*F*(1, 63.22) = .06, *Mdiff* = -.03, 95% CI [-.27, .21], *p* = .803) and right-wing participants (*F*(1,20.23) = .63, *Mdiff* = .16, 95% CI [-.58, .25], *p* = .412). However, a TOST equivalence test fails to confirm statistical equivalence to zero (left-wingers: *t*(63.22) = -1.15, *p* = .128; right-wingers: *t*(20.23) = -.009, *p* = .496). Thus, while we fail to find support for **H3**, we cannot rule out the absence of a meaningful effect.

**Inoculation and cross-protection.** To test hypothesis **H4**, we conduct a one-way Welch’s ANOVA on the averaged pre-post difference score in the perceived reliability of items making use of the “impersonation” technique, by condition (treatment – control)[[3]](#footnote-3). We find no significant effect of condition on pre-post reliability scores (*F*(1, 144.01) = 0.0, *Mdiff* = .00, 95% CI [-.24, .25], *p* = .975). Furthermore, a TOST equivalence test confirms statistical equivalence to 0 (*t*(144.01) = 1.99, *p* = .024), indicating an absence of a meaningful effect. Our findings thus do not support hypothesis **H4**.

**Exploratory analyses**. To see whether there is a change in the reliability ratings of “real news”, i.e., social media content not making use of a misinformation technique, we conduct a one-way Fisher’s ANOVA on the averaged pre-post difference score in the perceived reliability of neutral social media content, by condition[[4]](#footnote-4). We find no significant effect of condition on pre-post reliability scores (*F*(1, 160.22) = 2.25, *Mdiff* = -.18, 95% CI [-.42, .05], *p* = .127). However, a TOST equivalence test fails to confirm statistical equivalence to 0 (*t*(160.22) = -.54, *p* = .294).

*Table S1*. Sample composition

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Study 1** | | **Study 2** | | **Study 3** | |
| **Variable** |  | *N* | *%* | *N* | *%* | *N* | *%* |
|  |  |  |  |  |  |  |  |
| Age | 18-29 | 312 | 66.1 % |  |  |  |  |
|  | 30-49 | 109 | 23.1 % |  |  |  |  |
|  | Over 50 | 51 | 10.8 % |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | 18-24 |  |  |  |  | 12 | 1.5 % |
|  | 25-34 |  |  |  |  | 60 | 7.7 % |
|  | 35-44 |  |  |  |  | 123 | 15.8 % |
|  | 45-54 |  |  |  |  | 145 | 18.6 % |
|  | 55-64 |  |  |  |  | 230 | 29.6 % |
|  | 65+ |  |  |  |  | 208 | 26.7 % |
|  |  |  |  |  |  |  |  |
| Gender | Female | 204 | 43.2 % | 140 | 72.5 % | 495 | 63.6 % |
|  | Male | 212 | 44.9 % | 48 | 24.9 % | 282 | 36.2 % |
|  | Other | 56 | 11.9 % | 4 | 2.1 % |  |  |
|  | Prefer not to say |  |  | 1 | 0.5 % |  |  |
|  | Non-binary |  |  |  |  | 1 | 0.10% |
|  |  |  |  |  |  |  |  |
| Education | High school or less | 81 | 17.2 % |  |  |  |  |
|  | Some college/university | 254 | 53.8 % |  |  |  |  |
|  | Higher degree | 137 | 29.0 % |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Less than high school degree |  |  | 0 | 0.00% | 9 | 1.2 % |
|  | High school graduate (high school diploma or equivalent including GED) |  |  | 42 | 21.8 % | 110 | 14.1 % |
|  | Some college but no degree |  |  | 60 | 31.1 % | 180 | 23.1 % |
|  | Bachelor's degree in college |  |  | 49 | 25.4 % | 320 | 41.1 % |
|  | Professional degree |  |  | 4 | 2.1 % | 20 | 2.6 % |
|  | Master's degree |  |  | 33 | 17.1 % | 117 | 15.0 % |
|  | Doctoral degree |  |  | 5 | 2.6 % | 22 | 2.8 % |
|  |  |  |  |  |  |  |  |
| Social media use | Never | 20 | 4.2 % |  |  |  |  |
|  | Rarely | 82 | 17.4 % |  |  |  |  |
|  | Regularly | 182 | 38.6 % |  |  |  |  |
|  | Daily | 188 | 39.8 % |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Never |  |  | 0 | 0.00% | 89 | 11.4 % |
|  | Rarely |  |  | 4 | 2.1 % | 69 | 8.9 % |
|  | Sometimes |  |  | 19 | 9.8 % | 142 | 18.3 % |
|  | Regularly |  |  | 45 | 23.3 % | 185 | 23.8 % |
|  | Daily |  |  | 125 | 64.8 % | 293 | 37.7 % |
|  |  |  |  |  |  |  |  |
| Twitter use | Never |  |  | 48 | 24.9 % | 408 | 52.4 % |
|  | Rarely |  |  | 29 | 15.0 % | 82 | 10.5 % |
|  | Sometimes |  |  | 35 | 18.1 % | 114 | 14.7 % |
|  | Regularly |  |  | 35 | 18.1 % | 77 | 9.9 % |
|  | Daily |  |  | 46 | 23.8 % | 97 | 12.5 % |
|  |  |  |  |  |  |  |  |
| Played *Bad News* before | No | 394 | 83.5 % |  |  |  |  |
|  | Yes | 52 | 11.0 % |  |  |  |  |
|  | Don't remember | 26 | 5.5 % |  |  |  |  |
|  |  |  |  |  |  |  |  |
| CRT performance | Incorrect | 295 | 62.5 % | 182 | 94.3 % | 946 | 92.50% |
|  | Correct | 177 | 37.5 % | 11 | 5.7 % | 77 | 7.50% |
|  |  |  |  |  |  |  |  |
| Party affiliation | Democrat |  |  |  |  | 301 | 38.7 % |
|  | Republican |  |  |  |  | 247 | 31.7 % |
|  | Independent |  |  |  |  | 217 | 27.9 % |
|  | Other, namely: |  |  |  |  | 13 | 1.7 % |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| **Continuous variables** | | *M* | *SD* | *M* | *SD* | *M* | *SD* |
| Age |  |  |  | 26.0 | 9.09 |  |  |
| Political ideology (1-7) |  | 3.70 | 1.65 | 3.09 | 1.62 | 4.04 | 1.70 |
| Opposite party feelings |  |  |  |  |  | 39.40 | 24.60 |
| Opposite party traits |  |  |  |  |  | 2.57 | 0.61 |

