

The ephemeral effects of fact-checks on COVID-19 misperceptions: Evidence from the United States, Great Britain, and Canada

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Abstract

Widespread misperceptions about COVID-19 and the novel coronavirus threaten to exacerbate the severity of the pandemic. We conducted preregistered survey experiments in the United States, Great Britain, and Canada examining the effectiveness of fact-checks that seek to correct these false or unsupported misperceptions. Across three countries with differing levels of political conflict over the COVID-19 response, we demonstrate that fact-checks reduce targeted misperceptions, especially among the groups who are most vulnerable to these claims, and have minimal spillover effects on the accuracy of other beliefs about COVID-19. However, the positive effects of fact-checks on the accuracy of respondents' beliefs fail to persist over time in panel data even after repeated exposure. These results suggest that fact-checks can successfully change the beliefs of the people who would benefit from them most but that their effects are disappointingly ephemeral.

Misinformation about COVID-19 has circulated widely during the pandemic, confusing people about the disease and encouraging them to flout expert advice and government recommendations about how to prevent its spread (Bridgman et al. 2020; Lammers, Crusius and Gast 2020; Loomba et al. 2021). In response, journalists and public health officials have devoted a great deal of effort to debunking misinformation about the novel coronavirus. Will these efforts be successful? It is essential to determine how to most effectively counter false claims, which may not only distort beliefs and attitudes but also threaten public health.

Recent meta-analyses show that fact-checks and corrective information tend to reduce misperceptions immediately after exposure (Chan et al. 2017; Walter et al. 2020, N.d.). However, most prior studies have been conducted with American respondents, neglecting potential heterogeneity across countries in factors such as political polarization and media system structure. In addition, past studies typically concern longstanding political and health controversies; studying a novel topic like COVID-19 allows us to estimate receptiveness to factual evidence on an important but unfamiliar and rapidly changing issue. Most importantly, it is critical to determine whether the corrective effects we typically observe immediately after exposure can endure (Nyhan 2021). Does corrective information cause lasting change in factual beliefs, or do its effects quickly dissipate?

We investigate these questions using parallel pre-registered experiments testing the effects of exposure to fact-checks on COVID-19 pandemic misperceptions in the United States, Great Britain, and Canada. (Our British sample excludes Northern Ireland, so we use the more technically correct term for our sampling

frame of England, Scotland, and Wales, which together make up 97% of the population of the United Kingdom.) These countries combine demographic similarity with sharp differences in the extent to which the COVID-19 response has become politicized and in the severity of the pandemic at the time the studies were fielded (Merkley et al. 2020; Mordecai and Connaughton 2020; Pennycook, McPhetres, Bago and Rand 2021), allowing us to provide one of the most systematic tests to date of whether the effects of fact-checking generalize across different political and social contexts.

Our study design also allows us to test questions that are rarely explored in the previous literature on fact-checking. First, we exploit the multi-wave panel design of our surveys of the US and Great Britain (GB) to independently randomize exposure to fact-checks or placebo in multiple waves and to measure misperception beliefs over multiple waves. This design allows us to assess the persistence of fact-check effects over time and to test whether repeating fact-checks makes their effects more durable. We also examine to what extent fact-checks “spill over” and affect beliefs about other true and false claims related to COVID-19.

Results from all three countries demonstrate that corrective information successfully reduces misperceptions about COVID-19. Exposure to fact-checks significantly reduces the perceived accuracy of targeted claims within a given survey wave, especially among people who are most vulnerable to those claims, and has minimal spillover effects on other related beliefs. However, panel data from the US and GB reveal that the resulting accuracy improvements dissipate within weeks and are no longer measurable in subsequent waves. These findings suggest that durably

reducing misperceptions on issues like COVID-19 requires sustained exposure to corrective information.

Theory and hypotheses

The effectiveness of fact-checks

Our study examines the effectiveness of exposure to fact-checks at reducing misperceptions about COVID-19. Theoretically, judgments about factual claims can be subject to competing information processing goals: forming accurate beliefs versus defending existing beliefs or attitudes (Kunda 1990; Taber and Lodge 2006). The relative weight of accuracy and directional goals varies by context. Given the threat that COVID-19 poses to human health and well-being, accuracy goals should be especially salient. Moreover, exposure to fact-checks and other forms of corrective information tend to increase the accuracy of people's beliefs (Chan et al. 2017; Walter et al. 2020, N.d.; Nyhan 2021). We therefore expect fact-checks to reduce the perceived accuracy of the misperceptions they target immediately after exposure (**H1**).

We also test the hypothesis that fact-check effects on beliefs will persist (**H2**) based on some prior studies, which have found fact-check effects can be durable over a period of weeks (Nyhan and Reifler 2021; Carnahan, Bergan and Lee 2020). However, other research suggests they could attenuate more quickly. Treatment effects of political messages on opinion often decay rapidly (Chong and Druckman 2010; Gerber et al. 2011; Hill et al. 2013). Even with strong accuracy motives, peo-

ple may fail to incorporate information from fact-checks into long-term memory (Hardt, Nader and Nadel 2013).

Repetition, an approach frequently used in public health campaigns, is one way to counter the potential decay of fact-check effects. Repeated exposure can make claims more familiar, creating greater fluency that leads people to be more likely to infer that a claim is true (Fazio et al. 2015; Pennycook, Cannon and Rand 2018). Multiple exposures can also help people fully process a fact-check and incorporate its contents into memory (Cacioppo and Petty 1979). However, repeated exposure to fact-checks could also have diminishing effects due to diminished novelty (Arendt 2015). Based on these competing expectations, we pose a research question asking whether prior exposure to a fact-check changes the effect of subsequent fact-check exposure on misperception beliefs (**RQ1**).

A second research question asks whether fact-checks affect the perceived accuracy of other beliefs about COVID-19 (**RQ2**). One possibility is that correcting a misperception causes people to reconsider related beliefs that are now more cognitively accessible (Bridgman et al. 2020; Pennycook, McPhetres, Bago and Rand 2020). Exposure to fact-checks may also increase the salience of accuracy, which has been shown to increase truth discernment in sharing news online (Pennycook, Epstein, Mosleh, Arechar, Eckles and Rand 2021). Alternatively, however, correcting misperceptions could cause people to misdirect their skepticism toward accurate beliefs (Carey et al. 2020; Freeze et al. 2020) or to infer that uncorrected claims are more accurate (Pennycook, Bear, Collins and Rand 2020).

Finally, we test for heterogeneous treatment effects among groups that are

more misinformed or more vulnerable to misinformation. First, we consider political predispositions (**RQ3A**). In the US, Republicans and supporters of President Trump hold more misperceptions about COVID-19 (Druckman et al. 2020; Pennycook, McPhetres, Bago and Rand 2020). More generally, conservatives have been found to hold more misperceptions and/or to be less supportive of pandemic mitigation behaviors than moderates or liberals in the US, UK, and Canada (Druckman et al. 2021; Gadarian, Goodman and Pepinsky 2021; Grossman et al. 2020; Pennycook, McPhetres, Bago and Rand 2020; Taylor and Asmundson 2021; Pickup, Stecula and Van Der Linden 2020). We therefore test if treatment effects vary by party identification or approval of/feelings toward the country’s chief executive. Second, we consider trust in authoritative sources of information (**RQ3B**). People who distrust the health care system or the media or who have predispositions toward conspiracy theories may be more vulnerable to COVID-19 misinformation and/or more distrusting of fact-checks of those claims. Finally, we leverage the panel survey design in our US and Great Britain studies to examine pre-treatment misperceptions as a moderator of fact-check effectiveness (**RQ3C**). Each of these groups is potentially more resistant to fact-checks, but also more likely to be misinformed, creating greater scope for fact-checks to be effective.

Experimental design

In the US and Great Britain samples, we conducted 2×2 between-subjects experiments in which we measured COVID-19 beliefs over multiple waves. In Wave 1, respondents provided political and demographic information and rated the ac-

curacy of both true and false claims about COVID-19 (including ones that were fact-checked in future waves). In Wave 2, respondents were randomly assigned with equal probability to receive either four articles adapted from US and UK fact-checkers debunking myths about COVID-19 or four unrelated placebo articles (within each condition, the four articles were presented in randomized order). The fact-checks debunked the false claims that hydroxychloroquine and antibiotics can cure COVID-19 and the conspiracy theories that COVID-19 is a Chinese bioweapon or was patented by Bill Gates. In Wave 3, respondents were independently randomly assigned with equal probability to receive the same fact-checks or the placebo articles using the same procedure. These randomizations yield four experimental groups: respondents who received no fact-checks, fact-checks only in Wave 2, fact-checks only in Wave 3, and fact-checks in both Waves 2 and 3. After the randomizations in both Wave 2 and Wave 3, US and GB respondents again rated the accuracy of various claims about COVID-19, including false claims targeted by the fact-checks, false claims the fact-checks did not mention, and true claims. (US respondents also rated these claims in a fourth wave that did not include fact-checks.)

In our Canadian single-wave samples, pre-treatment measures were collected at the beginning of the study and participants were assigned with equal probability to either a fact-check or placebo condition. (See Materials and Methods and the Online Appendix for further details.)

We note that these experiments did not expose people to uncorrected misinformation; our treatments only included accurate information designed to address

common misperceptions. (We also referred participants at the end of the survey to their relevant national health authority for more information about the novel coronavirus at COVID-19.)

Results

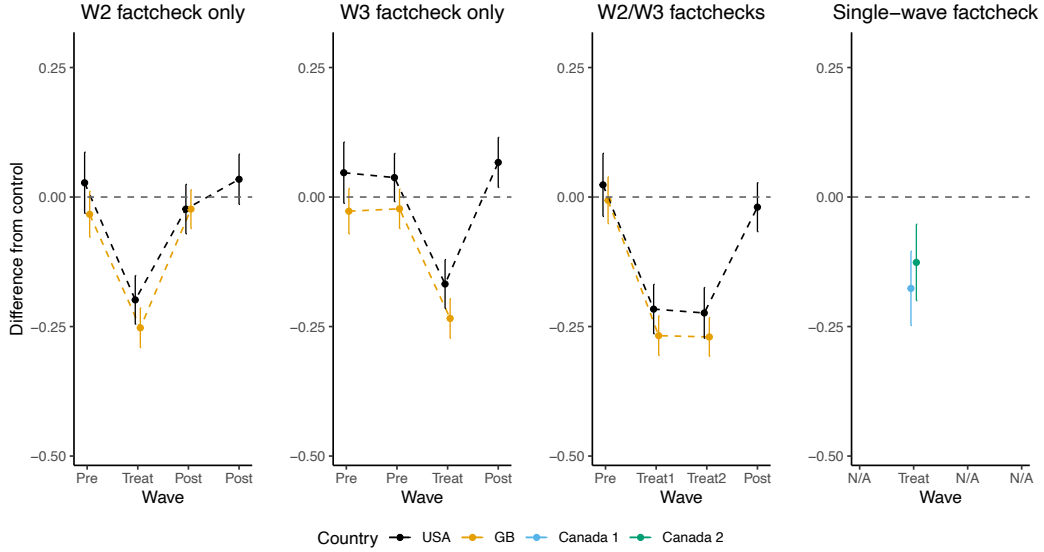
Targeted false claims

Results from our surveys in the US, Great Britain, and Canada indicate that belief in the misperceptions targeted by our fact-checks was relatively widespread, ranging from 18–34% in the US, 9–31% in Great Britain, and 23–35% in Canada across samples (see Table B1 in Online Appendix B).

Exposure to fact-checks debunking these claims induces substantial reductions in misperceptions in each country, but the effects do not persist in later waves. Results, which are summarized in Figure 1, are estimated using OLS with robust standard errors and follow our preregistrations unless noted. (Links to each preregistration and to replication data and code are provided in Online Appendix A.)

Consistent with our first preregistered hypothesis, fact-checks significantly decrease the perceived accuracy of an aggregate measure of false claims targeted by the fact-checks immediately after exposure in all survey waves in all countries ($p < .005$ in each case; see Tables C1–C18 in Online Appendix C). The sizes of these effects range from -0.09 (Canada Sample 2) to -0.24 (GB Wave 3) standard deviations. An exploratory analysis of individual belief items reveals that the fact-checks are consistently effective against the bioweapon, antibiotic, and hydroxy-

Figure 1: Effects of fact-check exposure on the perceived accuracy of targeted false claims about COVID-19



Covariate-adjusted average treatment effects of fact-check exposure (including 95% confidence intervals) on the perceived accuracy of false claims or conspiracy theories targeted by the fact-checks across conditions, country samples, and waves (see Tables C1–C18 in Online Appendix C). Outcome is the mean perceived accuracy of targeted claims on a four-point scale. The figure demonstrates that subjects significantly reduce their evaluations of the accuracy of false claims when they are in a treatment condition, but this effect never persists to subsequent waves. See Materials and Methods and the Online Appendix for details.

chloroquine misperceptions across countries, waves, and samples. By contrast, the fact-checks reduce Gates conspiracy belief only in the US in Wave 2. Belief in the Gates conspiracy was lower than other targeted misperceptions, particularly in Great Britain where a floor effect may have limited the potential impact of the fact-check (see Table B2 in the online appendix).

However, we find no support for our second hypothesis, which predicted fact-check effects would persist after the wave of exposure. In our panel data from the US and Great Britain, we could not reject the null hypothesis that exposure to fact-

checks in Wave 2 had no effect on the perceived accuracy of targeted false claims in Wave 3 (see Tables C1–C18 in the online Appendix). These effects allow to us rule out reductions in the perceived accuracy of targeted claims of -0.055 or greater (-0.081 s.d.) in the US and -0.087 or greater in GB (-0.175 s.d.) at the 95% confidence level (exploratory analysis using two one-sided equivalence tests: US $[-0.055, 0.079]$, GB $[-0.087, -0.006]$).

We also preregistered a research question asking whether exposure to fact-checks in Wave 2 would change the effect of exposure to fact-checks in Wave 3. In both the US and Great Britain, the interaction between the Wave 2 and 3 treatments was not significant, providing no evidence for this conjecture. Exploratory analyses of Wave 4 of the US sample reveal no consistent patterns of persistence or interactions between Wave 2 and 3 treatments (see Tables D27–D28 in the Online Appendix D).

Effect heterogeneity

To explore whether any of our treatment effects were moderated by individual-level characteristics or prior attitudes, we estimated a preregistered series of flexible nonlinear models designed to explore heterogeneity while minimizing false positives via regularization. We employ Bayesian Causal Forests (Hahn et al. 2020), an extension of tree-based approaches such as BART (Green and Kern 2012) that explicitly incorporates randomized treatments as separate from other pre-treatment covariates. Bayesian Causal Forests (BCF) generate posterior estimates of individual-level treatment effects that can be summarized for subgroups

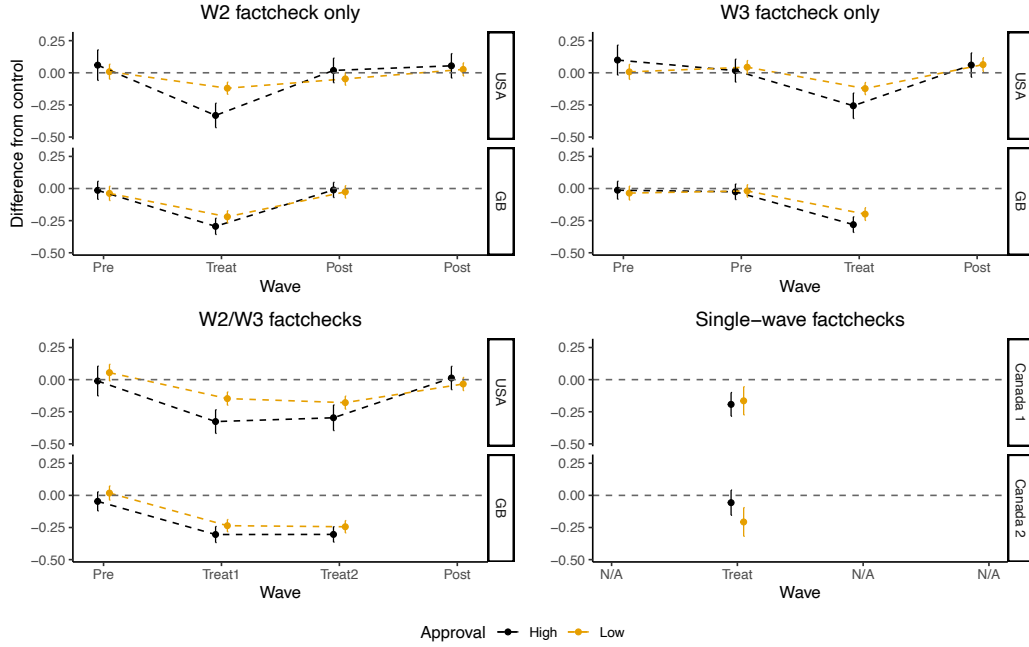
of interest. In Online Appendix E, we present graphical summaries of these treatment effect estimates plotted against the relevant moderator.

Our results provide encouraging evidence that fact-checks are often more effective at reducing misperceptions among the groups that are most vulnerable to them. In wave 2 of the US sample, for example, we find via recursive partitioning of the BCF-estimated posterior treatment effects that the negative effect of fact-check exposure on the perceived accuracy of false claims about COVID-19 is concentrated among subgroups with lower trust in the media and greater approval of Trump. Credible intervals from BCF posterior estimates confirm that Trump approvers in Wave 2 (95% credible interval: [-.413, -.009]) and 3 (95% CI: [-.123, -.018]) of the US sample are more receptive to the fact-checks than Trump disapprovers.

To illustrate this finding, Figure 2 presents an exploratory analysis following the same approach as Figure 1 above but estimates treatment effects separately for respondents who either approve or disapprove of their national leader (Trump in the US, Johnson in Great Britain, or Trudeau in Canada). As the figure indicates, fact-checks reduced targeted misperceptions immediately after exposure more among respondents who approved of their national leader than among those who disapproved in both the US and GB. By contrast, we find no evidence of heterogeneous effects by leader approval in Canada, where baseline misperceptions were uncorrelated with approval (unlike the US and GB).

Within Wave 3 of the US sample, we find similar moderation by conspiracy predispositions (95% CI: [-0.122, -0.006]), Trump approval (95% CI: [-0.123, -0.018]), and prior misperceptions (95% CI: [-0.122, -0.005]). Our findings on

Figure 2: Effects of fact-check exposure on the perceived accuracy of targeted false claims about COVID-19 by national leader approval



Covariate-adjusted average treatment effects of fact-check exposure (including 95% confidence intervals) on the perceived accuracy of false claims or conspiracy theories targeted by the fact-checks across conditions, country samples, and waves. “High approval” indicates respondents strongly or somewhat approved of the job performance of then-President Donald Trump (US), Prime Minister Boris Johnson (GB), or Prime Minister Justin Trudeau. “Low approval” indicates respondents instead somewhat or strongly disapproved. Outcome is the mean perceived accuracy of targeted claims on a four-point scale. See the Methods section and the Online Appendix for details.

effect heterogeneity are partially comparable in the Great Britain and Canada samples: treatment effects in Wave 2 of the British sample are greater among respondents with higher approval of Johnson (95% CI: [-0.101, -0.013]), lower media trust (95% CI: [-0.103, -0.000]), and greater prior misperceptions (95% CI: [-0.100, -0.002]), while in Canada it is respondents with high conspiracy predispositions (95% CI: [-0.109, -0.012]) who are more receptive to treatment.

Spillover effects

We also preregistered a second research question asking whether exposure to fact-checks on some items affects the perceived accuracy of true claims about COVID-19 or false claims that were not targeted by fact-checks. We find little evidence of spillover for true claims (see Tables D1–D18 in the online Appendix for results). We find no evidence of spillover in either treatment wave in the US sample, in Wave 3 of the British sample, or in either Canadian sample, though fact-check exposure did minimally affect belief in true claims in Wave 2 in Britain ($\beta = -.03$, Cohen's $d = -.03$, $p < .05$).

When we examine the perceived accuracy of false claims that were not targeted by the fact-checks, we deviate from our preregistration to separately examine the perceived accuracy of the claim that “The Chinese government is covering up the fact that the coronavirus escaped from one of its research laboratories,” which was preregistered as part of our scale of non-targeted false claims. When our studies were designed, predominant expert opinion rejected the lab leak account (Funke 2020). Subsequent reports have increased the plausibility of the lab leak account, though the matter remains unresolved (Kessler 2021).

We therefore first examine the effects of fact-check exposure on the index of non-targeted false claims that excludes the lab leak item (see Tables D19–D36 in the online Appendix). The preponderance of the evidence suggests fact-checks either had no measurable immediate impact ($p > .05$ in four of six survey waves where fact-checks were administered: US Wave 3, Great Britain Wave 3, and both Canadian samples) or a significant but substantively small effect ($\beta = -.05$, Cohen's

$d=-.05$, $p < .005$ in US Wave 2; $\beta=-.04$, Cohen's $d=-.05$, $p < .005$ in Great Britain Wave 2). As with the lab leak findings below, these effects may be driven by conceptual relationships between fact-checks and other false claims. Two of our fact-check corrections focused on potential COVID-19 cures (hydroxychloroquine and antibiotics) and in some instances we see spillover effects to other unproven remedies (colloidal silver and Vitamin C) that were not targeted by fact-checks (see Tables D23–D36 in Online Appendix D).

