

Populism and belief in fake news: Experimental evidence from four countries

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Abstract

Recent electoral successes by populist parties have coincided with growing concern about the prevalence and consequences of misinformation. However, existing research has failed to consider the potential causal effect of populism on citizens' factual beliefs. Integrating research on populist attitudes and the psychology of misinformation, we generate predictions about how activating latent populism affects belief in false claims and responsiveness to corrective information. We test these predictions with survey experiments covering 30 fake news stories across four countries (Spain, Portugal, India, United States). Descriptive results indicate that populist sentiment is consistently associated with greater belief in fake news. Experimentally activating latent populism causes strong emotional reactions; however, contrary to our preregistered hypotheses, activation does not increase belief in false claims or reduce the effectiveness of corrections. Collectively, our results suggest that strongly populist citizens are vulnerable to misinformation, but attempts to activate latent populism (e.g., through campaigns) are unlikely to make misperceptions more prevalent or resistant to correction.

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Misinformation can distort democratic debate and complicate policy efforts to address pressing crises from climate change to infectious disease. In many countries, these challenges are exacerbated by elites who make false or unsupported claims to attract voters (Nyhan 2020, 227–229). For instance, populist leaders often make conspiratorial claims about powerful elites allegedly working in secret to advance their own interests at the expense of the general public (Mudde and Rovira Kaltwasser 2017; Müller 2016). At the same time, correlational evidence suggests that citizens with populist attitudes are more likely to hold conspiratorial worldviews (Castanho Silva, Vegetti, and Littvay 2017) and endorse certain misperceptions (Eberl, Huber, and Greussing 2021; Stecula and Pickup 2021; van Kessel, Sajuria, and Hauwaert 2021).

While populist rhetoric and misinformation often co-occur, existing research has failed to consider the potential causal effects of populism on citizens' understanding of political facts. Integrating research on populist attitudes and the psychology of misperceptions, we generate predictions about how activating latent populism affects belief in fake news and responsiveness to corrections. Specifically, we argue that activating latent populism will increase belief in populist fake news and reduce the effectiveness of corrections — effects that we expect to be driven by respondents with high levels of latent populism. We test these predictions with preregistered survey experiments covering 30 fake news stories in four countries (Spain, Portugal, India, and the United States). Our experimental design combines pre-treatment measures of latent populism with randomized treatments that activate populism (via dispositional blame attribution) and provide corrective information to fake news stories. This approach provides the first causal estimates of the effect of individual-level populism on misinformation belief and persistence.

Before turning to the experimental results, however, we document a robust positive relationship between latent populism and belief in fake news across topics and countries. We then report three key experimental results, which run counter to our preregistered hypotheses. First, we find that activating latent populism does not increase belief in fake news. Second, turning to the effects of corrective information, we find that respondents are inconsistently responsive to fact checks, with pooled estimates in the predicted direction in two countries (although small in

magnitude) and null in two countries. Finally, we find no evidence that activating latent populism reduces the effectiveness of fact checks. In exploratory analyses, we find that activating latent populism leads to strong emotional reactions, increasing negative emotions and decreasing positive emotions. However, these strong emotional responses do not in turn increase belief in fake news or reduce the effectiveness of corrections.

These findings offer important insights for ongoing research into populism and misinformation. Perhaps most important, they call into question the prevailing view of populism as a latent disposition that requires activation by an external stimulus, such as an emotional or rhetorical cue (e.g., Hawkins, Kaltwasser, and Andreadis 2020). Rather, our data suggest that, in most countries, populism operates as a stable predisposition — more akin to partisan identification — which exerts influence on beliefs even in the absence of activation. At the same time, our exploratory analyses of emotions offer suggestive evidence that these dynamics may vary across otherwise similar countries where populism is more or less salient (e.g., Spain and Portugal).

Additionally, our results offer an important addendum to recent studies finding that fact checks consistently decrease belief in fake news (e.g., Wood and Porter 2019; Porter and Wood 2021; Porter, Velez, and Wood 2023). Examining 30 fake news claims on diverse topics across four countries, we find that corrections significantly decrease belief in one-third of cases (with mostly null effects in other cases). We also observe significant variation across countries: weak, moderate, and strongly populist respondents in one country (Portugal) consistently accept corrections, but effects are inconsistent in other countries (Spain, India, United States). These results suggest that the effectiveness of corrections is more contingent on country- and claim-specific factors than recent research suggests.

In the remainder of this article, we present a theoretical framework to understand the relationship between individual-level populism and belief in fake news, derive hypotheses, describe the experimental design and data, and present the descriptive and experimental results. We conclude with a discussion of implications for future research and normative issues surrounding factual knowledge in an era of rising elite populism.

Populism, corrections, and belief in fake news

Canonical theories of public opinion describe beliefs as resulting from the interaction of information and *predispositions*, understood as “stable individual-level traits that regulate the acceptance or nonacceptance of the political communications [a] person receives” (Zaller 1992, 22). Historically, much public opinion research has focused on fundamental predispositions, such as partisan identification (Campbell et al. 1960) and ideology (Converse 1964). Researchers have since turned their attention to a wider set of predispositions, including social identities (Klar 2013), values (Jacoby 2014), moral foundations (Clifford 2014), and, more recently, populism.

The study of populist predispositions — or populist attitudes — draws from the ideational approach, which conceives of populism as consisting of three distinct sets of beliefs: anti-elitism, people-centrism, and a moralized Manichean worldview (cf. Mudde and Rovira Kaltwasser 2017). Together, these three sets of beliefs inform the ideas that individuals hold about the political world and its actors (Hawkins, 2009; Hawkins, Riding, and Mudde, 2012; Akkerman, Mudde, and Zaslove, 2014).¹ Conceptualized this way, populist attitudes have been found to be common across countries (Van Hauwaert, Schimpf, and Azevedo 2018) and may be growing in recent years (Meyer and Wagner 2020). We follow the ideational approach and define populism as an individual-level predisposition that leads people to view politics and society as a perpetual and antagonistic struggle between an evil, corrupt elite and the virtuous “common” people.

Existing literature argues that populist attitudes do not operate at the same level as consciously held opinions towards candidates or issues. Rather, populist attitudes are a latent disposition that require activation by contextual, linguistic, or emotional cues (Hawkins and Kaltwasser 2018; Hawkins, Kaltwasser, and Andreadis 2020). Once activated, populist attitudes can create a “powerful motivation for action” (Hawkins, 2018: 62) and, in turn, shape beliefs and behavior. For instance, experimental research indicates that exposure to populist frames in news articles can increase feelings of resentment and boost support for populist parties (Bos, van der Brug, and de Vreese 2013). Similarly, Hameleers, Bos, and de Vreese (2018) demonstrate that populist

¹We use the terms *populist attitudes* and *populist predispositions* interchangeably.

frames blaming elites for national problems reduce support for incumbents and increase support for populist challengers. Bos et al. (2020) conduct experiments in 15 European countries and find that populist frames increase perceptions of economic insecurity and stimulate soft forms of participation, such as interest in discussing policy problems or signing a petition. Conversely, absent electoral activation on the supply side, populist attitudes may have little or no electoral effect (Hawkins, Kaltwasser, and Andreadis 2020; Medeiros 2021; Santana-Pereira and Cancela 2020).

While many past studies examine the effect of populist frames, other work demonstrates that individual-level populism can be activated by manipulating the manner in which people attribute blame for political or social problems (e.g., Busby, Gubler, and Hawkins 2019; Hameleers, Bos, and De Vreese 2017; Rico, Guinjoan, and Anduiza 2017). When considering a policy problem, voters can attribute blame *situationally* or *dispositionally*. Situational blame attribution involves focusing on the events or circumstances that gave rise to a problem (e.g., blaming unemployment on global economic trends). By contrast, dispositional blame attribution entails placing responsibility in the hands of groups or individuals who are morally or ethically flawed (e.g., blaming unemployment on corrupt actions by policymakers). This dispositional approach closely resembles populist rhetoric, which often blames problems on the actions of corrupt or immoral elites who pursue their own interests at the expense of the general public.

Past research indicates that these two forms of blame attribution — dispositional and situational — have strikingly different effects. In particular, dispositional blame attribution has been shown to stimulate populist ways of thinking and increase support for populist candidates. Busby, Gubler, and Hawkins (2019) show that dispositional blame attribution increases expressions of populist sentiment (as measured in open-ended survey responses) and support for populist candidates. By contrast, situational blame attribution has no such effects. Respondents who are encouraged to attribute blame situationally behave similarly to pure control respondents who received no blame attribution treatment at all (Busby, Gubler, and Hawkins 2019, 624–627).²

²In the experiments reported below, we take the same approach, comparing respondents who had their latent populism activated via a dispositional blame attribution task to respondents who did not.

While dispositional blame attribution has been shown to stimulate populist thinking and increase support for populist candidates, the extent to which this process affects broader attitudes — such as factual beliefs — remains an open question. We argue that activating individual-level populism should increase belief in fake news stories, especially stories that are framed in explicitly populist terms. Past research has demonstrated that individual-level populism is correlated with conspiratorial worldviews (Castanho Silva and Wratil 2023) and certain misperceptions (van Kessel, Sajuria, and Hauwaert 2021). Individuals with differing levels of latent populism, then, should start with different baseline (i.e., non-activated) propensities to believe populist fake news. The question then becomes whether these groups are similarly or differentially responsive to stimuli that activate latent populism.

Here, existing literature offers conflicting insights. Some past research finds that the effects of populism activation are limited to individuals with low to moderate levels of latent populism. For instance, Busby, Gubler, and Hawkins (2019, 619) argue, based on framing theory, that the effects of dispositional blame attribution should be limited to respondents with low levels of latent populism. They contend that individuals with high levels of latent populism are likely to adopt populist ways of thinking even in the absence of activation; by contrast, individuals with low levels of latent populism are not inclined to view the world in populism terms, but can be convinced to do so when presented with relevant frames or cues.

However, other research on populism — and the broader literature on opinion formation — suggest a contradictory possibility. For instance, Zaller's (1992) model suggests that opinions are affected by considerations that are received and accepted, where acceptance is based in part on consistency with pre-existing considerations (cf., Lodge and Taber 2013; Kunda 1990). Focusing on latent populism and belief in fake news, this logic suggests that a stimulus intended to activate latent populism (e.g., dispositional blame attribution) would not resonate with individuals who are not inclined to see the world through a populist lens — and therefore not affect related beliefs. Instead, activation should be most consequential for respondents with high levels of latent populism because such stimuli are consistent with their predispositions. And indeed, some

existing research suggests that populist frames have larger effects among respondents with high levels of political cynicism (Bos, van der Brug, and de Vreese 2013) or extreme ideological positions (Hameleers et al. 2021). We expect to observe a similar dynamic when it comes to latent populism. Specifically, we expect the effects of populism activation on factual beliefs to be largest for respondents with high levels of latent populism. We therefore predict that:

H1: Among people with populist predispositions, activating populism will increase belief in populist fake news.³

The same line of reasoning can help generate predictions about how people will respond to corrective information. In recent years, a large literature has developed examining the psychology of misinformation and best practices for correcting misperceptions (for overviews, see Ecker et al. 2022; Jerit and Zhao 2020).⁴ In an influential early article, Nyhan and Reifler (2010) found that corrections sometimes fail to reduce misperceptions — and may backfire among strongly directionally motivated respondents on some issues. More recent research, however, suggests that the “backfire effect” is exceedingly rare; to the contrary, corrections are effective at reducing misperceptions among most audiences on most issues (Wood and Porter 2019; Guess and Coppock 2020; Haglin 2017; Nyhan 2021). Several experimental studies have demonstrated the effectiveness of corrections across policy issues and countries. For instance, Wood and Porter (2019) conduct fact-checking experiments on 52 issues and find no instances of backfire; instead, “when presented with factual information...the average subject accedes to the correction and distances himself from the inaccurate claim” (160). Similarly, Porter and Wood (2021) conduct 28 experiments in four countries covering politics, economics, crime, and Covid-19, concluding that fact checks consistently reduce misperceptions (also see Porter, Velez, and Wood 2023). These findings are consistent with recent meta-analyses, which have concluded that fact checks

³This hypothesis was numbered H2 in our preregistrations.

⁴Consistent with this literature, we use the term *misperceptions* to refer to “beliefs about factual matters are not supported by clear evidence and expert opinion — a definition that includes both false and unsubstantiated beliefs about the world” (Nyhan and Reifler 2010, 305). This definition encompasses belief in the fake news claims examined below. We use the terms *corrective information*, *corrections*, and *fact checks* interchangeably to refer to any message that seeks to reduce misperceptions by providing relevant facts or evidence.

are effective at reducing misperceptions (Chan et al. 2017; Walter et al. 2020). In the experiments below, we examine the effectiveness of corrections in the context of fake news, which often has broadly populist and anti-institutional overtones and may therefore be more resistant to correction. Nonetheless, given existing evidence, we expect that:

H2: Fact checks will reduce belief in fake news claims.⁵

While we expect corrections to be generally effective, past research makes clear that the magnitude of correction effects can vary across contexts and across individuals with relevant predispositions. We focus in particular on how individuals with varying levels of latent populism respond to corrections about populist fake news. In this context, we theorize that the magnitude of correction effects will vary across individuals with different levels of latent populism. Specifically, we expect individuals with high levels of latent populism who undergo activation should be strongly motivated to believe populist fake news and, correspondingly, motivated to resist corrective information. While previous research has not examined the potential for populism to serve as a directional motivation in this fashion, other work suggests that the effectiveness of corrections can vary across individuals with different prior beliefs (Nyhan, Reifler, and Ubel 2013) and ideologies (Walter et al. 2020). More broadly, research on social identities has found that priming message-relevant identities can affect the persuasiveness of subsequent information. For instance, Druckman, Peterson, and Slothuus (2013) find that priming partisan identity (via a prompt that accentuates elite partisan polarization) alters the manner in which people process political arguments. Specifically, they find that when partisan polarization is accentuated, people tend to follow arguments from their preferred party regardless of the direction or strength of those arguments (also see Slothuus and de Vreese 2010).

In the context of fake news, we expect activated populism to serve as an especially strong directional motivation because it is so proximate to the message (i.e., misinformation) and counter-message (i.e., correction) at hand. Specifically, we expect that:

⁵This hypothesis was numbered H1 in our preregistrations.

H3: Among people with populist predispositions, activating populism will reduce the effectiveness of fact checks about populist fake news.

Design and data

We test these hypotheses with preregistered survey experiments in four countries: Spain ($N = 8,789$), Portugal ($N = 4,962$), India ($N = 3,003$), and the United States ($N = 3,203$).⁶ We selected these four countries because they vary on theoretically relevant dimensions (Druckman and Kam 2011), especially levels of elite and mass populism. On the elite side, the salience and electoral success of populist parties varies significantly across these four countries. At the time of our experiments, Spain had experienced a surge in elite populism on both the left and right, with left-wing populists Podemos (We Can) in 2015 followed by right-wing populists Vox in 2019. Despite sharing many cultural and socioeconomic characteristics with Spain, at the time of our survey, elite populism was largely absent in Portugal (Santana-Pereira and Cancela 2020).⁷ By contrast, during this period, politics in India and the United States were dominated by populists Narendra Modi and Donald Trump, respectively. While both are right-wing populists, Modi came to power on an agenda of religious (Hindu) nationalism while Trump more closely resembles many western European leaders elected in recent years on anti-immigration nationalistic platforms.

On the mass side, populism is present in all four countries, but to varying degrees. For instance, in the data we analyze below, pre-treatment populism is lowest in Portugal (2.84 out of 5), slightly higher in the United States (3.00) and Spain (3.03), and significantly higher in India (3.46). The distribution of populism is roughly normal in Spain, Portugal, and the United States, and strongly right-skewed in India, suggesting higher levels of latent populism in that country.⁸

⁶We filed two preregistrations with eGap. The first was filed in February 2021 and covered the Spain and Portugal studies. After we secured additional funding, we filed a second preregistration in December 2021, which covered the India and US studies. An anonymized version of both preregistrations is included in Online Appendix B. Following the preregistrations, we recruited the maximum number of respondents possible given the study budget in all four studies.

⁷Right-wing populist party Chega has gained representation in recent years, but was not a salient national force at the time our data were collected.

⁸All pairwise comparisons are significant at $p < .001$ using both t-tests and nonparametric Kolmogorov-Smirnov

These differences allow us to examine the extent to which our treatments (populism activation and corrections) have different effects across countries where populism is differentially salient. We provide more information about the distribution of pre-treatment populism in all four samples in Appendix B.

Respondents in Spain and Portugal were recruited from a commercial panel (NetQuest) and resembled the national population in terms of age, education, gender, and region. Respondents in India and the United States were recruited from Amazon’s Mechanical Turk (MTurk; Berinsky, Huber, and Lenz 2012). While MTurk samples are descriptively different from national populations, treatment effect estimates have been shown to generalize from MTurk to representative samples (Coppock 2019; Coppock, Leeper, and Mullinix 2018; Krupnikov, Nam, and Style 2021; Mullinix, Druckman, and Freese 2015), including recent studies of fake news discernment (Pennycook and Rand 2022).⁹

The design of all four survey experiments is similar. Respondents began the survey by answering a series of background questions, including demographics, political ideology, partisanship, conspiracism, and media use habits.¹⁰ Our critical pre-treatment characteristic is populist attitudes, which we measure using the standard six-question battery developed by Akkerman, Mudde, and Zaslove (2014). These questions ask respondents to agree or disagree with a series of six statements designed to capture three distinct subdimensions of populism: people-centrism, Manicheanism, and anti-elitism.¹¹ We use responses to these six questions to calculate an overall populism score for each respondent. Specifically, we follow Wuttke, Schimpf, and Schoen (2020) and aggregate the subscales of anti-elitism and people-centrism using arithmetic means and then

tests.

⁹More generally, the suitability of convenience samples depends not on descriptive similarity but instead on the existence of sufficient variance on theoretically relevant moderators (Druckman and Kam 2011). In our case, the most relevant moderator is latent populism. In Appendix B we show that we have substantial variance on this variable in all four countries, which allows us to divide the samples into terciles of pre-treatment populism following the procedure described in our preregistrations.

¹⁰Complete survey instruments are included in Online Appendix A.

¹¹The full wording of these items is provided in Appendix B. One might worry that this pre-treatment measure could result in priming and therefore contaminate our experimental results. Fortunately, recent evidence suggests that measuring moderators pre-treatment does not bias treatment effect estimates (Clifford, Sheagley, and Piston 2021; Sheagley and Clifford 2023).

calculate the geometric mean of the three subscales to create an overall populism score. We use this overall score to divide our samples into terciles of pre-treatment (i.e., latent) populism. We refer to respondents in these terciles as *weak*, *moderate*, and *strong* populists, respectively. Here, we note a deviation from our preregistration, which indicates that we would restrict certain experimental analyses to respondents in the top tercile of populist sentiment.¹² Instead, we present all results on the full sample of respondents, which we break down into terciles. This approach allows us to better contextualize the results from our preregistered subsample of strong populists. As will become clear shortly, weak, moderate, and strong populists have different baseline levels of belief in fake news. Presenting treatment effects only among strong populists would therefore offer a potentially misleading picture of treatment effects, which are estimated relative to an extreme baseline. (Of course, readers who prefer to consider only preregistered results can focus exclusively on the results among strong populists, which are presented below.)

After answering the populism battery, respondents were randomly assigned to two separate experimental treatments. The first is a latent populism activation task (treatment group) or no task (control group). The populism activation treatment consists of a three-item sequence that encourages dispositional blame attribution for a national problem.¹³ Treated respondents were first asked to rank a list of national problems in order of importance (respondents could also choose to specify another problem not listed). On the next screen, respondents were asked to explain in a few words which groups or individuals were most responsible for the problem they ranked as the most important, why these particular groups or individuals are responsible, and how they should be handled. Past research indicates that this task effectively activates latent populism, increasing expressions of populist sentiment (Busby, Gubler, and Hawkins 2019, study 1) and support for populist candidates (Busby et al. 2019, study 2).

In the next section of the survey, respondents were told that they would be presented with a series of news articles and asked to answer some questions about them. Respondents were then

¹²This restriction concerns H1 and H3 in the analyses below.

¹³Online Appendix A provides the full wording of all questions. The populism activation treatment is highlighted in yellow.

presented with a series of short articles (which we call news blurbs) about politics, science, education, religion, and other topics. The first news blurb shown to all respondents was a true story discussing recent increases in extreme weather events linked to climate change.¹⁴ Respondents were then presented with a series of randomly selected and ordered news blurbs that described recent fake news stories specific to the country context (see Appendix C for more information). For instance, in the Spanish experiment, all respondents first read the climate change blurb, and then were randomly assigned to read one blurb covering science (about genetically modified foods or vaccines), education (replacing language classes with religion or mandatory Islamic studies), political parties (about pacts by left- or right-wing coalitions in regional governments), and alleged conspiracies (by patent holders or NATO). In our preregistrations, we distinguish between fake news blurbs that are overtly populist (e.g., about conspiring politicians in Spain or corrupt Members of Parliament in India) and those that are not (e.g., about the safety of GMOs or vaccines). For ease of presentation, we report pooled models in the main text and separate claim-specific models (which distinguish between populist and non-populist stories) in Appendix D.

Our second experimental treatment — corrective information — was randomized at the blurb level. We created multiple versions of each news blurb: one version that included only a headline and short description of the false claim (control group), and other versions that included a short piece of corrective information (treatment group). To maximize realism, we created multiple versions of each correction varying only the source (e.g., fact checkers, scientists, economists).¹⁵ After reading each news blurb, respondents were asked to rate the accuracy of the central factual claim on a four-point scale ranging from “not at all accurate” to “very accurate.” This item serves as our primary dependent variable in the analyses below. This approach is consistent with past research into factual beliefs (Nyhan and Reifler 2010) and the perceived accuracy of fake news stories (Guess et al. 2020; Porter and Wood 2021).

We began all four experiments by collecting informed consent from respondents and explaining

¹⁴Placing the true story first in the sequence creates a few seconds of separation between the populism activation treatment and the first fake news blurb. The topic and order of subsequent blurbs was randomized.

¹⁵Following our preregistration, we maximize power by collapsing all respondents who saw corrections from any source into a single treatment group.

that the data they provide will be anonymous. Given our studies' focus on misinformation, we took several additional steps to minimize potential harms and comply with disciplinary ethical guidelines (American Political Science Association 2020). First, to avoid the possibility of popularizing low salience claims, we selected claims that were at least moderately salient already at the time of our experiments. Second, we fully debriefed all respondents at the conclusion of the study by presenting a list of all claims and explaining which were true and false. Finally, we supplemented this standard debriefing in Studies 3 and 4, which were conducted after the outbreak of Covid-19, with a statement about the safety and efficacy of vaccines and links to national and international health authorities. Our research protocols were reviewed and approved by the IRB at [REDACTED] before data collection began.

To summarize, the experimental design used in all four studies randomizes populism activation and exposure to corrective information about a range of fake news stories. Our outcome variable is belief in the central factual claim in each fake news blurb.

Results

Descriptive results

Before turning to the experimental results, we conduct a descriptive analysis of the relationship between latent populism and belief in fake news. Previous research has documented a positive relationship between populism and misperceptions on several topics, including Covid-19 (Eberl, Huber, and Greussing 2021; Stecula and Pickup 2021) and vaccines (Kennedy 2019), and conspiracy theories (van Prooijen et al. 2022). However, our data permit a more comprehensive test of this relationship across a diverse set of 30 false claims in four countries.

As described above, we divide the samples into terciles of pre-treatment populism, which we refer to as weak, moderate, and strong populists. In each country, we estimated preregistered OLS models predicting belief in false claims based on populism tercile, demographics, left/right

ideology, media consumption habits, conspiratorial thinking, and institutional trust.¹⁶ Because we are interested in the relationship between latent populism and baseline belief in fake news, we restrict this analysis to pure control respondents — that is, respondents who did not receive a populism activation treatment and were presented with an uncorrected version of a particular fake news story. The pooled results are presented in Table 1. We report separate claim-specific models in Appendix D.