*Table S2*. Item-level statistics – reliability outcome measure. Full = full *Bad News* game. Short = short *Bad News* game.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Study 1** | | | **Study 2** | | | | | | **Study 3** | | | | | | | | |
|  |  |  |  | **Control** | **Short** | **Control** | **Short** | **Control** | **Short** | **Full** | **Short** | **Control** | **Full** | **Short** | **Control** | **Full** | **Short** | **Control** |
| **Item name** | *M* | *SE* | *SD* | *M* | | *SE* | | *SD* | | *M* | | | *SE* | | | *SD* | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Polarization technique** | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Polarization-Lying-Pre | 2.79 | 0.09 | 2.00 | 2.81 | 3.10 | 0.16 | 0.18 | 1.63 | 1.60 |  |  |  |  |  |  |  |  |  |
| Polarization-Lying-Post | 2.55 | 0.09 | 1.94 | 2.89 | 2.94 | 0.15 | 0.19 | 1.56 | 1.72 |  |  |  |  |  |  |  |  |  |
| Polarization-IQ-Pre | 2.77 | 0.10 | 2.07 | 2.72 | 2.89 | 0.15 | 0.17 | 1.57 | 1.58 | 2.55 | 2.43 | 2.45 | 0.11 | 0.09 | 0.09 | 1.55 | 1.52 | 1.53 |
| Polarization-IQ-Post | 2.45 | 0.09 | 1.93 | 2.71 | 2.76 | 0.14 | 0.17 | 1.51 | 1.57 | 2.42 | 2.44 | 2.41 | 0.11 | 0.10 | 0.08 | 1.60 | 1.62 | 1.50 |
| Polarization-Career-Pre | 2.95 | 0.10 | 2.07 | 2.86 | 2.99 | 0.16 | 0.16 | 1.67 | 1.48 | 2.87 | 3.02 | 2.76 | 0.11 | 0.10 | 0.09 | 1.50 | 1.65 | 1.60 |
| Polarization-Career-Post | 2.63 | 0.09 | 2.00 | 2.87 | 2.73 | 0.15 | 0.19 | 1.59 | 1.73 | 2.53 | 2.70 | 2.61 | 0.11 | 0.11 | 0.09 | 1.56 | 1.69 | 1.59 |
| Polarization-Reporting-Pre | 3.23 | 0.09 | 1.95 | 2.90 | 3.33 | 0.14 | 0.17 | 1.51 | 1.55 | 3.32 | 3.25 | 3.10 | 0.12 | 0.12 | 0.10 | 1.69 | 1.84 | 1.72 |
| Polarization-Reporting-Post | 2.69 | 0.09 | 1.88 | 2.97 | 3.04 | 0.16 | 0.18 | 1.62 | 1.66 | 2.94 | 3.04 | 3.06 | 0.12 | 0.12 | 0.10 | 1.77 | 1.85 | 1.74 |
| Polarization-Immigration-Pre |  |  |  | 3.08 | 3.22 | 0.16 | 0.20 | 1.72 | 1.81 | 3.37 | 3.73 | 3.41 | 0.13 | 0.12 | 0.11 | 1.91 | 1.93 | 1.90 |
| Polarization-Immigration-Post |  |  |  | 3.03 | 2.87 | 0.16 | 0.19 | 1.69 | 1.75 | 2.99 | 3.20 | 3.21 | 0.13 | 0.12 | 0.11 | 1.89 | 1.92 | 1.91 |
| Polarization-Sociology-Pre |  |  |  | 2.81 | 2.94 | 0.17 | 0.21 | 1.74 | 1.86 | 3.00 | 2.90 | 2.88 | 0.13 | 0.12 | 0.10 | 1.80 | 1.86 | 1.78 |
| Polarization-Sociology-Post |  |  |  | 2.77 | 2.78 | 0.17 | 0.21 | 1.74 | 1.93 | 2.51 | 2.73 | 2.86 | 0.12 | 0.12 | 0.10 | 1.70 | 1.84 | 1.80 |
| Polarization-Morality-Pre |  |  |  | 2.44 | 2.33 | 0.16 | 0.16 | 1.70 | 1.48 | 2.44 | 2.66 | 2.55 | 0.12 | 0.11 | 0.09 | 1.71 | 1.76 | 1.66 |
| Polarization-Morality-Post |  |  |  | 2.39 | 2.47 | 0.16 | 0.18 | 1.64 | 1.65 | 2.49 | 2.48 | 2.51 | 0.12 | 0.11 | 0.10 | 1.74 | 1.73 | 1.70 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Other misinformation techniques** | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Impersonation-GoT-Pre |  |  |  | 4.89 | 5.02 | 0.19 | 0.20 | 2.03 | 1.86 | 4.27 | 4.14 | 3.92 | 0.12 | 0.12 | 0.09 | 1.74 | 1.85 | 1.68 |
| Impersonation-GoT-Post |  |  |  | 4.89 | 5.14 | 0.18 | 0.20 | 1.93 | 1.78 | 3.32 | 3.92 | 3.90 | 0.14 | 0.12 | 0.10 | 1.93 | 1.87 | 1.81 |
| Impersonation-Buf-Pre |  |  |  | 3.45 | 3.53 | 0.18 | 0.22 | 1.85 | 1.97 | 3.49 | 3.52 | 3.42 | 0.13 | 0.12 | 0.10 | 1.88 | 1.89 | 1.75 |
| Impersonation-Buf-Post |  |  |  | 3.70 | 3.66 | 0.18 | 0.21 | 1.90 | 1.91 | 2.95 | 3.52 | 3.42 | 0.14 | 0.13 | 0.11 | 2.05 | 2.00 | 1.88 |
| Conspiracy-Greenhouse-Pre | 3.04 | 0.10 | 2.20 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Conspiracy-Greenhouse-Post | 2.68 | 0.09 | 2.05 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Conspiracy-Elite-Pre | 2.73 | 0.09 | 2.05 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Conspiracy-Elite-Post | 2.42 | 0.09 | 1.99 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Conspiracy-Bitcoin-Pre |  |  |  |  |  |  |  |  |  | 3.34 | 3.42 | 3.37 | 0.11 | 0.10 | 0.10 | 1.54 | 1.66 | 1.71 |
| Conspiracy-Bitcoin-Post |  |  |  |  |  |  |  |  |  | 2.90 | 3.22 | 3.18 | 0.12 | 0.11 | 0.10 | 1.74 | 1.82 | 1.78 |
| Conspiracy-Insurance-Pre |  |  |  |  |  |  |  |  |  | 2.32 | 2.52 | 2.32 | 0.10 | 0.10 | 0.09 | 1.49 | 1.67 | 1.53 |
| Conspiracy-Insurance-Post |  |  |  |  |  |  |  |  |  | 2.10 | 2.41 | 2.41 | 0.10 | 0.11 | 0.09 | 1.46 | 1.71 | 1.63 |
| Emotion-Disease-Pre |  |  |  |  |  |  |  |  |  | 2.49 | 2.41 | 2.41 | 0.11 | 0.10 | 0.09 | 1.55 | 1.59 | 1.57 |
| Emotion-Disease-Post |  |  |  |  |  |  |  |  |  | 2.24 | 2.38 | 2.53 | 0.11 | 0.10 | 0.09 | 1.51 | 1.66 | 1.66 |
| Emotion-Senior-Pre |  |  |  |  |  |  |  |  |  | 3.22 | 3.20 | 3.04 | 0.12 | 0.11 | 0.09 | 1.67 | 1.73 | 1.66 |
| Emotion-Senior-Post |  |  |  |  |  |  |  |  |  | 2.68 | 2.92 | 2.98 | 0.12 | 0.11 | 0.10 | 1.66 | 1.74 | 1.72 |
| Discredit-Media-Pre |  |  |  |  |  |  |  |  |  | 3.53 | 3.71 | 3.50 | 0.15 | 0.14 | 0.12 | 2.15 | 2.20 | 2.09 |
| Discredit-Media-Post |  |  |  |  |  |  |  |  |  | 3.26 | 3.44 | 3.51 | 0.15 | 0.14 | 0.12 | 2.17 | 2.16 | 2.14 |
| Discredit-Science-Pre |  |  |  |  |  |  |  |  |  | 2.99 | 3.14 | 2.96 | 0.13 | 0.12 | 0.10 | 1.78 | 1.83 | 1.71 |
| Discredit-Science-Post |  |  |  |  |  |  |  |  |  | 2.69 | 3.06 | 2.99 | 0.12 | 0.11 | 0.10 | 1.75 | 1.82 | 1.74 |
| Trolling-Bank-Pre |  |  |  |  |  |  |  |  |  | 2.65 | 2.84 | 2.51 | 0.11 | 0.10 | 0.08 | 1.50 | 1.59 | 1.51 |
| Trolling-Bank-Post |  |  |  |  |  |  |  |  |  | 2.45 | 2.61 | 2.57 | 0.11 | 0.10 | 0.09 | 1.49 | 1.54 | 1.53 |
| Trolling-Leo-Pre |  |  |  |  |  |  |  |  |  | 2.72 | 3.11 | 2.71 | 0.12 | 0.12 | 0.10 | 1.72 | 1.92 | 1.77 |
| Trolling-Leo-Post |  |  |  |  |  |  |  |  |  | 2.57 | 2.92 | 2.78 | 0.13 | 0.12 | 0.10 | 1.78 | 1.94 | 1.80 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Real News Items** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Control-NASA-Pre | 5.10 | 0.10 | 2.17 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Control-NASA-Post | 5.10 | 0.10 | 2.17 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Control-Brands-Pre | 5.38 | 0.09 | 2.03 | 5.25 | 5.46 | 0.13 | 0.13 | 1.36 | 1.20 | 5.21 | 5.00 | 4.94 | 0.10 | 0.10 | 0.09 | 1.40 | 1.54 | 1.59 |
| Control-Brands-Post | 5.21 | 0.10 | 2.10 | 5.22 | 5.16 | 0.13 | 0.18 | 1.41 | 1.64 | 4.99 | 4.91 | 4.80 | 0.12 | 0.10 | 0.09 | 1.68 | 1.56 | 1.66 |
| Control-Brain-Pre | 5.16 | 0.09 | 2.00 | 5.21 | 5.31 | 0.13 | 0.12 | 1.31 | 1.13 | 5.56 | 5.51 | 5.36 | 0.10 | 0.08 | 0.08 | 1.37 | 1.25 | 1.37 |
| Control-Brain-Post | 5.18 | 0.09 | 2.06 | 5.19 | 5.20 | 0.14 | 0.15 | 1.47 | 1.39 | 5.21 | 5.36 | 5.37 | 0.12 | 0.08 | 0.08 | 1.66 | 1.31 | 1.42 |