By contrast, fact-checks reduce belief in the lab leak claim itself immediately after exposure. These effects were measurable in the US and Great Britain in both waves in which fact-checks were delivered and in both Canadian samples (β s range from $-.44$ to $-.19$, Cohen's d s range from $-.21$ to $-.09$, $p < .005$ in each case; see Tables D37–D40 in the online Appendix). We interpret these effects as a consequence of the conceptual relationship between the fact-checked claim that the Chinese government created COVID-19 as a bioweapon and the lab leak claim. Both allege that China played a role in COVID-19's spread and then covered it up.

Discussion

Preregistered survey experiments in the US, Great Britain, and Canada show that exposure to fact-checks decreased the perceived accuracy of targeted false claims about COVID-19 immediately after exposure. These decreases in false beliefs were often greatest among people who were previously most misinformed and/or who were potentially especially susceptible due to political affiliations or distrust

of established authorities. However, we find no evidence that repeated exposure to fact-checks increases their effects or that exposure to these claims has durable effects on the accuracy of people's beliefs over time.

The implications of these findings are mixed. Encouragingly, our results demonstrate that fact-checks can reduce false beliefs about COVID-19 immediately after exposure and that these effects replicate across survey waves and across countries with different levels of polarization. False claims about emerging health issues can be effectively refuted with corrective information. However, we find discouragingly little evidence that these effects endure or are strengthened by the repetition of fact-checks. Further research is needed to determine how to create durable changes in belief accuracy about health issues.

These results also underscore the importance of cross-national comparative analysis of messaging about controversial health and science issues. The US is often seen as an outlier due to high levels of polarization, which have hindered its pandemic response. However, we find essentially identical results in Great Britain and Canada, which are less polarized generally and have experienced less partisan controversy over the response to the pandemic.

Of course, this study has limitations that should be noted. First, we were only able to test fact-checks of four misperceptions that were salient in May 2020 in three countries. Future studies should examine a broader array of false claims across a broader range of countries, including the Global South. Second, our study design does not allow us to observe effects on health behavior; future studies should test whether fact-checks affect compliance with public health recommendations.

Third, we used a forced exposure design; researchers should incorporate designs in future research that allow for information choice in estimating the effects of fact-check exposure. Finally, the precision of our measurement of persistence and decay effects is limited by the frequency of survey waves in the US and Great Britain studies. Future research should estimate how quickly such correction effects decay.

Nonetheless, this research highlights the promise of fact-checks and the difficulty of durably reducing false beliefs. Without sustained intervention, misconceptions return.

Methods

Participants

We fielded parallel studies in three countries. The US and Great Britain studies were designed as three-wave panels (though we were later able to field a fourth US wave). In Canada, we fielded two single-wave studies whose design mirrored Waves 2 and 3 of the US and Great Britain studies.

The US and Great Britain studies used similar sampling strategies. For our American sample, 4,438 YouGov respondents were recruited to a three-wave panel survey from three sampling frames. 1,096 came from the general population YouGov panel; 2,238 came from YouGov's Pulse panel (which contains respondents who also consent to share their web-use histories); and 1,104 came from areas with a high incidence of COVID. Though a fourth wave was not pre-registered, we were later able to conduct a fourth wave. Respondents completed Wave 1 from May 20–

June 3, 2020 ($n = 4,438$; before the US summer 2020 case surge); Wave 2 from June 25–July 12, 2020 ($n = 3,680$; approaching the peak of the summer 2020 US case surge); Wave 3 from July 28–August 19, 2020 ($n = 2,983$; after the peak of the summer 2020 US case surge); and Wave 4 from March 9–23, 2021 ($n = 2,464$; after the winter 2020 US peak but before the spring 2021 decline).

Our British sample initially consisted of 5,456 YouGov respondents from England, Wales, and Scotland. 2,367 came from the general YouGov panel; 1,994 came from YouGov’s Pulse panel; and 1,095 came from areas with a high incidence of COVID. Respondents completed Wave 1 from September 11–29, 2020 ($n = 5,456$; as the fall 2020 UK case surge begins); Wave 2 from December 10–23, 2020 ($n = 4,170$; during the surge to the winter 2020 UK peak); and Wave 3 from February 4–22, 2021 ($n = 3,190$; during the decline from the winter 2020 UK peak).

In contrast to our American or British samples, our Canadian surveys are repeated cross-sections. Our first sample consists of 1,300 Dynata (formerly Survey Sampling International) panelists who completed the study from December 15, 2020–January 13, 2021 (at the peak of the winter 2020 case surge in Canada). Our second sample consists of 1,300 Dynata panelists who completed the study from February 3–28, 2021 (between the winter 2020 and spring 2021 case surges in Canada). Dynata uses quota-based sampling in order to approximate nationally representative samples. In this case, quotas were set on region (i.e., Atlantic, Quebec, Ontario, West) and language (i.e., French and English) along with interlocking quotas for education (i.e., degree vs. no degree), age (i.e., 18/34, 45–54, 55

and older), and gender to match population benchmarks from the 2016 Canadian census.

These studies were approved by human ethics review boards at Dartmouth College (STUDY00032068), Princeton University (IRB #12859), the University of Toronto (Protocol #00040160). The University of Exeter reviewed and approved the Great Britain study (SSIS Ethics Committee #201920-148), and recognized the approved protocols for the North American studies.

Measures

We describe outcome measures and moderators used in the study below. The wave numbers we provide apply to the US and Great Britain samples only. (The two Canadian samples were single-wave studies.)

Perceived accuracy of targeted false claims (Waves 1, 2, 3, 4). Respondents rated the perceived accuracy of four claims on four-point scales from 1 (not at all accurate) to 4 (very accurate): “The Chinese government created the coronavirus as a bioweapon,” “A group funded by Bill Gates patented the coronavirus that causes COVID-19,” “Antibiotics are effective in preventing and treating the coronavirus,” and “The medication hydroxychloroquine is proven to cure or prevent COVID-19.” The order of the items was randomized. The sum of the items was used to construct a scale score on targeted misperceptions. (Analyses of scale reliability and factor loadings are provided in Online Appendix A.)

Perceived accuracy of non-targeted false claims (Waves 1, 2, 3, 4). In the US

sample, respondents rated the perceived accuracy of six claims about COVID-19 that were not explicitly addressed in the fact-checks: “Sneezing is a symptom of the coronavirus,” “Hand dryers effectively kill the coronavirus,” “The coronavirus is being spread by 5G cell phone technology,” “Eating garlic prevents infection with the coronavirus,” “High doses of vitamin C are an effective treatment for COVID-19,” and “Colloidal silver can cure COVID-19.” Responses were provided on four-point scales from 1 (not at all accurate) to 4 (very accurate). Space constraints limited these lists slightly in other surveys. The British samples include all items except the colloidal silver and hand dryers items. The Canada samples include all items. (Analyses of scale reliability and factor loadings are provided in Online Appendix A.)

We initially pre-registered eight such false claims. One of those, “There is currently a vaccine proven to prevent the new coronavirus,” was a false claim in Waves 1–3 in the US sample and in Wave 1 in the British sample. However, it became true by the time subsequent survey waves were fielded in the US and Great Britain and was true at the time of both Canadian samples. To maximize consistency within and across samples, we omit this item from analyses. Another item, “The Chinese government is covering up the fact that the coronavirus escaped from one of its research laboratories,” was initially categorized as false but its status later changed to indeterminate. We thus analyze the item separately (see above).

Perceived accuracy of true claims (Waves 1, 2, 3, 4). Respondents rated the perceived accuracy of nine true claims not addressed by the fact-checks on 4-point scales from 1 (not at all accurate) to 4 (very accurate): “A new loss of

taste or smell is a symptom of COVID-19,” “Frequent hand washing is a way to protect against the coronavirus,” “Avoiding larger gatherings of people can help prevent the spread of the coronavirus,” “Coronavirus can be spread by people who do not show symptoms,” “A fever is a symptom of COVID-19,” “A dry cough is a symptom of COVID-19,” “Masks are an effective way to prevent the spread of the coronavirus” and “There is no cure for COVID-19.” The British and Canada samples have identical measures. In the pre-registration, we planned to include the item “The medication remdesivir reduces the time required to recover from COVID-19.” This claim was thought true by the best available evidence during Waves 1–3 of the US survey, but not in Wave 4 of the US survey or the British or Canadian samples. To maximize consistency within and across samples, we therefore omitted this item from our analysis, including the index of true claims. (Analyses of scale reliability and factor loadings are provided in Online Appendix A.)

Party (Wave 1). In the US sample, party was a three-point scale of self-reported party identification from 1 (Democratic) to 2 (Independent) to 3 (Republican). In the United Kingdom, party consisted of two dichotomous variables. The first equals 1 if a respondent identifies with a left-wing party (Labour, Liberal Democrats, Plaid Cymru, Scottish National Party, Greens) and 0 otherwise. The second equals 1 if a respondent identifies with a right-wing party (Conservatives, Brexit Party, UKIP) and 0 otherwise. People who did not identify with a party were the omitted category. In the Canadian sample, party consisted of three dichotomous variables. The first equals 1 if a respondent identified with or leaned

toward a left-wing party (Liberals, New Democratic Party, Bloc Quebecois, Green) and 0 otherwise. The second equals 1 if a respondent identified with or leaned toward the Conservative Party and 0 otherwise. People who did not identify with a party were the omitted category.

Ideology (Wave 1). In the United States, we measured ideology via a seven-point scale of ideological identification from 1 (very liberal) to 4 (moderate; middle of the road) to 7 (very conservative). In the British and Canada samples, we measured ideology via an eleven-point scale from 0 (left) to 10 (right).

Trust in health institutions (Wave 1). In the US sample, respondents filled out five items reporting the amount of trust they have in health institutions on a four-point scale from 1 (not at all) to 4 (a lot). Three concerned trust in governmental health institutions to handle the coronavirus outbreak. After receiving the prompt “How much do you trust the following people and organizations to do the right thing to best handle the coronavirus outbreak?” respondents were asked about “Hospitals and doctors,” “Scientists and researchers,” and the “Centers for Disease Control and Prevention (CDC).” They also indicated their level of trust in information from governmental health institutions by responding using the same scale to the prompt “How much, if at all, do you trust the information you get from...” for “Health experts in the state government?” and “Health experts in the federal government?” ($\alpha=.80$).

Participants in the British sample filled out five items measuring the amount of trust they have in health institutions on a four-point scale from 1 (not at all) to 4 (a lot). Four asked about trust in governmental health institutions using the prompt

“How much do you trust the following people and organizations to do the right thing to best handle the coronavirus outbreak?” Respondents were asked about “Hospitals and doctors,” “Scientists and researchers,” “Public Health England,” and “SAGE (Scientific Advisory Group for Emergencies.” They also were asked “How much, if at all, do you trust information you get from health experts in the UK government?” We deviate from the preregistration to drop the item on trust in health experts in sub-national governments (i.e., Scotland and Wales) to make sure responses were comparable ($\alpha=.84$).

The Canadian sample filled out six items measuring the amount of trust they have in health institutions on a four-point scale from 1 (not at all) to 4 (a lot). Four concerned trust in governmental health institutions to handle the coronavirus outbreak. Respondents were asked “How much do you trust the following people and organizations to do the right thing to best handle the coronavirus outbreak?” about “Hospitals and doctors,” “Scientists and researchers,” “Public Health Agency of Canada,” and “Dr. Theresa Tam.” They also were asked “How much, if at all, do you trust the information you get from...” about both “Health experts in your provincial government” and “Health experts in the Canadian government” ($\alpha=.91$ for each sample).

Trust in the media (Wave 1). The American sample filled out two items on trust in the media on four-point scales from 1 (not at all) to 4 (a lot). Respondents were asked “How much, if at all, do you trust the information you get from...” about “National news organizations” and “Local news organizations” ($r = .65$, $\alpha=.77$). The British sample was instead asked about “News organizations (such as the BBC,

The Daily Telegraph, and The Guardian)?” and “Social media (such as Facebook, Twitter, and Instagram)?” In the Canadian sample, respondents were asked about “News organizations (such as the CBC, Global News, and the Globe and Mail)” and “Social media (such as Facebook, Twitter, and Instagram)”. Because these items did not cohere into reliable indices (Great Britain: $r = .20$, $\alpha = .28$, Canada Sample 1: $r = .15$, $\alpha = .25$, Canada Sample 2: $r = .14$, $\alpha = .24$), we deviated from the preregistration and solely used the “news organizations” item in the British and Canada samples.

National leader affect (Wave 1). Respondents were asked to rate their national leader on a four-point scale of approval from 1 (strongly disapprove) to 4 (strongly approve) and a 0–100 point feeling thermometer. American respondents filled out these items for then-President Donald Trump, British respondents for Prime Minister Boris Johnson, and Canadian respondents for Prime Minister Justin Trudeau.

Conspiracy predispositions (Wave 1). Respondents answered four questions measuring their general tendency to believe in conspiracy theories on a five-point scale from 1 (strongly disagree) to 5 (strongly agree): “Much of our lives are being controlled by plots hatched in secret places,” “Even though we live in a democracy, a few people will always run things anyway,” “The people who really ‘run’ the country are not known to voters,” and “Big events like wars, recessions and the outcomes of elections are controlled by small groups of people who are working in secret against the rest of us” (Uscinski, Klobstad and Atkinson 2016). In all samples, reliabilities were excellent (US: $\alpha = .85$; Great Britain: $\alpha = .83$; Canada Sample 1: $\alpha = .84$; Canada Sample 2: $\alpha = .85$).

Analytic strategy

We estimate ordinary least squares regressions with HC2 robust standard errors. For covariate adjustment, we used a lasso variable selection procedure to determine the set of prognostic covariates to include in models for each dependent variable (Bloniarz et al. 2016). (Per our preregistration, we also report models estimated with no covariates in the online appendices; the results are almost always identical.) Eligible covariates were education, age group, gender, marital status, church attendance, region, party, ideology, living in a high incidence area, CRT score, political knowledge, race, trust in health institutions, trust in the media, and lagged outcome measures from Wave 1 (US and Great Britain only (details above and in the Online Appendix). As specified in our preregistration, all statistical tests are two-sided using a threshold of $p < .05$.

We tested RQ3 by comparing 95% credible intervals of BCF-estimated treatment effects among subgroups defined by median splits of prespecified set of moderators: party identification, leader approval, leader feeling thermometer, trust in health institutions, conspiracy predispositions, media trust, and prior belief in targeted misperceptions. We focus above on treatment effect credible intervals that do not overlap 0 for relevant moderator values.

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References

- Arendt, Florian. 2015. "Toward a dose-response account of media priming." Communication Research 42(8):1089–1115.
- Bloniarz, Adam, Hanzhong Liu, Cun-Hui Zhang, Jasjeet S Sekhon and Bin Yu. 2016. "Lasso adjustments of treatment effect estimates in randomized experiments." Proceedings of the National Academy of Sciences 113(27):7383–7390.
- Bridgman, Aengus, Eric Merkley, Peter John Loewen, Taylor Owen, Derek Ruths, Lisa Teichmann and Oleg Zhilin. 2020. "The causes and consequences of COVID-19 misperceptions: Understanding the role of news and social media." Harvard Kennedy School Misinformation Review 1(3).
- Cacioppo, John T. and Richard E. Petty. 1979. "Effects of message repetition and position on cognitive response, recall, and persuasion." Journal of personality and Social Psychology 37(1):97.
- Carey, John M, Victoria Chi, DJ Flynn, Brendan Nyhan and Thomas Zeitzoff. 2020. "The effects of corrective information about disease epidemics and outbreaks: Evidence from Zika and yellow fever in Brazil." Science advances 6(5):eaaw7449.

- Carnahan, Dustin, Daniel E Bergan and Sangwon Lee. 2020. "Do corrective effects last? Results from a longitudinal experiment on beliefs toward immigration in the US." Political Behavior.
- Chan, Man-pui Sally, Christopher R Jones, Kathleen Hall Jamieson and Dolores Albarracín. 2017. "Debunking: A meta-analysis of the psychological efficacy of messages countering misinformation." Psychological science 28(11):1531–1546.
- Chong, Dennis and James N Druckman. 2010. "Dynamic public opinion: Communication effects over time." American Political Science Review 104(4):663–680.
- Druckman, James N, Katherine Ognyanova, Matthew A Baum, David Lazer, Roy H Perlis, John Della Volpe, Mauricio Santillana, Hanyu Chwe, Alexi Quintana and Matthew Simonson. 2021. "The role of race, religion, and partisanship in misperceptions about COVID-19." Group Processes & Intergroup Relations 24(4):638–657.
- Druckman, James N, Samara Klar, Yanna Krupnikov, Matthew Levendusky and John Barry Ryan. 2020. "Affective polarization, local contexts and public opinion in America." Nature Human Behaviour.
- Fazio, Lisa K, Nadia M Brashier, B Keith Payne and Elizabeth J Marsh. 2015. "Knowledge does not protect against illusory truth." Journal of Experimental Psychology: General 144(5):993.

Freeze, Melanie, Mary Baumgartner, Peter Bruno, Jacob R. Gunderson, Joshua Olin, Morgan Quinn Ross and Justine Szafran. 2020. “Fake claims of fake news: political misinformation, warnings, and the tainted truth Effect.” Political Behavior.

Funke, Daniel. 2020. “Archived fact-check: Tucker Carlson guest airs debunked conspiracy theory that COVID-19 was created in a lab.” PolitiFact, September 16, 2020. Downloaded July 19, 2021 from <https://www.politifact.com/li-meng-yan-fact-check/>.

Gadarian, Shana, Sara Wallace Goodman and Thomas Pepinsky. 2021. “Partisanship, health behavior, and policy attitudes in the early stages of the COVID-19 pandemic.” PLOS One.

Gerber, Alan S, James G Gimpel, Donald P Green and Daron R Shaw. 2011. “How large and long-lasting are the persuasive effects of televised campaign ads? Results from a randomized field experiment.” American Political Science Review 105(1):135–150.

Green, Donald P and Holger L Kern. 2012. “Modeling heterogeneous treatment effects in survey experiments with Bayesian additive regression trees.” Public opinion quarterly 76(3):491–511.

Grossman, Guy, Soojong Kim, Jonah M Rexer and Harsha Thirumurthy. 2020. “Political partisanship influences behavioral responses to governors’ recom-

- mendations for COVID-19 prevention in the United States.” Proceedings of the National Academy of Sciences 117(39):24144–24153.
- Hahn, P Richard, Jared S Murray, Carlos M Carvalho et al. 2020. “Bayesian regression tree models for causal inference: Regularization, confounding, and heterogeneous effects (with discussion).” Bayesian Analysis 15(3):965–1056.
- Hardt, Oliver, Karim Nader and Lynn Nadel. 2013. “Decay happens: the role of active forgetting in memory.” Trends in cognitive sciences 17(3):111–120.
- Hill, Seth J, James Lo, Lynn Vavreck and John Zaller. 2013. “How quickly we forget: The duration of persuasion effects from mass communication.” Political Communication 30(4):521–547.
- Kessler, Glenn. 2021. “Timeline: How the Wuhan lab-leak theory suddenly became credible.” Washington Post, May 25, 2021. Downloaded July 19, 2021 from <https://www.washingtonpost.com/politics/2021/05/25/timeline-how-wuhan-lab-leak-theory-suddenly-became-credible/>.
- Kunda, Ziva. 1990. “The case for motivated reasoning.” Psychological bulletin 108(3):480.
- Lammers, Joris, Jan Crusius and Anne Gast. 2020. “Correcting misperceptions of exponential coronavirus growth increases support for social distancing.” Proceedings of the National Academy of Sciences 117(28):16264–16266.

Loomba, Sahil, Alexandre de Figueiredo, Simon J Piatek, Kristen de Graaf and Heidi J Larson. 2021. “Measuring the impact of COVID-19 vaccine misinformation on vaccination intent in the UK and USA.” Nature human behaviour 5(3):337–348.

Merkley, Eric, Aengus Bridgman, Peter John Loewen, Taylor Owen, Derek Ruths and Oleg Zhilin. 2020. “A rare moment of cross-partisan consensus: Elite and public response to the COVID-19 pandemic in Canada.” Canadian Journal of Political Science/Revue canadienne de science politique 53(2):311–318.

Mordecai, Mara and Aidan Connaughton. 2020. “Public opinion about coronavirus is more politically divided in US than in other advanced economies.” Pew Research Center.

Nyhan, Brendan. 2021. “Why the backfire effect does not explain the durability of political misperceptions.” Proceedings of the National Academy of Sciences 118(15).

Nyhan, Brendan and Jason Reifler. 2021. “Do people actually learn from fact-checking? Evidence from a longitudinal study during the 2014 campaign.” Unpublished manuscript. Downloaded June 11, 2021 from <https://www.dropbox.com/s/yyhuo9w9xo1rkfh/fact-checking-effects.pdf?dl=0>.

Pennycook, Gordon, Adam Bear, Evan T Collins and David G Rand. 2020. “The implied truth effect: Attaching warnings to a subset of fake news head-

lines increases perceived accuracy of headlines without warnings.” Management Science 66(11):4944–4957.

Pennycook, Gordon, Jonathon McPhetres, Bence Bago and David G Rand. 2020. “Predictors of attitudes and misperceptions about COVID-19 in Canada, the UK, and the USA.” PsyArXiv 10.

Pennycook, Gordon, Jonathon McPhetres, Bence Bago and David G Rand. 2021. “Beliefs About COVID-19 in Canada, the United Kingdom, and the United States: A Novel Test of Political Polarization and Motivated Reasoning.” Personality and Social Psychology Bulletin.