Table 1: Latent populism and belief in fake news (OLS models)

	<i>DV = belief in false claim (pooled)</i>			
	Study 1 (Spain)	Study 2 (Portugal)	Study 3 (India)	Study 4 (USA)
Moderate populist (tercile 2)	0.07* (0.03)	0.05 (0.05)	−0.10* (0.04)	0.39*** (0.04)
Strong populist (tercile 3)	0.18*** (0.03)	0.12 (0.06)	0.12** (0.04)	0.53*** (0.05)
Constant	2.11*** (0.06)	2.26*** (0.29)	2.94*** (0.05)	2.05*** (0.06)
Strong populist — moderate populist	0.11***	0.07	0.22***	0.14***
Demographics	✓	✓	✓	✓
Conspiratorial thinking	✓	✓	✓	✓
Institutional trust	✓	✓	✓	✓
Get news from social media	✓	✓	✓	✓
Left/right ideology	✓	✓		✓
Political knowledge	✓	✓		✓
N (respondent-blurbs)	5,633	1,463	3,281	3,366

Note: Cell entries are OLS coefficients with clustered standard errors in parentheses. Dependent variable ranges from 1–4 with higher values indicating greater belief in false claims. This specification was preregistered as an exploratory research question (RQ1). Demographics include age, sex, and education. Political knowledge and left/right ideology were not measured in Study 3 (India). Samples includes pure control condition for each blurb (no populism activation, no correction). Full results in Appendix Table A4. Significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Results demonstrate that latent populism is positively associated with fake news belief in three

¹⁶These models were preregistered as RQ1.

countries — Spain, India, and the United States — with estimates in the expected direction but insignificant in Portugal. While the results are somewhat mixed for moderate populists, holding strong populist predispositions is associated with greater belief in false claims in Spain, India, and the United States. Moreover, in these three countries, the coefficient on strong populists is significantly larger than the coefficient on moderate populists ($p < .001$ in all three models).

To further contextualize our results, we estimated separate claim-specific models in each country (see Appendix D). These results indicate that the relationship between holding strong populist priors and fake news belief is consistent across claims in Spain (6 out of 8 claims) and the United States (8 out of 8 claims). India presents an interesting test because of its strongly right-skewed distribution of latent populism. In this setting, strong populists are less distinct from weak and moderate populists than in countries (like Spain, Portugal, and the United States) where the distribution of populist attitudes is more normal. Nonetheless, in India, the relationship between strong latent populism and fake news belief is in the expected direction in all 9 models, but only significant in 1 model. Portugal stands out as the one country in which latent populism is not associated with fake news belief. In the claim-specific models, this relationship is significant in only 1 out of 5 claims.

Overall, these results suggest that latent populism is strongly associated with fake news belief in three countries (Spain, India, United States). This relationship is null in the one country (Portugal) that lacked salient populist force at the time of our data collection. We now turn to our preregistered analyses, which examine the causal effects of activating latent populism in all four countries.

Experimental results

The descriptive results demonstrate that strong levels of latent populism are associated with belief in fake news claims in three of our four countries. Past research into populist attitudes indicates that latent populism can be activated by an external cue. In our experiments, this cue takes the form of the dispositional blame attribution treatment discussed above. H1 predicts that

this treatment will increase belief in fake news among strong populists.¹⁷ We test this hypothesis with preregistered models that regress belief in false claims on a dummy variable for the populism activation treatment, pre-treatment populism tercile, and the interaction of these two terms. For all experimental analyses, we present pooled results in the main text and claim-specific models in Appendix D.

Figure 1 illustrates the effect of populism activation on overall belief in false claims within each tercile for all countries. Specifically, the figure depicts mean levels of belief among respondents assigned to the populism activation treatment (red dots) or not (black dots) along with 95 percent confidence intervals. An initial look at the figure reveals that, consistent with the descriptive results presented above, belief in false claims increases significantly with increases in latent populism (i.e., moving from left to right in each panel of the figure).

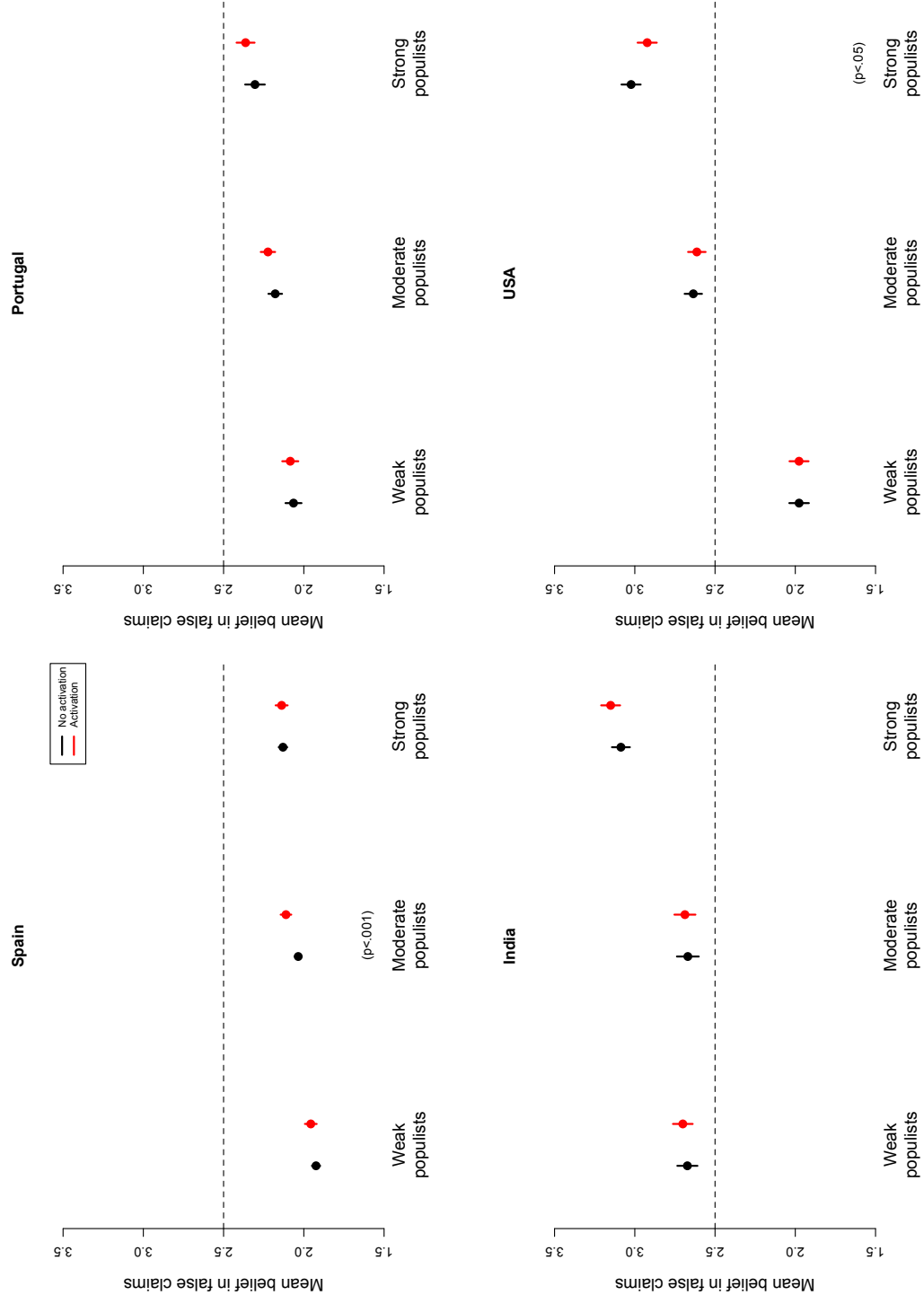
The key test of H1, however, is whether activation increases belief in fake news among respondents with high levels of latent populism. Contrary to H1, we fail to find any evidence that activation increase belief in false claims among strong populists: the effect is null in three countries (Spain, Portugal, India) and incorrectly signed, but only marginally significant, in the fourth country (USA). Looking beyond strong populists, we similarly find that activation fails to increase belief in false claims. Weak populists are unaffected by activation in all four countries. Among moderate populists, activating latent populism increases fake news belief in one country (Spain, $p < .001$) and has no effect in three countries (Portugal, India, United States)

Results from the claim-specific models reinforce these null effects (see Appendix Tables A13–16): across four countries and 30 fake news stories, we find that activation consistently fails to increase belief in fake news. We also find scant evidence that the effect of activation is heterogeneous across respondents with different levels of pre-treatment populism. We find only two instances — both in Spain — in which the effect of activation on belief in fake news is significantly larger for respondents with moderate compared to weak levels of pre-treatment populism (see Appendix Table A13). Overall, these results suggest that although latent populism

¹⁷This hypothesis was preregistered as H2. We reorder our hypotheses for expositional clarity.

is associated with fake news belief, activating this latent populism does not increase belief in fake news. H1 is not supported.

Figure 1: Effect of activating latent populism on belief in fake news



Note: Point estimates display mean belief in fake news claims among respondents exposed to populism activation treatment (red) or not exposed (black). Means calculated from models in Appendix Table A12. Belief is measured 1–4, where higher values indicate more belief. Error bars contain 95% confidence intervals. Dotted line shows the scale midpoint.

Our next two hypotheses focus on corrections. Based on previous research discussed above, H2 predicts that corrections will reduce belief in fake news. We test this hypothesis by examining the overall effectiveness of corrections, considering all respondents and all fake news claims from all four countries. Table 2 presents the results of pooled models, which include respondent fixed effects and clustered standard errors. The dependent variable is again belief in fake news; negative estimates therefore correspond to successful corrections.

As shown in Table 2, the effectiveness of corrections is inconsistent across countries. The pooled estimate is negative in two countries (Portugal $p < .001$, USA $p < .05$) and null in two countries (Spain, India). Claim-specific models suggest that these pooled estimates are masking substantial heterogeneity in the effectiveness of corrections across issues (see Appendix Tables A17–20). For instance, corrections significantly reduce belief in 3 out of 8 false claims in Spain, 4 out of 5 claims in Portugal, 1 out of 9 claims in India, and 2 out of 8 claims in the United States.

Table 2: Effect of corrections on fake news belief

	<i>DV = belief in false claims (pooled)</i>			
	Study 1 (Spain)	Study 2 (Portugal)	Study 3 (India)	Study 4 (USA)
Correction	−0.02 (0.01)	−0.13*** (0.02)	−0.004 (0.01)	−0.03* (0.01)
Constant	3.22*** (0.02)	2.21*** (0.03)	2.80*** (0.02)	2.99*** (0.03)
Respondent fixed effects	✓	✓	✓	✓
# fake news blurbs per respondent	4	3	5	5
# respondents	8,789	4,962	3,003	3,203
N (respondent-blurbs)	34,700	9,358	14,053	15,073

Note: Cell entries are OLS coefficients with clustered standard errors in parentheses. Dependent variable ranges from 1–4 with higher values indicating greater belief in false claims. Models include all fake news stories from all studies. Significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

To further explore these country differences, we turn to the two false claims that were included in all four studies: the alleged unsafety of childhood vaccines and an alleged conspiracy by the holders of medical patents. Focusing first on vaccines, we find that corrections have null effects in three countries (Portugal, India, United States) and backfire in Spain (though the effect is only marginally significant, $p < .05$). Turning to the patent holders conspiracy, we find that corrections reduce misperceptions in two countries (Portugal $p < .001$, USA $p < .05$), have null effects in one country (India), and backfire in one country (Spain $p < .05$).

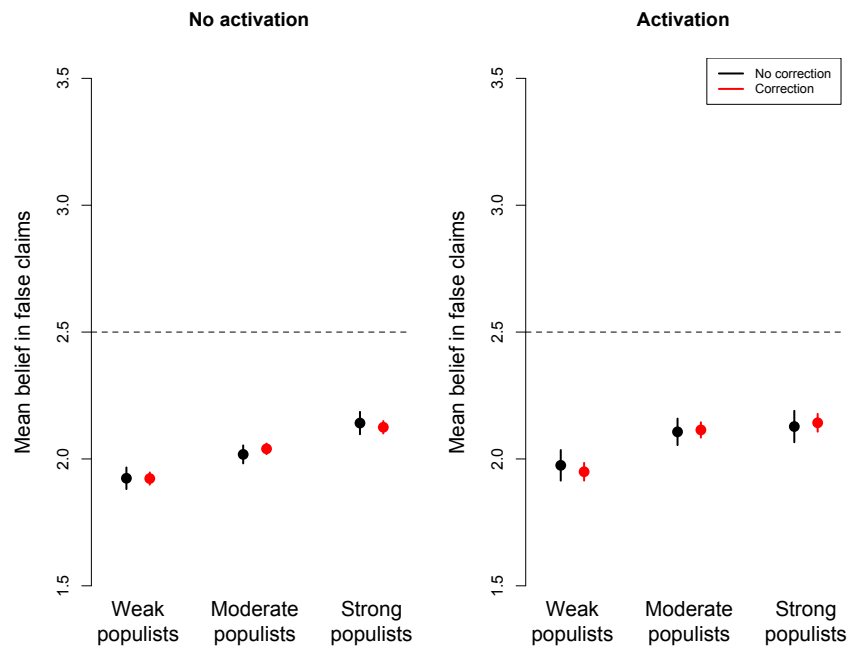
These analyses offer only partial support for H2 (in Portugal and the United States). More importantly, they suggest that the effectiveness of corrections varies significantly across claims and countries. This finding runs counter to some research work, discussed above, which finds that corrections are generally effective across claims and countries. We consider potential reasons for this disparity in the conclusion.

Our final hypothesis concerns the potential moderating effect of latent populism activation on the effectiveness of corrections. Specifically, H3 predicts that activating latent populism will reduce the effectiveness of corrections among strongly populist respondents. We test this hypothesis with models that interact exposure to a correction with pre-treatment populism, estimated separately for respondents who were assigned to the activation treatment or not.¹⁸ We present the results graphically in Figure 2. The figure depicts the effect of a correction on belief in false claims within each tercile. We further distinguish between respondents who received the latent populism activation treatment (right panel) or not (left panel). If H3 is supported, we would expect to observe significantly larger (and negatively signed) correction effects among respondents on in the left panels compared to the right.

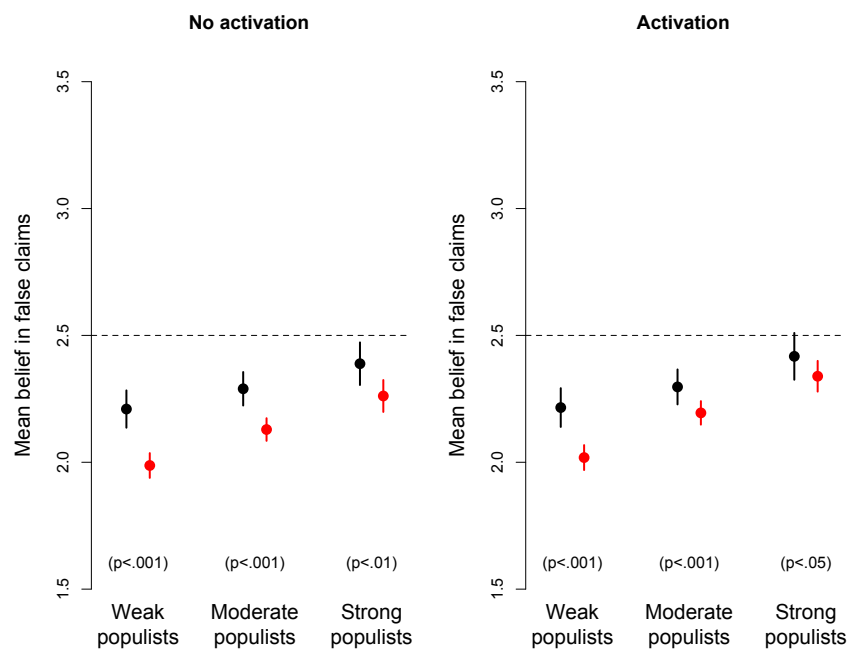
¹⁸Our preregistered test of this hypothesis mistakenly omits a necessary interaction between these variables and the populism activation treatment. For H3, the question of interest is whether the effect of a correction on belief varies across activated and non-activated respondents — a difference-in-differences. Our pooled models, where the unit of analysis is respondent-blurbs, are well powered to detect these difference-in-differences (see Appendix Tables A21–24).

Figure 2: Effect of corrections on belief in fake news: populism activation (treatment) vs. no activation (control) groups

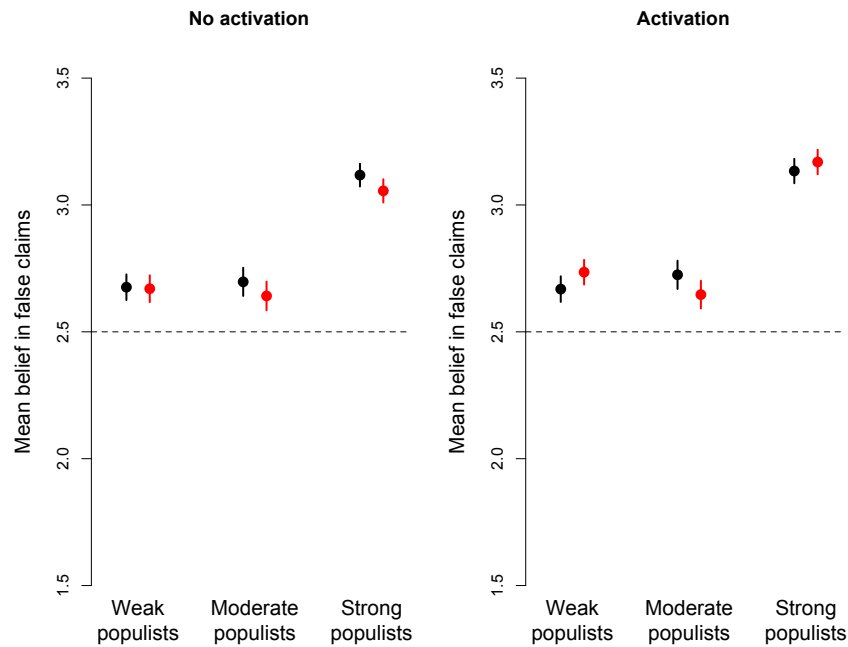
(a) Spain



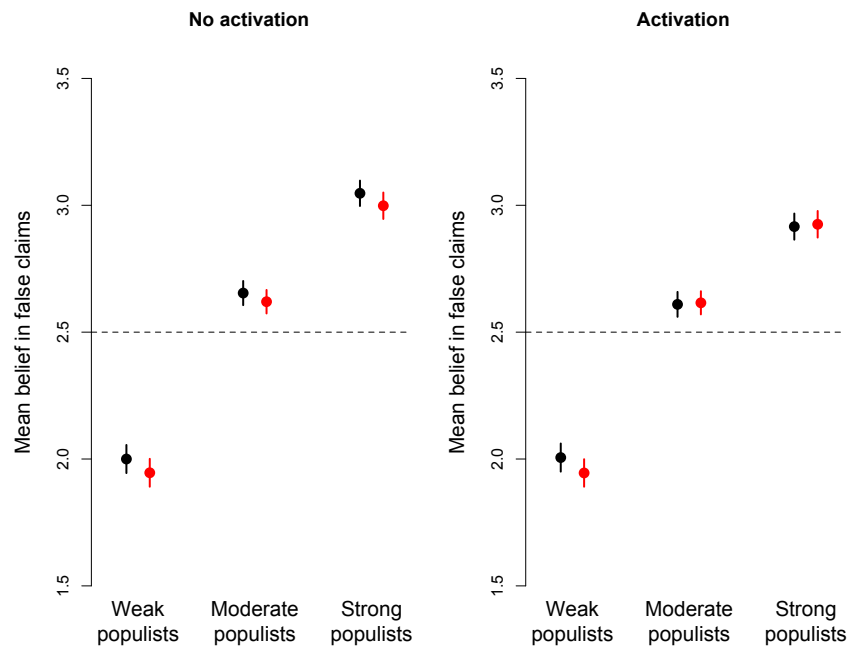
(b) Portugal



(c) India



(d) USA



Note: Point estimates show mean belief in false claims among respondents exposed to a correction (red) or not (black). Means calculated from models in Appendix Tables A21–A24. Left panels show populism activation (treatment) group; right panels show no activation (control) group. Belief is measured 1–4 (higher values indicate more belief). Error bars contain 95% confidence intervals. Dotted line shows the scale midpoint.

However, Figure 2 reveals no evidence that the effectiveness of corrections is diminished when latent populism is activated. Instead, in each country, we observe a similar pattern of results under both populism activation (right panels) and no activation (left panels). The effectiveness of corrections appears to depend on country context much more than populism activation. Consider the Portuguese results in panel (b). Here, we see that corrections consistently reduce misperceptions — both when populism is activated or not activated. In fact, in Portugal, corrections significantly reduce misperceptions across the board: among weak ($p < .001$), moderate ($p < .001$), and strong populists ($p < .01$) who were not activated, and among weak ($p < .001$), moderate ($p < .001$), and strong populists ($p < .01$) who were activated. Furthermore, there is no evidence that the magnitude of these correction effects is diminished when latent populism is activated.

The Portuguese results offer a stark contrast to the other countries — Spain, India, and the United States — where the effect of corrections on overall belief in false claims is null across all terciles.¹⁹ In these three countries, corrections fail to reduce misperceptions even in the no activation groups (left panels). Correspondingly, we find no evidence to support our prediction that activating latent populism reduces the effectiveness of corrections in these countries. H3 is not supported.

Exploratory analysis: activation causes strong emotional responses

Why does activating latent populism fail to increase misperceptions or reduce the effectiveness of corrections? One potential explanation is that our activation treatment, which relies on a writing task that encourages dispositional blame attribution, failed. While such failure would be inconsistent with past research that use the same approach (Busby, Gubler, and Hawkins 2019, studies 1 and 2), we nonetheless consider this possibility by examining the effect of the treatment on an outcome that is arguably more proximate than factual beliefs: emotions.

¹⁹Recall from our discussion of the H2 results that the pooled correction estimate is negative and significant in the United States. However, when splitting the sample for purposes of testing H3, these pooled effects are no longer significant.

Research suggests that populist messages or cues lead to strong emotional reactions, and that emotions may be a key mechanism through which populism affects broader attitudes (e.g., Demasi, McCoy, and Littvay 2024; Jost, Maurer, and Hassler 2020; Marcus 2021; Rico 2024; Sandberg, Jacobs, and Spierings 2022; Seawright 2012). In our experiments, we would therefore expect our treatment, if successful, to cause strong emotional reactions. More precisely, we would expect the treatment to increase negative emotions (e.g., anger, disgust) and reduce positive emotions (e.g., happiness, hope).