*Table S3*. Item-level statistics – confidence & sharing outcome measures (Study 3 only). Full = full *Bad News* game. Short = short game.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Confidence** | | | | | | | | | **Willingness to share** | | | | | | | | |
|  | *M* | | | *SE* | | | *SD* | | | *M* | | | *SE* | | | *SD* | | |
| **Condition** | **Full** | **Short** | **Control** | **Full** | **Short** | **Control** | **Full** | **Short** | **Control** | **Full** | **Short** | **Control** | **Full** | **Short** | **Control** | **Full** | **Short** | **Control** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Polarization items** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Polarization-IQ-Pre | 4.83 | 4.75 | 4.65 | 0.12 | 0.11 | 0.10 | 1.76 | 1.80 | 1.86 | 1.76 | 1.84 | 1.74 | 0.10 | 0.09 | 0.07 | 1.44 | 1.48 | 1.32 |
| Polarization-IQ-Post | 4.90 | 4.83 | 4.71 | 0.13 | 0.11 | 0.10 | 1.87 | 1.82 | 1.78 | 1.77 | 1.82 | 1.82 | 0.11 | 0.09 | 0.08 | 1.53 | 1.50 | 1.50 |
| Polarization-Career-Pre | 4.82 | 4.67 | 4.60 | 0.12 | 0.11 | 0.10 | 1.64 | 1.71 | 1.77 | 1.86 | 1.98 | 1.88 | 0.10 | 0.10 | 0.08 | 1.46 | 1.57 | 1.45 |
| Polarization-Career-Post | 4.84 | 4.93 | 4.67 | 0.13 | 0.10 | 0.10 | 1.88 | 1.63 | 1.77 | 1.62 | 1.83 | 1.82 | 0.09 | 0.09 | 0.08 | 1.28 | 1.47 | 1.44 |
| Polarization-Reporting-Pre | 4.72 | 4.81 | 4.47 | 0.11 | 0.10 | 0.10 | 1.63 | 1.65 | 1.83 | 1.88 | 2.01 | 1.93 | 0.10 | 0.11 | 0.08 | 1.46 | 1.68 | 1.48 |
| Polarization-Reporting-Post | 4.77 | 4.90 | 4.65 | 0.12 | 0.10 | 0.10 | 1.75 | 1.67 | 1.71 | 1.79 | 1.97 | 1.83 | 0.10 | 0.10 | 0.08 | 1.41 | 1.67 | 1.49 |
| Polarization-Immigration-Pre | 5.07 | 5.04 | 4.78 | 0.12 | 0.10 | 0.10 | 1.74 | 1.61 | 1.76 | 2.15 | 2.41 | 2.38 | 0.12 | 0.12 | 0.10 | 1.74 | 1.98 | 1.85 |
| Polarization-Immigration-Post | 5.02 | 5.04 | 4.92 | 0.13 | 0.10 | 0.10 | 1.78 | 1.63 | 1.72 | 1.91 | 2.21 | 2.14 | 0.11 | 0.11 | 0.10 | 1.56 | 1.81 | 1.78 |
| Polarization-Sociology-Pre | 4.99 | 5.08 | 4.66 | 0.13 | 0.11 | 0.11 | 1.87 | 1.82 | 1.89 | 2.08 | 2.22 | 2.11 | 0.11 | 0.12 | 0.10 | 1.62 | 1.86 | 1.75 |
| Polarization-Sociology-Post | 4.93 | 5.12 | 4.80 | 0.14 | 0.11 | 0.10 | 1.98 | 1.75 | 1.84 | 1.85 | 2.06 | 2.02 | 0.11 | 0.11 | 0.09 | 1.51 | 1.75 | 1.69 |
| Polarization-Morality-Pre | 5.06 | 5.03 | 4.77 | 0.14 | 0.11 | 0.11 | 1.96 | 1.81 | 1.93 | 1.70 | 2.00 | 1.90 | 0.10 | 0.11 | 0.09 | 1.47 | 1.71 | 1.54 |
| Polarization-Morality-Post | 5.04 | 5.07 | 4.86 | 0.14 | 0.12 | 0.10 | 2.02 | 1.83 | 1.86 | 1.78 | 1.91 | 1.77 | 0.11 | 0.10 | 0.08 | 1.49 | 1.63 | 1.44 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Other misinformation techniques** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Impersonation-GoT-Pre | 4.81 | 5.06 | 4.60 | 0.11 | 0.10 | 0.09 | 1.56 | 1.57 | 1.54 | 2.18 | 2.26 | 2.16 | 0.12 | 0.11 | 0.09 | 1.64 | 1.81 | 1.67 |
| Impersonation-GoT-Post | 5.04 | 5.02 | 4.75 | 0.12 | 0.10 | 0.09 | 1.75 | 1.55 | 1.63 | 1.82 | 2.24 | 2.05 | 0.10 | 0.11 | 0.09 | 1.47 | 1.77 | 1.65 |
| Impersonation-Buffett-Pre | 5.00 | 4.95 | 4.66 | 0.12 | 0.11 | 0.09 | 1.65 | 1.68 | 1.65 | 2.23 | 2.27 | 2.15 | 0.12 | 0.11 | 0.09 | 1.67 | 1.75 | 1.61 |