Pennycook, Gordon, Tyrone D Cannon and David G Rand. 2018. “Prior exposure increases perceived accuracy of fake news.” Journal of experimental psychology: general 147(12):1865.

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.

Pickup, Mark, Dominik Stecula and Clifton Van Der Linden. 2020. “Novel Coronavirus, Old Partisanship: COVID-19 Attitudes and Behaviours in the United States and Canada.” Canadian Journal of Political Science/Revue canadienne de science politique 53(2):357–364.

Taber, Charles S and Milton Lodge. 2006. “Motivated skepticism in the evaluation of political beliefs.” American journal of political science 50(3):755–769.

- Taylor, Steven and Gordon JG Asmundson. 2021. “Negative attitudes about face-masks during the COVID-19 pandemic: The dual importance of perceived ineffectiveness and psychological reactance.” PloS one 16(2):e0246317.
- Uscinski, Joseph E, Casey Klofstad and Matthew D Atkinson. 2016. “What drives conspiratorial beliefs? The role of informational cues and predispositions.” Political Research Quarterly 69(1):57–71.
- Walter, Nathan, John J Brooks, Camille J Saucier and Sapna Suresh. N.d. “Evaluating the impact of attempts to correct health misinformation on social media: A meta-analysis.” Health Communication.
- Walter, Nathan, Jonathan Cohen, R. Lance Holbert and Yasmin Morag. 2020. “Fact-checking: A meta-analysis of what works and for whom.” Political Communication 37(3):350–375.

Online Appendix A: Experiment and survey details

Replication data and code

<https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/6FIHZJ>

Survey codebooks and materials

https://osf.io/8h4ze/?view_only=5acfceb2a22644478981f88d73b991f5

Preregistration links

- US: https://osf.io/e4ptq/?view_only=b02f8a37219c4bed9c73168e272aee8c
- Great Britain: https://osf.io/bkfje/?view_only=af9f0dfd214e42b1be2f5af9ce8222db
- Canada: https://osf.io/jz86u/?view_only=0dca01dfc69d442ab598a188e4f42481

Scale reliability and factor loadings for belief measures

- **Perceived accuracy of targeted false claims (Waves 1, 2, 3, 4).** The internal reliabilities for this measure are good in the US sample ($\alpha=.75$ in Wave 1, $\alpha=.76$ in Wave 2, $\alpha=.78$ in Wave 3, $\alpha=.76$ in Wave 4). Principal components analysis (PCA) of these items reveal that measures converged to a single-factor solution in each wave that explains 57% of variation in Wave 1, 59% in Wave 2, 60% in Wave 3, and 59% in Wave 4. Reliabilities are slightly weaker in the British sample ($\alpha=.58$ in Wave 1; $\alpha=.66$ in Wave 2; $\alpha=.62$ in Wave 3). In all waves of the British sample, however, all items load onto a single-factor solution explaining 45% of variation in Wave 1, 50% of variation in Wave 2, and 47% of variation in Wave 3. Reliabilities are strong in both Canadian waves ($\alpha=.80$ and $.77$). In each sample, a one-factor solution emerges explaining 62% and 60% of variation, respectively.
- **Perceived accuracy of non-targeted false claims (Waves 1, 2, 3, 4).** The internal reliabilities for the aggregate measure in the US sample are satisfactory ($\alpha=.71$ in Wave 1, $\alpha=.69$ in Wave 2, $\alpha=.70$ in Wave 3, $\alpha=.70$ in Wave 4). PCAs yield a one-factor solution explaining 47% of variation in Wave 1, 47% of variation in Wave 2, 48% of variation in Wave 3, and 46% of variation in Wave 4. In the British sample, we found considerably weaker

reliabilities ($\alpha=.58$ in Wave 1; $\alpha=.54$ in Wave 2; $\alpha=.53$ in Wave 3). PCAs revealed a one-factor solution in all waves, which explained 50% of variation in Wave 1, 48% of variation in Wave 2, and 50% of variation in Wave 3. The internal reliabilities for this measure are strong in each of the Canadian samples ($\alpha s=.78$ each), and each of the claims load onto single-factor solutions explaining 55% and 56% of variation, respectively.

- **Perceived accuracy of true claims (Waves 1, 2, 3, 4).** The internal reliabilities for this measure in the US sample are good ($\alpha=.79$ in Wave 1, $\alpha=.81$ in Wave 2, $\alpha=.82$ in Wave 3, $\alpha=.78$ in Wave 4). However, PCAs yield inconsistent results by wave. Waves 1–3 yield a one-factor solution, explaining 43–47% of variation. However, in Wave 4, a two-factor solution emerged, with Factor 1 explaining 45% of variation and Factor 2 explaining 13% of variation. Factor 1 contains most items with the exception of dry cough as a symptom, which loads on Factor 2, and there being no cure for COVID-19, which loads on neither factor. Masks being effective loads positively onto Factor 1 and negatively onto Factor 2. In the British sample, internal reliabilities are good ($\alpha=.75$ in Wave 1; $\alpha=.72$ in Wave 2; $\alpha=.72$ in Wave 3). However, a two-factor solution emerged in each wave, with Factor 1 explaining 37–38% of variation and Factor 2 explaining 11–12% of variation. Most items loaded onto Factor 1. The items that load onto Factor 2 are inconsistent, though positive loadings for the dexamethasone and cure items occur for all three waves. Internal reliabilities are strong in each of the Canadian samples ($\alpha s=.79$ and $.78$, respectively), but a similar two-factor solution emerges in each. Factor 1, on which most items load, explains 44% and 41% of variation, respectively, in each sample. Factor 2 contains the dexamethasone and cure items, explaining 12% and 13% of variation, respectively. Because the eigenvalues for the second factor are close to 1 when present and Factor 2 had inconsistent interpretations across samples, we treat the true claims as a single index.

Covariate measures

- **Political knowledge (Wave 1).** In the United States, we measured political knowledge with an additive scale of correct answers to the following questions: “For how many years is a United States Senator elected - that is, how many years are there in one full term of office for a U.S. Senator?” “How many times can an individual be elected President of the United States un-

der current laws?” “How many U.S. Senators are there from each state?” “Who is currently the Prime Minister of the United Kingdom?” and “For how many years is a member of the United States House of Representatives elected - that is, how many years are there in one full term of office for a U.S. House member?” ($\alpha=.57$).

In the British sample, we used this five-item scale: “Under the Fixed Term Parliament Act, how often are UK general elections supposed to be held?” “Who is currently the Home Secretary for the UK?” “In UK elections, what time do the polls typically close?” “Who is currently the President of France?” and “How many seats are there currently in the House of Commons?” ($\alpha=.57$).

In the Canadian sample, we used a five-item scale: “What is the maximum life of a federal parliament according to section 4(2) of the Constitution Act, 1982?” “Who is currently the Minister of National Defence?” “Who is currently the President of France?” “Which Canadian province has the most representatives in the House of Commons?” and “How many seats are there currently in the House of Commons?” ($\alpha=.56$ in each sample).

- **Cognitive Reflection Test (CRT, Wave 1).** This measure, which only appeared in the US sample, is a three-item scale measuring analytic as opposed to intuitive thinking. It is an additive scale of correct answers to the following problems: “A cheese and crackers snack costs \$2.20 in total. The cheese costs \$2.00 more than the crackers. How much do the crackers cost?” and “If it takes 10 seamstresses 10 minutes to make 10 shirts, how long would it take 70 seamstresses to make 70 shirts?” ($\alpha=.74$).
- **High-incidence area (Wave 1).** In the US sample, we denoted respondents from high-incidence areas as a dichotomous variable that equals 1 if a respondent lived in a county that had a high incidence of COVID-19 as of May 18, 2020. In the British sample, we denoted respondents who lived in high-incidence areas by whether they came from the high-incidence sample. In the Canadian sample, we denoted respondents from high-incidence areas as a dichotomous variable that equals 1 if a respondent lived in a provincial health region that had a high incidence of COVID-19 as of December 2020 (for Wave 1) and February 2020 (for Wave 2). Details on the areas selected are provided below.
- **Political interest (Wave 1).** We used a five-point scale in each country that ranged from not at all interested (1) to extremely interested (5).

- **Demographics (Wave 1).** Participants completed standard demographic questions measuring characteristics such as education, age (divided into groups 18–34; 35–44; 45–54; 55–64; or 65+), gender, marital status, church attendance, region, and race.

Table A1: PCA of targeted false claims in Wave 1 of US sample

Claim	Factor 1
The Chinese government created the coronavirus as a bioweapon	0.538
A group funded by Bill Gates patented the coronavirus that causes COVID-19	0.509
Antibiotics are effective in preventing and treating the coronavirus	0.414
The medication hydroxychloroquine is proven to cure or prevent COVID-19	0.530
Eigenvalue (% variation explained)	2.288 (57%)

Table A2: PCA of targeted false claims in Wave 2 of US sample

Claim	Factor 1
The Chinese government created the coronavirus as a bioweapon	0.532
A group funded by Bill Gates patented the coronavirus that causes COVID-19	0.502
Antibiotics are effective in preventing and treating the coronavirus	0.437
The medication hydroxychloroquine is proven to cure or prevent COVID-19	0.524
Eigenvalue (% variation explained)	2.344 (59%)

Table A3: PCA of targeted false claims in Wave 3 of US sample

Claim	Factor 1
The Chinese government created the coronavirus as a bioweapon	0.539
A group funded by Bill Gates patented the coronavirus that causes COVID-19	0.499
Antibiotics are effective in preventing and treating the coronavirus	0.432
The medication hydroxychloroquine is proven to cure or prevent COVID-19	0.523
Eigenvalue (% variation explained)	2.408 (60%)

Table A4: PCA of targeted false claims in Wave 4 of US sample

Claim	Factor 1
The Chinese government created the coronavirus as a bioweapon	0.551
A group funded by Bill Gates patented the coronavirus that causes COVID-19	0.514
Antibiotics are effective in preventing and treating the coronavirus	0.378
The medication hydroxychloroquine is proven to cure or prevent COVID-19	0.537
Eigenvalue (% variation explained)	2.354 (59%)

Table A5: PCA of targeted false claims in Wave 1 of Great Britain sample

Claim	Factor 1
The Chinese government created the coronavirus as a bioweapon	0.492
A group funded by Bill Gates patented the coronavirus that causes COVID-19	0.534
Antibiotics are effective in preventing and treating the coronavirus	0.457
The medication hydroxychloroquine is proven to cure or prevent COVID-19	0.514
Eigenvalue (% variation explained)	1.785 (45%)

Table A6: PCA of targeted false claims in Wave 2 of Great Britain sample

Claim	Factor 1
The Chinese government created the coronavirus as a bioweapon	0.499
A group funded by Bill Gates patented the coronavirus that causes COVID-19	0.498
Antibiotics are effective in preventing and treating the coronavirus	0.477
The medication hydroxychloroquine is proven to cure or prevent COVID-19	0.524
Eigenvalue (% variation explained)	1.992 (50%)

Table A7: PCA of targeted false claims in Wave 3 of Great Britain sample

Claim	Factor 1
The Chinese government created the coronavirus as a bioweapon	0.503
A group funded by Bill Gates patented the coronavirus that causes COVID-19	0.492
Antibiotics are effective in preventing and treating the coronavirus	0.483
The medication hydroxychloroquine is proven to cure or prevent COVID-19	0.522
Eigenvalue (% variation explained)	1.899 (47%)

Table A8: PCA of targeted false claims in Canada 1 sample

Claim	Factor 1
The Chinese government created the coronavirus as a bioweapon	0.475
A group funded by Bill Gates patented the coronavirus that causes COVID-19	0.523
Antibiotics are effective in preventing and treating the coronavirus	0.488
The medication hydroxychloroquine is proven to cure or prevent COVID-19	0.512
Eigenvalue (% variation explained)	2.497 (62%)

Table A9: PCA of targeted false claims in Canada 2 sample

Claim	Factor 1
The Chinese government created the coronavirus as a bioweapon	0.485
A group funded by Bill Gates patented the coronavirus that causes COVID-19	0.514
Antibiotics are effective in preventing and treating the coronavirus	0.490
The medication hydroxychloroquine is proven to cure or prevent COVID-19	0.510
Eigenvalue (% variation explained)	2.388 (60%)

Table A10: PCA of non-targeted false claims in Wave 1 of US sample

Claim	Factor 1
Sneezing is a symptom of the coronavirus	0.162
Hand dryers effectively kill the coronavirus	0.374
The coronavirus is being spread by 5G cell phone technology	0.449
Eating garlic prevents infection with the coronavirus	0.480
High doses of vitamin C are an effective treatment for COVID-19	0.422
Colloidal silver can cure COVID-19	0.474
Eigenvalue (% variation explained)	2.837 (47%)

Table A11: PCA of non-targeted false claims in Wave 2 of US sample

Claim	Factor 1
Sneezing is a symptom of the coronavirus	0.137
Hand dryers effectively kill the coronavirus	0.374
The coronavirus is being spread by 5G cell phone technology	0.441
Eating garlic prevents infection with the coronavirus	0.477

High doses of vitamin C are an effective treatment for COVID-19	0.423
Colloidal silver can cure COVID-19	0.491
Eigenvalue (% variation explained)	2.810 (47%)

Table A12: PCA of non-targeted false claims in Wave 3 of US sample

Claim	Factor 1
Sneezing is a symptom of the coronavirus	0.124
Hand dryers effectively kill the coronavirus	0.369
The coronavirus is being spread by 5G cell phone technology	0.457
Eating garlic prevents infection with the coronavirus	0.485
High doses of vitamin C are an effective treatment for COVID-19	0.418
Colloidal silver can cure COVID-19	0.480
Eigenvalue (% variation explained)	2.855 (48%)

Table A13: PCA of non-targeted false claims in Wave 4 of US sample

Claim	Factor 1
Sneezing is a symptom of the coronavirus	0.138
Hand dryers effectively kill the coronavirus	0.366
The coronavirus is being spread by 5G cell phone technology	0.459
Eating garlic prevents infection with the coronavirus	0.485
High doses of vitamin C are an effective treatment for COVID-19	0.414
Colloidal silver can cure COVID-19	0.479
Eigenvalue (% variation explained)	2.784 (46%)

Table A14: PCA of non-targeted false claims in Wave 1 of Great Britain sample

Claim	Factor 1
Sneezing is a symptom of the coronavirus	0.237
The coronavirus is being spread by 5G cell phone technology	0.552
Eating garlic prevents infection with the coronavirus	0.593
High doses of vitamin C are an effective treatment for COVID-19	0.537
Eigenvalue (% variation explained)	1.998 (50%)

Table A15: PCA of non-targeted false claims in Wave 2 of Great Britain sample

Claim	Factor 1
Sneezing is a symptom of the coronavirus	0.178
The coronavirus is being spread by 5G cell phone technology	0.553
Eating garlic prevents infection with the coronavirus	0.601
High doses of vitamin C are an effective treatment for COVID-19	0.549
Eigenvalue (% variation explained)	1.934 (48%)

Table A16: PCA of non-targeted false claims in Wave 3 of Great Britain sample

Claim	Factor 1
Sneezing is a symptom of the coronavirus	0.171
The coronavirus is being spread by 5G cell phone technology	0.570
Eating garlic prevents infection with the coronavirus	0.596
High doses of vitamin C are an effective treatment for COVID-19	0.539
Eigenvalue (% variation explained)	1.996 (50%)

Table A17: PCA of non-targeted false claims in Canada 1 sample

Claim	Factor 1
Sneezing is a symptom of the coronavirus	0.282
Hand dryers effectively kill the coronavirus	0.458
The coronavirus is being spread by 5G cell phone technology	0.500
Eating garlic prevents infection with the coronavirus	0.508
High doses of vitamin C are an effective treatment for COVID-19	0.451
Eigenvalue (% variation explained)	2.746 (55%)

Table A18: PCA of non-targeted false claims in Canada 2 sample

Claim	Factor 1
Sneezing is a symptom of the coronavirus	0.279
Hand dryers effectively kill the coronavirus	0.453
The coronavirus is being spread by 5G cell phone technology	0.488
Eating garlic prevents infection with the coronavirus	0.509
High doses of vitamin C are an effective treatment for COVID-19	0.469

Eigenvalue (% variation explained)	2.787 (56%)
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Table A19: PCA of true claims in wave 1 of US sample

Claim	Factor 1
A new loss of taste or smell is a symptom of COVID-19	0.354
Frequent hand washing is a way to protect against the coronavirus	0.377
Avoiding large gatherings of people can help prevent the spread of the coronavirus	0.402
Coronavirus can be spread by people who do not show symptoms	0.383
A fever is a symptom of COVID-19	0.368
A dry cough is a symptom of COVID-19	0.330
Masks are an effective way to prevent the spread of the coronavirus	0.318
There is no cure for COVID-19	0.283
Eigenvalue (% variation explained)	3.477 (43%)

Table A20: PCA of true claims in wave 2 of US sample

Claim	Factor 1
A new loss of taste or smell is a symptom of COVID-19	0.361
Frequent hand washing is a way to protect against the coronavirus	0.371
Avoiding large gatherings of people can help prevent the spread of the coronavirus	0.396
Coronavirus can be spread by people who do not show symptoms	0.374
A fever is a symptom of COVID-19	0.347
A dry cough is a symptom of COVID-19	0.325
Masks are an effective way to prevent the spread of the coronavirus	0.372
There is no cure for COVID-19	0.267
Eigenvalue (% variation explained)	3.626 (45%)

Table A21: PCA of true claims in wave 3 of US sample

Claim	Factor 1
A new loss of taste or smell is a symptom of COVID-19	0.361
Frequent hand washing is a way to protect against the coronavirus	0.368
Avoiding large gatherings of people can help prevent the spread of the coronavirus	0.394
Coronavirus can be spread by people who do not show symptoms	0.374

A fever is a symptom of COVID-19	0.345
A dry cough is a symptom of COVID-19	0.323
Masks are an effective way to prevent the spread of the coronavirus	0.368
There is no cure for COVID-19	0.284
Eigenvalue (% variation explained)	3.778 (47%)

Table A22: PCA of true claims in wave 4 of US sample

Claim	Factor 1	Factor 2
A new loss of taste or smell is a symptom of COVID-19	0.384	0.248
Frequent hand washing is a way to protect against the coronavirus	0.385	-0.117
Avoiding large gatherings of people can help prevent the spread of the coronavirus	0.419	-0.335
Coronavirus can be spread by people who do not show symptoms	0.403	-0.124
A fever is a symptom of COVID-19	0.330	0.482
A dry cough is a symptom of COVID-19	0.270	0.603
Masks are an effective way to prevent the spread of the coronavirus	0.386	-0.446
There is no cure for COVID-19	0.191	-0.048
Eigenvalue (% variation explained)	3.571 (45%)	1.077 (13%)

Table A23: PCA of true claims in wave 1 of Great Britain sample

Claim	Factor 1	Factor 2
A new loss of taste or smell is a symptom of COVID-19	0.399	0.089
Frequent hand washing is a way to protect against the coronavirus	0.371	-0.148
Avoiding large gatherings of people can help prevent the spread of the coronavirus	0.390	-0.341
Coronavirus can be spread by people who do not show symptoms	0.396	-0.165
A fever is a symptom of COVID-19	0.300	0.297
A dry cough is a symptom of COVID-19	0.335	0.334
The steroid dexamethasone reduces the fatality rate of COVID-19 patients on ventilators	0.232	0.454
There is no cure for COVID-19	0.216	0.355
Masks are an effective way to prevent the spread of the coronavirus	0.304	-0.543
Eigenvalue (% variation explained)	3.393 (38%)	1.007 (11%)

Table A24: PCA of true claims in wave 2 of Great Britain sample

Claim	Factor 1	Factor 2
A new loss of taste or smell is a symptom of COVID-19	0.405	0.010
Frequent hand washing is a way to protect against the coronavirus	0.395	-0.167
Avoiding large gatherings of people can help prevent the spread of the coronavirus	0.410	-0.221
Coronavirus can be spread by people who do not show symptoms	0.402	-0.164
A fever is a symptom of COVID-19	0.290	0.301
A dry cough is a symptom of COVID-19	0.322	0.212
The steroid dexamethasone reduces the fatality rate of COVID-19 patients on ventilators	0.199	0.392
There is no cure for COVID-19	0.121	0.715
Masks are an effective way to prevent the spread of the coronavirus	0.328	-0.310
Eigenvalue (% variation explained)	3.389 (38%)	1.074 (12%)

Table A25: PCA of true claims in wave 3 of Great Britain sample

Claim	Factor 1	Factor 2
A new loss of taste or smell is a symptom of COVID-19	0.409	0.009
Frequent hand washing is a way to protect against the coronavirus	0.388	-0.207
Avoiding large gatherings of people can help prevent the spread of the coronavirus	0.388	-0.268
Coronavirus can be spread by people who do not show symptoms	0.410	-0.163
A fever is a symptom of COVID-19	0.282	0.327
A dry cough is a symptom of COVID-19	0.335	0.261
The steroid dexamethasone reduces the fatality rate of COVID-19 patients on ventilators	0.210	0.408
There is no cure for COVID-19	0.131	0.649
Masks are an effective way to prevent the spread of the coronavirus	0.332	-0.310
Eigenvalue (% variation explained)	3.372 (37%)	1.103 (12%)