To test these expectations, we take advantage of a battery of questions that were asked of all respondents immediately before they evaluated the fake news stories analyzed above (i.e., immediately post-treatment for respondents assigned to the activation treatment). These questions asked respondents to self-report the extent to which they felt various negative and positive emotions. Negative emotions included anger, disgust, fear/dread, and sadness, and positive emotions included enthusiasm, happiness, hope, and interest. For simplicity, we collapse negative and positive emotions into separate indices and examine how our activation treatment affects each index.²⁰

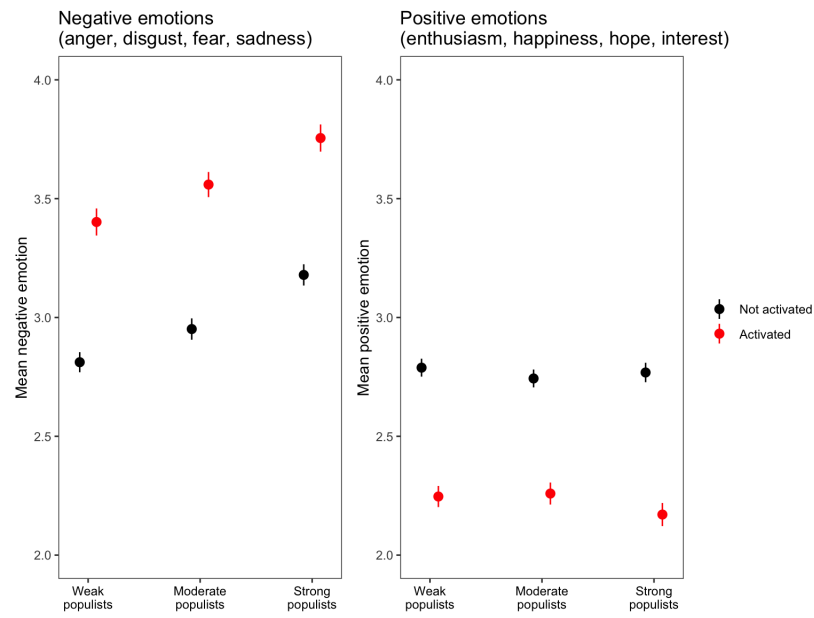
Figure 3 presents the effects of our treatments on self-reported emotions. Specifically, the figure depicts mean levels of negative emotions (left panels) and positive emotions (right panels) among respondents who received the activation treatment (red dots) or not (black dots). The lines contain 95 percent confidence intervals. Like the previous figures, we again break the samples down into terciles of pre-treatment populism on the horizontal axis.

Results demonstrate that our activation treatment led to strong emotional reactions (in the expected directions) in nearly all cases. In three countries — Spain, Portugal, and the United States — the treatment increased negative emotions and decreased positive emotions among respondents in all three terciles ($p < .001$ for all). This suggests that our treatments were successfully received and incorporated into respondents' emotional states in these three countries.

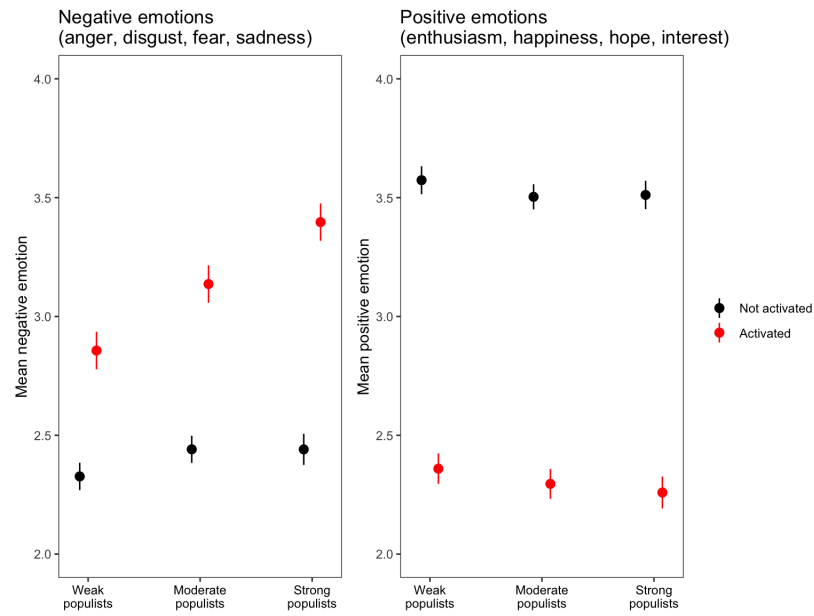
²⁰Our analysis of negative emotions was preregistered (RQ5). Our analysis of positive emotions is exploratory.

Figure 3: Effect of activating latent populism on negative and positive emotions

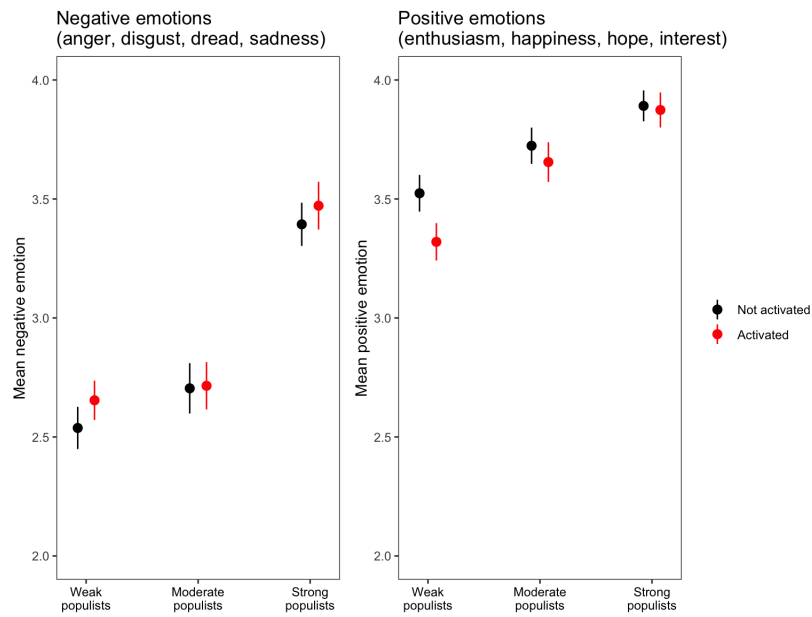
(a) Spain



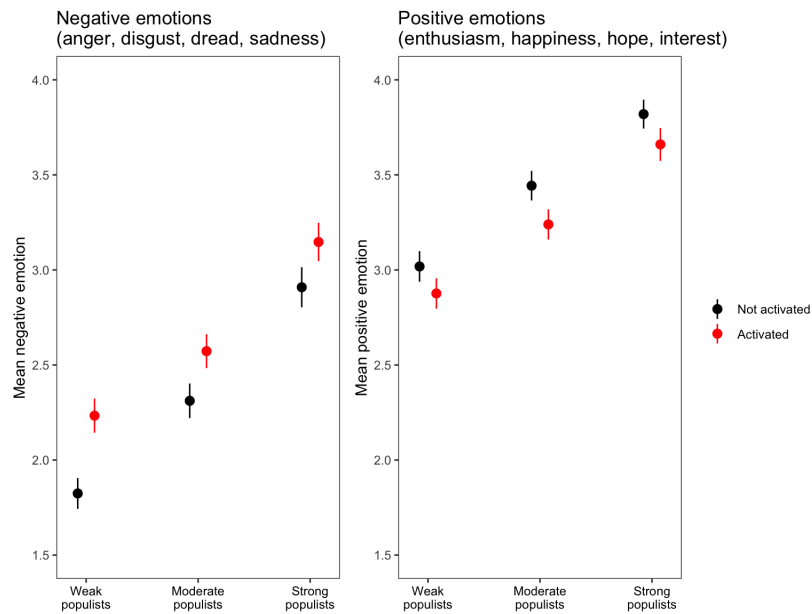
(b) Portugal



(c) India



(d) USA



Note: Point estimates show mean levels of negative emotions (left panels) and positive emotions (right panels). Red points show populism activation (treatment) group; black points show no activation (control) group. Emotions are measured 1–5 (higher values indicate more emotion). Error bars contain 95% confidence intervals.

India presents an interesting context for these analyses because of its uniquely high levels of pre-treatment populism (see Appendix B). In this setting, our treatment may potentially be received and internalized yet fail to affect downstream attitudes (e.g., emotions) due to a ceiling effect (for a similar argument, see Busby, Gubler, and Hawkins 2019). Consistent with this logic, Figure 3(c) demonstrates that in India the treatment affected negative and positive emotions in the expected directions only among weak populists ($p < .05$ and $p < .001$, respectively). By contrast, the treatment did not significantly affect negative or positive emotions among moderate and strong populists. Viewed in light of the results among weak populists in India, and all respondents in the other countries, we do not interpret these null effects as evidence of treatment failure. Rather, we argue that moderate and strong populists in India — the most populist respondents in our four studies — are pre-treated: they are likely to adopt populist ways of thinking even in the absence of activation.

More broadly, these patterns underscore the importance of understanding the pre-treatment environment in each country when interpreting the experimental results presented earlier (Druckman and Leeper 2012). We suspect that the effect of latent populism activation on broader attitudes may depend on pre-existing levels of populism and related emotional states. We return to this point in the conclusion.

Conclusion and discussion

This article examines the relationship between two of the most extensively discussed political phenomena in recent years: populism and misinformation. While previous research has established a descriptive association between populism and belief in false claims, ours is the first study to experimentally manipulate individual-level populism in order to gauge potential causal effects on misinformation belief and persistence.

Consistent with past work, our descriptive results reveal that latent populism is associated with fake news belief in three countries (Spain, India, United States), but not in Portugal —

the one included country in which populism was not a salient political force at the time of our studies. Our experimental results reveal that activating latent populism causes strong emotional reactions; however, contrary to our preregistered hypotheses, activation does not increase belief in false claims or undermine the effectiveness of corrections. Optimistically, these results suggest that attempts to activate latent populism (e.g., during campaigns) are unlikely to make misperceptions more prevalent or resistant to correction. Instead, our results suggest that misperceptions are more reflective of underlying populist attitudes, which likely interact with related attitudes (e.g., dissatisfaction with institutions) to shape how individuals interpret political reality.

These findings offer broader insights for our understanding of populism and misinformation. When it comes to populism, they raise questions about the prevailing account of populism as a latent disposition that requires activation by a rhetorical or emotional cue. In our data, respondents with varying levels of latent populism have very different baseline levels of belief in fake news, and these baselines are largely unaffected by activation. Of course, we could not control the pre-treatment environment our subjects found themselves in: respondents in our four countries were exposed to varying levels of populist rhetoric and electoral competition before receiving our activation treatment. For instance, populism was especially prevalent in elite discourse and electoral competition in India and the United States at the time of our studies, raising the possibility that respondents in these studies were pre-treated by real world events before undergoing our experimental activation. By contrast, populism was salient (arguably to a lesser degree) in Spain at the time of our studies and almost entirely absent in Portugal. Future research should consider more fully the role of country context, ideally with descriptive evidence on the salience of populism in the pre-treatment communication environment.

Turning to misinformation, our results offer an important addendum to recent multi-country studies which find that corrections are widely effective (Porter, Velez, and Wood 2023; Porter and Wood 2021; Wood and Porter 2019). By contrast, our results suggest that the effectiveness of corrections varies widely across topics and countries. Of course, past studies and our own experiments focused on different factual controversies occurring in different countries at different

points in time, making cross-country comparisons challenging. One possibility for the conflicting findings concerns the universe of fake news stories considered here. As described above, we strove to identify false claims that varied in their topical focus, salience, and degree of populist overtones. The latter criterion — populist overtone — may render a subset of false claims we consider more attractive to individuals with populist attitudes, reflecting either these individuals' genuine beliefs or and/or some level of expressive responding. To investigate this possibility, future research could experimentally manipulate the degree of populist language used to describe the same factual controversy. We suspect that the effectiveness of corrections may vary across versions of the same false claim and across individuals with different levels of populist attitudes. More broadly, we believe our results highlight the need for more comprehensive theorizing about the linkages between populism activation, corrections, and beliefs — as well as how this process varies across country contexts.

Of course, the studies reported here are limited and should be expanded upon in future research. We note three issues that strike us as particularly worthy of future exploration. First, our experiments seek to activate latent populism with a single approach: dispositional blame attribution. Given the diverse forms of populist communication across countries and parties, future research should explore alternative methods for activating latent populism (e.g., through frames or multimedia treatments). Second, future work should examine the effect of populism activation on factual beliefs in other countries, ideally those that differ substantially in terms of elite populist rhetoric and electoral competition. Finally, our results are of course limited to the universe of factual claims we included in our experiments. We encourage future studies to incorporate a wider range of factual controversies, ideally those that are salient in multiple countries to facilitate comparison.

Addressing these limitations and pursuing future studies like those suggested here would improve our understanding of the conditions under which populism contributes to one of the most pressing social and political challenges of our time: the prevalence and persistence of misinformation.

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Appendix A: Overview of studies

The table below provides an overview of the studies analyzed in this article. Ns include the number of respondents who reached the experimental portion of the survey. The Netquest samples (studies 1 and 2) included quotas for age, sex, education, and region. The MTurk samples (studies 3 and 4) were restricted to respondents with at least 95% prior task approval rates and who are located in India or the US, respectively.

In all studies, respondents were randomly assigned to receive a populism activation treatment or not (control group) before being presented with a series of randomly selected blurbs covering fake news stories in their country. More information about these blurbs is provided in Appendix C, and a full text of all blurbs is provided in the survey instruments in Online Appendix A.

Appendix Table A1: Overview of studies

	Study 1 (Spain)	Study 2 (Portugal)	Study 3 (India)	Study 4 (USA)
Sample	Netquest (N=8,789)	Netquest (N=4,962)	MTurk (N=3,003)	MTurk (N=3,203)
Data collection	2019/20	2020/21	2021	2021
Populism activation conditions	-control -dispositional -situational*	-control -dispositional	-control -dispositional	-control -dispositional
Total fake news blurbs shown	8	5	9	8
Fake news blurbs per respondent	4	3	5	4

*Study 1 (Spain) included two populism activation treatments — situational blame attribution and dispositional blame attribution — drawn from prior research (Busby, Gubler, and Hawkins 2019). These treatments are similar in format: they ask respondents to arrange a series of national problems in order of importance; on the next screen, respondents are asked to complete a short writing task. The situational activation treatment asks which events or circumstances are responsible for the respondent's top ranked problem, while the dispositional treatment asks which groups or individuals are responsible and what should be done to them. Past research indicates that dispositional blame attribution causes individuals to express populist sentiment (Busby, Gubler, and Hawkins 2019, study 1) and makes them more likely to support populist candidates (Busby, Gubler, and Hawkins 2019, study 2). By contrast, situational attribution does not. We therefore treat the situational activation treatment in study 1 as a placebo and merge it with the pure control condition. Given the smaller samples in studies 2–4, we omit the situational attribution treatment and compare the dispositional attribution group to a pure control.

Appendix Table A2: Sample descriptives

	Study 1 (Spain)	Study 2 (Portugal)	Study 3 (India)	Study 4 (USA)
N	8,789	4,962	3,003	3,203
Median age	45	52	30	36
Percent female	51.8	49.2	29.4	44.3
Percent university grad	60.2	41.6	82.0	78.7

While MTurk samples are descriptively unrepresentative, past research indicates that treatment effects estimated on MTurk samples generalize to representative samples (Coppock 2019; Coppock, Leeper, and Mullinix 2018; Krupnikov, Nam, and Style 2021; Mullinix, Druckman, and Freese 2015). This includes recent studies focusing on fake news discernment (Pennycook and Rand 2022).

Appendix B: Pre-treatment populism measure

We measure populist predispositions with the six-item Akkerman, Mudde, and Zaslove (2014) scale. The six items are:

Using the following scale, to what extent do you agree or disagree with the following statements? [order of statements randomized]

Politicians in [Congress/the House] need to follow the will of the people. (*People-centrism*)

The people, and not politicians, should make our most important policy decisions. (*People-centrism*)

The political differences between the elite and the people are large than the differences among the people. (*People-centrism*)

What people call “compromise” in politics is really just selling out on one’s principles. (*Manicheanism*)

I would rather be represented by an ordinary citizen than an experienced politician. (*Anti-elitism*)

Politicians talk too much and take too little action. (*Anti-elitism*)

-Strongly agree [5]

-Somewhat agree [4]

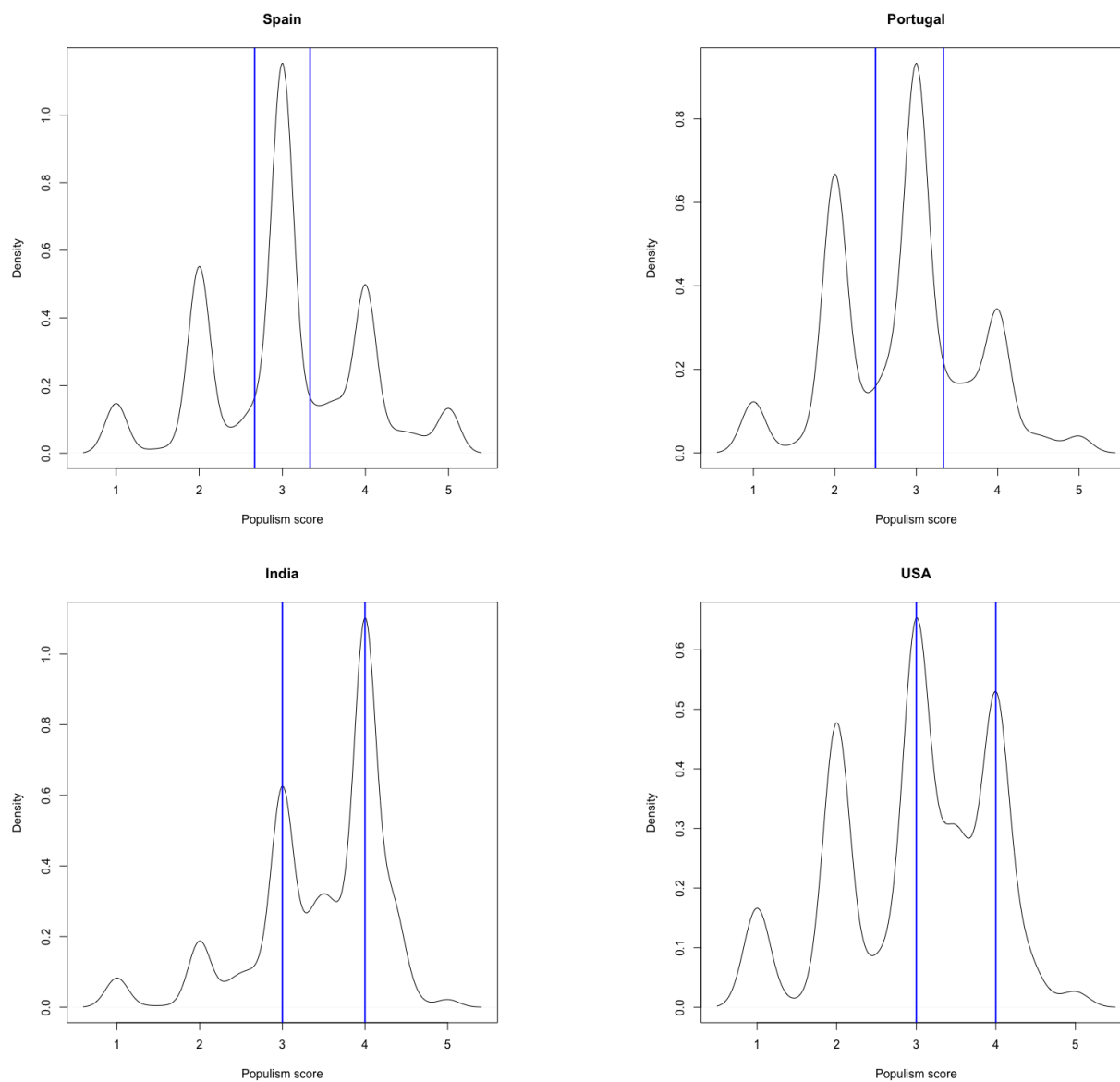
-Neither agree nor disagree [3]

-Somewhat disagree [2]

-Strongly disagree [1]

As described in the main text, we follow Wuttke, Schimpf, and Schoen (2020) and aggregate the subscales of anti-elitism and people-centrism using arithmetic means and then calculate the geometric mean of the three subscales to create an overall populism score. Following our pre-registration, we use this overall score to divide our samples into terciles of pre-treatment (i.e., latent) populism, which we refer to as weak, moderate, and strong populists. The distribution of overall scores and cutoffs are displayed in Appendix Figure A1.

Appendix Figure A1: Distribution of pre-treatment populism (all studies)



Note: Blue lines indicate tercile cutoffs.

Appendix Table A3: Descriptive statistics on pre-treatment populism (all studies)

	Study 1 (Spain)	Study 2 (Portugal)	Study 3 (India)	Study 4 (USA)
Mean (SD)	3.03 (0.92)	2.84 (0.84)	3.46 (0.78)	3.00 (0.93)
Median	3.00	3.00	3.67	3.00
Tercile 1 tercile 2 cutoff	3.00	3.08	3.72	3.00
Tercile 2 tercile 3 cutoff	3.00	3.68	4.30	3.50

Appendix C: News blurbs by country

Working with research assistants, we identified fake news stories that were circulating in each country at the time of our experiments and reported on by professional fact-checking organizations. In each country, we aimed to identify a set of stories that varied on the following dimensions: topical focus (e.g., science, religion, education, corruption, generalized conspiracies), salience, and populist overtones. (Our preregistration identifies a subset of stories that are overtly populist in tone. We mark these stories with an asterisk in the list and tables below.) After identifying a large set of potential stories for use in our experiments, we consulted with country experts about the salience of each story and suitability for inclusion in our experiments.

The final set of news stories used in our experiments is listed below. For each story, we wrote a headline and one paragraph overview, which we call a “news blurb.” The blurb resembles the length and format of a social media post or search engine result. For each news blurb, we also wrote a short paragraph that provides corrective information attributed to an expert source (e.g., fact-checkers, public health experts, etc.). To maximize realism, we randomized corrections at the blurb level and attributed corrections to different sources across stories. The full text of all blurbs and corrections are provided in the survey instruments (Online Appendix A).

Spain

- Climate change (true story about extreme weather events)
(Order of all subsequent blurbs randomized)
- ONE of the following: Genetically modified foods unsafe; vaccine-autism link
- ONE of the following: Replace language classes with religion; mandatory Islamic studies
- ONE of the following: Left-wing (PSOE/Podemos) secret pact*; right-wing (PP/Vox) secret pact*
- ONE of the following: Patent holders; NATO secret fumigations

Portugal

- Climate change (true story about extreme weather events)
(Order of all subsequent blurbs randomized)
- ONE of the following: Genetically modified foods unsafe; vaccine-autism link
- ONE of the following: Left-wing (PPD/PSD/CDS-PP) secret pact*; right-wing (PS/BE) secret pact*
- Patent holders

India

- Climate change (true story about extreme weather events)
(Order of all subsequent blurbs randomized)
- TWO of the following: Vaccine-autism link; Covid-19 side effects; swabs implant devices in brain
- ONE of the following: Law easing mosque construction*; Islamic studies on civil service exam*
- ONE of the following: Patent holders restricting supply; hospital managers hoarding oxygen tanks
- ONE of the following: Cabal releasing Covid-19 variants; MPs get rent paid for*

United States

- Climate change (true story about extreme weather events)
(Order of all subsequent blurbs randomized)
- ONE of the following: Genetically modified foods unsafe OR vaccine-autism link
- ONE of the following: Covid-19 side effects OR swabs implant devices in brain
- ONE of the following: Biden lies about voting laws*; Republicans lie about voting laws*
- BOTH of the following: Patent holders restricting supply; cabal releasing Covid-19 variants

Example stimuli

Here we provide an example news blurb (used in Studies 3 and 4) as seen by our respondents. The control (no correction) version of the blurb appears as follows:

YOU HEARD IT HERE: LEAKED DOCXS SHOW SUPER-WEALTHY CABAL PLOTTING TO RELEASE NEW COVID-19 VARIANTS

Thursday (10:30pm EST): Newly released documents suggest a plot by universities, nonprofits, and global elites to release Covid-19 variants on a planned schedule. The website where the documents first appeared claims, "These are the PLANNED COVID-19 VARIANTS - just look at this doc with a table of 'release dates' in different major cities!!" Next to the table, the document included logos of universities and organizations including Johns Hopkins University, the World Health Organization, the World Economic Forum and the Bill and Melinda Gates Foundation.