| Impersonation-Buffett-Post | 5.26 | 5.04 | 4.88 | 0.13 | 0.10 | 0.09 | 1.81 | 1.62 | 1.63 | 1.91 | 2.23 | 2.09 | 0.11 | 0.11 | 0.09 | 1.60 | 1.82 | 1.61 |
| Conspiracy-Bitcoin-Pre | 4.56 | 4.63 | 4.53 | 0.11 | 0.09 | 0.09 | 1.57 | 1.52 | 1.59 | 1.92 | 2.11 | 2.04 | 0.11 | 0.10 | 0.09 | 1.51 | 1.63 | 1.59 |
| Conspiracy-Bitcoin-Post | 4.84 | 4.72 | 4.60 | 0.12 | 0.10 | 0.10 | 1.76 | 1.65 | 1.74 | 1.72 | 2.04 | 1.90 | 0.09 | 0.10 | 0.09 | 1.35 | 1.66 | 1.56 |
| Conspiracy-Insurance-Pre | 4.73 | 4.93 | 4.62 | 0.14 | 0.12 | 0.11 | 1.97 | 1.84 | 1.94 | 1.69 | 1.96 | 1.87 | 0.10 | 0.10 | 0.08 | 1.36 | 1.60 | 1.48 |
| Conspiracy-Insurance-Post | 4.95 | 5.04 | 4.81 | 0.14 | 0.11 | 0.11 | 1.98 | 1.81 | 1.89 | 1.61 | 1.95 | 1.80 | 0.09 | 0.10 | 0.08 | 1.28 | 1.62 | 1.45 |
| Emotion-Disease-Pre | 4.80 | 5.01 | 4.64 | 0.13 | 0.11 | 0.11 | 1.87 | 1.79 | 1.93 | 1.81 | 1.82 | 1.92 | 0.11 | 0.10 | 0.09 | 1.52 | 1.54 | 1.52 |
| Emotion-Disease-Post | 4.91 | 5.05 | 4.84 | 0.14 | 0.11 | 0.10 | 1.98 | 1.70 | 1.80 | 1.63 | 1.81 | 1.81 | 0.09 | 0.09 | 0.08 | 1.32 | 1.51 | 1.47 |
| Emotion-Senior-Pre | 4.71 | 4.86 | 4.73 | 0.12 | 0.10 | 0.09 | 1.71 | 1.59 | 1.65 | 1.85 | 2.09 | 2.09 | 0.10 | 0.11 | 0.09 | 1.39 | 1.68 | 1.63 |
| Emotion-Senior-Post | 4.95 | 4.93 | 4.81 | 0.12 | 0.11 | 0.09 | 1.75 | 1.68 | 1.60 | 1.75 | 1.94 | 1.94 | 0.10 | 0.10 | 0.09 | 1.41 | 1.56 | 1.60 |
| Discredit-Media-Pre | 5.45 | 5.34 | 5.10 | 0.12 | 0.10 | 0.10 | 1.66 | 1.62 | 1.71 | 2.25 | 2.62 | 2.48 | 0.13 | 0.13 | 0.11 | 1.86 | 2.10 | 1.95 |
| Discredit-Media-Post | 5.38 | 5.38 | 5.27 | 0.12 | 0.10 | 0.09 | 1.76 | 1.60 | 1.61 | 2.19 | 2.47 | 2.24 | 0.13 | 0.13 | 0.10 | 1.91 | 2.08 | 1.85 |
| Discredit-Science-Pre | 4.88 | 4.85 | 4.67 | 0.12 | 0.11 | 0.10 | 1.69 | 1.72 | 1.78 | 1.87 | 2.17 | 2.05 | 0.11 | 0.11 | 0.09 | 1.49 | 1.78 | 1.64 |
| Discredit-Science-Post | 4.93 | 4.98 | 4.76 | 0.13 | 0.10 | 0.09 | 1.89 | 1.63 | 1.65 | 1.69 | 2.09 | 1.98 | 0.10 | 0.11 | 0.09 | 1.40 | 1.72 | 1.59 |
| Trolling-Bank-Pre | 4.56 | 4.52 | 4.35 | 0.13 | 0.11 | 0.10 | 1.78 | 1.80 | 1.80 | 1.69 | 1.80 | 1.78 | 0.09 | 0.09 | 0.08 | 1.28 | 1.51 | 1.37 |
| Trolling-Bank-Post | 4.79 | 4.72 | 4.53 | 0.12 | 0.11 | 0.10 | 1.76 | 1.70 | 1.80 | 1.61 | 1.79 | 1.78 | 0.08 | 0.09 | 0.08 | 1.21 | 1.45 | 1.43 |
| Trolling-Leo-Pre | 4.99 | 5.11 | 4.90 | 0.14 | 0.11 | 0.11 | 1.93 | 1.76 | 1.89 | 1.65 | 2.17 | 2.03 | 0.09 | 0.12 | 0.09 | 1.30 | 1.85 | 1.63 |
| Trolling-Leo-Post | 5.13 | 5.11 | 4.89 | 0.13 | 0.11 | 0.10 | 1.91 | 1.81 | 1.81 | 1.72 | 2.03 | 1.91 | 0.10 | 0.11 | 0.09 | 1.44 | 1.75 | 1.55 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Real News Items** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Control-Brands-Pre | 5.44 | 5.36 | 5.24 | 0.09 | 0.08 | 0.08 | 1.35 | 1.32 | 1.42 | 2.69 | 2.64 | 2.56 | 0.14 | 0.12 | 0.11 | 1.97 | 1.92 | 1.90 |
| Control-Brands-Post | 5.34 | 5.24 | 5.22 | 0.10 | 0.09 | 0.08 | 1.46 | 1.38 | 1.45 | 2.49 | 2.58 | 2.46 | 0.14 | 0.12 | 0.11 | 2.01 | 1.98 | 1.90 |
| Control-Brain-Pre | 5.75 | 5.70 | 5.52 | 0.09 | 0.07 | 0.07 | 1.29 | 1.20 | 1.27 | 3.33 | 3.40 | 3.24 | 0.15 | 0.13 | 0.12 | 2.10 | 2.13 | 2.10 |
| Control-Brain-Post | 5.61 | 5.54 | 5.44 | 0.10 | 0.08 | 0.08 | 1.38 | 1.26 | 1.40 | 2.88 | 3.14 | 2.98 | 0.15 | 0.14 | 0.12 | 2.17 | 2.19 | 2.16 |