Table A26: PCA of true claims in Canada 1 sample

Claim	Factor 1	Factor 2
A new loss of taste or smell is a symptom of COVID-19	0.392	-0.039
Frequent hand washing is a way to protect against the coronavirus	0.377	-0.192
Avoiding large gatherings of people can help prevent the spread of the coronavirus	0.388	-0.175
Coronavirus can be spread by people who do not show symptoms	0.394	-0.059
A fever is a symptom of COVID-19	0.387	0.064
A dry cough is a symptom of COVID-19	0.299	0.255
The steroid dexamethasone reduces the fatality rate of COVID-19 patients on ventilators	0.032	0.763
There is no cure for COVID-19	0.135	0.523
Masks are an effective way to prevent the spread of the coronavirus	0.375	-0.046
Eigenvalue (% variation explained)	3.923 (44%)	1.105 (12%)

Table A27: PCA of true claims in Canada 2 sample

Claim	Factor 1	Factor 2
A new loss of taste or smell is a symptom of COVID-19	0.395	0.017
Frequent hand washing is a way to protect against the coronavirus	0.380	-0.217
Avoiding large gatherings of people can help prevent the spread of the coronavirus	0.403	-0.188
Coronavirus can be spread by people who do not show symptoms	0.403	-0.088
A fever is a symptom of COVID-19	0.367	0.113
A dry cough is a symptom of COVID-19	0.303	0.271
The steroid dexamethasone reduces the fatality rate of COVID-19 patients on ventilators	0.057	0.677
There is no cure for COVID-19	0.147	0.580
Masks are an effective way to prevent the spread of the coronavirus	0.353	-0.171
Eigenvalue (% variation explained)	3.708 (41%)	1.130 (13%)

High-incidence COVID-19 area definition

In the US sample, we designated people as living in a high-incidence area if they lived in a county with one of the highest per capita numbers of COVID-19 deaths as of the end of April 2020. They were selected using the following procedure. First, we reverse-sorted counties by per capita death rate. We then selected counties from the top of the list until their cumulative population equalled 10% of the total US population. The list of high-incidence counties we chose were as follows:

- Baker County, Georgia
- Bergen County, New Jersey
- Bienville Parish, Louisiana
- Calhoun County, Georgia
- Chaffee County, Colorado
- Chambers County, Alabama
- Clay County, Georgia
- Coffey County, Kansas
- Decatur County, Indiana
- Dooly County, Georgia
- Dougherty County, Georgia
- Early County, Georgia
- East Feliciana Parish, Louisiana
- Essex County, Massachusetts
- Essex County, New Jersey
- Fairfield County, Connecticut
- Greer County, Oklahoma
- Hamilton County, Nebraska

- Hampden County, Massachusetts
- Hartford County, Connecticut
- Hudson County, New Jersey
- Iberville Parish, Louisiana
- Jefferson Parish, Louisiana
- Lee County, Georgia
- Leflore County, Mississippi
- Macomb County, Michigan
- Mercer County, Michigan
- Middlesex County, Massachusetts
- Middlesex County, New Jersey
- Mitchell County, Georgia
- Monmouth County, New Jersey
- Morgan County, Colorado
- Morris County, New Jersey
- Nassau County, New York
- New Haven County, Connecticut
- New York City, New York
- Norfolk County, Massachusetts
- Oakland County, Michigan
- Ocean County, New Jersey
- Orange County, New York
- Orleans Parish, Louisiana

- Passaic County, New Jersey
- Plaquemines Parish, Louisiana
- Plymouth County, Massachusetts
- Pointe Coupe Parish, Louisiana
- Randolph County, Georgia
- Red River Parish, Louisiana
- Rockland County, New York
- Somerset County, New Jersey
- St. Charles Parish, Louisiana
- St. James Parish, Louisiana
- St. John the Baptist Parish, Louisiana
- Suffolk County, Massachusetts
- Suffolk County, New York
- Sumter County, Georgia
- Sussex County, New Jersey
- Terrell County, Georgia
- Toole County, Montana
- Turner County, Georgia
- Union County, New Jersey
- Upson County, Georgia
- Warren County, New Jersey
- Wayne County, Michigan
- Webster County, Georgia

- West Baton Rouge Parish, Louisiana
- Westchester County, New York
- Wilcox County, Georgia
- Wilkinson County, Mississippi

We used an analogous procedure to select high-incidence areas in the British sample based on whether they were in local authorities with the highest per capita number of COVID-19 deaths as of the end of June 2020. These local authorities were as follows:

- Brent, England
- Bromsgrove, England
- Bury, England
- Cheshire East, England
- County Durham, England
- Croydon, England
- Derby, England
- East Dunbartonshire, Scotland
- East Staffordshire, England
- Epping Forest, England
- Harrogate, England
- Harrow, England
- Hertsmere, England
- Inverclyde, Scotland
- Middlesbrough, England
- Midlothian, Scotland

- North East Derbyshire, England
- North Warwickshire, England
- Reigate and Banstead, England
- Rhondda Cynon Taf, Wales
- Rotherham, England
- Salford, England
- Solihull, England
- South Lakeland, England
- Stockport, England
- Stratford-on-Avon, England
- Sunderland, England
- Tameside, England
- Walsall, England
- Watford, England
- West Dunbartonshire, Scotland
- Wirral, England

In the Canadian sample, we designated people as living in a high-incidence area if they lived in a provincial health region with one of the highest per capita numbers of COVID-19 deaths as of December 2020 (for Wave 1) and February 2020 (for Wave 2). These areas were selected using the following procedure. First, we reverse-sorted health regions by per capita death rate. We then selected health regions from the top of the list until their cumulative population equalled or exceeded 10% of the total Canadian population. The list of high-incidence health regions we chose were as follows:

- Région de Montréal
- Région de Laval

- Région de Lanaudière
- Région de la Capitale-Nationale
- Région de la Montérégie

Online Appendix B: Additional sample descriptives

Table B1: Perceived accuracy of targeted false, non-targeted false, and true claims among control respondents in each sample

		Wave 1/single wave	Wave 2	Wave 3	Wave 4
US	Targeted false	1.75 (0.74)	1.73 (0.76)	1.78 (0.81)	1.78 (0.72)
	Non-targeted false	1.73 (0.54)	1.72 (0.57)	1.73 (0.64)	1.70 (0.52)
	True	3.45 (0.54)	3.47 (0.56)	3.45 (0.66)	3.34 (0.63)
GB	Targeted false	1.70 (0.51)	1.67 (0.56)	1.65 (0.50)	
	Non-targeted false	1.70 (0.43)	1.66 (0.44)	1.65 (0.43)	
	True	3.53 (0.40)	3.49 (0.37)	3.46 (0.40)	
Canada 1	Targeted false	1.94 (0.74)			
	Non-targeted false	1.91 (0.66)			
	True	3.17 (0.52)			
Canada 2	Targeted false	1.90 (0.70)			
	Non-targeted false	1.89 (0.59)			
	True	3.12 (0.53)			

Notes: Scales from 1 (not at all accurate) to 4 (very accurate). Standard deviations in parentheses. Weighted in US and UK samples.

Table B2: Perceived accuracy of each individual targeted false claim among control respondents by wave and sample

		Wave 1/single wave	Wave 2	Wave 3	Wave 4
US	The Chinese government created the coronavirus as a bioweapon	1.98 (1.07)	1.95 (1.08)	1.94 (1.08)	1.95 (1.04)
	A group funded by Bill Gates patented the coronavirus that causes COVID-19	1.61 (0.97)	1.61 (0.95)	1.63 (1.00)	1.60 (0.90)
	Antibiotics are effective in preventing and treating the coronavirus	1.73 (0.89)	1.63 (0.86)	1.67 (0.89)	1.67 (0.84)
GB	The medication hydroxychloroquine is proven to cure or prevent COVID-19	1.72 (0.94)	1.74 (0.96)	1.88 (1.08)	1.89 (1.03)
	The Chinese government created the coronavirus as a bioweapon	2.07 (0.91)	1.91 (0.94)	1.87 (0.93)	
	A group funded by Bill Gates patented the coronavirus that causes COVID-19	1.39 (0.68)	1.39 (0.70)	1.31 (0.63)	
Canada 1	Antibiotics are effective in preventing and treating the coronavirus	1.59 (1.79)	1.54 (0.77)	1.55 (0.75)	
	The medication hydroxychloroquine is proven to cure or prevent COVID-19	1.75 (0.75)	1.83 (1.81)	1.88 (0.80)	
	The Chinese government created the coronavirus as a bioweapon	2.10 (1.04)			
Canada 2	A group funded by Bill Gates patented the coronavirus that causes COVID-19	1.81 (0.93)			
	Antibiotics are effective in preventing and treating the coronavirus	1.89 (0.91)			
	The medication hydroxychloroquine is proven to cure or prevent COVID-19	1.94 (0.93)			
	The Chinese government created the coronavirus as a bioweapon	2.01 (1.01)			
	A group funded by Bill Gates patented the coronavirus that causes COVID-19	1.80 (0.94)			
	Antibiotics are effective in preventing and treating the coronavirus	1.88 (0.91)			
	The medication hydroxychloroquine is proven to cure or prevent COVID-19	1.92 (0.89)			

Notes: Scales from 1 (not at all accurate) to 4 (very accurate). Standard deviations in parentheses. Weighted in US and UK samples.

Table B3: Perceived accuracy of each individual targeted false claim among respondents in the control condition in each wave and sample. Weighted in US and UK samples.

		Wave 1/single wave	Wave 2	Wave 3	Wave 4
US	The Chinese government created the coronavirus as a bioweapon	31%	31%	31%	31%
	A group funded by Bill Gates patented the coronavirus that causes COVID-19	19%	19%	20%	19%
	Antibiotics are effective in preventing and treating the coronavirus	21%	16%	19%	18%
GB	The medication hydroxychloroquine is proven to cure or prevent COVID-19	23%	24%	30%	29%
	The Chinese government created the coronavirus as a bioweapon	32%	25%	24%	
	A group funded by Bill Gates patented the coronavirus that causes COVID-19	8%	9%	7%	
Canada 1	Antibiotics are effective in preventing and treating the coronavirus	15%	13%	12%	
	The medication hydroxychloroquine is proven to cure or prevent COVID-19	16%	21%	23%	
	A group funded by Bill Gates patented the coronavirus as a bioweapon	34%			
Canada 2	Antibiotics are effective in preventing and treating the coronavirus	23%			
	The medication hydroxychloroquine is proven to cure or prevent COVID-19	27%			
	A group funded by Bill Gates patented the coronavirus as a bioweapon	29%			
	Antibiotics are effective in preventing and treating the coronavirus	24%			
	The medication hydroxychloroquine is proven to cure or prevent COVID-19	24%			
		25%			

Notes: Scales from 1 (not at all accurate) to 4 (very accurate). Standard deviations in parentheses.

Table B4: Descriptive statistics: US sample (all conditions; weighted)

Variable	Mean (SD) or %
Perceived accuracy, targeted false claims (W1, 1–4pt scale)	1.78 (0.73)
Perceived accuracy, targeted false claims (W2, 1–4pt scale)	1.64 (0.71)
Perceived accuracy, targeted false claims (W3, 1–4pt scale)	1.67 (0.73)
Perceived accuracy, targeted false claims (W4, 1–4pt scale)	1.82 (0.76)
Perceived accuracy, non-targeted false claims (W1, 1–4pt scale)	1.72 (0.53)
Perceived accuracy, non-targeted false claims (W2, 1–4pt scale)	1.67 (0.53)
Perceived accuracy, non-targeted false claims (W3, 1–4pt scale)	1.68 (0.55)
Perceived accuracy, non-targeted false claims (W4, 1–4pt scale)	1.72 (0.53)
Perceived accuracy, non-targeted true claims (W1, 1–4pt scale)	3.49 (0.50)
Perceived accuracy, non-targeted true claims (W2, 1–4pt scale)	3.53 (0.49)
Perceived accuracy, non-targeted true claims (W3, 1–4pt scale)	3.52 (0.53)
Perceived accuracy, non-targeted true claims (W4, 1–4pt scale)	3.40 (0.53)
University education	44%
Age 18–34	16%
Age 35–44	20%
Age 45–54	14%
Age 45–54	23%
Age 65+	27%
Male	48%
Married	53%
Frequent church attendance	27%
Northeast	16%
Midwest	21%
South	39%
West	23%
Democratic	54%
Republican	33%
Independent	13%
Conservatism (1–7pt scale)	3.88 (1.99)
Lives in high-incidence area	11%
CRT score (0–3pt scale)	0.99 (1.02)
Political knowledge (0–5pt scale)	4.00 (1.17)
Non-white	32%
Political interest (1–5pt scale)	3.69 (1.14)

Conspiracy Predispositions (0–4pt scale)	2.21 (1.09)
Health trust (0–3pt scale)	2.18 (0.64)
Media trust (0–3pt scale)	1.80 (0.80)
Trump approval (0–3pt scale)	1.21 (1.30)
Trump feeling thermometer (0–100pt scale)	40.19 (41.74)

Table B5: Descriptive statistics: Great Britain sample (all conditions; weighted)

Variable	Mean (SD) or %
Perceived accuracy, targeted false claims (W1, 1–4pt scale)	1.67 (0.52)
Perceived accuracy, targeted false claims (W2, 1–4pt scale)	1.51 (0.53)
Perceived accuracy, targeted false claims (W3, 1–4pt scale)	1.50 (0.52)
Perceived accuracy, non-targeted false claims (W1, 1–4pt scale)	1.68 (0.44)
Perceived accuracy, non-targeted false claims (W2, 1–4pt scale)	1.59 (0.44)
Perceived accuracy, non-targeted false claims (W3, 1–4pt scale)	1.60 (0.44)
Perceived accuracy, non-targeted true claims (W1, 1–4pt scale)	3.50 (0.44)
Perceived accuracy, non-targeted true claims (W2, 1–4pt scale)	3.44 (0.43)
Perceived accuracy, non-targeted true claims (W3, 1–4pt scale)	3.44 (0.43)
University education	30%
Age 18–34	19%
Age 35–44	17%
Age 45–54	20%
Age 45–54	18%
Age 65+	25%
Male	50%
Married	45%
Frequent church attendance	8%
North East	7%
North West	14%
Yorkshire and the Humber	7%
East Midlands	8%
West Midlands	9%
East of England	9%
London	12%
South East	11%
South West	9%

Wales	5%
Scotland	8%
Left party ID (Labour, SNP, Greens, Lib Dems, Plaid Cymru)	44%
Right party ID (Conservative, Brexit Party)	37%
Other/no party	19%
Conservatism (0–10pt scale)	5.09 (1.91)
Lives in high-incidence Area	27%
Political knowledge (0–5pt scale)	3.00 (1.36)
Non-white	6%
Political interest (1–5pt scale)	2.82 (1.06)
Conspiracy predispositions (0–4pt scale)	1.71 (0.91)
Health trust (0–3pt scale)	2.18 (0.06)
Media trust (0–3pt scale)	1.29 (0.64)
Johnson approval (0–3pt scale)	1.17 (0.96)
Johnson feeling thermometer (0–100pt scale)	40.20 (31.08)

Table B6: Descriptive statistics: Canada 1 sample (all conditions; unweighted)

Variable	Mean (SD) or %
Perceived accuracy, targeted false claims (1–4pt scale)	1.79 (0.74)
Perceived accuracy, non-targeted false claims (1–4pt scale)	1.83 (0.63)
Perceived accuracy, non-targeted true claims (1–4pt scale)	3.18 (0.52)
University education	26%
Age 18–34	27%
Age 35–44	17%
Age 45–54	17%
Age 45–54	18%
Age 65+	21%
Male	48%
Married	52%
Frequent church attendance	21%
Atlantic	7%
Ontario	40%
Quebec	21%
West	32%
Left party ID (Liberals, NDP, Bloc Quebecois, Greens)	52%

Right party ID (Conservatives)	27%
Other/no party	21%
Conservatism (0–10pt scale)	5.44 (2.20)
Political knowledge (0–5pt scale)	1.95 (1.32)
Non-white	21%
Political interest (1–5pt scale)	3.13 (1.13)
Conspiracy predispositions (0–4pt scale)	1.96 (0.99)
Health trust (0–3pt scale)	2.22 (0.69)
Media trust (0–3pt scale)	1.65 (0.67)
Trudeau approval (0–3pt scale)	1.54 (0.97)
Trudeau feeling thermometer (0–100pt scale)	50.46 (31.28)

Table B7: Descriptive statistics: Canada 2 sample (all conditions; unweighted)

Variable	Mean (SD) or %
Perceived accuracy, targeted false claims (1–4pt scale)	1.81 (0.73)
Perceived accuracy, non-targeted false claims (1–4pt scale)	1.85 (0.62)
Perceived accuracy, non-targeted true claims (1–4pt scale)	3.15 (0.52)
University education	26%
Age 18–34	27%
Age 35–44	16%
Age 45–54	17%
Age 45–54	18%
Age 65+	21%
Male	49%
Married	52%
Frequent church attendance	23%
Atlantic	7%
Ontario	39%
Quebec	24%
West	30%
Left party ID (Liberals, NDP, Bloc Quebecois, Greens)	55%
Right party ID (Conservatives)	26%
Other/no party	19%
Conservatism (0–10pt scale)	5.56 (2.23)
Political knowledge (0–5pt scale)	1.94 (1.34)

Non-white	22%
Political interest (1–5pt scale)	3.18 (1.12)
Conspiracy predispositions (0–4pt scale)	1.93 (1.00)
Health trust (0–3pt scale)	2.15 (0.69)
Media trust (0–3pt scale)	1.63 (0.66)
Trudeau approval (0–3pt scale)	1.44 (0.97)
Trudeau feeling thermometer (0–100pt scale)	47.97 (31.74)

Online Appendix C: Additional results for targeted claims

Table C1: Effect of fact-checks on perceived accuracy of targeted false claims in US sample

	W2 targeted false		W3 targeted false		W4 targeted false	
W2 fact-check	−0.193*** (0.026)	−0.227*** (0.017)	0.012 (0.041)	−0.023 (0.024)	0.063 (0.041)	0.034 (0.025)
W3 fact-check			−0.149*** (0.040)	−0.168*** (0.024)	0.079 (0.042)	0.067** (0.025)
W2 FC × W3 FC			−0.033 (0.055)	−0.033 (0.034)	−0.104 (0.059)	−0.121*** (0.035)
Party ID (three-point)				0.061 (0.037)		0.131*** (0.039)
Ideology (seven-point)		0.023*** (0.006)		0.025*** (0.008)		0.043*** (0.009)
Cognitive Reflection Test						−0.033*** (0.008)
Health trust		−0.092*** (0.022)		−0.130*** (0.025)		−0.102*** (0.023)
Media trust		−0.032 (0.017)		−0.038* (0.018)		−0.065*** (0.019)
Lagged DV		0.626*** (0.023)		0.615*** (0.023)		0.608*** (0.025)
Constant	1.633*** (0.020)	0.782*** (0.075)	1.629*** (0.030)	0.869*** (0.087)	1.661*** (0.029)	0.830*** (0.079)
N	2,408	2,397	2,400	2,366	2,408	2,372
R ²	0.022	0.608	0.015	0.623	0.002	0.646

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table C2: Effect of fact-checks on perceived accuracy of targeted false claims in Great Britain sample

	W2 targeted false		W3 targeted false	
W2 fact-check	−0.268*** (0.018)	−0.248*** (0.014)	−0.046 (0.025)	−0.023 (0.019)
W3 fact-check			−0.243*** (0.025)	−0.234*** (0.020)
W2 FC × W3 FC			−0.004 (0.034)	−0.012 (0.027)
Ideology (seven-point)		0.018*** (0.004)		0.019*** (0.004)
Knowledge		−0.046*** (0.006)		−0.039*** (0.006)
Health trust		−0.075*** (0.015)		−0.120*** (0.015)
Lagged DV		0.540*** (0.019)		0.478*** (0.018)
Constant	1.599*** (0.013)	0.941*** (0.059)	1.600*** (0.018)	1.106*** (0.059)
N	3,171	3,147	3,165	3,140
R ²	0.067	0.453	0.063	0.424

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table C3: Effect of fact-checks on perceived accuracy of targeted false claims in Canada 1 sample

	Coefficient (SE)	
Fact-check treatment	−0.225*** (0.041)	−0.162*** (0.037)
University		−0.146** (0.044)
Age 55–64		−0.189*** (0.048)
Age 65+		−0.232*** (0.045)
Male		0.121* (0.039)
Frequent church		0.267*** (0.051)
West		−0.093* (0.039)
Right party ID		−0.140** (0.044)
Ideology (seven-point)		0.095*** (0.011)
Knowledge		−0.090*** (0.016)
Non-white		0.269*** (0.052)
Political interest		0.090*** (0.019)
Health trust		−0.279*** (0.038)
Media trust		−0.018 (0.027)
Constant	1.937*** (0.028)	1.961*** (0.119)
N	1,376	1,147
R ²	0.022	0.389

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table C4: Effect of fact-checks on perceived accuracy of targeted false claims in Canada 2 sample

	Coefficient (SE)	
Fact-check treatment	−0.140*** (0.040)	−0.126*** (0.038)
Age 45–54		−0.245*** (0.057)
Age 55–64		−0.183*** (0.058)
Age 65+		−0.216* (0.049)
Male		0.087* (0.039)
Frequent church		0.258*** (0.050)
Left PID		0.072 (0.059)
Right PID		−0.077 (0.066)
Ideology (seven-point)		0.098*** (0.010)
Knowledge		−0.077*** (0.016)
Non-white		0.147* (0.051)
Political interest		0.047* (0.021)
Health trust		−0.210*** (0.035)
Constant	1.901*** (0.027)	1.775*** (0.123)
N	1,362	1,144
R ²	0.009	0.313