The treatment (correction) version appears as follows:

YOU HEARD IT HERE: LEAKED DOCXS SHOW SUPER-WEALTHY CABAL PLOTTING TO RELEASE NEW COVID-19 VARIANTS

Thursday (10:30pm EST): Newly released documents suggest a plot by universities, nonprofits, and global elites to release Covid-19 variants on a planned schedule. The website where the documents first appeared claims, "These are the PLANNED COVID-19 VARIANTS - just look at this doc with a table of 'release dates' in different major cities!!" Next to the table, the document included logos of universities and organizations including Johns Hopkins University, the World Health Organization, the World Economic Forum and the Bill and Melinda Gates Foundation.

After the story went viral, fact checkers were quick to point out that table doesn't represent the work of any of the named organizations. The World Health Organization and the Bill and Melinda Gates Foundation both responded to press queries to confirm the documents weren't genuine. The table also falsely claims the delta variant of the coronavirus emerged in June 2021. Finally, the posts ignore that variants occur in the population through random mutations and are not created by humans.

The dependent variable appeared as follows:

As far as you know, how accurate is the statement that an international group of powerful people and institutions is working together to release new Covid-19 variants?

- ☐ Totally accurate
- ☐ Very accurate
- ☐ Not very accurate
- ☐ Not at all accurate

Appendix D: Supplemental tables and figures

We present pooled results in the main text and separate claim-specific models in appendices. Our preregistrations identify a subset of news stories that are more overtly populist (e.g., about alleged electoral pacts in Spain or corrupt members of parliament in India). These claims are marked with an asterisk (*) in the tables below.

Descriptive analysis (latent populism and belief in fake news)

Table 1 in the main text reports pooled models examining the relationship between latent populism and belief in fake news (preregistered as RQ1). Here we reproduce the same table showing estimates for the covariates that are suppressed in Table 1. The estimates shown in Table 1 are shaded in the table below.

We also report separate claim-specific models using the same pre-registered specification in all four countries.

As noted in the main text, we are interested here in the relationship between latent (i.e., non-activated) populism and baseline belief in fake news. We therefore restrict these analyses to respondents in the pure control condition for each news blurb — that is, respondents who received neither populism activation nor a correction.

Appendix Table A4: Latent populism and belief in fake news

	<i>DV = belief in false claim (pooled)</i>			
	Study 1 (Spain)	Study 2 (Portugal)	Study 3 (India)	Study 4 (USA)
Moderate populist (tercile 2)	0.07* (0.03)	0.05 (0.05)	−0.10* (0.04)	0.39*** (0.04)
Strong populist (tercile 3)	0.18*** (0.03)	0.12 (0.06)	0.12** (0.04)	0.53*** (0.05)
Conspiracism (tercile 2)	−0.001 (0.03)	0.07 (0.05)	0.14*** (0.04)	0.32*** (0.04)
Conspiracism (tercile 3)	0.06 (0.03)	0.19*** (0.06)	0.44*** (0.05)	0.44*** (0.05)
Ideology (conservative)	0.004 (0.01)	−0.001 (0.01)		0.01* (0.01)
University grad	−0.05 (0.03)	−0.16*** (0.05)	−0.28*** (0.04)	0.24*** (0.04)
Frequent social media news	0.02 (0.02)	−0.02 (0.05)	−0.11*** (0.03)	0.02 (0.03)
Age 29–44	−0.02 (0.04)	−0.15** (0.07)	−0.15*** (0.03)	−0.19*** (0.04)
Age 45–59	−0.11** (0.04)	−0.06 (0.07)	−0.49*** (0.08)	−0.26*** (0.05)
Age 60+	−0.12*** (0.04)	−0.16** (0.08)	−0.51*** (0.18)	−0.33*** (0.07)
Female	0.06** (0.03)	0.06 (0.05)	−0.04 (0.03)	−0.05 (0.03)
Institutional trust (tercile 2)	−0.05 (0.03)	−0.02 (0.06)	0.05 (0.04)	0.04 (0.04)
Institutional trust (tercile 3)	−0.15*** (0.03)	−0.03 (0.06)	0.10** (0.05)	0.29*** (0.05)
Political knowledge (tercile 2)	−0.07* (0.03)	0.14 (0.28)		−0.11** (0.04)
Political knowledge (tercile 3)	−0.14** (0.03)	0.08 (0.28)		−0.36*** (0.04)
Constant	2.11*** (0.06)	2.26*** (0.29)	2.94*** (0.05)	2.05*** (0.06)
Strong populist – moderate populist	0.11***	0.07	0.22***	0.14***
N	5,633	1,463	3,281	3,366

Note: Cell entries are OLS coefficients with clustered standard errors in parentheses. Dependent variable ranges from 1–4 with higher values indicating greater belief in false claims. This specification was preregistered as an exploratory research question (RQ1). Political knowledge and left/right ideology were not measured in Study 3 (India). Samples include respondents in pure control condition for each blurb (no populism activation, no correction). Significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Appendix Table A5: Claim-specific models (Spain, 1 of 2)

	<i>DV: belief in false claim</i>			
	GMOs unsafe	Vaccines unsafe	Religion in school	Islamic studies
Moderate populist (tercile 2)	0.06 (0.08)	0.02 (0.08)	0.17** (0.07)	0.01 (0.07)
Strong populist (tercile 3)	0.26*** (0.09)	0.15* (0.08)	0.15** (0.07)	0.11 (0.07)
Conspiracism (tercile 2)	0.17** (0.08)	−0.07 (0.08)	−0.18*** (0.07)	−0.02 (0.07)
Conspiracism (tercile 3)	0.33*** (0.09)	−0.16* (0.09)	−0.09 (0.07)	−0.09 (0.07)
Ideology (conservative)	−0.01 (0.01)	−0.003 (0.01)	−0.003 (0.01)	0.05*** (0.01)
University grad	−0.07 (0.07)	−0.06 (0.07)	−0.03 (0.06)	−0.003 (0.06)
Frequent social media news	0.11* (0.07)	0.06 (0.06)	0.09* (0.05)	0.02 (0.06)
Age 29–44	0.02 (0.10)	0.09 (0.10)	−0.08 (0.08)	−0.02 (0.08)
Age 45–59	−0.06 (0.10)	−0.09 (0.10)	−0.26*** (0.08)	−0.19** (0.09)
Age 60+	−0.09 (0.12)	−0.24** (0.12)	−0.26*** (0.10)	−0.11 (0.10)
Female	0.16** (0.07)	−0.01 (0.07)	0.08 (0.05)	0.01 (0.06)
Institutional trust (tercile 2)	−0.02 (0.08)	−0.11 (0.08)	−0.04 (0.07)	−0.10 (0.07)
Institutional trust (tercile 3)	−0.11 (0.09)	−0.06 (0.08)	−0.10 (0.07)	−0.19*** (0.07)
Political knowledge (tercile 2)	−0.12 (0.09)	−0.11 (0.09)	−0.11 (0.07)	−0.03 (0.08)
Political knowledge (tercile 3)	−0.16* (0.09)	−0.10 (0.09)	−0.17** (0.07)	−0.03 (0.08)
Constant	2.46*** (0.17)	2.00*** (0.16)	1.88*** (0.13)	1.68*** (0.15)
N	685	675	883	927

Note: Cell entries are OLS coefficients with standard errors in parentheses. Dependent variable ranges from 1–4 with higher values indicating greater belief in false claims. This specification was preregistered as an exploratory research question (RQ1). Sample includes respondents in pure control condition for each blurb (no populism activation, no correction). Significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Appendix Table A6: Claim-specific models (Spain, 2 of 2)

	<i>DV: belief in false claim</i>			
	Left-wing* pact	Right-wing* pact	Patent holders	NATO fumigations
Moderate populist (tercile 2)	0.05 (0.07)	0.21*** (0.08)	0.09 (0.08)	−0.08 (0.10)
Strong populist (tercile 3)	0.08 (0.08)	0.35*** (0.08)	0.18** (0.09)	0.23** (0.11)
Conspiracism (tercile 2)	−0.04 (0.07)	−0.02 (0.08)	0.07 (0.08)	0.23** (0.10)
Conspiracism (tercile 3)	0.04 (0.08)	0.07 (0.09)	0.31*** (0.09)	0.29** (0.12)
Ideology (conservative)	0.05*** (0.01)	−0.06*** (0.01)	0.01 (0.01)	−0.001 (0.02)
University grad	−0.14** (0.07)	0.02 (0.07)	0.002 (0.07)	−0.20** (0.09)
Frequent social media news	0.15** (0.06)	−0.04 (0.06)	−0.0002 (0.07)	−0.04 (0.08)
Age 29–44	−0.14 (0.09)	−0.05 (0.10)	0.23** (0.10)	−0.14 (0.13)
Age 45–59	−0.15 (0.10)	−0.19* (0.10)	0.29*** (0.10)	−0.29** (0.14)
Age 60+	−0.31*** (0.11)	−0.26** (0.11)	0.42*** (0.12)	−0.36** (0.15)
Female	0.06 (0.06)	−0.08 (0.07)	0.02 (0.07)	0.28*** (0.09)
Institutional trust (tercile 2)	0.10 (0.07)	−0.01 (0.08)	−0.18** (0.08)	−0.01 (0.10)
Institutional trust (tercile 3)	−0.10 (0.08)	−0.13 (0.08)	−0.28*** (0.09)	−0.02 (0.11)
Political knowledge (tercile 2)	−0.12 (0.08)	−0.03 (0.09)	0.01 (0.09)	−0.04 (0.12)
Political knowledge (tercile 3)	−0.06 (0.08)	−0.10 (0.09)	−0.08 (0.09)	−0.14 (0.12)
Constant	1.98*** (0.15)	2.50*** (0.16)	2.25*** (0.17)	1.96*** (0.22)
N	654	691	709	409

Note: Cell entries are OLS coefficients with standard errors in parentheses. Dependent variable ranges from 1–4 with higher values indicating greater belief in false claims. This specification was preregistered as an exploratory research question (RQ1). Sample includes respondents in pure control condition for each blurb (no populism activation, no correction). Significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Appendix Table A7: Claim-specific models (Portugal)

	<i>DV: belief in false claim</i>				
	GMOs unsafe	Vaccines unsafe	Left-wing* pact	Right-wing* pact	Patent holders
Moderate populist (tercile 2)	0.06 (0.12)	−0.05 (0.12)	−0.20* (0.11)	0.15 (0.13)	0.13 (0.09)
Strong populist (tercile 3)	0.04 (0.15)	0.17 (0.15)	−0.05 (0.14)	0.07 (0.15)	0.22** (0.11)
Conspiracism (tercile 2)	0.16 (0.12)	−0.06 (0.12)	0.12 (0.12)	−0.11 (0.13)	0.14 (0.09)
Conspiracism (tercile 3)	0.28** (0.14)	0.01 (0.13)	0.41*** (0.13)	−0.04 (0.14)	0.30*** (0.11)
Ideology (conservative)	−0.05** (0.02)	0.01 (0.02)	−0.03 (0.02)	0.08*** (0.02)	−0.003 (0.02)
University grad	−0.24** (0.10)	−0.38*** (0.11)	0.11 (0.10)	0.06 (0.11)	−0.21** (0.08)
Frequent social media news	−0.11 (0.10)	−0.06 (0.10)	−0.05 (0.10)	0.06 (0.11)	−0.02 (0.08)
Age 29–44	−0.15 (0.17)	−0.01 (0.15)	−0.33** (0.15)	−0.47** (0.20)	−0.05 (0.13)
Age 45–59	−0.001 (0.16)	−0.05 (0.15)	−0.21 (0.14)	−0.61*** (0.19)	0.11 (0.13)
Age 60+	−0.02 (0.18)	−0.15 (0.17)	−0.16 (0.16)	−0.90*** (0.21)	0.02 (0.14)
Female	0.37*** (0.10)	−0.10 (0.10)	0.16 (0.10)	−0.18 (0.12)	−0.02 (0.08)
Institutional trust (tercile 2)	0.03 (0.12)	−0.004 (0.12)	0.07 (0.12)	−0.04 (0.14)	−0.13 (0.10)
Institutional trust (tercile 3)	0.04 (0.13)	−0.07 (0.13)	−0.02 (0.13)	−0.15 (0.14)	−0.07 (0.10)
Political knowledge (tercile 2)	−0.58 (0.80)	0.33 (0.41)	−0.42 (0.57)	−0.06 (0.51)	−0.06 (0.51)
Political knowledge (tercile 3)	−0.60 (0.79)	0.25 (0.41)	−0.51 (0.57)	0.02 (0.12)	−0.12 (0.50)
Constant	3.25*** (0.84)	1.76*** (0.41)	2.88*** (0.60)	2.43*** (0.32)	2.55*** (0.51)
N	246	242	261	247	467

Note: Cell entries are OLS coefficients with standard errors in parentheses. Dependent variable ranges from 1–4 with higher values indicating greater belief in false claims. This specification was preregistered as an exploratory research question (RQ1). Sample includes respondents in pure control condition for each blurb (no populism activation, no correction). Significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Appendix Table A8: Claim-specific models (India, 1 of 2)

	<i>DV: belief in false claim</i>				
	Vaccines unsafe	Covid vax side effx	Nasal swabs	Mosque* construction	Islamic* studies
Moderate populist (tercile 2)	−0.04 (0.11)	−0.20* (0.11)	−0.26** (0.12)	−0.05 (0.13)	−0.38*** (0.13)
Strong populist (tercile 3)	0.18 (0.12)	0.13 (0.12)	0.06 (0.14)	0.14 (0.15)	−0.16 (0.15)
Conspiracism (tercile 2)	0.26** (0.11)	0.19* (0.11)	0.03 (0.13)	−0.08 (0.13)	0.16 (0.14)
Conspiracism (tercile 3)	0.32** (0.14)	0.34** (0.13)	0.55*** (0.15)	0.34** (0.16)	0.57*** (0.17)
University grad	−0.25** (0.11)	−0.39*** (0.11)	−0.36** (0.14)	−0.45*** (0.12)	−0.12 (0.14)
Frequent social media news	−0.13 (0.09)	−0.01 (0.09)	−0.08 (0.10)	−0.12 (0.10)	−0.21* (0.11)
Age 29–44	−0.09 (0.09)	−0.23*** (0.09)	−0.18* (0.10)	−0.13 (0.10)	−0.15 (0.11)
Age 45–59	−0.65*** (0.23)	−0.62** (0.25)	−0.95*** (0.28)	−0.30 (0.27)	−0.23 (0.28)
Age 60+	0.71 (0.44)	−1.17** (0.51)	−0.69 (0.55)	−0.62 (0.53)	−0.005 (0.65)
Female	−0.01 (0.09)	−0.05 (0.09)	−0.04 (0.10)	−0.14 (0.11)	0.08 (0.11)
Institutional trust (tercile 2)	0.15 (0.11)	0.05 (0.10)	0.30** (0.12)	0.29** (0.13)	0.12 (0.13)
Institutional trust (tercile 3)	0.22* (0.13)	0.14 (0.13)	0.28* (0.15)	0.34** (0.16)	0.23 (0.17)
Constant	2.73*** (0.15)	3.02*** (0.15)	2.75*** (0.19)	2.95*** (0.17)	2.91*** (0.19)
N	428	460	393	347	305

Note: Cell entries are OLS coefficients with standard errors in parentheses. Dependent variable ranges from 1–4 with higher values indicating greater belief in false claims. This specification was preregistered as an exploratory research question (RQ1). Sample includes respondents in pure control condition for each blurb (no populism activation, no correction). Significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Appendix Table A9: Claim-specific models (India, 2 of 2)

	<i>DV: belief in false claim</i>			
	Patent holders	CO2 tanks	Covid vaccines	MPs'* rent
Moderate populist (tercile 2)	0.02 (0.11)	0.06 (0.11)	0.05 (0.13)	−0.02 (0.11)
Strong populist (tercile 3)	0.15 (0.11)	0.29** (0.12)	0.08 (0.13)	0.11 (0.13)
Conspiracism (tercile 2)	0.05 (0.11)	0.16 (0.11)	0.35*** (0.12)	0.22* (0.12)
Conspiracism (tercile 3)	0.34*** (0.13)	0.39*** (0.14)	0.69*** (0.16)	0.55*** (0.14)
University grad	−0.28*** (0.11)	−0.13 (0.12)	−0.10 (0.13)	−0.29** (0.11)
Frequent social media news	−0.11 (0.09)	−0.03 (0.09)	−0.23** (0.10)	−0.15 (0.09)
Age 29–44	−0.11 (0.08)	−0.03 (0.09)	−0.17* (0.10)	−0.16* (0.09)
Age 45–59	−0.11 (0.23)	−0.44* (0.23)	−0.59** (0.26)	−0.10 (0.27)
Age 60+	−1.89*** (0.53)	−1.01 (0.77)	−0.14 (0.59)	−0.51 (0.48)
Female	−0.11 (0.09)	−0.07 (0.09)	−0.03 (0.10)	−0.03 (0.10)
Institutional trust (tercile 2)	0.03 (0.10)	−0.12 (0.11)	−0.20 (0.12)	−0.25** (0.11)
Institutional trust (tercile 3)	0.08 (0.12)	−0.30** (0.13)	−0.10 (0.15)	−0.10 (0.15)
Constant	3.07*** (0.14)	3.00*** (0.15)	2.81*** (0.17)	3.15*** (0.16)
N	350	345	311	342

Note: Cell entries are OLS coefficients with standard errors in parentheses. Dependent variable ranges from 1–4 with higher values indicating greater belief in false claims. This specification was preregistered as an exploratory research question (RQ1). Sample includes respondents in pure control condition for each blurb (no populism activation, no correction). Significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Appendix Table A10: Claim-specific models (USA, 1 of 2)

	<i>DV: belief in false claim</i>			
	GMOs unsafe	Vaccines unsafe	Covid vax side effx	Nasal swabs
Moderate populist (tercile 2)	0.45*** (0.11)	0.31*** (0.12)	0.47*** (0.14)	0.60*** (0.13)
Strong populist (tercile 3)	0.49*** (0.14)	0.30** (0.15)	0.46*** (0.16)	0.75*** (0.16)
Conspiracism (tercile 2)	0.34*** (0.11)	0.51*** (0.12)	0.48*** (0.14)	0.33** (0.13)
Conspiracism (tercile 3)	0.53*** (0.14)	0.56*** (0.14)	0.62*** (0.16)	0.38** (0.15)
Ideology (conservative)	0.01 (0.02)	0.05** (0.02)	0.04 (0.03)	0.002 (0.03)
University grad	0.26** (0.10)	0.25** (0.13)	−0.02 (0.13)	0.57*** (0.13)
Frequent social media news	0.08 (0.08)	0.16* (0.09)	0.13 (0.11)	−0.04 (0.10)
Age 29–44	−0.20* (0.11)	−0.19* (0.11)	−0.08 (0.13)	−0.09 (0.12)
Age 45–59	−0.25* (0.13)	0.06 (0.14)	−0.16 (0.16)	−0.47*** (0.15)
Age 60+	−0.12 (0.21)	−0.29 (0.20)	0.004 (0.22)	−0.42** (0.19)
Female	0.18** (0.08)	−0.07 (0.09)	−0.09 (0.10)	−0.08 (0.10)
Institutional trust (tercile 2)	−0.01 (0.11)	0.12 (0.11)	−0.17 (0.12)	0.27** (0.13)
Institutional trust (tercile 3)	0.20 (0.12)	0.48*** (0.14)	0.21 (0.15)	0.55*** (0.15)
Political knowledge (tercile 2)	−0.07 (0.11)	−0.12 (0.13)	−0.04 (0.15)	−0.02 (0.15)
Political knowledge (tercile 3)	−0.31*** (0.10)	−0.46*** (0.11)	−0.29** (0.13)	−0.14 (0.13)
Constant	2.03*** (0.17)	1.70*** (0.19)	1.99*** (0.21)	1.11*** (0.21)
N	351	370	329	353

Note: Cell entries are OLS coefficients with standard errors in parentheses. Dependent variable ranges from 1–4 with higher values indicating greater belief in false claims. This specification was preregistered as an exploratory research question (RQ1). Sample includes respondents in pure control condition for each blurb (no populism activation, no correction). Significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Appendix Table A11: Claim-specific models (USA, 2 of 2)

	<i>DV: belief in false claim</i>			
	Dems* lie	GOP* lies	Patent holders	Covid variants
Moderate populist (tercile 2)	0.16 (0.12)	0.31*** (0.11)	0.15* (0.08)	0.53*** (0.08)
Strong populist (tercile 3)	0.33** (0.14)	0.57*** (0.13)	0.21** (0.09)	0.79*** (0.10)
Conspiracism (tercile 2)	0.14 (0.12)	0.45*** (0.11)	0.28*** (0.08)	0.31*** (0.08)
Conspiracism (tercile 3)	0.26* (0.14)	0.62*** (0.12)	0.45*** (0.09)	0.35*** (0.10)
Ideology (conservative)	−0.07*** (0.02)	0.06** (0.02)	−0.01 (0.01)	0.05*** (0.02)
University grad	0.14 (0.11)	0.41*** (0.11)	0.01 (0.08)	0.29*** (0.08)
Frequent social media news	−0.08 (0.09)	−0.01 (0.08)	0.03 (0.06)	0.02 (0.07)
Age 29–44	−0.35*** (0.11)	−0.13 (0.11)	−0.19** (0.07)	−0.22*** (0.08)
Age 45–59	−0.47*** (0.13)	−0.36*** (0.13)	−0.13 (0.09)	−0.30*** (0.10)
Age 60+	−0.63*** (0.23)	−0.002 (0.18)	−0.31** (0.13)	−0.32** (0.14)
Female	−0.08 (0.09)	−0.11 (0.09)	0.01 (0.06)	−0.14** (0.06)
Institutional trust (tercile 2)	0.33*** (0.11)	−0.33*** (0.10)	0.02 (0.07)	0.06 (0.08)
Institutional trust (tercile 3)	0.60*** (0.14)	−0.24* (0.12)	0.24*** (0.09)	0.44*** (0.10)
Political knowledge (tercile 2)	−0.07 (0.13)	−0.13 (0.12)	−0.17** (0.08)	−0.18** (0.09)
Political knowledge (tercile 3)	−0.12 (0.11)	−0.41*** (0.11)	−0.33*** (0.07)	−0.56*** (0.08)
Constant	2.76*** (0.18)	2.04*** (0.17)	2.68*** (0.13)	1.68*** (0.13)
N	379	388	769	756

Note: Cell entries are OLS coefficients with standard errors in parentheses. Dependent variable ranges from 1–4 with higher values indicating greater belief in false claims. This specification was preregistered as an exploratory research question (RQ1). Sample includes respondents in pure control condition for each blurb (no populism activation, no correction). Significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

H1 (effect of activation on belief)

Figure 1 in the main text presents the effect of activation on belief in fake news across terciles on pre-treatment populism. Following our preregistration, we estimate a pooled model and separate claim-specific models in each country. As described in the main text, in estimating the pooled model, we deviate from our preregistration by including all respondents rather than restricting the analysis to the top tercile of populist sentiment. This approach allows us to better contextualize the results among our preregistered subsample, where effects are relative to an extreme baseline of high belief in fake news. Our pooled models interact populism terciles with a dummy variable for the activation treatment:

$$Y_i = \beta_0 + \beta_1 \text{activation}_i + \beta_2 \text{tercile}_i + \beta_3 \text{activation} \times \text{tercile} + \epsilon_i,$$

where Y_i is respondent i 's average belief across all fake news stories they were shown, activation is a dummy variable for treatment, tercile is a categorical variable for level of pre-treatment populism, and ϵ is random error.²¹

The pooled results in each country are presented in the table below.

²¹Our preregistration mistakenly indicates that we will include respondent fixed effects in the pooled model. Such a model cannot be estimated because the activation dummy and respondent fixed effect are perfectly collinear.