*Table S4*. Study 1: Paired-samples *t*-tests for the pre- and post-game reliability of misinformation and real news, by item.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Item** |  | **t** | **df** | ***p*** | **Mdiff** | **95% CI** | **Cohen's *d*** |
| **Polarization items** |  |  |  |  |  |  |  |
| Polarization-Lying-Pre | Polarization-Lying-Post | 2.344 | 471 | **0.019** | 0.24 | [0.04, 0.44] | 0.11 |
| Polarization-Career-Pre | Polarization-Career-Post | 2.812 | 471 | **0.005** | 0.32 | [0.10, 0.54] | 0.13 |
| Polarization-IQ-Pre | Polarization-IQ-Post | 3.000 | 471 | **0.003** | 0.32 | [0.11, 0.54] | 0.14 |
| Polarization-Reporting-Pre | Polarization-Reporting-Post | 5.366 | 471 | **< .001** | 0.54 | [0.35, 0.74] | 0.25 |
|  |  |  |  |  |  |  |  |
| **Conspiracy items** |  |  |  |  |  |  |  |
| Conspiracy-Greenhouse-Pre | Conspiracy-Greenhouse-Post | 3.191 | 471 | **0.002** | 0.36 | [0.14, 0.59] | 0.15 |
| Conspiracy-Elite-Pre | Conspiracy-Elite-Post | 3.094 | 471 | **0.002** | 0.31 | [0.11, 0.51] | 0.14 |
|  |  |  |  |  |  |  |  |
| **Control (real news) items** |  |  |  |  |  |  |  |
| Control-NASA-Pre | Control-NASA-Post | -0.054 | 471 | 0.957 | -0.01 | [-0.24, 0.23] | 0.00 |
| Control-Brands-Pre | Control-Brands-Post | 1.460 | 471 | 0.145 | 0.17 | [-0.06, 0.39] | 0.07 |
| Control-Brain-Pre | Control-Brain-Post | -0.224 | 471 | 0.823 | -0.03 | [-0.25, 0.20] | -0.01 |