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table C5: Effect of fact-checks on perceived accuracy of targeted false claims in Wave 2 of US sample

	Chinese bioweapon	Bill Gates	Antibiotics	Hydroxychloroquine
W2 fact-check	−0.243*** (0.027)	−0.106*** (0.027)	−0.254*** (0.026)	−0.291*** (0.025)
Lives in high-incidence area			0.148*** (0.033)	
Party ID (three-point)	0.040 (0.053)			
Ideology (seven-point)	0.051*** (0.012)		0.034*** (0.007)	0.041*** (0.009)
Cognitive Reflection Test			−0.029* (0.012)	
Knowledge			−0.079*** (0.015)	
Health trust	−0.114*** (0.034)	−0.147*** (0.035)		−0.163*** (0.032)
Media trust	−0.078*** (0.025)	−0.076*** (0.026)		−0.054* (0.024)
Lagged DV	0.597*** (0.019)	0.492*** (0.026)	0.328*** (0.021)	0.472*** (0.023)
Constant	0.923*** (0.107)	1.230*** (0.090)	1.200*** (0.077)	1.187*** (0.100)
N	2,378	2,402	2,327	2,403
R ²	0.581	0.355	0.252	0.471

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table C6: Effect of fact-checks on perceived accuracy of targeted false claims in Wave 2 of US sample (no covariates)

	Chinese bioweapon	Bill Gates	Antibiotics	Hydroxychloroquine
W2 fact-check	−0.195*** (0.041)	−0.095*** (0.034)	−0.244*** (0.030)	−0.234*** (0.034)
Constant	1.861*** (0.031)	1.487*** (0.025)	1.549*** (0.023)	1.633*** (0.026)
N	2,409	2,411	2,412	2,411
R ²	0.009	0.003	0.027	0.019

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table C7: Effect of fact-checks on perceived accuracy of targeted false claims in Wave 3 of US sample

	Chinese bioweapon	Bill Gates	Antibiotics	Hydroxychloroquine
W2 fact-check	0.010 (0.038)	0.027 (0.040)	-0.075 (0.039)	-0.044 (0.038)
W3 fact-check	-0.170*** (0.039)	-0.069 (0.038)	-0.173*** (0.038)	-0.231*** (0.038)
W2 FC $\times$ W3 FC	-0.052 (0.055)	-0.056 (0.054)	-0.013 (0.053)	-0.032 (0.053)
Party ID (three-point)	0.139* (0.059)			0.213*** (0.053)
Ideology (seven-point)	0.030* (0.012)	0.038*** (0.009)	0.035*** (0.008)	0.055*** (0.012)
Cognitive Reflection Test			-0.047*** (0.012)	
Knowledge	-0.027 (0.016)	-0.099*** (0.015)	-0.074*** (0.015)	
Health trust	-0.205*** (0.037)	-0.118*** (0.036)	-0.102*** (0.029)	-0.185*** (0.036)
Media trust	-0.063* (0.029)	-0.038 (0.027)		-0.073** (0.026)
Lagged DV	0.552*** (0.022)	0.441*** (0.027)	0.302*** (0.023)	0.469*** (0.026)
Constant	1.281*** (0.134)	1.389*** (0.134)	1.497*** (0.117)	1.231*** (0.111)
N	2,295	2,317	2,321	2,380
R ²	0.566	0.371	0.237	0.525

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table C8: Effect of fact-checks on perceived accuracy of targeted false claims in Wave 3 of US sample (no covariates)

	Chinese bioweapon	Bill Gates	Antibiotics	Hydroxychloroquine
W2 fact-check	0.063 (0.060)	0.064 (0.050)	-0.086 (0.044)	-0.004 (0.057)
W3 fact-check	-0.121* (0.059)	-0.049 (0.048)	-0.192*** (0.045)	-0.238*** (0.054)
W2 FC $\times$ W3 FC	-0.068 (0.082)	-0.092 (0.067)	0.034 (0.060)	0.008 (0.075)
Constant	1.790*** (0.043)	1.451*** (0.036)	1.554*** (0.033)	1.731*** (0.041)
N	2,406	2,409	2,411	2,410
R ²	0.006	0.004	0.016	0.016

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01, *p<0.05.

Table C9: Effect of fact-checks on perceived accuracy of targeted false claims in Wave 4 of US sample

	Chinese bioweapon	Bill Gates	Antibiotics	Hydroxychloroquine
W2 fact-check	0.027 (0.040)	0.090* (0.039)	0.027 (0.042)	−0.019 (0.039)
W3 fact-check	0.064 (0.041)	0.113*** (0.040)	0.093* (0.043)	0.013 (0.039)
W2 FC × W3 FC	−0.054 (0.056)	−0.195*** (0.056)	−0.114 (0.061)	−0.102 (0.055)
Party ID (three-point)	0.310*** (0.059)	0.131* (0.055)		0.203*** (0.057)
Ideology (seven-point)	0.065*** (0.013)	0.028* (0.012)	0.046*** (0.008)	0.086*** (0.012)
Cognitive Reflection Test	−0.041*** (0.013)		−0.062*** (0.015)	
Knowledge	0.001 (0.016)	−0.102*** (0.016)	−0.058*** (0.016)	
Health trust	−0.180*** (0.036)	−0.200*** (0.037)		−0.151*** (0.038)
Media trust	−0.110*** (0.027)	−0.051 (0.029)		−0.100*** (0.030)
Lagged DV	0.538*** (0.022)	0.461*** (0.027)	0.347*** (0.024)	0.467*** (0.026)
Constant	1.151*** (0.132)	1.587*** (0.132)	1.108*** (0.086)	1.119*** (0.110)
N	2,300	2,297	2,326	2,380
R ²	0.616	0.410	0.198	0.521

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table C10: Effect of fact-checks on perceived accuracy of targeted false claims in Wave 4 of US sample (no covariates)

	Chinese bioweapon	Bill Gates	Antibiotics	Hydroxychloroquine
W2 fact-check	0.087 (0.061)	0.134** (0.050)	0.011 (0.046)	0.020 (0.057)
W3 fact-check	0.100 (0.062)	0.151*** (0.052)	0.072 (0.047)	−0.002 (0.057)
W2 FC × W3 FC	−0.056 (0.088)	−0.245*** (0.073)	−0.058 (0.067)	−0.056 (0.080)
Constant	1.870*** (0.043)	1.459*** (0.034)	1.554*** (0.033)	1.762*** (0.041)
N	2,412	2,409	2,411	2,411
R ²	0.002	0.005	0.001	0.0005

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table C11: Effect of fact-checks on perceived accuracy of targeted false claims in Wave 2 of Great Britain sample

	Chinese bioweapon	Bill Gates	Antibiotics	Hydroxychloroquine
W2 fact-check	−0.301*** (0.024)	−0.037 (0.020)	−0.235*** (0.021)	−0.446*** (0.023)
Ideology (seven-point)		0.022*** (0.006)	0.007 (0.006)	0.028*** (0.006)
Health trust	−0.156*** (0.026)	−0.100*** (0.023)	−0.085*** (0.022)	
Media trust		−0.037*** (0.014)		
Lagged DV	0.541*** (0.016)	0.374*** (0.024)	0.347*** (0.021)	0.375*** (0.019)
Constant	0.636*** (0.065)	0.361*** (0.067)	0.464*** (0.063)	0.372*** (0.034)
N	3,167	3,170	3,175	3,176
R ²	0.407	0.201	0.180	0.254

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table C12: Effect of fact-checks on perceived accuracy of targeted false claims in Wave 2 of Great Britain sample (no covariates)

	Chinese bioweapon	Bill Gates	Antibiotics	Hydroxychloroquine
W2 fact-check	−0.323*** (0.030)	−0.049* (0.023)	−0.233*** (0.023)	−0.471*** (0.025)
Constant	0.829*** (0.024)	0.330*** (0.017)	0.476*** (0.018)	0.769*** (0.020)
N	3,179	3,183	3,187	3,186
R ²	0.034	0.001	0.031	0.101

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table C13: Effect of fact-checks on perceived accuracy of targeted false claims in Wave 3 of Great Britain sample

	Chinese bioweapon	Bill Gates	Antibiotics	Hydroxychloroquine
W2 fact-check	−0.056 (0.034)	0.048 (0.027)	−0.047 (0.034)	−0.074* (0.036)
W3 fact-check	−0.221*** (0.035)	0.016 (0.027)	−0.295*** (0.031)	−0.444*** (0.034)
W2 FC × W3 FC	0.027 (0.048)	−0.085* (0.038)	0.034 (0.043)	0.001 (0.046)
University				−0.101*** (0.025)
Ideology (seven-point)	0.036*** (0.007)			0.024*** (0.006)
Knowledge		−0.064*** (0.009)		−0.060*** (0.010)
Health trust	−0.190*** (0.025)	−0.158*** (0.021)		−0.133*** (0.024)
Lagged DV	0.504*** (0.016)	0.299*** (0.023)	0.350*** (0.020)	0.258*** (0.019)
Constant	0.551*** (0.071)	0.697*** (0.064)	0.363*** (0.025)	1.009*** (0.077)
N	3,171	3,171	3,172	3,167
R ²	0.393	0.200	0.186	0.224

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table C14: Effect of fact-checks on perceived accuracy of targeted false claims in Wave 3 of Great Britain sample (no covariates)

	Chinese bioweapon	Bill Gates	Antibiotics	Hydroxychloroquine
W2 fact-check	−0.060 (0.045)	0.038 (0.031)	−0.061 (0.037)	−0.105** (0.039)
W3 fact-check	−0.213*** (0.044)	0.022 (0.031)	−0.322*** (0.033)	−0.458*** (0.037)
W2 FC × W3 FC	−0.012 (0.061)	−0.087* (0.043)	0.068 (0.046)	0.019 (0.050)
Constant	0.811*** (0.033)	0.253*** (0.021)	0.544*** (0.027)	0.795*** (0.028)
N	3,183	3,184	3,181	3,180
R ²	0.017	0.002	0.048	0.095

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01, *p<0.05.

Table C15: Effect of fact-checks on perceived accuracy of targeted false claims in Canada 1 sample

	Chinese bioweapon	Bill Gates	Antibiotics	Hydroxychloroquine
Fact-check treatment	−0.256*** (0.053)	0.001 (0.049)	−0.189*** (0.048)	−0.244*** (0.048)
Age 55–64		−0.214** (0.066)	−0.262*** (0.060)	−0.183** (0.066)
Age 65+	−0.200*** (0.061)	−0.201* (0.063)	−0.250*** (0.062)	−0.224** (0.059)
Male			0.246*** (0.051)	
Frequent church	0.338*** (0.073)	0.254*** (0.066)	0.294*** (0.065)	0.264*** (0.066)
Right PID		−0.219*** (0.058)		
West			−0.151*** (0.051)	
Quebec				0.194*** (0.065)
Ideology (seven-point)	0.112*** (0.014)	0.108*** (0.013)	0.060*** (0.013)	0.100*** (0.013)
Knowledge		−0.104*** (0.020)	−0.112*** (0.019)	−0.073*** (0.018)
Non-white	0.218* (0.071)	0.190*** (0.067)	0.390*** (0.069)	0.348*** (0.068)
Political Interest		0.117*** (0.026)		
Health trust	−0.422*** (0.045)	−0.345*** (0.044)	−0.086* (0.041)	−0.295*** (0.046)
Constant	2.340*** (0.148)	1.834*** (0.144)	1.838*** (0.131)	2.076*** (0.143)
N	1,151	1,150	1,151	1,150
R ²	0.256	0.265	0.221	0.274

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01, *p<0.05.

Table C16: Effect of fact-checks on perceived accuracy of targeted false claims in Canada 1 sample (no covariates)

	Chinese bioweapon	Bill Gates	Antibiotics	Hydroxychloroquine
Fact-check treatment	−0.288*** (0.054)	−0.065 (0.051)	−0.238*** (0.049)	−0.301*** (0.050)
Constant	2.096*** (0.039)	1.813*** (0.035)	1.895*** (0.034)	1.940*** (0.035)
N	1,380	1,379	1,380	1,380
R ²	0.020	0.001	0.017	0.026

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01, *p<0.05.

Table C17: Effect of fact-checks on perceived accuracy of targeted false claims in Canada 2 sample

	Chinese bioweapon	Bill Gates	Antibiotics	Hydroxychloroquine
Fact-check treatment	−0.156*** (0.054)	−0.010 (0.051)	−0.155*** (0.051)	−0.171*** (0.051)
Age 45–54		−0.227*** (0.066)		
Age 55–64		−0.235** (0.064)		
Age 65+			−0.228*** (0.057)	−0.128* (0.061)
Frequent church	0.270*** (0.069)	0.347*** (0.068)	0.304*** (0.068)	0.341*** (0.070)
Right PID		−0.222*** (0.064)		
Quebec				0.154 (0.086)
Lives in High Incidence				0.135 (0.098)
Ideology (seven-point)	0.112*** (0.014)	0.121*** (0.014)	0.072*** (0.012)	0.093*** (0.013)
Knowledge	−0.062 (0.021)	−0.055*** (0.019)	−0.105*** (0.020)	−0.046* (0.020)
Non-white		0.193*** (0.065)	0.247*** (0.068)	0.257** (0.069)
Health trust	−0.357*** (0.048)	−0.277*** (0.046)		−0.162*** (0.046)
Constant	2.232*** (0.155)	1.857*** (0.146)	1.617*** (0.093)	1.662*** (0.146)
N	1,152	1,152	1,153	1,126
R ²	0.203	0.230	0.156	0.184

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table C18: Effect of fact-checks on perceived accuracy of targeted false claims in Canada 2 sample (no covariates)

	Chinese bioweapon	Bill Gates	Antibiotics	Hydroxychloroquine
Fact-check treatment	−0.167*** (0.054)	−0.029 (0.052)	−0.148*** (0.049)	−0.212*** (0.049)
Constant	2.013*** (0.038)	1.801*** (0.036)	1.876*** (0.034)	1.915*** (0.034)
N	1,374	1,376	1,374	1,375
R ²	0.007	0.0002	0.006	0.013

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01, *p<0.05.

Online Appendix D: Additional results for non-targeted claims

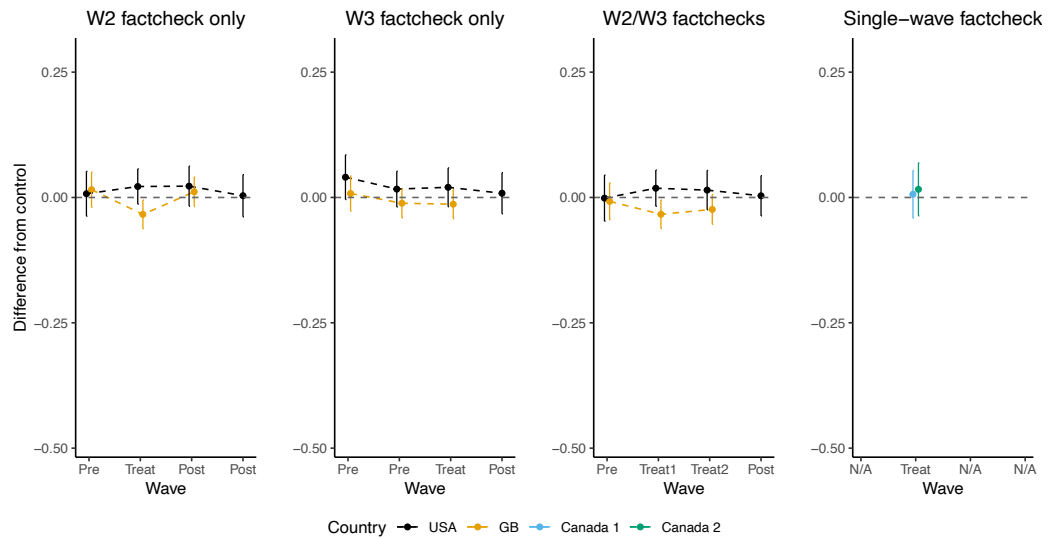


Figure D1: Covariate-adjusted average treatment effects for perceived accuracy of true claims across conditions (four-point scale), samples, and waves.

Table D1: Effect of fact-checks on perceived accuracy of true claims in US sample

	W2 true		W3 true		W4 true	
W2 fact-check	−0.019 (0.019)	0.012 (0.013)	0.012 (0.029)	0.023 (0.020)	−0.009 (0.029)	−0.001 (0.021)
W3 fact-check			0.052 (0.028)	0.021 (0.020)	0.036 (0.029)	0.00001 (0.021)
W2 FC × W3 FC			−0.067 (0.039)	−0.029 (0.028)	−0.043 (0.040)	0.001 (0.028)
Party ID (three-point)						−0.058* (0.029)
Ideology (seven-point)		−0.024*** (0.004)		−0.028*** (0.004)		−0.030*** (0.006)
Knowledge						0.024*** (0.007)
Health trust		0.089*** (0.017)		0.089*** (0.020)		0.134*** (0.022)
Media trust				0.028* (0.014)		0.020 (0.014)
Lagged DV		0.639*** (0.029)		0.606*** (0.030)		0.507*** (0.027)
Constant	3.597*** (0.014)	1.205*** (0.104)	3.581*** (0.022)	1.282*** (0.116)	3.470*** (0.022)	1.382*** (0.096)
N	2,404	2,392	2,402	2,389	2,406	2,290
R ²	0.0004	0.542	0.002	0.516	0.002	0.506

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table D2: Effect of fact-checks on perceived accuracy of true claims in Great Britain sample

	W2 true		W3 true	
W2 fact-check	−0.023 (0.014)	−0.028** (0.011)	0.016 (0.019)	0.011 (0.015)
W3 fact-check			−0.018 (0.019)	−0.013 (0.015)
W2 fact-check × W3 fact-check			−0.020 (0.027)	−0.022 (0.021)
Health trust		0.121*** (0.015)		0.121*** (0.014)
Lagged DV		0.564*** (0.022)		0.513*** (0.022)
Constant	3.494*** (0.010)	1.235*** (0.076)	3.484*** (0.014)	1.403*** (0.075)
N	3,150	3,121	3,153	3,121
R ²	0.001	0.447	0.002	0.408

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table D3: Effect of fact-checks on perceived accuracy of true claims in Canada 1 sample

	Coefficient (SE)	
Fact-check treatment	0.003 (0.029)	0.006 (0.024)
Age 55–64		0.075** (0.027)
Male		–0.171*** (0.026)
Frequent church		–0.085*** (0.031)
Quebec		–0.172*** (0.031)
Knowledge		0.053*** (0.009)
Health trust		0.330*** (0.022)
Constant	3.170*** (0.020)	24.66*** (0.057)
N	1,367	1,236
R ²	0.00001	0.298

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01, *p<0.05.

Table D4: Effect of fact-checks on perceived accuracy of true claims in Canada 2 sample

	Coefficient (SE)	
Fact-check treatment	0.037 (0.029)	0.027 (0.027)
Age 45—54		0.168*** (0.038)
Age 55–64		0.191*** (0.038)
Age 65+		0.129*** (0.036)
Male		–0.161*** (0.027)
Frequent church		–0.107* (0.039)
Quebec		–0.184*** (0.044)
Lives in High Incidence		–0.057 (0.050)
Ideology (seven-point)		–0.027*** (0.008)
Knowledge		0.048*** (0.011)
Nonwhite		–0.054 (0.041)
Political Interest		0.043*** (0.015)
Health trust		0.242*** (0.028)
Media trust		0.019 (0.022)
Constant	3.123*** (0.020)	2.567*** (0.093)
N	1,358	1,121
R ²	0.001	0.295

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table D5: Effect of fact-checks on perceived accuracy of true claims in wave 2 of US sample

	Lose taste	Handwashing	Avoid crowds	Asymptomatic	Fever	Dry cough	Masks	No cure
W2 fact-check	0.010 (0.025)	-0.0004 (0.020)	0.0002 (0.021)	-0.010 (0.021)	0.007 (0.024)	0.059* (0.028)	-0.018 (0.025)	0.041 (0.032)
Party ID (three-point)							-0.146*** (0.046)	
Ideology (seven-point)	-0.019** (0.007)			-0.037** (0.006)		-0.027*** (0.008)	-0.033*** (0.010)	-0.045*** (0.009)
Knowledge	0.072*** (0.013)							
Health trust	0.090*** (0.026)		0.225*** (0.026)	0.143*** (0.025)		0.097*** (0.028)	0.267*** (0.035)	0.169*** (0.035)
Media trust							0.106*** (0.024)	
Lagged DV	0.464*** (0.027)	0.452*** (0.030)	0.450*** (0.031)	0.465*** (0.034)	0.426*** (0.028)	0.481*** (0.023)	0.393*** (0.022)	0.362*** (0.023)
Constant	1.520*** (0.127)	2.058*** (0.119)	1.546*** (0.110)	1.806*** (0.138)	2.073*** (0.110)	1.636*** (0.112)	1.522*** (0.098)	2.019*** (0.127)
N	2,321	2,410	2,406	2,406	2,411	2,406	2,380	2,400
R ²	0.311	0.213	0.350	0.287	0.162	0.274	0.460	0.223

OLS regression with robust standard errors in parentheses; *** p<0.005, ** p<0.01; * p<0.05.