Appendix Table A12: Effect of populism activation on fake news belief

	<i>DV: average belief in false claims</i>			
	Spain	Portugal	India	USA
Populism activation	0.03 (0.02)	0.02 (0.04)	0.03 (0.04)	0.00 (0.04)
Moderate populist (tercile 2)	0.10*** (0.02)	0.11*** (0.03)	−0.003 (0.05)	0.66*** (0.04)
Strong populist (tercile 3)	0.23*** (0.03)	0.24*** (0.04)	0.41*** (0.04)	1.05*** (0.04)
Activation × moderate	0.04 (0.03)	0.03 (0.05)	−0.01 (0.06)	−0.02 (0.06)
Activation × strong	−0.05 (0.03)	0.04 (0.05)	0.04 (0.06)	−0.10 (0.06)
Constant	1.89*** (0.02)	2.06 (0.02)	2.67 (0.03)	1.98 (0.03)
<i>Effect of populism activation:</i>				
Weak populists (tercile 1)	0.03	0.02	0.03	0.00
Moderate populists (tercile 2)	0.08***	0.05	0.02	−0.02
Strong populists (tercile 3)	0.01	0.06	0.06	−0.10*
Respondent fixed effects	✓	✓	✓	✓
N	8,697	3,201	2,817	3,024

Note: Cell entries are OLS coefficients with clustered standard errors in parentheses. Dependent variable is the average belief in all false claims respondent was randomly displayed, which ranges from 1–4 with higher values indicating greater belief. Models include all fake news stories from all studies. Significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Claim-specific models for each country are presented in the tables below.

Appendix Table A13: Effect of populism activation on fake news belief (Spain)

	<i>DV: belief in false claim</i>							
	GMOs unsafe	Vaccines unsafe	Religion in school	Islamic studies	Left-wing* pact	Right-wing* pact	Patent holders	NATO fumigations
Populism activation	0.02 (0.05)	0.08 (0.05)	-0.004 (0.05)	-0.07 (0.05)	0.08 (0.05)	0.10* (0.05)	0.03 (0.05)	0.03 (0.05)
Moderate populist (tercile 2)	0.12*** (0.04)	0.10*** (0.04)	0.12*** (0.04)	0.03 (0.04)	0.14*** (0.04)	0.10** (0.04)	0.14*** (0.04)	0.15*** (0.04)
Strong populist (tercile 3)	0.26*** (0.04)	0.15*** (0.04)	0.14*** (0.04)	0.05 (0.04)	0.19*** (0.04)	0.24*** (0.04)	0.33*** (0.04)	0.31*** (0.04)
Activation × moderate	0.01 (0.07)	-0.11 (0.07)	0.10* (0.06)	0.14** (0.07)	0.02 (0.06)	-0.01 (0.07)	0.07 (0.07)	0.12* (0.07)
Activation × strong	-0.05 (0.07)	-0.07 (0.07)	0.02 (0.06)	0.04 (0.07)	0.01 (0.07)	-0.16** (0.07)	-0.01 (0.07)	-0.05 (0.07)
Constant	2.40*** (0.03)	1.72*** (0.03)	1.52*** (0.03)	1.72*** (0.03)	1.92*** (0.03)	2.00*** (0.03)	2.40*** (0.03)	1.70*** (0.03)
N	4,355	4,312	4,419	4,240	4,293	4,354	4,395	4,262

Note: Cell entries are OLS coefficients with standard errors in parentheses. Dependent variable is belief in the false claim (measured 1–4 where higher values indicate greater belief). Significance levels: *p<.05, **p<.01, ***p<.001.

Appendix Table A14: Effect of populism activation on fake news belief (Portugal)

	<i>DV: belief in false claim</i>				
	GMOs unsafe	Vax unsafe	Left-wing* pact	Right-wing* pact	Patent holders
Populism activation	−0.04 (0.07)	−0.08 (0.06)	0.03 (0.06)	0.02 (0.07)	0.10 (0.05)
Moderate populist (tercile 2)	0.04 (0.07)	0.10 (0.06)	0.001 (0.06)	0.14* (0.07)	0.23** (0.05)
Strong populist (tercile 3)	0.17* (0.07)	0.17* (0.07)	0.14 (0.07)	0.21** (0.07)	0.37** (0.06)
Activation × moderate	0.11 (0.09)	0.10 (0.09)	−0.02 (0.09)	0.02 (0.10)	−0.03 (0.07)
Activation × strong	−0.01 (0.10)	0.05 (0.10)	−0.03 (0.10)	0.05 (0.10)	0.09 (0.08)
Constant	2.39*** (0.05)	1.57*** (0.04)	2.09*** (0.04)	1.99*** (0.05)	2.20*** (0.04)
N	1,569	1,628	1,639	1,549	2,946

Note: Cell entries are OLS coefficients with standard errors in parentheses. Dependent variable is belief in the false claim (measured 1–4 where higher values indicate greater belief). Significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Appendix Table A15: Effect of populism activation on fake news belief (India)

	<i>DV: belief in false claim</i>									
	Vaccines unsafe	Covid vax side effx	Nasal swabs	Mosque* construction	Islamic* studies	Patent holders	CO2 tanks	Covid variants	MPs* rent	
Populism activation	0.06 (0.07)	0.02 (0.07)	0.05 (0.08)	0.05 (0.08)	-0.02 (0.08)	0.06 (0.07)	-0.04 (0.08)	0.03 (0.08)	0.04 (0.08)	
Moderate populist (tercile 2)	0.03 (0.07)	-0.03 (0.07)	-0.02 (0.08)	0.07 (0.09)	-0.14* (0.09)	0.03 (0.08)	0.01 (0.08)	0.03 (0.09)	-0.01 (0.08)	
Strong populist (tercile 3)	0.48*** (0.07)	0.41*** (0.07)	0.50*** (0.08)	0.42*** (0.08)	0.37*** (0.08)	0.36*** (0.07)	0.31*** (0.07)	0.41*** (0.08)	0.41*** (0.07)	
Activation × moderate	0.004 (0.10)	-0.14 (0.10)	0.04 (0.11)	-0.14 (0.12)	0.14 (0.12)	0.001 (0.11)	0.03 (0.11)	0.07 (0.12)	-0.08 (0.11)	
Activation × strong	-0.02 (0.10)	0.11 (0.10)	-0.02 (0.11)	0.06 (0.12)	0.03 (0.12)	0.07 (0.10)	0.08 (0.10)	0.02 (0.11)	0.01 (0.11)	
Constant	2.63*** (0.05)	2.70*** (0.05)	2.53*** (0.06)	2.57*** (0.06)	2.72*** (0.06)	2.75*** (0.05)	2.83*** (0.05)	2.66*** (0.06)	2.73*** (0.05)	
N	1,872	1,883	1,861	1,460	1,352	1,420	1,391	1,378	1,436	

Note: Cell entries are OLS coefficients with standard errors in parentheses. Dependent variable is belief in the false claim (measured 1–4 where higher values indicate greater belief). Significance levels: *p<.05, **p<.01, ***p<.001.

Appendix Table A16: Effect of populism activation on fake news belief (USA)

	<i>DV: belief in false claim</i>							
	GMOs unsafe	Vaccines unsafe	Covid vax side effx	Nasal swabs	Dems* lie	GOP* lies	Patent holders	Covid variants
Populism activation	0.005 (0.07)	-0.03 (0.08)	0.09 (0.08)	-0.03 (0.09)	0.02 (0.08)	0.02 (0.08)	0.004 (0.05)	-0.04 (0.06)
Moderate populist (tercile 2)	0.60*** (0.07)	0.70*** (0.08)	0.69*** (0.08)	0.90*** (0.09)	0.44*** (0.08)	0.62*** (0.08)	0.45*** (0.05)	0.89*** (0.06)
Strong populist (tercile 3)	0.91*** (0.08)	1.13*** (0.08)	0.92*** (0.09)	1.45*** (0.09)	0.87*** (0.08)	1.06*** (0.09)	0.76*** (0.05)	1.32*** (0.06)
Activation × moderate	-0.06 (0.10)	-0.07 (0.11)	-0.14 (0.11)	0.04 (0.12)	-0.07 (0.11)	0.10 (0.11)	-0.02 (0.07)	-0.001 (0.08)
Activation × strong	-0.13 (0.11)	-0.08 (0.12)	-0.11 (0.12)	-0.10 (0.13)	-0.17 (0.12)	-0.19 (0.12)	-0.07 (0.08)	-0.05 (0.09)
Constant	2.18*** (0.05)	1.93*** (0.06)	2.06*** (0.06)	1.43*** (0.06)	2.23*** (0.06)	2.00*** (0.06)	2.31*** (0.04)	1.63*** (0.04)
N	1,497	1,482	1,516	1,535	1,486	1,532	3,007	3,013

Note: Cell entries are OLS coefficients with standard errors in parentheses. Dependent variable is belief in the false claim (measured 1–4 where higher values indicate greater belief). Significance levels: *p<.05, **p<.01, ***p<.001.

H2 (effect of corrections on belief)

Table 2 in the main text presents the results of pooled models estimating the effect of corrections on fake news belief. Here we report claim-specific models for each country.

Appendix Table A17: Effect of corrections on fake news belief (Spain)

DV: belief in false claim								
	GMOs unsafe	Vaccines unsafe	Religion in school	Islamic studies	Left-wing* pact	Right-wing* pact	Patent holders	NATO fumigations
Correction	−0.10*** (0.03)	0.06* (0.03)	−0.02 (0.03)	0.06* (0.03)	−0.03 (0.03)	−0.06* (0.03)	−0.06* (0.03)	−0.05 (0.04)
Constant	2.61*** (0.03)	1.77*** (0.03)	1.64*** (0.02)	1.70*** (0.02)	2.09*** (0.03)	2.17*** (0.03)	2.62*** (0.03)	1.91*** (0.03)
N	4,362	4,322	4,422	4,254	4,303	4,362	4,403	4,272

Note: Cell entries are OLS coefficients with standard errors in parentheses. Dependent variable is belief in false claim (measured 1–4, where higher values indicate more belief). Significance levels: *p<.05, **p<.01, ***p<.001.

Appendix Table A18: Effect of corrections on fake news belief (Portugal)

	<i>DV: belief in false claim</i>				
	GMOs unsafe	Vaccines unsafe	Left-wing* pact	Right-wing* pact	Patent holders
Correction	−0.21*** (0.04)	−0.05 (0.04)	−0.22*** (0.04)	−0.14*** (0.04)	−0.14*** (0.03)
Constant	2.59*** (0.04)	1.67*** (0.03)	2.28*** (0.03)	2.21*** (0.04)	2.53*** (0.03)
N	1,573	1,633	1,644	1,553	2,955

Note: Cell entries are OLS coefficients with standard errors in parentheses. Dependent variable is belief in false claim (measured 1–4, where higher values indicate more belief). Significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Appendix Table A19: Effect of corrections on fake news belief (India)

<i>DV: belief in false claim</i>									
	Vaccines unsafe	Covid vax side effx	Nasal swabs	Mosque* construction	Islamic* studies	Patent holders	CO2 tanks	Covid variants	MPs* rent
Correction	-0.04 (0.04)	0.03 (0.04)	0.05 (0.05)	0.003 (0.05)	-0.06 (0.05)	0.001 (0.04)	-0.10* (0.04)	0.02 (0.03)	-0.07 (0.05)
Constant	2.86*** (0.03)	2.82*** (0.03)	2.70*** (0.03)	2.75*** (0.03)	2.86*** (0.04)	2.93*** (0.03)	2.99*** (0.03)	2.83*** (0.03)	2.92*** (0.03)
N	1,872	1,883	1,861	1,460	1,352	1,420	1,391	1,378	1,436

Note: Cell entries are OLS coefficients with standard errors in parentheses. Dependent variable is belief in false claim (measured 1-4, where higher values indicate more belief). Significance levels: *p<.05, **p<.01, ***p<.001.

Appendix Table A20: Effect of corrections on fake news belief (USA)

<i>DV: belief in false claim</i>									
	GMOs unsafe	Vaccines unsafe	Covid side effx	Nasal swabs	Dems* lie	GOP* lies	Patent holders	Covid variants	
Correction	-0.05 (0.05)	0.02 (0.05)	0.06 (0.05)	0.02 (0.06)	-0.19** (0.05)	-0.03 (0.05)	-0.10* (0.03)	0.07 (0.04)	
Constant	2.67*** (0.03)	2.49*** (0.04)	2.58*** (0.04)	2.18*** (0.04)	2.71*** (0.03)	2.58*** (0.04)	2.75*** (0.02)	2.31*** (0.03)	
N	1,497	1,483	1,517	1,535	1,487	1,532	3,008	3,014	

Note: Cell entries are OLS coefficients with standard errors in parentheses. Dependent variable is belief in false claim (measured 1–4, where higher values indicate more belief). Significance levels: *p<.05, **p<.01, ***p<.001.

H3 (moderating effect of populism activation on corrections)

Figure 2 in the main text presents the effect of corrections on fake news belief across terciles of pre-treatment populism, comparing respondents who received the populism activation treatment (right panels) or not (left panels). Here we report the result of pooled models for each country.

Appendix Table A21: Effect of corrections on fake news belief (Spain)

	<i>DV: belief in false claim</i>	
	No activation	Activation
Correction	−0.001 (0.03)	−0.03 (0.04)
Moderate populist (tercile 2)	0.09** (0.03)	0.13** (0.04)
Strong populist (tercile 3)	0.22*** (0.03)	0.15** (0.03)
Correction × moderate	0.02 (0.03)	0.03 (0.05)
Correction × strong	−0.02 (0.04)	0.04 (0.05)
Constant	1.92*** (0.02)	1.97*** (0.03)
<i>Effect of correction by tercile:</i>		
Weak populists	−0.001	−0.03
Moderate populists	0.02	0.01
Strong populists	−0.02	0.01
N (respondent-blurbs)	23,070	11,560

Note: Cell entries are OLS coefficients with clustered standard errors in parentheses. Dependent variable is belief in false claim (measured 1–4, where higher values indicate more belief). Significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Appendix Table A22: Effect of corrections on fake news belief (Portugal)

	<i>DV: belief in false claim</i>	
	No activation	Activation
Correction	−0.22*** (0.05)	−0.20*** (0.05)
Moderate populist (tercile 2)	0.08 (0.05)	0.08 (0.05)
Strong populist (tercile 3)	0.18** (0.06)	0.20** (0.06)
Correction × moderate	0.06 (0.06)	0.10 (0.06)
Correction × strong	0.10 (0.07)	0.12 (0.07)
Constant	2.21*** (0.04)	2.22*** (0.04)
<i>Effect of correction by tercile:</i>		
Weak populists	−0.22***	−0.20***
Moderate populists	−0.16***	−0.10*
Strong populists	−0.13*	−0.08
N (respondent-blurbs)	4,682	4,649

Note: Cell entries are OLS coefficients with clustered standard errors in parentheses. Dependent variable is belief in false claim (measured 1–4, where higher values indicate more belief). Significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Appendix Table A23: Effect of corrections on fake news belief (India)

	<i>DV: belief in false claim</i>	
	No activation	Activation
Correction	−0.01 (0.04)	0.07 (0.04)
Moderate populist (tercile 2)	0.02 (0.05)	0.06 (0.05)
Strong populist (tercile 3)	0.44*** (0.05)	0.47*** (0.05)
Correction × moderate	−0.05 (0.06)	−0.14** (0.05)
Correction × strong	−0.06 (0.05)	−0.03 (0.05)
Constant	2.68*** (0.04)	2.67*** (0.04)
<i>Effect of correction by tercile:</i>		
Weak populists	−0.01	0.07
Moderate populists	−0.06	−0.08*
Strong populists	−0.06	0.04
N (respondent-blurbs)	7,199	6,854

Note: Cell entries are OLS coefficients with clustered standard errors in parentheses. Dependent variable is belief in false claim (measured 1–4, where higher values indicate more belief). Significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Appendix Table A24: Effect of corrections on fake news belief (USA)

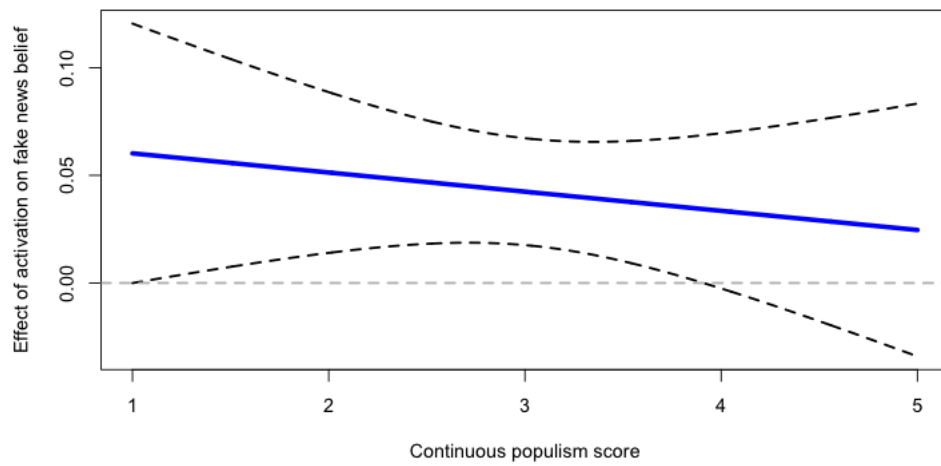
	<i>DV: belief in false claim</i>	
	No activation	Activation
Correction	−0.05 (0.04)	−0.06 (0.04)
Moderate populist (tercile 2)	0.65*** (0.05)	0.60*** (0.05)
Strong populist (tercile 3)	1.05*** (0.05)	0.91*** (0.05)
Correction × moderate	0.02 (0.05)	0.07 (0.05)
Correction × strong	0.01 (0.0.06)	0.07 (0.06)
Constant	2.00*** (0.04)	2.01*** (0.04)
<i>Effect of correction by tercile:</i>		
Weak populists	−0.05	−0.06
Moderate populists	−0.04	0.01
Strong populists	−0.05	0.01
N (respondent-blurbs)	7,455	7,613

Note: Cell entries are OLS coefficients with clustered standard errors in parentheses. Dependent variable is belief in false claim (measured 1–4, where higher values indicate more belief). Significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

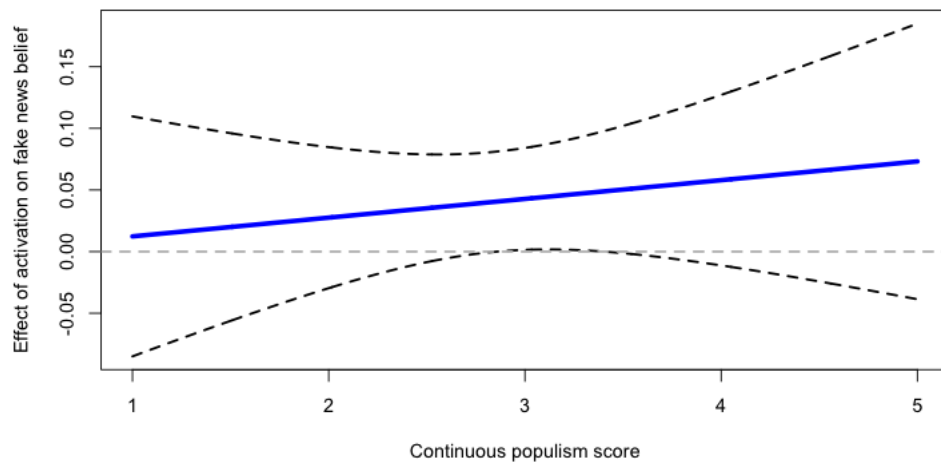
Verifying robustness with continuous measure of populism

Appendix Figure A2: Effect of populism activation on belief in fake news (using continuous populism measure)

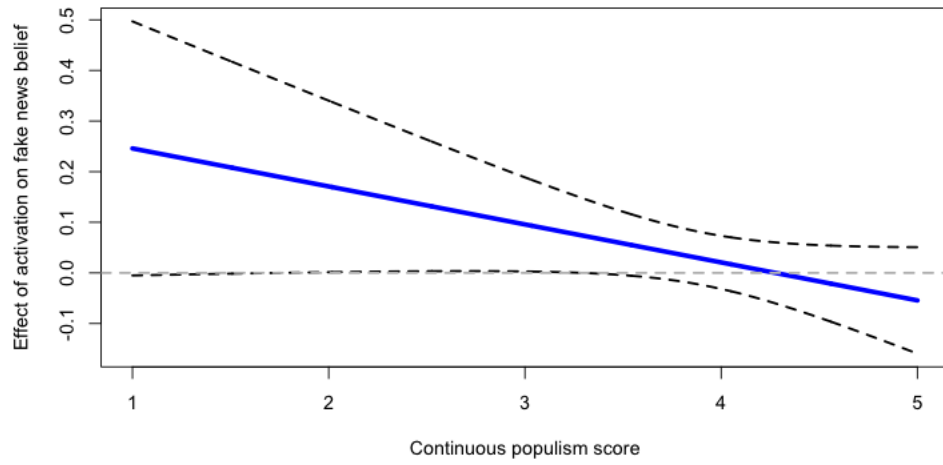
(a) Spain



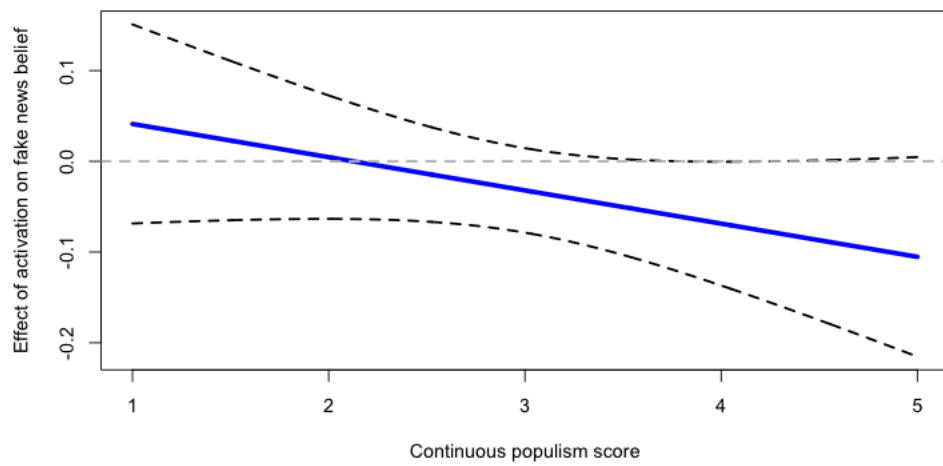
(b) Portugal



(c) India



(d) USA



Note: xxxx

Appendix Table A25: Effect of populism activation on belief in fake news (using continuous populism measure; Spain)

<i>DV: average belief in false claims</i>	
Populism activation	0.07 (0.04)
Populism score	0.09*** (0.01)
Activation × score	−0.01 (0.01)
Constant	1.75*** (0.03)
N	8,697

Note: Cell entries are OLS coefficients with clustered standard errors in parentheses. Dependent variable is average belief in all false claims respondent was randomly displayed, which ranges from 1–4 with higher values indicating greater belief. Significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Appendix Table A26: Effect of populism activation on belief in fake news (using continuous populism measure; Portugal)

	<i>DV: average belief in false claims</i>
Populism activation	−0.003 (0.07)
Populism score	0.12*** (0.02)
Activation × score	0.02 (0.02)
Constant	1.83*** (0.05)
N	3,201

Note: Cell entries are OLS coefficients with clustered standard errors in parentheses. Dependent variable is average belief in all false claims respondent was randomly displayed, which ranges from 1–4 with higher values indicating greater belief. Significance levels: *p<.05, **p<.01, ***p<.001.