*Table S5*. Study 1: Logistic regression with type of news that participants chose to spread in the *Bad News* game (0 = predominantly left-leaning topics; 1 = predominantly right-leaning topics), as predicted by political ideology, age, gender, education, social media use, CRT performance, and whether people played *Bad News* before.

|  |  |  |  |
| --- | --- | --- | --- |
|  | *News topic choice (0 = left-wing, 1 = right-wing)* | | |
| **Predictors** | **Odds Ratios** | **CI** | **p** |
| (Intercept) | 0.82 | 0.21 – 3.26 | 0.778 |
| Political Ideology | 0.98 | 0.84 – 1.14 | 0.767 |
| Age | 0.93 | 0.61 – 1.40 | 0.722 |
| Gender | 0.65 | 0.41 – 1.04 | 0.076 |
| Education | 1.32 | 0.89 – 1.97 | 0.171 |
| Social Media Use | 0.95 | 0.71 – 1.26 | 0.704 |
| CRT | 1.28 | 0.80 – 2.06 | 0.307 |
| Played Bad News Before | 0.88 | 0.41 – 1.86 | 0.745 |
|  |  |  |  |
| Observations | 304 |  |  |
| R2 Tjur | 0.027 |  |  |

*Table S6*. Study 1: Linear regression with age, gender, education level, political ideology (1 left-wing, 7 right-wing), social media use, whether people have played *Bad News* before, and CRT score, predicting the pre-post difference in the perceived reliability of polarizing social media content.

|  |  |  |  |
| --- | --- | --- | --- |
|  | *Pre-post difference for "polarization"* | | |
| **Predictors** | **Estimates** | **95% CI** | ***p*** |
| (Intercept) | 0.14 | -0.80 – 1.07 | 0.774 |
| Age | 0.03 | -0.26 – 0.33 | 0.826 |
| Gender | 0.17 | -0.15 – 0.49 | 0.297 |
| Education | 0 | -0.27 – 0.28 | 0.989 |
| Political Ideology | -0.03 | -0.13 – 0.08 | 0.631 |
| Social Media Use | 0.08 | -0.12 – 0.27 | 0.440 |
| Played Bad News Before | -0.42 | -0.95 – 0.11 | 0.120 |
| CRT | 0.29 | -0.04 – 0.62 | 0.089 |
|  |  |  |  |
| Observations | 397 |  |  |
| R2 / R2 adjusted | 0.022 / 0.005 |  |  |