Table D6: Effect of fact-checks on perceived accuracy of true claims in wave 2 of US sample (no covariates)

	Lose taste	Handwashing	Avoid crowds	Asymptomatic	Fever	Dry cough	Masks	No cure
W2 fact-check	-0.046 (0.029)	-0.016 (0.022)	-0.024 (0.026)	-0.027 (0.024)	-0.013 (0.026)	0.018 (0.032)	-0.063 (0.034)	0.033 (0.036)
Constant	3.615*** (0.020)	3.749*** (0.016)	3.714*** (0.018)	3.747*** (0.017)	3.655*** (0.018)	3.418*** (0.023)	3.419*** (0.024)	3.447*** (0.026)
N	2,410	2,410	2,412	2,412	2,411	2,412	2,412	2,408
R ²	0.001	0.0002	0.0004	0.001	0.0001	0.0001	0.001	0.0003

OLS regression with robust standard errors in parentheses; *** p<0.005, ** p<0.01; * p<0.05.

Table D7: Effect of fact-checks on perceived accuracy of true claims in wave 3 of US sample

	Lose taste	Handwashing	Avoid crowds	Asymptomatic	Fever	Dry cough	Masks	No cure
W2 fact-check	0.010 (0.033)	0.058* (0.029)	0.031 (0.032)	0.003 (0.029)	0.040 (0.033)	0.094* (0.041)	-0.012 (0.037)	-0.042 (0.047)
W3 fact-check	0.028 (0.032)	0.013 (0.029)	0.002 (0.033)	0.004 (0.029)	0.071* (0.031)	0.072 (0.042)	-0.023 (0.036)	0.052 (0.047)
W2 fact-check $\times$ W3 fact-check	-0.042 (0.045)	-0.022 (0.040)	-0.039 (0.047)	-0.017 (0.042)	-0.093* (0.045)	-0.112 (0.057)	0.006 (0.052)	0.052 (0.066)
Party ID (three-point)							-0.124* (0.052)	
Ideology (seven-point)			-0.032*** (0.007)	-0.035*** (0.006)		-0.030*** (0.008)	-0.060*** (0.012)	-0.051*** (0.010)
Knowledge						0.057*** (0.014)		0.081*** (0.017)
Health trust	0.146*** (0.021)	0.159*** (0.020)	0.203*** (0.030)	0.168*** (0.026)		0.092*** (0.028)	0.276*** (0.037)	0.146*** (0.043)
Media trust							0.087*** (0.028)	0.081** (0.031)
Lagged DV	0.368*** (0.024)	0.404*** (0.030)	0.402*** (0.034)	0.475*** (0.036)	0.399*** (0.032)	0.424*** (0.024)	0.366*** (0.023)	0.357*** (0.024)
Constant	2.024*** (0.097)	1.842*** (0.119)	1.868*** (0.139)	1.696*** (0.147)	2.183*** (0.127)	1.622*** (0.133)	1.757*** (0.109)	1.586*** (0.144)
N	2,406	2,406	2,404	2,403	2,412	2,321	2,377	2,321
R ²	0.244	0.239	0.295	0.304	0.158	0.241	0.445	0.254

OLS regression with robust standard errors in parentheses; *** p<0.005, ** p<0.01; * p<0.05.

Table D8: Effect of fact-checks on perceived accuracy of true claims in wave 3 of US sample (no covariates)

	Lose taste	Handwashing	Avoid crowds	Asymptomatic	Fever	Dry cough	Masks	No cure
W2 fact-check	-0.025 (0.037)	0.058 (0.034)	0.032 (0.039)	-0.0004 (0.035)	0.033 (0.036)	0.058 (0.046)	-0.045 (0.049)	-0.025 (0.055)
W3 fact-check	0.041 (0.036)	0.032 (0.033)	0.029 (0.040)	0.035 (0.035)	0.079* (0.034)	0.112* (0.047)	0.010 (0.048)	0.067 (0.054)
W2 fact-check $\times$ W3 fact-check	-0.049 (0.052)	-0.064 (0.046)	-0.087 (0.055)	-0.045 (0.050)	-0.116* (0.049)	-0.139* (0.064)	-0.016 (0.069)	-0.004 (0.076)
Constant	3.672*** (0.027)	3.703*** (0.026)	3.674*** (0.029)	3.720*** (0.026)	3.658*** (0.027)	3.407*** (0.036)	3.439*** (0.035)	3.387*** (0.039)
N	2,412	2,411	2,411	2,409	2,412	2,409	2,409	2,412
R ²	0.002	0.001	0.001	0.001	0.003	0.003	0.001	0.001

OLS regression with robust standard errors in parentheses; *** p<0.005, ** p<0.01, * p<0.05.

Table D9: Effect of fact-checks on perceived accuracy of true claims in wave 4 of US sample

	Lose taste	Handwashing	Avoid crowds	Asymptomatic	Fever	Dry cough	Masks	No cure
W2 fact-check	0.025 (0.029)	0.027 (0.031)	0.010 (0.034)	-0.010 (0.031)	0.025 (0.034)	0.031 (0.045)	-0.014 (0.040)	-0.057 (0.061)
W3 fact-check	0.055 (0.028)	0.010 (0.031)	0.017 (0.033)	0.036 (0.029)	0.040 (0.035)	0.048 (0.044)	-0.044 (0.039)	-0.021 (0.061)
W2 fact-check $\times$ W3 fact-check	-0.074 (0.041)	-0.005 (0.043)	-0.003 (0.047)	-0.036 (0.043)	-0.042 (0.049)	-0.060 (0.064)	0.012 (0.055)	0.078 (0.085)
Party ID (three-point)			-0.094* (0.044)				-0.344*** (0.056)	
Ideology (seven-point)	-0.022*** (0.006)		-0.042*** (0.009)	-0.045*** (0.006)		-0.030*** (0.009)	-0.054*** (0.011)	-0.059*** (0.013)
Cognitive Reflection Test score						0.054*** (0.015)		
Knowledge	0.069*** (0.011)					0.057*** (0.017)		0.036 (0.023)
Political interest								0.026 (0.023)
Health trust	0.119*** (0.024)	0.172*** (0.028)	0.256*** (0.037)	0.224*** (0.027)		0.081** (0.031)	0.371*** (0.040)	0.061 (0.049)
Media trust		0.061*** (0.019)	0.069*** (0.023)				0.114*** (0.027)	0.008 (0.038)
Lagged DV	0.230*** (0.021)	0.378*** (0.031)	0.392*** (0.033)	0.414*** (0.033)	0.398*** (0.030)	0.365*** (0.023)	0.323*** (0.024)	0.334*** (0.026)
Constant	2.445*** (0.117)	1.742*** (0.118)	1.640*** (0.132)	1.812*** (0.138)	2.112*** (0.117)	1.585*** (0.133)	1.639*** (0.113)	1.647*** (0.165)
N	2,322	2,406	2,381	2,406	2,412	2,321	2,379	2,319
R ²	0.203	0.234	0.393	0.296	0.136	0.175	0.496	0.127

OLS regression with robust standard errors in parentheses; *** p<0.005, ** p<0.01; * p<0.05.

Table D10: Effect of fact-checks on perceived accuracy of true claims in wave 4 of US sample (no covariates)

	Lose taste	Handwashing	Avoid crowds	Asymptomatic	Fever	Dry cough	Masks	No cure
W2 fact-check	0.006 (0.032)	0.022 (0.035)	0.006 (0.043)	-0.016 (0.038)	0.018 (0.037)	0.002 (0.049)	-0.058 (0.054)	-0.036 (0.063)
W3 fact-check	0.076* (0.031)	0.027 (0.036)	0.043 (0.042)	0.065 (0.034)	0.048 (0.038)	0.088 (0.048)	-0.019 (0.054)	-0.017 (0.063)
W2 fact-check $\times$ W3 fact-check	-0.102* (0.045)	-0.045 (0.049)	-0.054 (0.060)	-0.064 (0.051)	-0.066 (0.053)	-0.077 (0.069)	-0.001 (0.076)	0.040 (0.089)
Constant	3.722*** (0.024)	3.658*** (0.026)	3.582*** (0.031)	3.694*** (0.026)	3.585*** (0.028)	3.178*** (0.035)	3.396*** (0.039)	2.933*** (0.046)
N	2,411	2,412	2,412	2,412	2,412	2,410	2,411	2,410
R ²	0.004	0.0004	0.001	0.003	0.001	0.002	0.001	0.0001

OLS regression with robust standard errors in parentheses; *** p<0.005, ** p<0.01; * p<0.05.

Table D11: Effect of fact-checks on perceived accuracy of true claims in wave 2 of Great Britain sample

	Lose taste	Hand washing	Avoid crowds	Asymptomatic	Fever	Dry cough	Dexamethasone	No cure	Masks
W2 fact-check	0.008 (0.015)	-0.010 (0.017)	-0.009 (0.017)	-0.003 (0.015)	0.038 (0.025)	0.074*** (0.022)	-0.138*** (0.026)	0.092** (0.034)	-0.038 (0.022)
Male								-0.271*** (0.035)	
Ideology (seven-point)							0.005 (0.007)	-0.028*** (0.009)	
Knowledge								0.042*** (0.015)	
Political interest								0.049* (0.019)	
Health trust	0.154*** (0.019)	0.179*** (0.022)	0.207*** (0.022)	0.158*** (0.020)		0.124*** (0.025)	0.112*** (0.025)	0.005 (0.031)	
Lagged DV	0.320*** (0.024)	0.394*** (0.025)	0.381*** (0.026)	0.466*** (0.028)	0.446*** (0.021)	0.421*** (0.016)	0.462*** (0.017)	0.351*** (0.020)	0.534*** (0.019)
Constant	1.572*** (0.074)	1.251*** (0.075)	1.277*** (0.076)	1.167*** (0.087)	1.329*** (0.059)	1.179*** (0.055)	0.752*** (0.073)	0.986*** (0.105)	1.108*** (0.046)
N	3,169	3,176	3,173	3,173	3,169	3,178	3,170	3,161	3,178
R ²	0.198	0.239	0.269	0.316	0.187	0.202	0.238	0.132	0.294

OLS regression with robust standard errors in parentheses; *** p<0.005, ** p<0.01; * p<0.05.

Table D12: Effect of fact-checks on perceived accuracy of true claims in wave 2 of Great Britain sample (no covariates)

	Lose taste	Hand washing	Avoid crowds	Asymptomatic	Fever	Dry cough	Dexamethasone	No cure	Masks
W2 fact-check	0.016 (0.017)	-0.015 (0.019)	-0.007 (0.020)	0.011 (0.018)	0.027 (0.028)	0.087*** (0.025)	-0.138*** (0.029)	0.093** (0.036)	-0.039 (0.027)
Constant	2.781*** (0.012)	2.713*** (0.014)	2.764*** (0.014)	2.798*** (0.013)	2.441*** (0.020)	2.508*** (0.019)	1.882*** (0.020)	1.789*** (0.026)	2.247*** (0.019)
N	3,178	3,184	3,180	3,183	3,178	3,184	3,181	3,176	3,184
R ²	0.0003	0.0002	0.00004	0.0001	0.0003	0.004	0.007	0.002	0.001

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table D13: Effect of fact-checks on perceived accuracy of true claims in wave 3 of Great Britain sample

	Lose taste	Hand washing	Avoid crowds	Asymptomatic	Fever	Dry cough	Dexamethasone	No cure	Masks
W2 fact-check	-0.002 (0.020)	0.024 (0.025)	0.009 (0.023)	0.012 (0.020)	0.074* (0.035)	0.009 (0.030)	-0.004 (0.036)	0.070 (0.049)	-0.057 (0.031)
W3 fact-check	-0.003 (0.021)	0.010 (0.025)	-0.008 (0.025)	0.010 (0.021)	0.016 (0.035)	0.033 (0.030)	-0.116*** (0.037)	0.116* (0.049)	-0.041 (0.030)
W2 fact-check $\times$ W3 fact-check	0.011 (0.029)	-0.015 (0.035)	-0.0005 (0.033)	-0.028 (0.029)	-0.042 (0.050)	0.016 (0.042)	-0.074 (0.053)	-0.010 (0.068)	0.055 (0.043)
Male					-0.135*** (0.026)			-0.270*** (0.034)	
Knowledge									0.007 (0.010)
Political interest									-0.004 (0.012)
Health trust	0.140*** (0.019)	0.210*** (0.023)	0.219*** (0.023)	0.173*** (0.020)	0.129*** (0.026)	0.152*** (0.023)	0.146*** (0.025)		0.271*** (0.027)
Lagged DV	0.314*** (0.024)	0.372*** (0.027)	0.298*** (0.025)	0.414*** (0.029)	0.404*** (0.022)	0.368*** (0.020)	0.426*** (0.017)	0.336*** (0.020)	0.395*** (0.018)
Constant	1.642*** (0.074)	1.218*** (0.081)	1.501*** (0.077)	1.300*** (0.091)	1.201*** (0.074)	1.295*** (0.070)	0.843*** (0.063)	1.231*** (0.059)	0.860*** (0.070)
N	3,170	3,173	3,176	3,173	3,172	3,172	3,169	3,168	3,176
R ²	0.195	0.224	0.219	0.294	0.196	0.192	0.211	0.112	0.292

OLS regression with robust standard errors in parentheses; **p<0.005, *p<0.01; *p<0.05.

Table D14: Effect of fact-checks on perceived accuracy of true claims in wave 3 of Great Britain sample (no covariates)

	Lose Taste	Hand Washing	Avoid Crowds	Asymptomatic	Fever	Dry Cough	Dexamethasone	No Cure	Masks
W2 fact-check	0.007 (0.022)	0.018 (0.028)	0.013 (0.026)	0.023 (0.024)	0.073 (0.039)	0.023 (0.033)	-0.024 (0.040)	0.082 (0.051)	-0.060 (0.035)
W3 fact-check	-0.001 (0.023)	0.006 (0.028)	-0.018 (0.028)	0.004 (0.025)	0.040 (0.039)	0.028 (0.034)	-0.138*** (0.041)	0.131* (0.052)	-0.044 (0.036)
W2 fact-check $\times$ W3 fact-check	0.009 (0.033)	-0.011 (0.040)	-0.001 (0.038)	-0.029 (0.035)	-0.071 (0.056)	0.017 (0.047)	-0.025 (0.059)	-0.042 (0.072)	0.063 (0.051)
Constant	2.801*** (0.016)	2.693*** (0.020)	2.793*** (0.019)	2.824*** (0.018)	2.420*** (0.028)	2.555*** (0.024)	1.966*** (0.028)	1.842*** (0.038)	2.339*** (0.025)
N	3,180	3,182	3,183	3,183	3,185	3,181	3,180	3,180	3,185
R ²	0.0002	0.0001	0.0005	0.0004	0.001	0.001	0.009	0.004	0.001

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table D15: Effect of fact-checks on perceived accuracy of true claims in Canada 1 sample

	Lose taste	Hand washing	Avoid crowds	Asymptomatic	Fever	Dry cough	Masks masks	No cure	Dexa- mathasone
Fact-check treatment	0.044 (0.039)	-0.032 (0.035)	-0.066 (0.042)	0.025 (0.041)	0.083* (0.039)	0.046 (0.047)	-0.056 (0.042)	0.117* (0.055)	-0.040 (0.051)
Age 35-44	-0.042 (0.061)								
Age 55-64	0.153*** (0.052)	0.191*** (0.044)							
Age 65+	0.156** (0.048)	0.190*** (0.040)	0.209*** (0.044)	0.123* (0.039)	0.073 (0.045)		0.178*** (0.048)	-0.325*** (0.072)	-0.140 (0.065)
University									0.174*** (0.061)
Male	-0.206*** (0.041)	-0.160*** (0.037)		-0.167*** (0.043)	-0.277*** (0.041)		-0.133 (0.042)	-0.217*** (0.057)	
Frequent church	-0.129* (0.050)	-0.169** (0.048)	-0.208*** (0.057)	-0.216*** (0.055)	-0.123* (0.051)		-0.155*** (0.052)		
West	0.108** (0.041)	0.056 (0.038)			0.116*** (0.041)				
Quebec		-0.152*** (0.050)		-0.277*** (0.058)		-0.307*** (0.061)		-0.232*** (0.069)	
Knowledge	-0.367*** (0.080)	-0.265*** (0.068)		-0.340*** (0.085)				-0.469*** (0.117)	
Nonwhite		-0.116* (0.051)			-0.190* (0.054)				0.162** (0.062)
Ideology (seven-point)			-0.035** (0.011)	-0.025* (0.011)			-0.016 (0.011)		0.043*** (0.012)
Health trust	0.316*** (0.034)	0.331*** (0.032)	0.481*** (0.038)	0.479*** (0.040)	0.311*** (0.033)	0.314*** (0.037)	0.578*** (0.042)	0.085* (0.035)	0.093** (0.034)
Media trust							0.088* (0.034)		1.683*** (0.115)
Constant	2.602*** (0.085)	2.750*** (0.087)	2.640*** (0.116)	2.571*** (0.119)	2.576*** (0.090)	2.421*** (0.091)	2.013*** (0.120)	2.921*** (0.098)	
N	1,374	1,376	1,151	1,151	1,373	1,378	1,155	1,378	1,154
R ²	0.165	0.220	0.230	0.274	0.166	0.083	0.316	0.051	0.054

OLS regression with robust standard errors in parentheses; ***, p<0.005, **, p<0.01; *, p<0.05.

Table D16: Effect of fact-checks on perceived accuracy of true claims in Canada 1 sample (no covariates)

	Lose taste	Hand washing	Avoid crowds	Asymptomatic	Fever	Dry cough	Masks masks	No cure	Dexa- mathasone
Fact-check treatment	0.047 (0.042)	-0.028 (0.039)	-0.049 (0.044)	0.027 (0.044)	0.071 (0.042)	0.041 (0.049)	-0.066 (0.047)	0.094 (0.056)	-0.102* (0.048)
Constant	3.395*** (0.031)	3.504*** (0.027)	3.506*** (0.030)	3.461*** (0.030)	3.344*** (0.030)	3.048*** (0.034)	3.308*** (0.032)	2.599*** (0.039)	2.361*** (0.033)
N	1,379	1,382	1,379	1,379	1,377	1,380	1,383	1,380	1,379
R ²	0.001	0.0004	0.001	0.0003	0.002	0.0005	0.001	0.002	0.003

OLS regression with robust standard errors in parentheses; *** p<0.005, ** p<0.01; * p<0.05.

Table D17: Effect of fact-checks on perceived accuracy of true claims in Canada 2 sample

	Lose taste	Hand washing	Avoid crowds	Asymptomatic	Fever	Dry cough	Masks masks	No cure	Dexa- mathasone
Fact-check treatment	-0.003 (0.042)	-0.028 (0.040)	0.042 (0.044)	0.051 (0.044)	0.018 (0.046)	0.023 (0.051)	-0.008 (0.046)	0.101 (0.057)	-0.015 (0.047)
Age 45-54	0.225*** (0.050)	0.266*** (0.061)							
Age 55-64	0.169*** (0.049)	0.255*** (0.054)	0.249*** (0.053)				0.283*** (0.054)		
Age 65+		0.274*** (0.053)	0.261*** (0.053)				0.232*** (0.055)		
Male	-0.173*** (0.044)	-0.143*** (0.042)	-0.167*** (0.046)	-0.122*** (0.045)	-0.172*** (0.047)	-0.217*** (0.053)			
Frequent church	-0.235*** (0.060)	-0.101 (0.059)	-0.212*** (0.060)	-0.245*** (0.059)					
Quebec				-0.201*** (0.054)	-0.295*** (0.058)	-0.430*** (0.067)			
Ideology (seven-point)	-0.022* (0.011)	-0.026* (0.011)	-0.024* (0.011)	-0.054*** (0.012)	-0.022 (0.012)	-0.049*** (0.013)	-0.037*** (0.011)		
Knowledge	0.070*** (0.016)	0.049** (0.017)	0.046* (0.018)	0.064*** (0.017)	0.072*** (0.017)	0.036 (0.020)			
Non-white	-0.120 (0.058)	-0.105 (0.061)			-0.254*** (0.062)	-0.175* (0.064)			
University									0.167*** (0.057)
Left party ID									0.106* (0.050)
Political interest								0.097***	-0.281*** (0.023)
Health trust	0.262*** (0.036)	0.283*** (0.036)	0.413*** (0.041)	0.341*** (0.042)	0.224*** (0.039)	0.153*** (0.051)	0.545*** (0.041)		0.044 (0.045)
Media trust						0.058 (0.041)			-0.302* (0.124)
Constant	2.943*** (0.124)	2.880*** (0.120)	2.609*** (0.128)	2.998*** (0.129)	3.024*** (0.133)	2.679*** (0.149)	2.182*** (0.129)	2.599*** (0.039)	1.766*** (0.098)
N	1,149	1,151	1,150	1,153	1,150	1,150	1,152	1,374	1,364
R ²	0.162	0.181	0.224	0.192	0.111	0.119	0.244	0.002	0.040

OLS regression with robust standard errors in parentheses; ***, p<0.005, **, p<0.01, * p<0.05.