Appendix Table A27: Effect of populism activation on belief in fake news (using continuous populism measure; India)

<i>DV: average belief in false claims</i>	
Populism activation	0.32 (0.17)
Populism score	0.23*** (0.03)
Activation × score	−0.08 (0.04)
Constant	1.91*** (0.12)
N	2,817

Note: Cell entries are OLS coefficients with clustered standard errors in parentheses. Dependent variable is average belief in all false claims respondent was randomly displayed, which ranges from 1–4 with higher values indicating greater belief. Significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

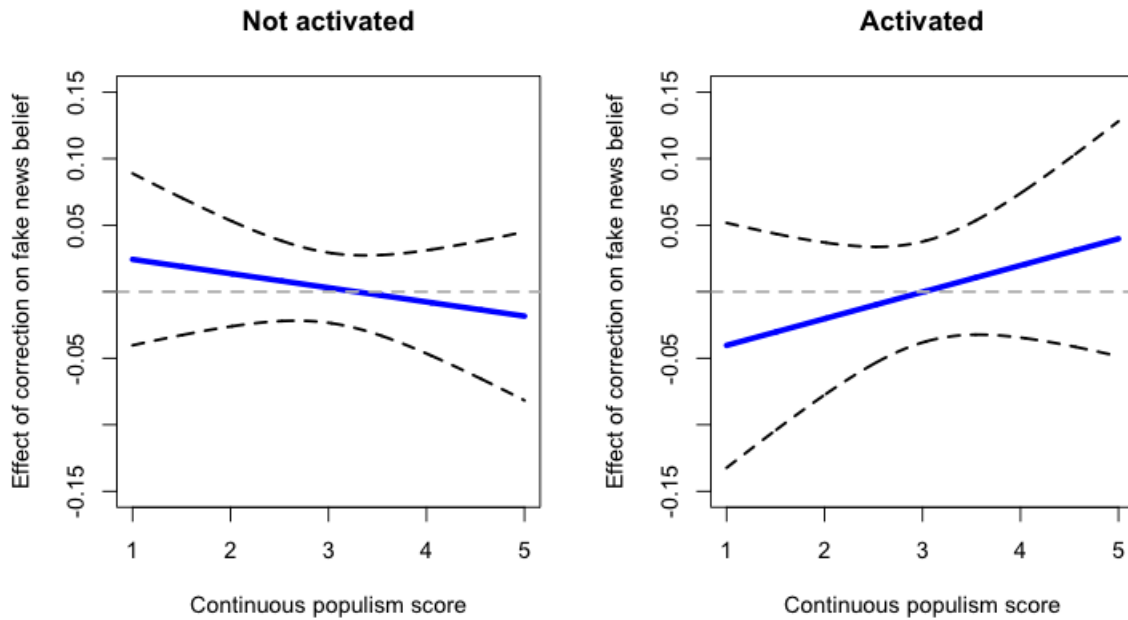
Appendix Table A28: Effect of populism activation on belief in fake news (using continuous populism measure; USA)

	<i>DV: average belief in false claims</i>
Populism activation	0.08 (0.08)
Populism score	0.46*** (0.02)
Populism activation \times score	−0.04 (0.03)
Constant	1.15*** (0.06)
N	3,204

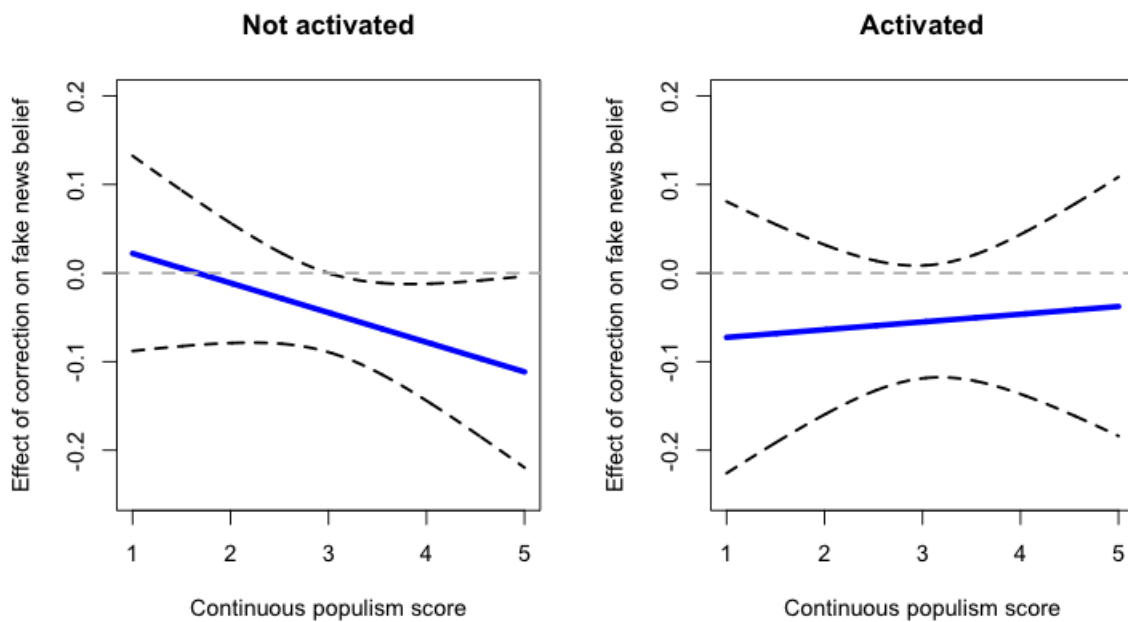
Note: Cell entries are OLS coefficients with clustered standard errors in parentheses. Dependent variable is average belief in all false claims respondent was randomly displayed, which ranges from 1–4 with higher values indicating greater belief. Significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Appendix Figure A3: Effect of corrections on belief in fake news: populism activation (treatment) vs. no activation (control) groups (using continuous populism measure)

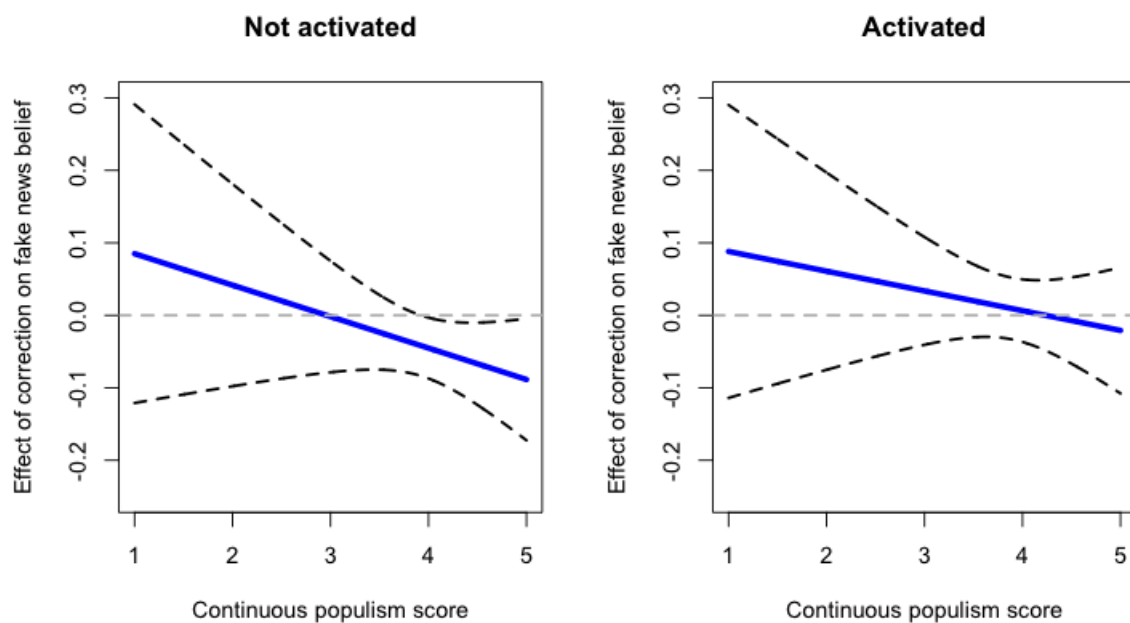
(a) Spain



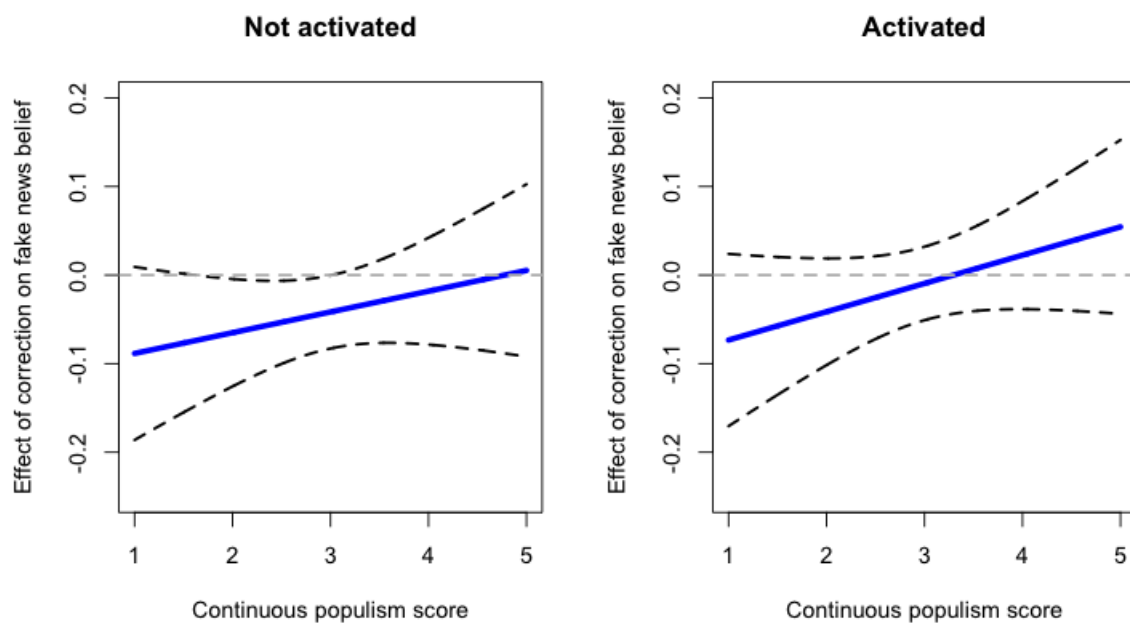
(b) Portugal



(c) India



(d) USA



Note: xxxx

Appendix Table A29: Effect of corrections on belief in fake news (H3, Spain)

	<i>DV: belief in false claim</i>	
	No activation	Activation
Correction	0.03 (0.05)	−0.06 (0.07)
Populism score	0.10*** (0.01)	0.07*** (0.02)
Correction × score	−0.01 (0.01)	0.02 (0.02)
Constant	1.73*** (0.04)	1.86*** (0.06)
N (respondent-blurbs)	23,070	11,560

Note: Cell entries are OLS coefficients with clustered standard errors in parentheses. Dependent variable is belief in false claim (measured 1–4, where higher values indicate more belief). Significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Appendix Table A30: Effect of corrections on belief in fake news (H3, Portugal)

	<i>DV: belief in false claim</i>	
	No activation	Activation
Correction	0.06 (0.08)	−0.08 (0.11)
Populism score	0.14*** (0.02)	0.09*** (0.03)
Correction × score	−0.03 (0.03)	0.01 (0.03)
Constant	1.91*** (0.04)	2.10*** (0.10)
N (respondent-blurbs)	8,683	4,379

Note: Cell entries are OLS coefficients with clustered standard errors in parentheses. Dependent variable is belief in false claim (measured 1–4, where higher values indicate more belief). Significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Appendix Table A31: Effect of corrections on belief in fake news (H3, India)

	<i>DV: belief in false claim</i>	
	No activation	Activation
Correction	0.13 (0.14)	0.12 (0.14)
Populism score	0.25*** (0.02)	0.17*** (0.02)
Correction × score	−0.04 (0.04)	−0.03 (0.03)
Constant	1.85*** (0.04)	2.17*** (0.10)
N (respondent-blurbs)	7,199	6,854

Note: Cell entries are OLS coefficients with clustered standard errors in parentheses. Dependent variable is belief in false claim (measured 1–4, where higher values indicate more belief). Significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Appendix Table A32: Effect of corrections on belief in fake news (H3, USA)

	<i>DV: belief in false claim</i>	
	No activation	Activation
Correction	−0.11 (0.07)	−0.11 (0.07)
Populism score	0.45*** (0.02)	0.41*** (0.02)
Correction × score	0.02 (0.02)	0.03 (0.02)
Constant	1.20*** (0.05)	1.28*** (0.05)
N (respondent-blurbs)	7,455	7,613

Note: Cell entries are OLS coefficients with clustered standard errors in parentheses. Dependent variable is belief in false claim (measured 1–4, where higher values indicate more belief). Significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Online Appendix A: Survey instruments

This appendix contains the survey instrument used in each each study. Study 1 (Spain) was fielded in Spanish, Study 2 (Portugal) in Portuguese, and Studies 3 (India) and 4 (USA) in English.

Study 1 (Spain)

This study is led by [REDACTED] and [REDACTED] from [REDACTED] in [REDACTED] to find out people's opinions on political issues and political groups in Spain. The data you will provide us when participating in the study will be completely anonymous. You can exit at any time by clicking "exit" at the top of your browser. We will ensure that we do not process data that could identify you, either alone or in combination with additional information. Your participation is voluntary and you can withdraw your consent at any time or for any reason. Do you agree to participate in this study?

-Yes, I agree to participate.

-No, I do not agree to participate.

[Screen out if "No" is selected]

--- page break ---

In this first part of the survey we will ask you some questions about yourself.

Are you of Spanish nationality?

-Yes

-No

What is the region you currently reside in?

-AMB (Barcelona Metropolitan Area)

-AMM (Madrid Metropolitan Area)

-Catalonia-Aragon and the Balearic Islands (Balearic Islands, non-metropolitan Barcelona,

-Gerona, Huesca, Lérida, Tarragona and Zaragoza).

-Levante (Albacete, Alicante, Castellón, Murcia and Valencia)

-South (Almería, Badajoz, Cádiz, Córdoba, Granada, Huelva, Jaén, Málaga and Seville)

-Center (Ávila, Cáceres, Ciudad Real, Cuenca, Guadalajara, non-metropolitan

Madrid, -Salamanca, Segovia, Soria, Teruel, Toledo, Valladolid and Zamora)

-Northwest (La Coruña, León, Lugo, Orense, Oviedo and Pontevedra)

-North-Central (Álava, Burgos, Guipúzcoa, Logroño, Navarra, Palencia, Santander and Vizcaya).

-Canary Islands

How old were you on your last birthday? Please write a number. [Text entry]

What is your gender?

-Female

-Male

What is the highest level of education you have completed?

-Without studies

-Incomplete primary studies

-Primary education

- First stage of secondary education
- Second stage of secondary education
- Higher education (we include the third degree: diplomas, engineers, social graduates, etc.)

Which of the following situations are you currently in?

- Work with a permanent contract
- Work with a temporary contract
- Self-employment
- Retired or pensioner (has previously worked)
- Pensioner (has not previously worked)
- Unemployed and have worked before
- Unemployed and looking for their first job
- Student
- Unpaid domestic work
- Another situation

--- page break ---

Next we are interested in your opinion about how things work and are managed in the world and in Spain. Please read each of the following statements and use the respective rating scale to indicate how likely it is in your opinion that the statement is true. Remember that there are no "objectively" right or wrong answers and that we are interested in your personal opinion.

[Order of statements randomized]

I think there are many very important things happening in the world, of which the public is never informed.

I think that politicians generally do not tell us the real reasons for their decisions.

I believe that government agencies carefully monitor all citizens.

I believe that events that superficially appear unconnected are often the result of secret activities.

I think there are secret organizations that greatly influence political decisions.

- 0% - not true at all
- 10% - extremely unlikely
- 20% - very unlikely
- 30% - unlikely
- 40% - unlikely
- 50% - undecided
- 60% - somewhat likely
- 70% - probable
- 80% - very likely
- 90% - extremely likely
- 100% - true

--- page break ---

And using the following scale, could you say to what extent you agree or disagree with the following statements?

[Order of statements randomized]

Politicians must always listen carefully to the people's problems.

Politicians don't need to spend time with ordinary people to do a good job.

The government is largely run by a few big interests looking out for themselves.

Government officials use their power to try to improve people's lives.

You can tell if a person is good or bad by knowing their political stance.

The people I disagree with politically are not bad.

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

— page break —

And using the following scale, could you say to what extent you agree or disagree with the following statements?

[Order of statements randomized]

Politicians in Congress have to follow the will of the people.

The most important decisions should be made by the people and not by politicians.

In politics, agreement is called what it really means to renounce one's own principles.

The political differences between the elite and the people are greater than the differences that exist within the people.

I would rather be represented by an ordinary citizen than by an experienced politician.

Politicians talk a lot and do very little.

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

How interested are you in politics?

- Not interested
- A little interested
- Quite interested
- Very interested

When talking about politics, the expressions left and right are normally used. On this scale there are a series of points that go from left to right. At what point would you place yourself?

- LEFT 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- RIGHT 10

— page break —

[Display if 17 years old on last birthday question]

Imagine that in the last general elections on November 10 you had been of voting age, and that you had been able to participate in these elections. Which party or coalition would you have voted for in the last general elections on November 10?

- Más País
- PSOE
- PP
- Citizens
- Unidas Podemos
- VOX
- CKD
- JxCat-Junts
- BNG
- EAJ-PNV
- EH Bildu
- CCa-PNC
- PRC (Regionalist Party of Cantabria)
- PACMA
- NA+
- Another party, which one? [Text entry]
- I would have voted null
- In Blank
- I wouldn't have voted
- I don't know

[Display if 18 or older on last birthday question]

Could you tell me if in the general elections of November 10, 2019...?

- I went to vote and I voted
- I was not old enough to vote
- I went to vote, but I couldn't do it
- I didn't go to vote because I couldn't
- I preferred not to vote
- I don't remember

[Display if responded "I went to vote and I voted" to previous question]

If you went to vote and voted, which party or coalition did you vote for?

- Más País
- PSOE
- PP
- Citizens
- Unidas Podemos
- VOX
- CKD
- JxCat-Junts
- BNG
- EAJ-PNV
- EH Bildu
- CCa-PNC
- PRC (Regionalist Party of Cantabria)
- PACMA
- NA+
- Another party, which one? [Text entry]

--- page break ---

Would you say that, in general, most people can be trusted, or that one is never prudent enough in dealing with others? Please rate yourself on a scale of 1 to 10, with 1 meaning 'you can never be too cautious' and 10 meaning 'most people can be trusted'.

- 1 – It is never prudent enough
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 – Most people can be trusted

We are going to name a series of institutions, using a scale from 0 to 10, in which 0 means 'no trust' and 10 'maximum trust'. Could you please tell us the degree of trust they deserve? currently...?

Scientists
Doctors
Judges
Journalists
Politicians in general
The judicial system
The Government of Spain
Political parties
The media
The General Council of Medical
The Congress of Spain

-0 – No trust
-1
-2
-3
-4
-5
-6
-7
-8
-9
-10 - Maximum confidence

--- page break ---

Do you have an account on any of the following social networks? Please select all that apply.

-Facebook
-Twitter
-Tuenti
-Instagram
-Other social networks (Hi5, Google+, etc.)

How often do you use the following media to find or share news about politics?

Facebook
Twitter
WhatsApp
Media pages (newspapers, radios, etc.)

-More than once a day
-Once a day
-Once every few days
-Once a week
-Once a month

- Less than once a month
- Never

— page break —

Now we would like to ask you some questions about politics and government.

[Order of knowledge questions randomized]

Could you tell me who the president of VOX is?

- Santiago Abascal
- Javier Ortega Smith
- Rocío Monasterio
- Iván Espinosa de los Monteros

Of the following groups of people, who has the right to vote in general elections (to the Congress and the Senate)?

- All people residing in Spain
- Who pays taxes in Spain
- All people who legally reside in Spain
- People with Spanish nationality

Do you know who was the first president of the government after the transition?

- Carlos Arias Navarro
- Adolfo Suárez
- Leopoldo Calvo-Sotelo
- Felipe González

Nicolás Maduro is the president of which country?

- Venezuela
- El Salvador
- Honduras
- Mexico

In what year was the Spanish Constitution approved?

- 1966
- 1970
- 1978
- 1989

Does the PSOE currently govern with an absolute majority?

- Yes
- No
- I don't know

— page break —

We are interested in knowing how often you do certain activities. Now, to make sure you are paying attention to the survey, please select the "Never" option.

- Several times a day
- Once a day
- Several times a week
- Several times a month
- Never

— page break —

[Random assignment into one of the following three conditions (control/no populism activation, situational activation treatment, or dispositional activation treatment)]

[Control/no populism activation]

Right now, how intensely do you feel the following emotions?

Anger
Disgust
Fear
Joy
Enthusiasm
Interest
Sadness
Hope

- Very little or not at all
- A little
- Moderately
- Quite a bit
- A lot

[Situational activation treatment]

Below we present a list of problems that currently exist in Spain. If you consider that the list below is not complete, please add the missing subject in the "other" field. Please order them from most serious (1) to least serious (10).

- _____ economic problems
- _____ social problems
- _____ the impact that immigrants have on social systems
- _____ the impact that immigrants have on Spanish culture
- _____ underemployment and the high percentage of temporary contracts
- _____ the great economic inequalities in the country
- _____ the slow recovery after the economic crisis
- _____ problems related to education
- _____ the problems related to the independence of Catalonia

_____ Others. Which? [Text entry]

We want to ask you some questions about [pipe in response to previous question], the problem you described as the most serious. What events or circumstances do you think are primarily responsible for causing this problem? (Please limit your answer to a few words.)

[Text entry]

In at least a few sentences, explain why you believe these events or circumstances are responsible and how they should be acted upon.

[Text entry]

When you think about this problem, how intensely do you feel the following emotions?

Anger
Disgust
Fear
Joy
Enthusiasm
Interest
Sadness
Hope

-Very little or not at all
-A little
-Moderately
-Quite a bit
-A lot

— page break —

[Dispositional activation treatment]

Below we present a list of problems that currently exist in Spain. If you consider that the list below is not complete, please add the missing subject in the “other” field. Please order them from most serious (1) to least serious (10).

_____ economic problems
_____ social problems
_____ the impact that immigrants have on social systems
_____ the impact that immigrants have on Spanish culture
_____ underemployment and the high percentage of temporary contracts
_____ the great economic inequalities in the country
_____ the slow recovery after the economic crisis
_____ problems related to education
_____ the problems related to the independence of Catalonia
_____ Others. Which? [Text entry]

We want to ask you some questions about [pipe in top ranked problem from previous question], the problem you described as the most serious. What groups or individuals do you think are primarily responsible for causing this problem? (Please limit your answer to a few words.)

[Text entry]

In at least a few sentences, explain why you believe these groups or individuals are responsible and how we should handle them.

[Text entry]

When you think about this problem, how intensely do you feel the following emotions?

Anger
Disgust
Fear
Joy
Enthusiasm
Interest
Sadness
Hope

-Very little or not at all
-A little
-Moderately
-Quite a bit
-A lot

— page break —

[Random assignment to one of the following]

On the following pages, we will show you some articles with recently published news. Please read them carefully before answering the questions below.

—

On the following pages, we will show you some articles with recently published news. Please read them carefully before answering the questions below. When you read them, keep in mind that there has been a lot of comment lately about the quality of information in the media, due to the spread of fake news, conspiracy theories or other forms of misinformation; statements that also circulate widely on the internet. For this reason and in summary, it is important for readers to be skeptical of the supposedly objective statements contained in the news.

—

On the following pages, we will show you some articles with recently published news. Please read them carefully before answering the questions below. When you read them, keep in mind that some people maintain that society is dominated by small groups of powerful elites who pursue their own interests to the detriment of ordinary people. While it is true that some members of society have more power than others, it is important to approach with skepticism reports that place the blame for major social or economic problems on these groups without reliable evidence

— page break —

EXTREME WEATHER EVENTS LINKED TO CLIMATE CHANGE

Climate scientists agree that human activity is causing extreme weather events, such as hurricanes, tornadoes, droughts and wildfires, with greater frequency.