*Table S7.* Study 2: item-level one-way Welch’s ANOVAs (treatment – control); “Diff” indicates pre-post difference score for each item.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item** | **F** | **df1** | **df2** | ***p*** |
| Polarization-Lying-Diff | 1.201 | 1 | 151 | 0.275 |
| Polarization-IQ-Diff | 0.556 | 1 | 183 | 0.457 |
| Polarization-Career-Diff | 2.019 | 1 | 130 | 0.158 |
| Polarization-Reporting-Diff | 3.337 | 1 | 138 | 0.07 |
| Polarization-Immigration-Diff | 2.131 | 1 | 132 | 0.147 |
| Polarization-Sociology-Diff | 0.565 | 1 | 181 | 0.453 |
| Polarization-Morality-Diff | 1.502 | 1 | 173 | 0.222 |
| Impersonation-GoT-Diff | 0.694 | 1 | 138 | 0.406 |
| Impersonation-Buf-Diff | 0.367 | 1 | 135 | 0.546 |
| Control-Brands-Diff | 3.555 | 1 | 156 | 0.061 |
| Control-Brain-Diff | 0.322 | 1 | 179 | 0.571 |

*Table S8*. Study 3: Logistic regression with type of news that participants reported spreading in the shortened *Bad News* game (0 = predominantly left-leaning topics; 1 = predominantly right-leaning topics), as predicted by political ideology, age, gender, education, social media use, and Twitter use.

|  |  |  |  |
| --- | --- | --- | --- |
|  | *News topic choice (0 = left-wing, 1 = right-wing)* | | |
| **Predictors** | **Odds Ratios** | **95% CI** | ***p*** |
| (Intercept) | 0.11 | 0.01 – 0.83 | 0.035 |
| Political ideology (left - right) | 1.66 | 1.37 – 2.03 | **<0.001** |
| Age | 0.89 | 0.70 – 1.14 | 0.365 |
| Gender | 0.77 | 0.41 – 1.40 | 0.390 |
| Education | 0.93 | 0.75 – 1.16 | 0.519 |
| Social media use | 1.05 | 0.82 – 1.36 | 0.691 |
| Twitter use | 1.01 | 0.79 – 1.27 | 0.967 |
|  |  |  |  |
| Observations | 252 |  |  |
| R2 | 0.13 |  |  |

*Table S9*. Study 3: Linear regressions with condition (*Bad News –* short version, *Bad News* – full version, control), political ideology, age, gender, and education predicting feelings about the opposing party and traits of the opposing party.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | *Opposing party feelings* | | | *Opposing party traits* | | |
| **Predictors** | **b** | **95% CI** | ***p*** | **b** | **95% CI** | ***p*** |
| (Intercept) | 1.03 | 1.02 – 1.03 | <0.001 | 1.47 | 1.41 – 1.53 | <0.001 |
| Condition: |  |  |  |  |  |  |
| *Bad News* (short) - *Bad News* (full) | 1.00 | 0.99 – 1.00 | 0.099 | 0.98 | 0.96 – 1.00 | 0.108 |
| *Bad News* (full) – Control | 1.00 | 0.99 – 1.00 | 0.444 | 0.99 | 0.97 – 1.01 | 0.346 |
| Political Ideology | 1.00 | 1.00 – 1.00 | 0.035 | 1.00 | 1.00 – 1.00 | 0.934 |
| Age | 1.00 | 1.00 – 1.00 | 0.009 | 1.00 | 1.00 – 1.01 | 0.189 |
| Gender | 1.00 | 1.00 – 1.01 | 0.156 | 1.01 | 0.99 – 1.02 | 0.509 |
| Education | 1.00 | 1.00 – 1.00 | 0.210 | 1.00 | 0.99 – 1.00 | 0.762 |
|  |  |  |  |  |  |  |
| Observations | 516 |  |  | 548 |  |  |
| R2 Nagelkerke | 0.022 |  |  | 0.008 |  |  |

*Table S10*. Study 3: Logistic regression with type of news that participants reported spreading in the shortened *Bad News* game (0 = predominantly left-leaning topics; 1 = predominantly right-leaning topics), as predicted by political ideology, age, gender, education, social media use, and Twitter use. Results are shown for the *full* dataset, with suspicious responses included (see the “Sample” section in Study 3).

|  |  |  |  |
| --- | --- | --- | --- |
|  | *News topic choice (0 = left-wing, 1 = right-wing)* | | |
| **Predictors** | **Odds Ratios** | **95% CI** | ***p*** |
| (Intercept) | 0.11 | 0.02 – 0.58 | 0.010 |
| Political Ideology | 1.51 | 1.29 – 1.77 | **<0.001** |
| Age | 0.94 | 0.76 – 1.15 | 0.528 |
| Gender | 0.77 | 0.46 – 1.30 | 0.333 |
| Education | 0.94 | 0.78 – 1.14 | 0.539 |
| Social Media Use | 1.11 | 0.90 – 1.38 | 0.331 |
| Twitter Use | 0.99 | 0.81 – 1.20 | 0.910 |
|  |  |  |  |
| Observations | 328 |  |  |
| R2 | 0.104 |  |  |