Table D18: Effect of fact-checks on perceived accuracy of true claims in Canada 2 sample (no covariates)

	Lose Taste	Hand Washing	Avoid Crowds	Asymptomatic	Fever	Dry Cough	Masks Masks	No Cure	Dexa- Mathasone
Fact-check treatment	-0.005 (0.042)	-0.021 (0.041)	0.055 (0.046)	0.093* (0.044)	0.027 (0.044)	0.041 (0.049)	0.036 (0.047)	0.101 (0.057)	-0.008 (0.048)
Constant	3.422*** (0.030)	3.473*** (0.029)	3.420*** (0.033)	3.382*** (0.033)	3.312*** (0.030)	2.990*** (0.034)	3.220*** (0.033)	2.59*** (0.049)	2.303*** (0.033)
N	1,372	1,374	1,375	1,378	1,374	1,373	1,374	1,374	1,370
R ²	0.00001	0.0002	0.001	0.003	0.0003	0.001	0.0004	0.002	0.00002

OLS regression with robust standard errors in parentheses; *** p<0.005, ** p<0.01; * p<0.05.

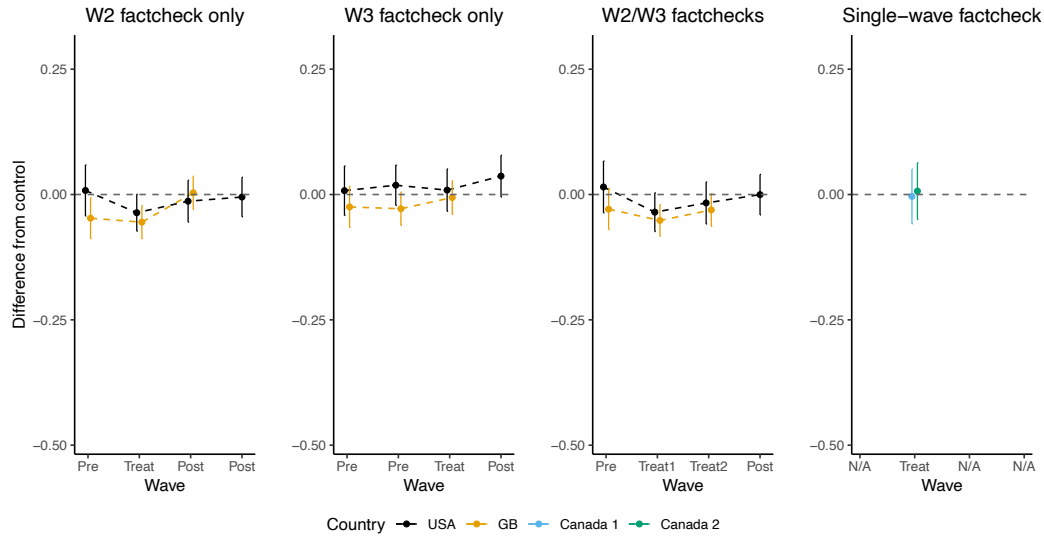


Figure D2: Covariate-adjusted average treatment effects for perceived accuracy of non-targeted false claims across conditions (4-point scale), samples, and waves.

Table D19: Effect of fact-checks on perceived accuracy of non-targeted false claims in US sample

	W2 non-targeted false		W3 non-targeted false		W4 non-targeted false	
W2 fact-check	-0.029 (0.019)	-0.045*** (0.014)	-0.005 (0.019)	-0.013 (0.021)	-0.003 (0.019)	-0.005 (0.020)
W3 fact-check				0.009 (0.022)		0.037 (0.021)
W2 × W3 FC				-0.012 (0.029)		-0.032 (0.029)
Ideology (seven-point)						0.028*** (0.004)
Lagged DV		0.657*** (0.025)		0.634*** (0.028)		0.575*** (0.027)
Constant	1.533*** (0.014)	0.530*** (0.036)	1.527*** (0.014)	0.556*** (0.042)	1.534*** (0.014)	0.531*** (0.040)
N	2,409	2,401	2,397	2,390	2,406	2,397
R ²	0.001	0.467	0.00003	0.420	0.00001	0.405

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table D20: Effect of fact-checks on perceived accuracy of non-targeted false claims in Great Britain sample

	W2 non-targeted false		W3 non-targeted false	
W2 fact-check	−0.059*** (0.015)	−0.039*** (0.012)	−0.019 (0.020)	0.003 (0.017)
W3 fact-check			−0.016 (0.021)	−0.006 (0.017)
W2 fact-check × W3 FC			−0.020 (0.029)	−0.028 (0.023)
Knowledge				−0.032*** (0.005)
Health trust				−0.084*** (0.013)
Lagged DV		0.571*** (0.023)		0.488*** (0.022)
Constant	0.457*** (0.011)	0.195*** (0.012)	0.453*** (0.015)	0.512*** (0.041)
N	3,167	3,149	3,166	3,145
R ²	0.005	0.357	0.002	0.342

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01, *p<0.05.

Table D21: Effect of fact-checks on perceived accuracy of non-targeted false claims in Canada 1 sample

	Coefficient (SE)	
Fact-check treatment	−0.053 (0.030)	−0.004 (0.028)
Age 55—64		−0.172*** (0.035)
Age 65+		−0.191*** (0.035)
Frequent church		0.196*** (0.040)
Ideology (seven-point)		0.054*** (0.007)
Knowledge		−0.069*** (0.012)
Non-white		0.309*** (0.040)
Political interest		0.063*** (0.014)
Health trust		−0.148*** (0.029)
Media trust		0.047*** (0.021)
Constant	1.520*** (0.021)	1.327*** (0.084)
N	1,376	1,147
R ²	0.002	0.319

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table D22: Effect of fact-checks on perceived accuracy of non-targeted false claims in Canada 2 sample

	Coefficient (SE)	
Fact-check treatment	−0.004 (0.030)	0.005 (0.029)
Age 45-54		−0.236*** (0.041)
Age 55-64		−0.183*** (0.043)
Age 65+		−0.240*** (0.037)
Male		0.088*** (0.029)
Frequent church		0.240*** (0.038)
Ideology (seven-point)		0.067*** (0.008)
Knowledge		−0.058*** (0.011)
Non-white		0.172*** (0.041)
Media trust		0.656*** (0.079)
Constant	1.490*** (0.020)	1.143*** (0.064)
N	1,362	1,149
R ²	0.00001	0.292

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table D23: Effect of fact-checks on perceived accuracy of specific non-targeted false claims in wave 2 of US sample

	Sneezing	Hand dryers	5G	Garlic	Vitamin C	Colloidal silver
W2 fact-check	0.031 (0.036)	-0.048 (0.027)	-0.049** (0.018)	-0.042* (0.018)	-0.096*** (0.027)	-0.060*** (0.020)
Ideology (seven-point)					0.025*** (0.008)	0.036*** (0.005)
Cognitive Reflection Test score					-0.065*** (0.012)	
Knowledge			-0.072*** (0.011)			
Health trust				-0.096*** (0.027)		
Lagged DV	0.482*** (0.020)	0.444*** (0.023)	0.506*** (0.035)	0.582*** (0.029)	0.548*** (0.020)	0.469*** (0.029)
Constant	1.153*** (0.048)	0.836*** (0.036)	0.882*** (0.070)	0.530*** (0.035)	0.971*** (0.093)	0.555*** (0.037)
N	2,411	2,411	2,327	2,411	2,401	2,408
R ²	0.217	0.207	0.363	0.383	0.378	0.306

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table D24: Effect of fact-checks on perceived accuracy of specific non-targeted false claims in wave 2 of US sample (no covariates)

	Sneezing	Hand dryers	5G	Garlic	Vitamin C	Colloidal silver
W2 fact-check	0.026 (0.041)	−0.024 (0.030)	−0.018 (0.022)	−0.021 (0.024)	−0.076* (0.034)	−0.059* (0.024)
Constant	2.189*** (0.029)	1.514*** (0.022)	1.195*** (0.016)	1.264*** (0.017)	1.720*** (0.025)	1.313*** (0.018)
N	2,412	2,412	2,412	2,411	2,410	2,412
R ²	0.0002	0.0003	0.0003	0.0003	0.002	0.003

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01, *p<0.05.

Table D25: Effect of fact-checks on perceived accuracy of specific non-targeted false claims in wave 3 of US sample

	Sneezing	Hand dryers	5G	Garlic	Vitamin C	Colloidal silver
W2 fact-check	0.122* (0.052)	−0.039 (0.039)	−0.056* (0.026)	−0.034 (0.029)	0.007 (0.040)	−0.067* (0.031)
W3 fact-check	0.115* (0.053)	−0.017 (0.039)	−0.018 (0.027)	−0.020 (0.029)	0.018 (0.043)	−0.033 (0.032)
W2 FC × W3 FC	−0.165* (0.074)	0.040 (0.055)	0.049 (0.037)	0.029 (0.040)	−0.076 (0.057)	0.046 (0.043)
Ideology (seven-point)					0.032*** (0.009)	0.031*** (0.007)
Knowledge						−0.055*** (0.013)
Health trust					−0.143*** (0.030)	−0.080*** (0.027)
Lagged DV	0.474*** (0.020)	0.384*** (0.023)	0.528*** (0.037)	0.561*** (0.031)	0.523*** (0.021)	0.387*** (0.034)
Constant	1.167*** (0.054)	0.912*** (0.041)	0.564*** (0.044)	0.565*** (0.039)	0.983*** (0.101)	1.088*** (0.117)
N	2,408	2,409	2,406	2,410	2,403	2,318
R ²	0.206	0.159	0.311	0.331	0.338	0.264

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01, *p<0.05.

Table D26: Effect of fact-checks on perceived accuracy of specific non-targeted false claims in wave 3 of US sample (no covariates)

	Sneezing	Hand dryers	5G	Garlic	Vitamin C	Colloidal silver
W2 fact-check	0.080 (0.058)	−0.011 (0.043)	−0.037 (0.032)	−0.006 (0.035)	0.029 (0.049)	−0.060 (0.035)
W3 fact-check	0.094 (0.059)	−0.011 (0.043)	−0.035 (0.033)	−0.015 (0.036)	0.042 (0.051)	−0.034 (0.037)
W2 FC × W3 FC	−0.091 (0.083)	0.025 (0.060)	0.060 (0.044)	0.012 (0.049)	−0.073 (0.070)	0.056 (0.049)
Constant	2.199*** (0.042)	1.496*** (0.031)	1.199*** (0.025)	1.270*** (0.026)	1.661*** (0.036)	1.315*** (0.028)
N	2,409	2,410	2,409	2,410	2,410	2,408
R ²	0.001	0.0001	0.001	0.0001	0.0005	0.001

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table D27: Effect of fact-checks on perceived accuracy of specific non-targeted false claims in wave 4 of US sample

	Sneezing	Hand dryers	5G	Garlic	Vitamin C	Colloidal silver
W2 fact-check	0.044 (0.051)	−0.084* (0.039)	−0.024 (0.023)	−0.014 (0.029)	0.011 (0.041)	0.023 (0.032)
W3 fact-check	0.082 (0.051)	−0.025 (0.040)	0.028 (0.026)	0.020 (0.030)	0.075 (0.042)	0.029 (0.032)
W2 FC × W3 FC	−0.097 (0.073)	0.031 (0.055)	0.001 (0.035)	−0.002 (0.043)	−0.013 (0.059)	−0.064 (0.044)
Party ID (three-point)					0.117* (0.055)	
Ideology (seven-point)					0.053*** (0.013)	0.042*** (0.007)
Knowledge						−0.063*** (0.012)
Health trust					−0.108*** (0.031)	−0.108*** (0.025)
Lagged DV	0.336*** (0.020)	0.385*** (0.023)	0.471*** (0.033)	0.544*** (0.032)	0.454*** (0.022)	0.401*** (0.030)
Constant	1.349*** (0.054)	0.963*** (0.042)	0.590*** (0.039)	0.582*** (0.041)	0.957*** (0.101)	1.131*** (0.106)
N	2,410	2,408	2,409	2,410	2,382	2,320
R ²	0.118	0.161	0.287	0.288	0.303	0.292

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table D28: Effect of fact-checks on perceived accuracy of specific non-targeted false claims in wave 4 of US sample (no covariates)

	Sneezing	Hand dryers	5G	Garlic	Vitamin C	Colloidal silver
W2 fact-check	0.015 (0.055)	−0.055 (0.043)	−0.007 (0.028)	0.014 (0.035)	0.020 (0.049)	0.022 (0.036)
W3 fact-check	0.066 (0.055)	−0.018 (0.044)	0.013 (0.030)	0.024 (0.036)	0.086 (0.050)	0.016 (0.037)
W2 FC × W3 FC	−0.044 (0.078)	0.014 (0.060)	0.017 (0.041)	−0.019 (0.051)	0.009 (0.071)	−0.038 (0.052)
Constant	2.079*** (0.040)	1.547*** (0.032)	1.155*** (0.020)	1.265*** (0.025)	1.737*** (0.035)	1.330*** (0.026)
N	2,411	2,409	2,412	2,410	2,412	2,411
R ²	0.001	0.001	0.001	0.0002	0.003	0.0002

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table D29: Effect of fact-checks on perceived accuracy of specific non-targeted false claims in wave 2 of Great Britain sample

	Sneezing	5G	Garlic	Vitamin C
W2 fact-check	0.014 (0.025)	−0.016 (0.012)	−0.052*** (0.015)	−0.122*** (0.025)
Lagged DV	0.401*** (0.018)	0.491*** (0.038)	0.512*** (0.029)	0.469*** (0.019)
Constant	0.344*** (0.020)	0.054*** (0.009)	0.117*** (0.011)	0.498*** (0.021)
N	3,175	3,180	3,179	3,171
R ²	0.184	0.269	0.282	0.195

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table D30: Effect of fact-checks on perceived accuracy of specific non-targeted false claims in wave 2 of Great Britain sample (no covariates)

	Sneezing	5G	Garlic	Vitamin C
W2 fact-check	−0.011 (0.027)	−0.037* (0.015)	−0.064*** (0.017)	−0.128*** (0.027)
Constant	0.654*** (0.019)	0.131*** (0.012)	0.235*** (0.013)	0.811*** (0.020)
N	3,183	3,185	3,186	3,178
R ²	0.00005	0.002	0.004	0.007

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01, *p<0.05.

Table D31: Effect of fact-checks on perceived accuracy of specific non-targeted false claims in wave 3 of Great Britain sample

	Sneezing	5G	Garlic	Vitamin C
W2 fact-check	0.042 (0.036)	0.018 (0.018)	−0.019 (0.020)	−0.041 (0.034)
W3 fact-check	0.083* (0.037)	0.00003 (0.018)	−0.042* (0.020)	−0.068* (0.034)
W2 FC × W3 FC	−0.092 (0.053)	−0.029 (0.023)	0.001 (0.028)	0.016 (0.047)
Knowledge			−0.036*** (0.006)	−0.052*** (0.010)
Health trust			−0.086*** (0.016)	−0.146*** (0.024)
Lagged DV	0.377*** (0.018)	0.471*** (0.036)	0.423*** (0.028)	0.407*** (0.019)
Constant	0.430*** (0.028)	0.032* (0.012)	0.422*** (0.048)	0.964*** (0.069)
N	3,173	3,177	3,171	3,174
R ²	0.153	0.280	0.279	0.200

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01, *p<0.05.

Table D32: Effect of fact-checks on perceived accuracy of specific non-targeted false claims in wave 3 of Great Britain sample (no covariates)

	Sneezing	5G	Garlic	Vitamin C
W2 fact-check	0.018 (0.039)	−0.007 (0.021)	−0.028 (0.024)	−0.062 (0.037)
W3 fact-check	0.082* (0.041)	−0.018 (0.021)	−0.050* (0.024)	−0.077* (0.038)
W2 fact-check * W3 fact-check	−0.091 (0.057)	−0.018 (0.028)	−0.004 (0.032)	0.041 (0.053)
Constant	0.724*** (0.028)	0.115*** (0.015)	0.219*** (0.018)	0.752*** (0.028)
N	3,181	3,182	3,181	3,184
R ²	0.002	0.002	0.004	0.002

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01, *p<0.05.

Table D33: Effect of fact-checks on perceived accuracy of specific non-targeted false claims in Canada 1 sample. Note: Colloidal silver was inadvertently omitted from the pre-registration, so it is included here but not in the overall index of non-targeted false claims for Canadian respondents.

	Sneezing	Hand dryers	5G	Garlic	Vitamin C	Colloidal silver
Fact-check	0.012 (0.052)	−0.048 (0.048)	0.014 (0.044)	−0.018 (0.045)	−0.083 (0.048)	−0.081 (0.044)
Age 45-54						−0.214*** (0.068)
Age 55-64			−0.220*** (0.056)	−0.233*** (0.055)	−0.255*** (0.061)	−0.207*** (0.063)
Age 65+			−0.281*** (0.052)	−0.263*** (0.053)	−0.267* (0.062)	−0.292* (0.057)
Male			0.119* (0.047)	0.127* (0.048)		
Frequent Church		0.248*** (0.067)	0.300*** (0.064)	0.288*** (0.066)	0.263*** (0.066)	0.172*** (0.057)
Ontario					0.137*** (0.048)	
Quebec		0.311*** (0.064)	0.117 (0.064)	0.163** (0.062)		0.178*** (0.058)
West			−0.126* (0.047)			
Conservatism		0.073*** (0.011)	0.067*** (0.012)	0.073*** (0.011)	0.077*** (0.012)	0.076*** (0.011)
Knowledge		−0.118*** (0.019)	−0.106*** (0.019)	−0.094*** (0.020)		−0.103*** (0.018)
Non-White		0.476*** (0.065)	0.357*** (0.066)	0.471*** (0.069)	0.343*** (0.065)	0.323*** (0.064)
Political Interest		0.081*** (0.025)	0.107*** (0.023)	0.060* (0.023)	0.059* (0.023)	0.102*** (0.024)
Health trust			−0.201*** (0.042)	−0.167*** (0.040)	−0.319*** (0.040)	−0.220*** (0.041)
Constant	2.240*** (0.037)	1.083*** (0.098)	1.372*** (0.139)	1.411*** (0.137)	1.961*** (0.141)	1.612*** (0.137)
N	1,379	1,153	1,149	1,153	1,153	1,150
R ²	0.00004	0.186	0.280	0.267	0.242	0.261

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01, *p<0.05.

Table D34: Effect of fact-checks on perceived accuracy of specific non-targeted false claims in Canada 1 sample (no covariates). Note: Colloidal silver inadvertently omitted from pre-registration, so it is included here but not in the overall index.

	Sneezing	Hand dryers	5G	Garlic	Vitamin C	Colloidal silver
Fact-check Treatment	0.012 (0.052)	−0.082 (0.048)	−0.032 (0.046)	−0.074 (0.046)	−0.150*** (0.049)	−0.124** (0.045)
Constant	2.240*** (0.037)	1.745*** (0.034)	1.523*** (0.032)	1.625*** (0.034)	1.994*** (0.034)	1.696*** (0.033)
N	1,379	1,380	1,378	1,382	1,381	1,379
R ²	0.00004	0.002	0.0003	0.002	0.007	0.005

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table D35: Effect of fact-checks on perceived accuracy of specific non-targeted false claims in Canada 2 sample. Note: Colloidal silver inadvertently omitted from pre-registration, so it is included here but not in the overall index.

	Sneezing	Hand dryers	5G	Garlic	Vitamin C	Colloidal silver
Fact-check	0.051 (0.057)	−0.011 (0.049)	0.025 (0.044)	0.018 (0.046)	−0.045 (0.050)	0.011 (0.045)
Age 45-54		−0.183** (0.064)	−0.327*** (0.061)		−0.288*** (0.068)	−0.281*** (0.066)
Age 55-64			−0.290*** (0.063)			−0.280*** (0.059)
Age 65+	−0.194* (0.072)	−0.111 (0.060)	−0.314*** (0.058)	−0.168*** (0.049)	−0.249*** (0.064)	−0.297*** (0.063)
Male		0.159*** (0.049)				0.121*** (0.045)
Frequent Church	0.197** (0.070)	0.281*** (0.064)	0.312*** (0.062)	0.364*** (0.065)	0.383*** (0.067)	0.352*** (0.062)
Quebec	−0.138* (0.070)	0.216*** (0.064)				
Left PID		0.226*** (0.053)	0.261*** (0.048)			0.204** (0.050)
Ontario					0.158* (0.052)	
Conservatism	0.033* (0.014)	0.087*** (0.012)	0.100*** (0.012)	0.082*** (0.011)	0.085*** (0.013)	0.080*** (0.012)
Knowledge		−0.091*** (0.018)	−0.070*** (0.017)	−0.069** (0.018)	−0.088*** (0.019)	−0.082*** (0.017)
Non-White	0.108 (0.071)	0.269*** (0.067)	0.154* (0.063)	0.420*** (0.065)	0.233** (0.066)	0.214** (0.065)
Health trust			−0.113*** (0.042)		−0.086 (0.044)	−0.110** (0.042)
Media trust	0.118*** (0.035)					
Constant	1.791*** (0.118)	1.090*** (0.098)	1.235*** (0.138)	1.140*** (0.082)	1.771*** (0.141)	1.435*** (0.139)
N	1,156	1,155	1,155	1,159	1,150	1,153
R ²	0.051	0.167	0.246	0.211	0.209	0.238

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01, *p<0.05.

Table D36: Effect of fact-checks on perceived accuracy of specific non-targeted false claims in Canada 2 sample (no covariates). Note: Colloidal silver inadvertently omitted from pre-registration, so it is included here but not in the overall index.