As far as you know, how accurate is the claim that human activity is causing extreme weather events to occur more frequently?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

[Note: Respondents were randomly assigned to 4 of the following fake news blurbs following the procedure explained in Appendix C.]

— page break —

[No correction]

DEBATE OVER THE SAFETY OF GENETICALLY MODIFIED FOOD

Activists opposed to genetically modified foods argue that the changes made can vary the nutritional content and introduce toxins that damage vital organs.

[Correction1]

DEBATE OVER THE SAFETY OF GENETICALLY MODIFIED FOOD

Activists opposed to genetically modified foods argue that the changes made can vary the nutritional content and introduce toxins that damage vital organs.

However, the vast majority of doctors believe that genetically modified foods are safe. Furthermore, scientific studies have not shown that negative side effects occur from consuming these foods.

[Correction2]

DEBATE ON THE SAFETY OF GENETICALLY MODIFIED FOODS

Activists opposed to genetically modified foods argue that the changes made can vary nutritional content and introduce toxins that damage vital organs. However, the vast majority of public health agencies believe that genetically modified foods are safe. Furthermore, scientific studies have not shown that negative side effects occur from consuming these foods.

[Correction3]

DEBATE OVER THE SAFETY OF GENETICALLY MODIFIED FOOD

Activists opposed to genetically modified foods argue that the changes made can vary the nutritional content and introduce toxins that damage vital organs. However, the vast majority of scientists believe that genetically modified foods are safe. Furthermore, scientific studies have not shown that negative side effects occur from consuming these foods.

[All respondents]

As far as you know, how accurate do you think the statement that genetically modified foods are unsafe is?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[No correction]

MORE AND MORE PARENTS REJECT VACCINES FOR FEAR OF AUTISM

In many countries, small groups of parent activists claim that their children began to show signs of autism shortly after receiving mandatory vaccinations.

[Correction1]

MORE AND MORE PARENTS REJECT VACCINES FOR FEAR OF AUTISM

In many countries, small groups of parent activists claim that their children began to show signs of autism shortly after receiving mandatory vaccinations. However, doctors warn that scientific studies have consistently confirmed that vaccines do not cause autism.

[Correction2]

MORE AND MORE PARENTS REJECT VACCINES FOR FEAR OF AUTISM

In many countries, small groups of parent activists claim that their children began to show signs of autism shortly after receiving mandatory vaccinations. However, public health agencies warn that scientific studies have consistently confirmed that vaccines do not cause autism.

[Correction3]

MORE AND MORE PARENTS REJECT VACCINES FOR FEAR OF AUTISM

In many countries, small groups of parent activists claim that their children began to show signs of autism shortly after receiving mandatory vaccinations. However, other parenting groups caution that scientific studies have consistently confirmed that vaccines do not cause autism.

[All respondents]

As far as you know, how accurate is the claim that vaccines increase the risk of autism?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[No correction]

EXCLUSIVE: CENTRAL GOVERNMENT CONSIDERING DECREASING LANGUAGE CLASSES TO REPLACE THEM WITH RELIGION

Leaked documents reveal that the central government is studying various ways to reduce class time dedicated to language and replace it with religion classes.

[Correction1]

EXCLUSIVE: CENTRAL GOVERNMENT CONSIDERING DECREASING LANGUAGE CLASSES TO REPLACE THEM WITH RELIGION

Leaked documents reveal that the central government is studying various ways to reduce class time dedicated to language and replace it with religion classes.

Journalists who have investigated this matter warn that this change is not possible because the power to determine the school curriculum falls to the regional governments.

[Correction2]

EXCLUSIVE: CENTRAL GOVERNMENT CONSIDERING DECREASING LANGUAGE CLASSES TO REPLACE THEM WITH RELIGION

Leaked documents reveal that the central government is studying various ways to reduce class time dedicated to language and replace it with religion classes.

Fact-checking associations such as Newtral or Maldita Hemeroteca, which have investigated the matter, warn that this change is not possible because the power to determine the school curriculum falls to the regional governments.

[All respondents]

As far as you know, how accurate is the statement that the government is considering reducing language classes and replacing them with religion?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[No correction]

EXCLUSIVE: CENTRAL GOVERNMENT CONSIDERING INCLUDING COMPULSORY ISLAMIC STUDIES IN SCHOOL CURRICULUM

Leaked documents reveal that the central government is studying various ways to incorporate compulsory Islamic studies in the school curriculum.

[Correction1]

EXCLUSIVE: CENTRAL GOVERNMENT CONSIDERING INCLUDING COMPULSORY ISLAMIC STUDIES IN SCHOOL CURRICULUM

Leaked documents reveal that the central government is studying various ways to incorporate compulsory Islamic studies in the school curriculum.

However, journalists who have investigated the matter warn that Islamic studies would not be mandatory for all students. It is worth remembering that the Spanish Constitution guarantees that students can receive religion classes in accordance with the convictions of their families.

[Correction2]

EXCLUSIVE: CENTRAL GOVERNMENT CONSIDERING INCLUDING COMPULSORY ISLAMIC STUDIES IN SCHOOL CURRICULUM

Leaked documents reveal that the central government is studying various ways to incorporate compulsory Islamic studies in the school curriculum.

However, fact-checking associations such as Newtral or Maldita Hemeroteca, which have investigated the matter, warn that Islamic studies would not be mandatory for all students. It is worth remembering that the Spanish Constitution guarantees that students can receive religion classes in accordance with the convictions of their families.

[All respondents]

As far as you know, how accurate is the statement that the government is considering implementing mandatory Islamic studies classes in the school curriculum?

- Totally accurate
- Very accurate

-Not very accurate
-Not at all accurate

— page break —

[No correction]

IN THE VALENCIAN COMMUNITY, PSOE AND PODEMOS REACH A SECRET AGREEMENT TO LIMIT THE TIME OF THE OPPOSITION IN THE PARLIAMENTARY DEBATE

PSOE and Podemos agree to prevent deputies from replying to members of the Government in debates in the Valencian Cortes. A change that would suppress the voices, opinions and interests of an important sector of the people.

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and Podemos agree to prevent deputies from replying to members of the Government in debates in the Valencian Cortes. A change that would suppress the voices, opinions and interests of an important sector of the people.

To date, there is no evidence of this supposed agreement, but political scientists indicate that said plan goes against the regulations of the Cortes and therefore could not be applied. The regulations grant the opposition the right to reply in plenary.

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[All respondents]

As far as you know and belief, how accurate is the statement that PSOE and Podemos agreed to limit the debate time available to the opposition?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[No correction]

IN ANDALUSIA, PP, CIUDADANOS AND VOX REACH A SECRET AGREEMENT TO LIMIT THE OPPOSITION'S DEBATE TIME IN THE PARLIAMENTARY DEBATE

PP, Ciudadanos and Vox agree to prevent deputies from replying to members of the Government in the debates of the Parliament of Andalusia . A change that would suppress the voices, opinions and interests of an important sector of the people.

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[No correction]

PATENT OWNERS LIMIT THE SUPPLY OF CANCER MEDICINES

A piece of news that has received a lot of attention recently maintains that the cure for cancer - of some types - is more than developed, but that there is a Patent Mafia that prevents its use for raise drug prices.

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However, experts say there is no evidence that patent owners are restricting supply. In fact, the cost of many medicines has fallen dramatically in Europe in recent decades.

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However, the General Council of Medical Associations indicates that there is no evidence that patent owners are restricting supply. In fact, the cost of many medicines has fallen dramatically in Europe in recent decades.

[All respondents]

As far as you know, how accurate is the claim that patent holders are restricting the supply of medicines to raise prices?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[No correction]

NATO MILITARY AIRPLANES CARRYING OUT CLANDESTINE FUMIGATIONS IN SPAIN

According to a recent report, NATO military planes are carrying out clandestine fumigations in Spain. It is a geoengineering program to manipulate the climate and global communications with harmful effects on health.

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[Correction4]

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[Correction5]

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[Correction6]

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[All respondents]

As far as you know, how accurate is the statement that NATO planes are being used to carry out clandestine fumigation in Spain?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

Now we would like to ask you some questions about politics and government. We would like to know your best guess on each of the topics you will be consulted on. In addition, we will also constantly ask you how sure you are that the answer you give us is correct. It's okay if you're not sure of the answer; We just want to know what your best guesses are. Therefore, it is important to keep in mind that what we are interested in is simply knowing what a person's first impression is without asking another person, or searching for answers on the Internet or without any other help. So please don't do any of this. Please, just tell us the answer that seems most accurate to you.

--- page break ---

These days there is a lot of talk about environmental pollution by carbon dioxide (CO₂). What do you think is the percentage of total global CO₂ emissions that comes from China?

- Between 0% and 25%
- Between 26% and 50%
- Between 51% and 75%
- Between 76% and 100%

How sure are you about this answer?

- Totally sure
- Quite sure
- Moderately sure
- Not very sure
- Nothing sure

--- page break ---

These days there is a lot of talk about environmental pollution by carbon dioxide (CO₂). What do you think is the percentage of total global CO₂ emissions that comes from the US?

- Between 0% and 25%
- Between 26% and 50%
- Between 51% and 75%
- Between 76% and 100%

How sure are you about this answer?

- Totally sure
- Quite sure
- Moderately sure
- Not very sure
- Nothing sure

--- page break ---

According to the National Institute of Statistics (INE), a person is unemployed if they are not employed in any job and are looking for work. According to this definition, what percentage of Spaniards are currently unemployed?

- Approximately 10%
- Approximately 15%
- Approximately 20%
- Approximately 25%

How sure are you about this answer?

- Totally sure
- Quite sure
- Moderately sure
- Not very sure
- Nothing sure

--- page break ---

As far as you know and belief, is there a time limit during which an unemployed person in Spain can collect unemployment benefits?

- No, there is no limit.
- Yes, there is a limit.

How sure are you about this answer?

- Totally sure
- Quite sure
- Moderately sure
- Not very sure
- Nothing sure

--- page break ---

The European Union Stability and Growth Pact establishes that member countries cannot register a fiscal deficit of more than 3% and a public debt of more than 60% of GDP. What is the situation in Spain at this very moment?

- A deficit greater than 3% and a public debt of more than 60% of GDP
- A deficit of less than 3% and a public debt of more than 60% of GDP
- A deficit of less than 3% and a public debt of less than 60% of GDP
- A deficit greater than 3% and a public debt of less than 60% of GDP

How sure are you about this answer?

- Totally sure
- Quite sure
- Moderately sure
- Not very sure
- Nothing sure

--- page break ---

The number of foreigners living in Spain increased by 285,554 during 2018, which means a growth of 6.26% in residents, according to the National Institute of Statistics (INE). The current foreign population is the highest since 2013. What is the percentage of immigrants in Spain?

- Just over 10% of the country's total residents
- Just over 5% of the country's total residents
- Just over 15% of the country's total residents
- Just over 20% of the country's total residents

How sure are you about this answer?

- Totally sure
- Quite sure
- Moderately sure
- Not very sure
- Nothing sure

--- page break ---

What do you think is the percentage of the budget (Gross National Income (GNI)) allocated to Official Development Assistance?

- Between 0% and 10%
- Between 11% and 20%
- Between 21% and 30%
- 31% or more

How sure are you about this answer?

- Totally sure
- Quite sure

- Moderately sure
- Not very sure
- Nothing sure

--- page break ---

The level of representation of women in parliaments varies between countries. In France and Norway it is around 40%, while in Germany they reach 31% and in Canada only 27%. What do you think is the percentage of women in the Spanish Congress of Deputies at the moment?

- Between 20% and 30%
- Between 31% and 40%
- Between 41% and 50%
- More than 50%

How sure are you about this answer?

- Totally sure
- Quite sure
- Moderately sure
- Not very sure
- Nothing sure

--- page break ---

Last year, the average net income per household in Spain was 28,417 euros. In China, was the median net household income higher, lower, or about the same?

- The average net household income in China was higher.
- The average net household income in China was lower.
- The average net household income in China was almost the same.

How sure are you about this answer?

- Totally safe
- Quite safe
- Moderately safe
- Not very secure
- Nothing safe

— page break —

Thank you very much for your participation. This is the last page of the survey. In the last pages, we present some of the following claims about Spanish politics and other topics. As part of this study, it was important that we present to you some false claims and some true ones. FYI, the claims contained in the following stories are:

TRUE: EXTREME WEATHER EVENTS, LINKED TO CLIMATE CHANGE

FALSE: DEBATE OVER THE SAFETY OF GENETICALLY MODIFIED FOODS

FALSE: MORE AND MORE PARENTS REJECT VACCINES FOR FEAR OF AUTISM

FALSE: EXCLUSIVE: CENTRAL GOVERNMENT CONSIDERING INCLUDING MANDATORY ISLAMIC STUDIES IN THE CURRICULUM

FALSE: EXCLUSIVE: THE CENTRAL GOVERNMENT CONSIDERS REDUCE LANGUAGE CLASSES TO REPLACE THEM WITH RELIGION

FALSE: IN THE VALENCIAN COMMUNITY, PSOE AND PODEMOS REACH A SECRET AGREEMENT TO LIMIT THE TIME OF THE OPPOSITION IN THE PARLIAMENTARY DEBATE
FALSE: IN ANDALUSIA, PP, CITIZENS AND VOX REACH A SECRET AGREEMENT TO LIMIT THE OPPOSITION'S DEBATE TIME IN THE PARLIAMENTARY DEBATE

FALSE: PATENT OWNERS LIMIT THE SUPPLY OF MEDICINES FOR CANCER

FALSE: NATO MILITARY PLANES CARRY OUT CLANDESTINE FUMIGATIONS IN SPAIN

Do you have any questions or comments about this study? We are especially interested in any questions you find confusing or unclear.

[Text entry]

Study 2 (Portugal)

This study is led by [REDACTED] and [REDACTED], from [REDACTED] of [REDACTED], to study people's opinions on political issues and political groups in Portugal. The data you provide to us when participating in the study will be completely anonymous. You can exit at any time by clicking "exit" at the top of your browser. We ensure that we do not process data that could identify you, alone or in combination with additional information. Your participation is voluntary and you can withdraw your consent at any time or for any reason. Do you agree to participate in this study?

-Yes, I accept to participate.

-No, I do not agree to participate.

[Screen out if "No" is selected]

— page break —

In this first part of the survey, we will ask you some questions about yourself.

Are you of Portuguese nationality?

-Yes

-No

What region do you currently reside in?

-Porto Metropolitan Area

-Lisbon Metropolitan Area

-Northern Region

-Central Region

-Alentejo Region

-Algarve

-Autonomous Region of the Azores

-Autonomous Region of Madeira

How old were you on your last birthday? Please write a number. [Text entry]

What is your gender?

-Female

-Male

What was the highest level of education you achieved? Please select only one of the following options:

-None

-Incomplete Primary

-4 complete years (complete primary – 4th grade)

-6 full years (preparatory, 2nd cycle of basic)

-9 full years (former 5th year, current 3rd cycle of basic)

-12 full years (secondary)

-Complete Polytechnic (Complete secondary course)

-University (Bachelor's degree, postgraduate)

What is your working condition?

- Self-employed worker (Professional or independent worker without employees)
- Businessman or professional with employees
- Worker with fixed contract
- Worker with temporary contract
- Member of a cooperative
- Family support (without remuneration)
- Unemployed and have worked before
- Unemployed and looking for their first job
- Student
- Retired
- Takes care of household chores
- Another situation

Next, we are interested in your opinion on how things work and are treated in the world and in Portugal. Please read each of the following statements and use the respective rating scale to indicate how likely it is that your statement is true. Please remember that there are no "objectively" correct or incorrect answers and that we are interested in your personal opinion.

[Order of statements randomized]

I think a lot of very important things happen in the world that the public is never informed about.

I think politicians generally don't tell us the real reasons for their decisions.

I think government agencies carefully monitor all citizens.

I think that events that superficially appear to be unconnected are often the result of secret activities.

I think there are secret organizations that greatly influence political decisions.

- 0% - not true
- 10% - extremely unlikely
- 20% - very unlikely
- 30% - unlikely
- 40% - unlikely
- 50% - undecided
- 60% - somewhat likely
- 70% - probable
- 80% - very likely
- 90% - extremely likely
- 100% - true

And, using the scale below, could you say to what extent you agree or disagree with each of the following statements?

[Order of statements randomized]

Politicians in Congress have to follow the will of the people.

The most important decisions should be made by the people and not by politicians.

In politics, agreement is called what it really means to renounce one's own principles.

The political differences between the elite and the people are greater than the differences that exist within the people.

I would rather be represented by an ordinary citizen than by an experienced politician.

Politicians talk a lot and do very little.

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

--- page break ---

How interested are you in politics?

- Not interested
- A little interested
- Quite interested
- Very interested

In politics it is common to talk about "left" and "right". Using this scale, where would you position yourself?

- LEFT 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- RIGHT 10

Could you tell us what you did in the October 6, 2019 general election?

- I went to vote and I voted
- I wasn't old enough to vote
- I went to vote, but I couldn't do it
- I didn't vote because I couldn't
- I preferred not to vote
- In the record

[Display if responded "I went to vote and I voted" to previous question]

If you voted, which party or coalition did you vote for?

- PPD/PSD
- CDS-PP
- PS
- BE
- PCP
- PEV
- PAN
- CHEGA
- IL
- LIVRE
- Aliança
- PCTP/MRPP
- RIR
- Another party, what? [Text entry]

--- page break ---

In general, would you say that most people can be trusted or that you should not be too careful when dealing with others? Using this scale, where would you position yourself?

- 1 – There is little care when dealing with others
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 – Most people can be trusted

Next, we will show you a series of institutions. Using a scale of 0 to 10, where 0 means 'no trust' and 10 'complete trust', could you please tell us how much trust they deserve today...?

Scientists
Doctors
Politicians in general
The judicial system
The Government of Portugal
Political parties
The media

- 0 – No confidence
- 1
- 2
- 3

- 4
- 5
- 6
- 7
- 8
- 9
- 10 - Maximum confidence

--- page break ---

Do you have an account on one of the following social networks? Please select all that apply.

- Facebook
- Twitter
- Instagram
- Other social networks (Hi5, Google+, etc.)

How often do you use the following means to search for or share news about politics?

Facebook
Twitter
WhatsApp
Media pages (newspapers, radios, etc.)

- More than once a day
- Once a day
- Once every few days
- Once a week
- Once a month
- Less than once a month
- Never

— page break —

Now, we would like to ask you some questions about politics and government.

[Order of knowledge questions randomized]

Could you tell us who the leader of CHEGA is?

- Rui Tavares
- André Ventura
- Hugo Ernano
- Miguel Rangel

Of the following groups of people, who has the right to vote in general elections (for the Assembly of the Republic)?

- All people resident in Portugal
- Who pays taxes in Portugal

- All people legally residing in Portugal
- People of Portuguese nationality

Do you know who was the Prime Minister of the 1st Constitutional Government of Portugal in 1976?

- Mário Soares
- Alfredo Jorge Nobre da Costa
- Henrique de Barros
- Francisco Sá Carneiro

Nicolás Maduro is the president of which country?

- Venezuela
- El Salvador
- Honduras
- Mexico

In what year was the Constitution of the Portuguese Republic approved?

- 1966
- 1976
- 1978
- 1989

— page break —

We are interested in knowing how often you perform certain activities. Now, to make sure you're paying attention to the search, select "Never."

- Several times a day
- Once a day
- Several times a week
- Several times a month
- Never

— page break —

[Random assignment into one of the following two conditions (control/no populism activation or dispositional activation treatment)]

[Control/no populism activation]

Now, how intensely do you feel the following emotions?

Anger
Disgust
Fear
Joy
Enthusiasm
Interest
Sadness
Hope

-Very little or not at all
-A little
-Moderately
-Quite a bit
-A lot

— page break —

[Dispositional activation treatment]

Here is a list of problems that currently exist in Portugal. If you consider that the list below is not complete, add the missing subject in the "other" field. Rank them from most serious (1) to least serious (10).

_____ economic problems
_____ problems of a social nature
_____ impact that immigrants have on the social system
_____ the impact that immigrants have on Portuguese culture
_____ underemployment and high percentage of temporary contracts
_____ the country's great economic inequalities
_____ slow recovery after the economic crisis
_____ problems related to education
_____ issues related to COVID-19
_____ Others. Which? [Text entry]

We want to ask you a few questions about [pipe in top ranked problem from previous question], the problem you classified as the most serious. What groups or individuals do you think are primarily responsible for causing this problem? (Be brief in your answer.)

[Text entry]

In at least a few sentences, explain why you think these groups or individuals are responsible and how we should handle them.

[Text entry]

When you think about this problem, how strongly do you feel the following emotions?

Anger
Disgust

Fear
Joy
Enthusiasm
Interest
Sadness
Hope

-Very little or not at all
-A little
-Moderately
-Quite a bit
-A lot

— page break —

[Random assignment to one of the following]

On the following pages, we will show some articles with recently published news. Please read them carefully before answering the questions below.

—

On the following pages, we will show some articles with recently published news. Please read them carefully before answering the questions below. As you read them, remember that some people argue that society is dominated by small groups of powerful elites who pursue their own interests to the detriment of ordinary people. While it is true that some members of society have more power than others, it is important to approach reports that blame major social or economic problems on these groups without reliable evidence with skepticism.

— page break —

EXTREME WEATHER EVENTS LINKED TO CLIMATE CHANGE

Climate scientists agree that human activity is causing extreme weather events such as hurricanes, tornadoes, droughts and wildfires more frequently.

--- page break ---

To your best knowledge and understanding, how accurate is the claim that human activity is causing extreme weather events more frequently?

-Totally accurate
-Very accurate
-Not very accurate
-Not at all accurate

— page break —

[Note: Respondents were randomly assigned to 3 of the following fake news blurbs following the procedure explained in Appendix C.]

— page break —

[No correction]

DEBATE ON THE SAFETY OF GENETICALLY MODIFIED FOOD

Activists who oppose genetically modified foods argue that the changes made can vary nutritional content and introduce toxins that harm vital organs.

[Correction1]

DEBATE ON THE SAFETY OF GENETICALLY MODIFIED FOOD

Activists who oppose genetically modified foods argue that changes made can vary nutritional content and introduce toxins that harm vital organs. However, the vast majority of doctors believe that genetically modified foods are safe. Furthermore, scientific studies have not demonstrated that negative side effects occur from consuming these foods.

[Correction2]

DEBATE ON THE SAFETY OF GENETICALLY MODIFIED FOOD

Activists who oppose genetically modified foods argue that changes made can vary nutritional content and introduce toxins that harm vital organs. However, the vast majority of public health agencies believe that genetically modified foods are safe. Furthermore, scientific studies have not demonstrated that negative side effects occur from consuming these foods.

As far as you know, how accurate is the statement that genetically modified foods are unsafe?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[No correction]

MORE AND MORE PARENTS REJECT VACCINES FOR FEAR OF AUTISM

In many countries, small groups of activist parents maintain that their children began to show signs of autism soon after receiving the required vaccines.

[Correction1]

MORE AND MORE PARENTS REJECT VACCINES FOR FEAR OF AUTISM

In many countries, small groups of parent activists maintain that their children began to show signs of autism soon after receiving the required vaccines. However, doctors caution that scientific studies have consistently confirmed that vaccines do not cause autism.

[Correction2]

MORE AND MORE PARENTS REJECT VACCINES FOR FEAR OF AUTISM

In many countries, small groups of parent activists maintain that their children began to show signs of autism soon after receiving the required vaccines. However, other parenting groups warn that scientific studies have consistently confirmed that vaccines do not cause autism.

[All respondents]

To your best knowledge and understanding, how accurate is the claim that vaccines increase the risk of autism?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[No correction]

PATENT OWNERS LIMIT THE SUPPLY OF CANCER MEDICINES

News has received a lot of attention recently that the cure for cancer - of some types - is more than developed, but that there is a patent mafia, which prevents its use for increase drug prices.