*Table S11*. Study 3: One-way ANOVAs for the pre-post difference scores (Diff) for the reliability, confidence, and willingness-to-share measures, for the polarization items (“Polarization”), the misinformation items that do *not* make use of the “polarization” technique (“NoPolarization”), and for non-misinformation (“RealNews”). Results are shown for the *full* dataset, with suspicious responses included (see the “Sample” section in Study 3).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variable** | **F** | **df1** | **df2** | ***p*** |  |
| **Reliability** |  |  |  |  |  |
| Polarization-Reliability-Diff | 3.548 | 2 | 564 | 0.029 |  |
| NoPolarization-Reliability-Diff | 17.947 | 2 | 567 | < .001 |  |
| RealNews-Reliability-Diff | 5.594 | 2 | 590 | 0.004 |  |
|  |  |  |  |  |  |
| **Confidence** |  |  |  |  |  |
| Polarization-Confidence-Diff | 0.248 | 2 | 593 | 0.78 |  |
| NoPolarization-Confidence-Diff | 0.324 | 2 | 599 | 0.723 |  |
| RealNews-Confidence-Diff | 0.609 | 2 | 602 | 0.544 |  |
|  |  |  |  |  |  |
| **Sharing** |  |  |  |  |  |
| Polarization-Sharing-Diff | 0.796 | 2 | 570 | 0.452 |  |
| NoPolarization-Sharing-Diff | 0.15 | 2 | 576 | 0.861 |  |
| RealNews-Sharing-Diff | 2.762 | 2 | 604 | 0.064 |  |
|  |  |  |  |  |  |
| **Descriptives** | **Condition** | **N** | **Mdiff** | **SD** | **SE** |
| **Reliability** |  |  |  |  |  |
| Polarization-Reliability-Diff | Full | 273 | -0.18 | 1.00 | 0.06 |
|  | Short | 334 | -0.18 | 0.76 | 0.04 |
|  | Control | 416 | -0.06 | 0.59 | 0.03 |
| NoPolarization-Reliability-Diff | Full | 273 | -0.33 | 0.87 | 0.05 |
|  | Short | 334 | -0.13 | 0.60 | 0.03 |
|  | Control | 416 | 0.00 | 0.50 | 0.02 |
| RealNews-Reliability-Diff | Full | 273 | -0.34 | 1.25 | 0.08 |
|  | Short | 334 | -0.11 | 0.91 | 0.05 |
|  | Control | 416 | -0.05 | 0.85 | 0.04 |
|  |  |  |  |  |  |
| **Confidence** |  |  |  |  |  |
| Polarization-Confidence-Diff | Full | 273 | 0.04 | 1.06 | 0.06 |
|  | Short | 334 | 0.04 | 1.00 | 0.05 |
|  | Control | 416 | 0.08 | 0.79 | 0.04 |
| NoPolarization-Confidence-Diff | Full | 273 | 0.09 | 0.94 | 0.06 |
|  | Short | 334 | 0.04 | 0.80 | 0.04 |
|  | Control | 416 | 0.08 | 0.70 | 0.03 |
| RealNews-Confidence-Diff | Full | 273 | -0.15 | 1.13 | 0.07 |
|  | Short | 334 | -0.10 | 0.84 | 0.05 |
|  | Control | 416 | -0.06 | 0.85 | 0.04 |
|  |  |  |  |  |  |
| **Sharing** |  |  |  |  |  |
| Polarization-Sharing-Diff | Full | 273 | 0.01 | 0.95 | 0.06 |
|  | Short | 334 | -0.07 | 0.68 | 0.04 |
|  | Control | 416 | -0.06 | 0.57 | 0.03 |
| NoPolarization-Sharing-Diff | Full | 273 | -0.08 | 0.74 | 0.04 |
|  | Short | 334 | -0.06 | 0.54 | 0.03 |
|  | Control | 416 | -0.08 | 0.46 | 0.02 |
| RealNews-Sharing-Diff | Full | 273 | -0.29 | 1.22 | 0.07 |
|  | Short | 334 | -0.08 | 1.11 | 0.06 |
|  | Control | 416 | -0.10 | 0.96 | 0.05 |

**References cited in the supplement**

Basol, M., Roozenbeek, J., & van der Linden, S. (2020). Good news about Bad News: Gamified inoculation boosts confidence and cognitive immunity against fake news. *Journal of Cognition*, *3(1)*(2), 1–9. https://doi.org/https://doi.org/10.5334/joc.91

Maertens, R., Roozenbeek, J., Basol, M., & van der Linden, S. (2021). Long-term effectiveness of inoculation against misinformation: Three longitudinal experiments. *Journal of Experimental Psychology: Applied*, *27*(1), 1–16. https://doi.org/10.1037/xap0000315

Peer, E., Brandimarte, L., Samat, S., & Acquisti, A. (2017). Beyond the Turk: Alternative platforms for crowdsourcing behavioral research. *Journal of Experimental Social Psychology*, *70*, 153–163. https://doi.org/10.1016/j.jesp.2017.01.006

1. Bartlett’s test is significant (Bartlett’s *k2*= 9.195, *p* = .002), indicating that the assumption of equal variances is violated. We therefore report Welch’s instead of Fisher’s ANOVA. [↑](#footnote-ref-1)
2. Here again we dichotomized the 7-point political ideology scale so that 1-3 = left-wing and 5-7 = right-wing, with moderates (4) excluded. [↑](#footnote-ref-2)
3. Bartlett’s test is significant (Bartlett’s *k2*= 9.176, *p* = .002), indicating that the assumption of equal variances is violated. [↑](#footnote-ref-3)
4. Bartlett’s test is not significant (Bartlett’s *k2*= 2.425, *p* = .119), indicating that the assumption of equal variances is met. [↑](#footnote-ref-4)