	Sneezing	Hand dryers	5G	Garlic	Vitamin C	Colloidal silver
Fact-check	0.021 (0.053)	−0.001 (0.048)	0.024 (0.045)	0.006 (0.046)	−0.063 (0.051)	0.004 (0.045)
Constant	2.212*** (0.036)	1.695*** (0.033)	1.477*** (0.030)	1.586*** (0.031)	1.971*** (0.035)	1.617*** (0.031)
N	1,370	1,373	1,379	1,379	1,373	1,377
R ²	0.0001	0.00000	0.0002	0.00001	0.001	0.00000

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table D37: Effect of fact-checks on perceived accuracy of lab leak claim in US sample

	W2 lab leak		W3 lab leak		W4 lab leak	
W2 fact-check	−0.244*** (0.048)	−0.309*** (0.030)	−0.008 (0.070)	−0.082 (0.044)	0.061 (0.067)	−0.002 (0.045)
W3 fact-check			−0.210*** (0.069)	−0.251*** (0.045)	0.069 (0.068)	0.038 (0.044)
W2 FC × W3 FC			−0.053 (0.097)	−0.037 (0.064)	−0.064 (0.096)	−0.059 (0.062)
Party ID (three-point)		0.175*** (0.059)		0.175** (0.065)		0.329*** (0.060)
Ideology (seven-point)		0.051*** (0.013)		0.055*** (0.014)		0.068*** (0.014)
Health trust		−0.208*** (0.033)		−0.216*** (0.038)		−0.148*** (0.037)
Media trust				−0.074* (0.030)		−0.089*** (0.029)
Lagged DV		0.615*** (0.020)		0.563*** (0.021)		0.523*** (0.021)
Constant	2.302*** (0.035)	1.029*** (0.107)	2.244*** (0.051)	1.258*** (0.121)	2.302*** (0.048)	1.175*** (0.118)
N	2,411	2,381	2,408	2,377	2,410	2,379
R ²	0.011	0.603	0.010	0.576	0.001	0.589

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

Table D38: Effect of fact-checks on perceived accuracy of lab leak claim in Great Britain sample

	W2 lab leak		W3 lab leak	
W2 fact-check	−0.461*** (0.036)	−0.435*** (0.028)	−0.029 (0.051)	−0.020 (0.039)
W3 fact-check			−0.287*** (0.051)	−0.295*** (0.040)
W2 FC × W3 FC			−0.075 (0.071)	−0.040 (0.056)
Ideology (eleven-point)		0.033*** (0.008)		0.052*** (0.008)
Health trust		−0.136*** (0.027)		−0.250*** (0.028)
Lagged DV		0.591*** (0.015)		0.530*** (0.016)
Constant	1.344*** (0.026)	0.572*** (0.076)	1.313*** (0.037)	0.789*** (0.082)
N	3,181	3,172	3,185	3,176
R ²	0.050	0.439	0.027	0.402

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01, *p<0.05.

Table D39: Effect of fact-checks on perceived accuracy of lab leak claim in Canada
1 sample

	Coefficient (SE)	
Fact-check	−0.286*** (0.057)	−0.237*** (0.057)
University		−0.286*** (0.066)
Age 65+		−0.132 (0.072)
Frequent church		0.186* (0.080)
Nonwhite		0.184* (0.072)
Ideology (eleven-point)		0.103*** (0.014)
Political Interest		0.099*** (0.030)
Health trust		−0.26*** (0.058)
Media Trust		−0.144*** (0.046)
Constant	2.360*** (0.040)	2.516*** (0.166)
N	1,381	1,152
R ²	0.018	0.218

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

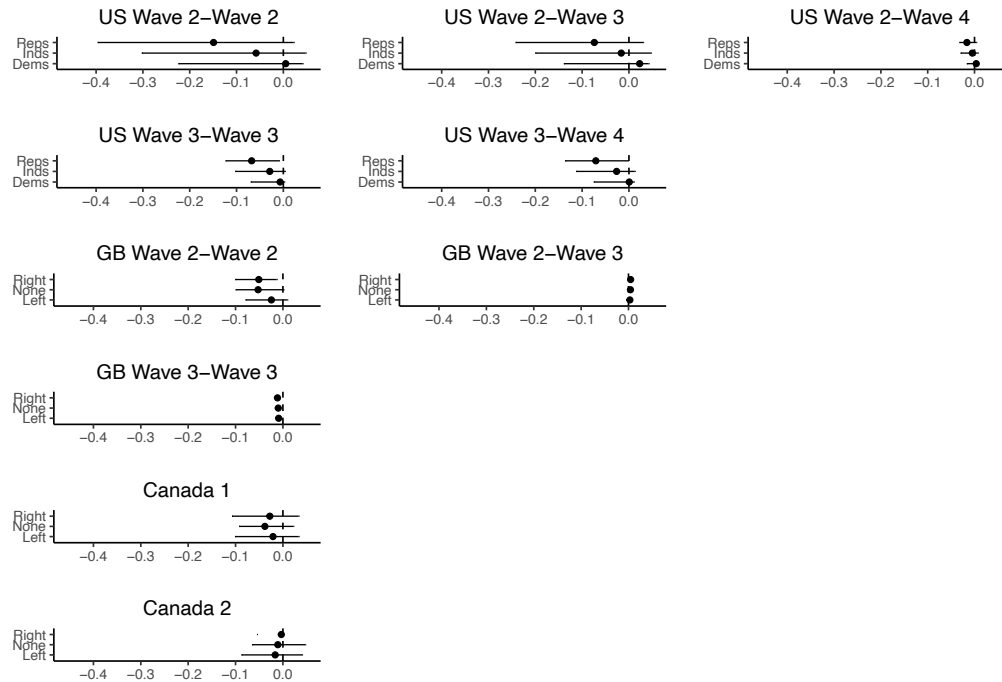
Table D40: Effect of fact-checks on perceived accuracy of lab leak claim in Canada
2 sample

	Coefficient (SE)	
Fact-check	−0.211*** (0.057)	−0.187*** (0.059)
Ideology (eleven-point)		0.123*** (0.014)
Health trust		−0.307*** (0.046)
Constant	2.383*** (0.039)	2.354*** (0.153)
N	1,373	1,153
R ²	0.010	0.136

OLS regression with robust standard errors in parentheses; ***p<0.005, **p<0.01; *p<0.05.

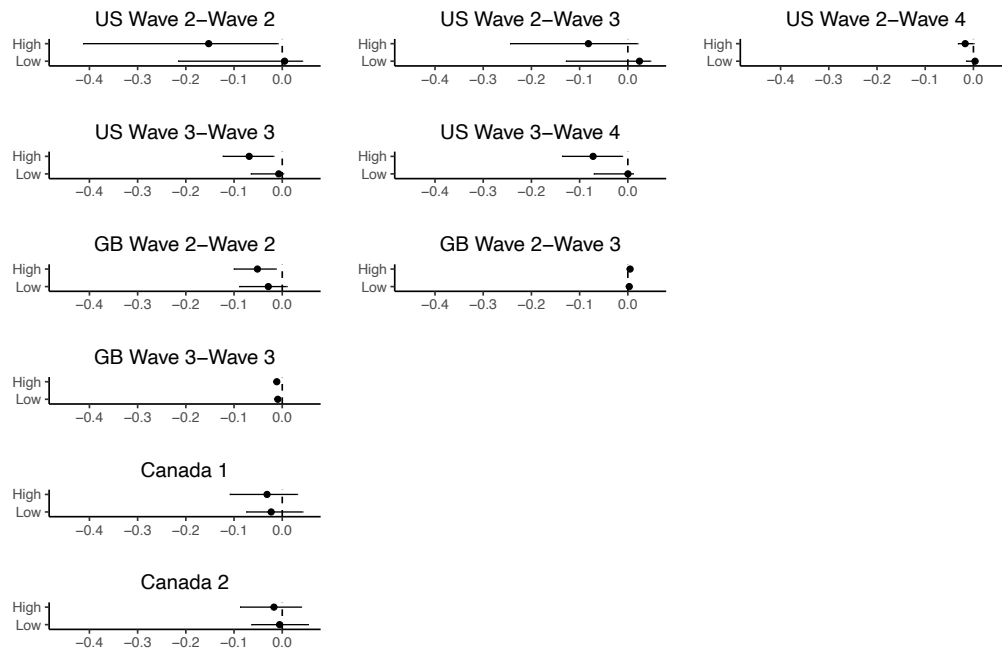
Online Appendix E: Heterogeneous treatment effects

Figure E1: Effects of fact-check exposure on the perceived accuracy of false claims about COVID-19 by party



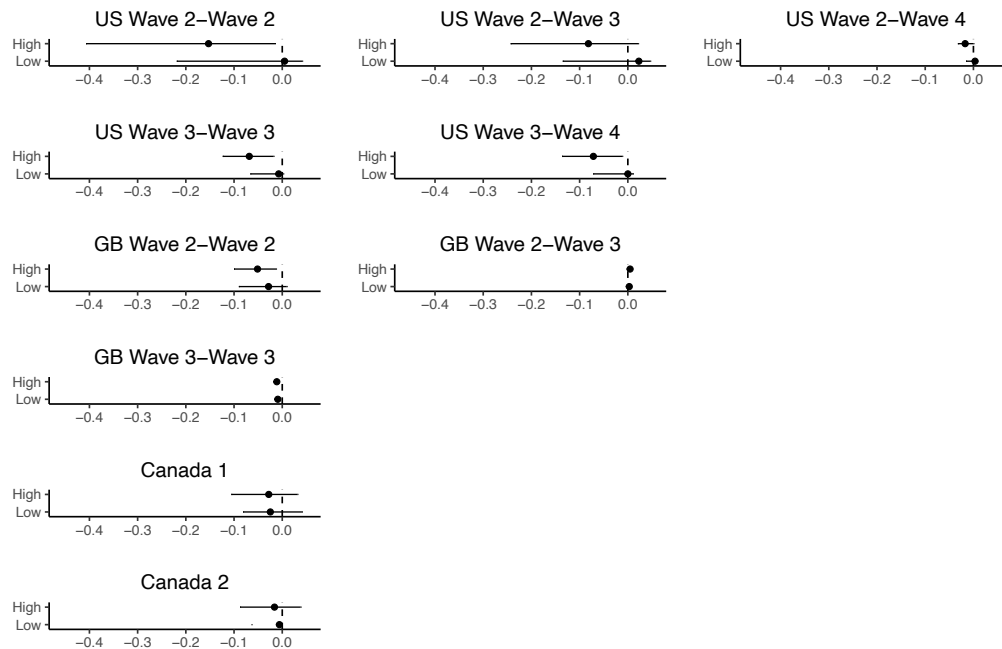
Covariate-adjusted average treatment effects of fact-check exposure on the perceived accuracy of false claims or conspiracy theories targeted by the fact-checks across conditions, country samples, and waves. Outcome measure is a four-point scale of perceived accuracy. See the Methods section and the Online Appendix for details.

Figure E2: Effects of fact-check exposure on the perceived accuracy of false claims about COVID-19 by leader approval



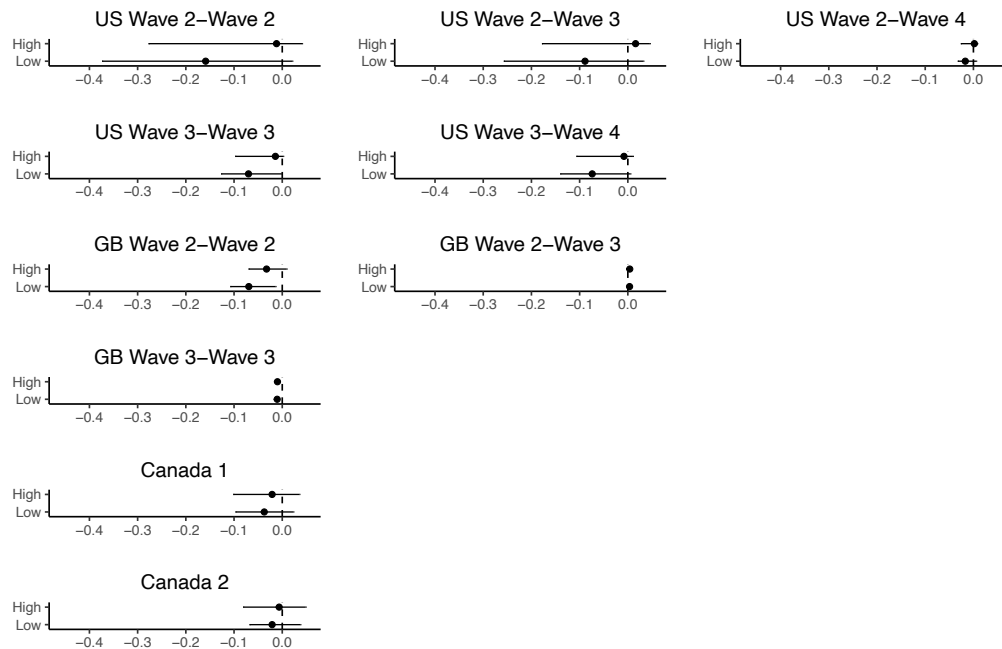
Covariate-adjusted average treatment effects of fact-check exposure on the perceived accuracy of false claims or conspiracy theories targeted by the fact-checks across conditions, country samples, and waves. Outcome measure is a four-point scale of perceived accuracy. See the Methods section and the Online Appendix for details.

Figure E3: Effects of fact-check exposure on the perceived accuracy of false claims about COVID-19 by national leader feeling thermometer rating



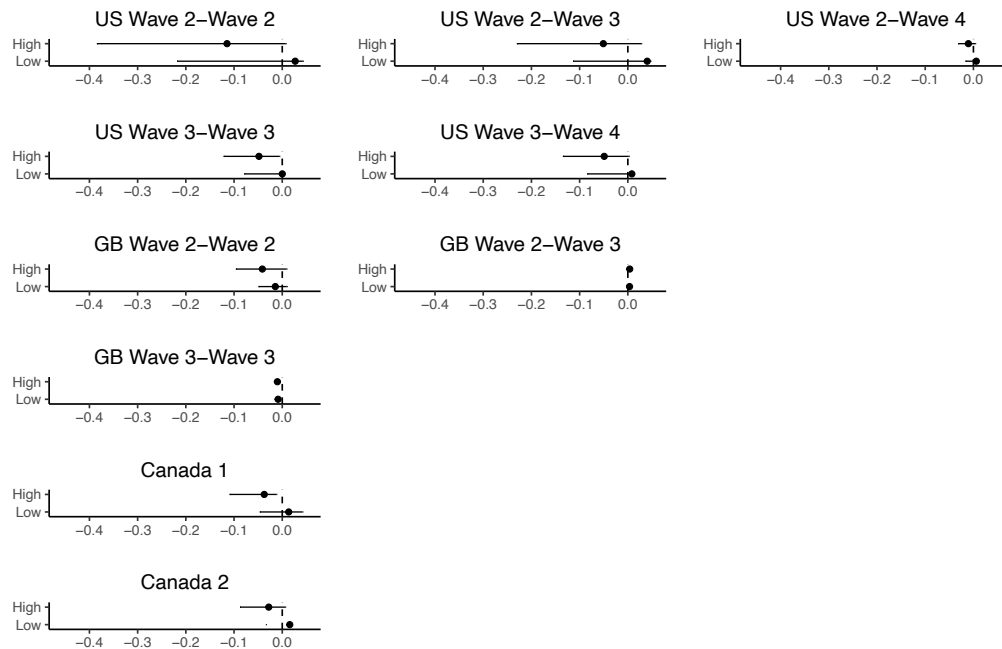
Covariate-adjusted average treatment effects of fact-check exposure on the perceived accuracy of false claims or conspiracy theories targeted by the fact-checks across conditions, country samples, and waves. Outcome measure is a four-point scale of perceived accuracy. See the Methods section and the Online Appendix for details.

Figure E4: Effects of fact-check exposure on the perceived accuracy of false claims about COVID-19 by trust in health institutions



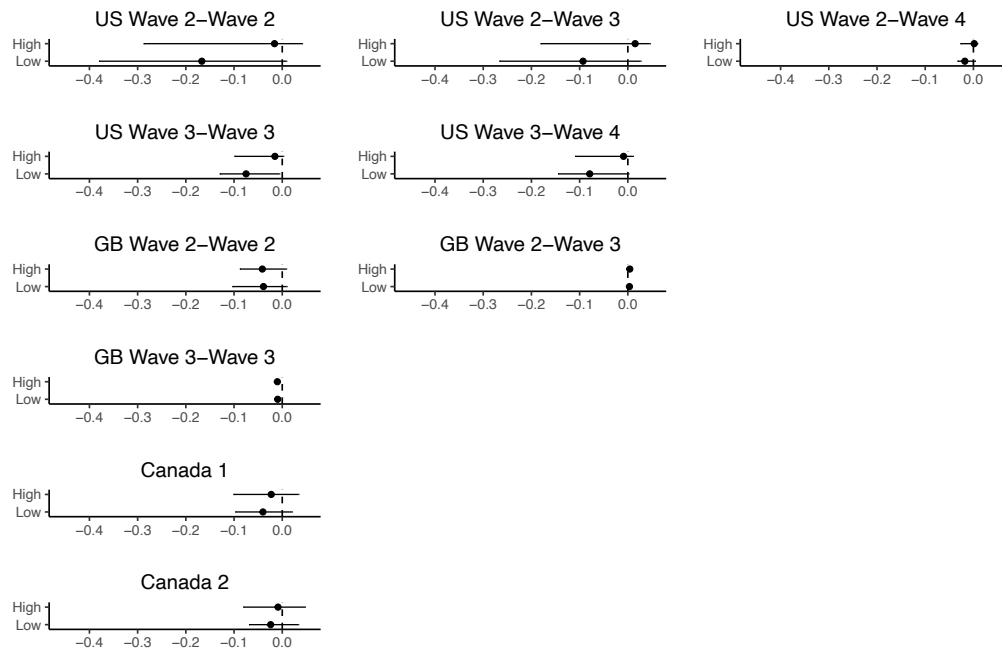
Covariate-adjusted average treatment effects of fact-check exposure on the perceived accuracy of false claims or conspiracy theories targeted by the fact-checks across conditions, country samples, and waves. Outcome measure is a four-point scale of perceived accuracy. See the Methods section and the Online Appendix for details.

Figure E5: Effects of fact-check exposure on the perceived accuracy of false claims about COVID-19 by conspiracy predispositions



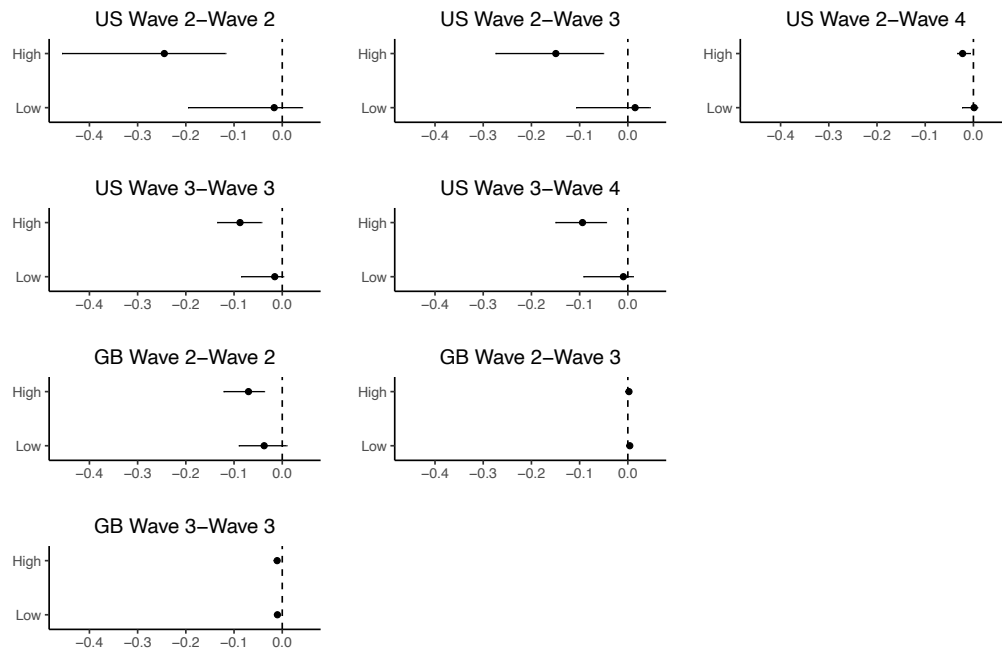
Covariate-adjusted average treatment effects of fact-check exposure on the perceived accuracy of false claims or conspiracy theories targeted by the fact-checks across conditions, country samples, and waves. Outcome measure is a four-point scale of perceived accuracy. See the Methods section and the Online Appendix for details.

Figure E6: Effects of fact-check exposure on the perceived accuracy of false claims about COVID-19 by trust in the media



Covariate-adjusted average treatment effects of fact-check exposure on the perceived accuracy of false claims or conspiracy theories targeted by the fact-checks across conditions, country samples, and waves. Outcome measure is a four-point scale of perceived accuracy. See the Methods section and the Online Appendix for details.

Figure E7: Effects of fact-check exposure on the perceived accuracy of false claims about COVID-19 by prior misperceptions



Covariate-adjusted average treatment effects of fact-check exposure on the perceived accuracy of false claims or conspiracy theories targeted by the fact-checks across conditions, country samples, and waves. Outcome measure is a four-point scale of perceived accuracy. See the Methods section and the Online Appendix for details.