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[Correction2]

PATENT OWNERS LIMIT THE SUPPLY OF CANCER MEDICINES

News has received a lot of attention recently that the cure for cancer - of some types - is more than developed, but that there is a patent mafia, which prevents its use to increase drug prices. However, many Twitter users were quick to point out that there is no evidence that patent owners are restricting supply. In fact, the cost of many medicines has fallen dramatically in Europe in recent decades.

[All respondents]

To your best knowledge and understanding, how accurate is the allegation that patent owners are restricting the supply of medicines to increase prices?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[No correction]

IN MADEIRA, PPD/PSD AND CDS-PP REACH A SECRET AGREEMENT TO LIMIT THE OPPOSITION'S TIME IN PARLIAMENTARY DEBATE

PPD/PSD and CDS-PP agree to prevent deputies from responding to government members in debates in the Legislative Assembly of Autonomous Region of Madeira. This represents a change that would suppress the voices, opinions and interests of an important sector of the people.

[Correction1]

IN MADEIRA, PPD/PSD AND CDS-PP REACH A SECRET AGREEMENT TO LIMIT THE OPPOSITION'S TIME IN PARLIAMENTARY DEBATE

PPD/PSD and CDS-PP agree to prevent deputies from responding to government members in debates in the Legislative Assembly of the Autonomous Region from Madeira. This represents a change that would suppress the voices, opinions and interests of an important sector of the people. So far, there is no evidence of this supposed agreement, but political scientists indicate that the said plan is contrary to the rules of the Legislative Assembly and, therefore, cannot be applied. The regulation grants the opposition the right to respond in plenary.

[Correction2]

IN MADEIRA, PPD/PSD AND CDS-PP REACH A SECRET AGREEMENT TO LIMIT THE OPPOSITION'S TIME IN PARLIAMENTARY DEBATE

PPD/PSD and CDS-PP agree to prevent deputies from responding to government members in debates in the Legislative Assembly of the Autonomous Region from Madeira. This represents a change that would suppress the voices, opinions and interests of an important sector of the people. So far, there is no evidence of this supposed agreement, the Civic Association of Democratic Dialogue (ACDD) indicates that the aforementioned plan is contrary to the rules of the Legislative Assembly and, therefore, cannot be applied. The regulation grants the opposition the right to respond in plenary.

[All respondents]

As far as you know, how accurate is the statement that the PPD/PSD and the CDS-PP agreed to limit the debate time that the opposition has?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[No correction]

IN THE AZORES, PS AND BE REACH A SECRET AGREEMENT TO LIMIT THE OPPOSITION'S TIME IN PARLIAMENTARY DEBATE

PS and BE agree to prevent deputies from responding to government members in debates in the Legislative Assembly of the Autonomous Region of the Azores. This represents a change that would suppress the voices, opinions and interests of an important sector of the people.

[Correction1]

IN THE AZORES, PS AND BE REACH A SECRET AGREEMENT TO LIMIT THE OPPOSITION'S TIME IN PARLIAMENTARY DEBATE

PS and BE agree to prevent deputies from responding to government members in debates in the Legislative Assembly of the Autonomous Region of the Azores. This represents a change that would suppress the voices, opinions and interests of an important sector of the people. So far, there is no evidence of this supposed agreement, political scientists indicate that the said plan is contrary to the rules of the Legislative Assembly and, therefore, cannot be applied. The regulation grants the opposition the right to respond in plenary.

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IN THE AZORES, PS AND BE REACH A SECRET AGREEMENT TO LIMIT THE OPPOSITION'S TIME IN PARLIAMENTARY DEBATE

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[All respondents]

As far as you know, how accurate is the statement that the PS and BE agreed to limit the debate time that the opposition has?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

Thank you very much for your participation. This is the last page of the search. In the last few pages, we present some of the following statements about Portuguese politics and other issues. As part of this study, it was important that we present some false statements and some true statements. FYI, the claims contained in the following stories are:

TRUE: EXTREME WEATHER EVENTS LINKED TO CLIMATE CHANGE

FALSE: DEBATE ON THE SAFETY OF GENETICALLY MODIFIED FOOD

FALSE: MORE AND MORE PARENTS REJECT VACCINES FOR FEAR OF AUTISM

FALSE: PATENT OWNERS LIMIT THE SUPPLY OF CANCER MEDICINES

FALSE: IN MADEIRA, PPD/PSD AND CDS-PP REACH A SECRET AGREEMENT TO LIMIT THE OPPOSITION'S TIME IN THE PARLIAMENTARY DEBATE

FAKE: IN THE AZORES, PS AND BE REACH A SECRET AGREEMENT TO LIMIT THE OPPOSITION'S TIME IN THE DEBATE

FALSE: PATENT OWNERS LIMIT THE SUPPLY OF CANCER DRUGS

Do you have any questions or comments about this study? We are especially interested in any questions you find confusing or unclear.

[Text entry]

Study 3 (India)

This study is being conducted by [REDACTED] and [REDACTED] of [REDACTED] and [REDACTED] of [REDACTED]. The study's purpose is to understand the opinions of India residents about some of the political issues and figures that have been in the news lately. The data that you will provide us when participating in the study will be completely anonymous. You can exit at any time by clicking "exit" at the top of your browser. We will not process any data that can identify you, either alone or in combination with additional information. Your participation is voluntary, and you can withdraw your consent at any time or for any reason.

Do you confirm that you have read the information above regarding participation in this survey?

-Yes

-No

Do you understand that your participation is voluntary and that you are free to withdraw at any time?

-Yes

-No

Do you agree to participate in this study?

-Yes

-No

[Screen out if any of the above are answered "No"]

--- page break ---

This first set of questions asks for some information about you.

In which country do you reside?

-Pakistan

-Bangladesh

-Nepal

-India

-Bhutan

-Sri Lanka

-Other [Text entry]

[Screen out if "India" not selected]

Please write your MTurk ID number in the box below. This information will not be used to identify you.

[Text entry]

--- page break ---

What is your gender?

-Male

-Female

-Other [Text entry]

What is your age in years? (Please write years in whole numbers. Examples: 20, 36, 55) [Text entry]

Until which class have you completed education?

- Never attended school
- Class 1 to 5
- Class 5 to 7
- Class 8 to 10
- Class 11
- Intermediate/Class 12/ITI/Diploma
- Graduation (General/Engineering/Medical/Law)
- Post-graduation (Masters/Doctorate/PhD)
- Other (please specify) [Text entry]

Which language do you mostly speak at home?

- Hindi
- English
- Urdu
- Telugu
- Tamil
- Marathi
- Bengali
- Other (please specify) [Text entry]

--- page break ---

What religion do you follow?

- Hindu
- Muslim
- Sikkh
- Christian
- Boddha
- Jain
- Other (please specify) [Text entry]

How often do you practice these religious activities --- daily, weekly, only on festivals, or never?

Prayer, puja, namaz, etc.

Visiting temple/mosque/church/gurudwara

- Daily
- Weekly
- Only on festivals
- Never

--- page break ---

What is your primary source of income?

- Monthly salary/pension (regular)
- Casual wage labour
- Self-employed/business
- Agricultural work (own land)
- Help in own family business
- Studying and also working
- Studying
- Not earning income/no business
- Incapacitated/unable to work
- Housewife
- Other (please specify) [Text entry]

Do you have a phone? If so, what kind: a normal phone or a smartphone with a touchscreen?

- Yes - normal phone
- Yes - smartphone
- No - don't have a phone

[Display if answered "Yes - smartphone" to previous question]

Does your phone have an internet connection?

- Yes
- No
- Not sure

Which of the following best describes the area/locality in which you live?

- Small village (less than 10,000 people)
- Village (less than 50,000 people)
- Town (50,000-1 lakh)
- Small city (1-5 lakh)
- Big city (5-10 lakh)
- Metropolitan city (more than 10 lakh)

--- page break ---

[Display if answered "Village" or "Small village" to previous question]

Which of the following best describes the house in which you live?

- Pucca (both wall and roof are made of pucca material)
- Pucca-kuccha (either wall or roof is made of pucca material, but others of kuccha material)
- Kaccha (both wall and roof are made of kuccha material)
- Hut (both wall and roof are made of grass, leaves, mud, un-brunt brick or bamboo)

--- page break ---

[Display if answered "Town," "Small city," "Big city," or "Metropolitan city" to previous question]

Which of the following best describes the house in which you live?

- Bungalow
- House/flat
- Kuccha house
- Slum/Jhuggi/Jhopadi

--- page break ---

How many rooms are there in your house?

- 1
 - 2
 - 3
 - 4
 - 5
 - 6
 - 7
 - 8
- Other (please specify) [Text entry]

How many total members are there in your household?

- 1
 - 2
 - 3
 - 4
 - 5
 - 6
 - 7
 - 8
- Other (please specify) [Text entry]

What is your total household monthly income in rupees (including the income of ALL members of the household)?

- 2,500 or less
- 2,500 - 5,000
- 5,001 - 10,000
- 10,001 - 20,000
- 20,001 - 30,000
- 30,001 - 50,000
- More than 50,000
- More than 1 lakh
- More than 2 lakh

— page break —

Now we have a few questions about politics.

Some voters are long-term supporters of a political party while other voters support different parties in different elections. What about you? Have you been a supporter of one party for a long period?

-Yes

-No

--- page break ---

[if "Yes" to previous question]

Which party are you a long-term supporter of?

- BJP - Bharatiya Janata Party
- INC - Indian National Congress
- AAP - Aam Aadmi Party
- JD(S) - Janata Dal (Secular)
- TRS - Telangana Rashtra Samithi
- TDP - Telugu Desam Party
- YSRCP - YSR Congress Party
- AIMIM - All India Majlis-e-Ittehadul Muslimeen
- AIADMK - All India Anna Dravida Munnetra Kazhagam
- DMK - Dravida Munnetra Kazhagam
- CPI (M) - Communist Party of India (Marxist)
- CPI - Communist Party of India
- AITC (Trinamool Congress)
- Shiv Sena
- NCP -Nationalist Congress Party
- RJD - Rashtriya Janata Dal
- JD (U) - Janata Dal (United)
- LJP - Lok Janshakti Party
- BJD - Biju Janata Dal
- SP - Samajwadi Party
- BSP - Bahujan Samaj Party
- Other (please specify acronym if not in list above) [Text entry]

[if "No" to previous question]

Would you say you support a specific party at the moment?

-Yes

-No

[if "Yes" to previous question]

Which party are you a supporter of at the moment?

- BJP - Bharatiya Janata Party
- INC - Indian National Congress
- AAP - Aam Aadmi Party
- JD(S) - Janata Dal (Secular)

- TRS - Telangana Rashtra Samithi
- TDP - Telugu Desam Party
- YSRCP - YSR Congress Party
- AIMIM - All India Majlis-e-Ittehadul Muslimeen
- AIADMK - All India Anna Dravida Munnetra Kazhagam
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- JD (U) - Janata Dal (United)
- LJP - Lok Janshakti Party
- BJD - Biju Janata Dal
- SP - Samajwadi Party
- BSP - Bahujan Samaj Party
- Other (please specify acronym if not in list above or below) [Text entry]

[if "No" to previous question]

We understand that you are not a supporter of a political party. However, if you had to choose, which of the following parties would you say you come closest to?

- BJP - Bharatiya Janata Party
- INC - Indian National Congress
- AAP - Aam Aadmi Party
- JD(S) - Janata Dal (Secular)
- TRS - Telangana Rashtra Samithi
- TDP - Telugu Desam Party
- YSRCP - YSR Congress Party
- AIMIM - All India Majlis-e-Ittehadul Muslimeen
- AIADMK - All India Anna Dravida Munnetra Kazhagam
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- CPI (M) - Communist Party of India (Marxist)
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- JD (U) - Janata Dal (United)
- LJP - Lok Janshakti Party
- BJD - Biju Janata Dal
- SP - Samajwadi Party
- BSP - Bahujan Samaj Party
- Other (please specify acronym if not in list above or below) [Text entry]

--- page break ---

How close are you to each of these parties?

BJP

INC

-Very far

-Far

-Close

-Very close

--- page break ---

How often do you use the following -- more than twice per day, once or twice per day, a few days per week, a few days per month, a few days per year, or never?

Facebook

Twitter

WhatsApp

Instagram

Mobile wallet (like Paytm, BHIM, etc.)

-More than once a day

-Once a day

-Once every few days

-Once a week

-Once a month

-Less than once a month

-Never

--- page break ---

Using the following scale, please tell us to what extent you agree or disagree with the following statements.

[Order of statements randomized]

Politicians in Congress have to follow the will of the people.

The most important decisions should be made by the people and not by politicians.

In politics, agreement is called what it really means to renounce one's own principles.

The political differences between the elite and the people are greater than the differences that exist within the people.

I would rather be represented by an ordinary citizen than by an experienced politician.

Politicians talk a lot and do very little.

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

How interested are you in politics?

- Not at all interested
- A little interested
- Very interested
- Extremely interested

--- page break ---

We're interested in your opinion about how things work in India. Please read each of the following statements and use the scale to indicate how likely it is that each statement is true. Please remember that there are no "objectively" correct or incorrect answers; we're just interested in your personal opinion.

[Order of statements randomized]

I think a lot of very important things happen in the world that the public is never informed about.

I think politicians generally don't tell us the real reasons for their decisions.

I think government agencies carefully watch over all citizens.

I think events that on the surface seem to be disconnected are often the result of covert activities.

I think there are many secret organizations that influence political decisions.

- 0% - certainly false
- 10%
- 20%
- 30%
- 40%
- 50% - undecided
- 60%
- 70%
- 80%
- 90%
- 100% - certainly true

--- page break ---

Below, we've listed several people and institutions. Using a scale from 0 to 10, where 0 represents "no confidence" and 10 represents "complete confidence," please tell us how much confidence do you have in...

[Order of list randomized]

Scientists
Doctors
Central Commonwealth
World Health Organization
Journalists
Fact checkers
Experts
University professors
Economists

-0 (no confidence)

-1

-2

-3

-4

-5

-6

-7

-8

-9

-10 - (total confidence)

--- page break ---

Do you use any of the following social networks? Please check all that apply.

-Facebook

-Twitter

-Instagram

-TikTok

-Other networks (Hi5, Google+, etc.)

How often do you use the following sources to read or share political news?

Facebook

Twitter

Instagram

Tik Tok

Media pages (newspapers, radios, etc.)

-More than once a day

-Once a day

-Once every few days

-Once a week

-Once a month

-Less than once a month

-Never

--- page break ---

We are interested in knowing how often you do certain activities. We're also interested in whether people are reading survey questions carefully. To make sure you're paying attention to the questions, please disregard the question below and select both "a few times per day" and "never."

How often do you search for political news on Twitter?

- A few times per day
- Once per day
- A few times per week
- A few times per month
- Never

[Screen out if respondent does not follow instructions]

--- page break ---

[Random assignment into one of the following two conditions (control/no populism activation or dispositional activation treatment)]

[Control/no populism activation]

At the moment, how intensely do you feel the following emotions?

Boredom
Disgust
Dread
Happiness
Enthusiasm
Interest
Sadness
Hope
Anger

- Very little or not at all
- A little
- Moderately
- Quite a bit
- A lot

--- page break ---

[Dispositional activation treatment]

Below we've listed a set of problems that currently exist in India. Please order them from the most severe (1) to least severe (10). If you believe that the list below is not complete, please add the problem that is missing in the "Other" box.

- _____ Education
- _____ Healthcare
- _____ Poverty
- _____ Women's rights
- _____ Air/sound/water pollution
- _____ Unemployment or underemployment
- _____ Climate change
- _____ Covid-19 and vaccines
- _____ Child labour
- _____ Other (please write) [Text entry]

We want to ask you some questions about [pipe in top ranked problem from previous question], the problem you rated as the most serious. Which groups or individuals do you believe are primarily responsible for causing this problem? (Please limit your answer to a few words).

[Text entry]

In at least a few sentences, why do you believe these groups or individuals are responsible? And how should we handle them?

[Text entry]

At the moment, how intensely do you feel the following emotions?

Boredom
Disgust
Dread
Happiness
Enthusiasm
Interest
Sadness
Hope
Anger

- Very little or not at all
- A little
- Moderately
- Quite a bit
- A lot

--- page break ---

[Random assignment into one of the following]

On the next few pages, we'll show you some text from articles that have appeared in the news lately. Please read the articles carefully before answering the questions that follow.

—

On the next few pages, we'll show you some text from articles that have appeared in the news lately. Please read the articles carefully before answering the questions that follow.

As you read them, keep in mind that some people argue that society is dominated by small groups of powerful elites who pursue their own interests to the detriment of ordinary people. While it is true that some members of society have more power than others, it is important to approach reports that blame these groups for major social or economic problems without credible evidence with skepticism.

--- page break ---

EXTREME WEATHER EVENTS LINKED TO CLIMATE CHANGE

Climate scientists agree that human activity is causing extreme weather events, such as hurricanes, tornadoes, droughts, and forest fires, to occur more often.

--- page break ---

As far as you know, how accurate is the statement that human activity is causing extreme climate events to occur more often?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[Note: Respondents were randomly assigned to 5 of the following fake news blurbs following the procedure explained in Appendix C.]

[No correction version]

MORE PARENTS WORRIED ABOUT POSSIBLE MMR VAX/AUTISM LINK

According to a new report, more parents are declining to vaccinate their children against MMR because of concerns about a possible link between the vaccine and autism. In some parts of the country, MMR vaccination rates are so low that public health officials are worried that society may lose its so-called "herd immunity" against measles.

[Correction version]

MORE PARENTS WORRIED ABOUT POSSIBLE MMR VAX/AUTISM LINK

According to a new report, more parents are declining to vaccinate their children against MMR because of concerns about a possible link between the vaccine and autism. In some parts of the country, MMR vaccination rates are so low that public health officials are worried that society may lose its so-called "herd immunity" against measles.

However, claims of a link between vaccines and autism are not supported by scientific research. According to a recent review of this research, "Many studies have been conducted on a large number of children who have been closely observed for a number of years, and no connection has been found between the MMR vaccine and the occurrence of autism in children."

[All respondents]

As far as you know, how accurate is the statement that the MMR vaccine is linked to autism?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[No correction version]

ACROSS COUNTRY, CITIZENS DEBATE COVID VACCINE SAFETY AND WISDOM OF MANDATES

The debate over Covid-19 vaccine mandates continues across the country, as people on both sides of the debate made their case in front of government and community forums across India. Across the country, many citizens argue that Covid-19 vaccines carry serious side effects, including sterilization, menstrual disorders, and miscarriage during pregnancy.

[Correction version]

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The debate over Covid-19 vaccine mandates continues across the country, as people on both sides of the debate made their case in front of government and community forums across India. Across the country, many citizens argue that Covid-19 vaccines carry serious side effects, including sterilization, menstrual disorders, and miscarriage during pregnancy.

It is important to note that these claims are inconsistent with scientific research and public health guidance. To the contrary, the World Health Organization (WHO) has given full approval to several Covid-19 vaccines after a review of scientific data indicated that serious side effects were exceedingly rare.

[All respondents]

As far as you know, how accurate is the statement that Covid-19 vaccines cause serious side effects?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[No correction version]

EXPLOSIVE NEW REPORT: COVID-19 NASAL SWABS SAID TO IMPLANT TRACKING DEVICES IN BRAIN

A new report claims that nasal swabs used to test for Covid-19 can be used to plant microchips in the brain. According to the report, these chips can be used for multiple purposes, including geographic tracking and the remote electronic signalling, which can affect cognition.

[Correction version]

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A new report claims that nasal swabs used to test for Covid-19 can be used to plant microchips in the brain. According to the report, these chips can be used for multiple purposes, including geographic tracking and the remote electronic signalling, which can affect cognition.

Since the report went viral, numerous fact-checking organizations have investigated the microchips claim and found no support. As one fact checker summarizes on its website, doctors agree that nasopharyngeal swabs are widely used and do not contain chips. In fact, the smallest microchip in existence is too wide to fit on the tip of a nasal swab.

[All respondents]

As far as you know, how accurate is the statement that Covid-19 nasal swabs implant tracking devices in the brain?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[No correction version]

BREAKING NEWS FROM RAJASTHAN: GOVERNMENT TO ISSUE PENALTIES FOR BLOCKING CONSTRUCTION OF MOSQUES AND MADRASAS

A wonderful gift to Hindus by Ashok Gehlot, Chief Minister of Rajasthan, to bring relief to the people of Alam-e-Islam! The government announced that if jihadis build a tomb or mosque in front of your house and you stop them, then you will be jailed for 3 years. No bail. You can even get a mazar built in your own home by voting for Congress, that too for free. All the credit for this brotherhood goes to the Gehlot government on behalf of all secular Hindus.

[Correction version]

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Vishvas News, an independent fact-checking organization, contacted Lokesh Sharma, OSD to Rajasthan Chief Minister Ashok Gehlot. Sharma indicated that the viral posts are false, and also promised action will be taken against those who make such false and misleading posts viral in the context of Rajasthan. Lokesh Sharma also posted a tweet in this regard.

[All respondents]

As far as you know, how accurate is the statement that the Rajasthan government implemented new penalties against people who block the construction of mosques and madrasas?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[No correction version]

OUTRAGE OVER ISLAMIC STUDIES AS OPTIONAL SUBJECT FOR UPSC EXAM

In the latest episode of a years-long debate over the UPSC exam, more and more people are expressing outrage that Islamic Studies is an optional subject for the exam. As one concerned citizen says, "If someone can become an IAS officer with Islamic Studies as their subject, then the Vedas, the Ramayana, the Bhagavad Gita, and the Upanishads should also be included as subjects in the UPSC exam. The government is suppressing important voices of the people."

[Correction version]

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An independent review of the UPSC curriculum, however, suggests that such claims are false. As one education professor wrote, "There are a total of seven subjects included in the Mains syllabus. Out of these, five are compulsory for all candidates, whereas the sixth and seventh can be of their choosing. Even in these optional subjects, there is no mention of Islamic Studies. This can be seen clearly in the explanatory document on the UPSC website."

[All respondents]

As far as you know, how accurate is the statement that Islamic Studies is an optional subject on the UPSC exam?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[No correction version]

WESTERN PATENT HOLDERS RESTRICT SUPPLY OF CANCER MEDICINES, DRIVING UP PRICES

According to a new report, cures for several forms of cancer are advancing rapidly, but the availability of these life-saving drugs is being restricted by Western patent holders. The report alleges that a network of pharmaceutical patent holders is intentionally restricting supply in order to keep prices high.

[Correction version]

WESTERN PATENT HOLDERS RESTRICT SUPPLY OF CANCER MEDICINES, DRIVING UP PRICES

According to a new report, cures for several forms of cancer are advancing rapidly, but the availability of these life-saving drugs is being restricted by Western patent holders. The report alleges that a network of pharmaceutical patent holders is intentionally restricting supply in order to keep prices high.

Since the report first appeared, several leading economists have raised serious doubt about the claim, arguing that there is no evidence. In fact, the costs of many cancer treatment drugs has decreased rapidly in recent years.

[All respondents]

As far as you know, how accurate is the statement that the holders of medical patents are restricting supply of life-saving cancer drugs in order to increase prices?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[No correction version]

NEWS FROM DELHI: HOSPITAL MANAGERS HOARDING SUPPLY OF OXYGEN TANKS, DRIVING UP PRICES

As the nation continues to struggle with inconsistent supplies of oxygen, an explosive new report claims that hospital managers across the country are colluding with the manufacturers of oxygen tanks to restrict supply and drive up prices. According to the report, a janitor in Delhi saw a stockpile of oxygen tanks in a "secret room" inside his hospital, one of the largest in India. Across the country, citizens continue to be enraged by the lack of oxygen that resulted in thousands of deaths since the covid-19 epidemic began.

[Correction version]

NEWS FROM DELHI: HOSPITAL MANAGERS HOARDING SUPPLY OF OXYGEN TANKS, DRIVING UP PRICES

As the nation continues to struggle with inconsistent supplies of oxygen, an explosive new report claims that hospital managers across the country are colluding with the manufacturers of oxygen tanks to restrict supply and drive up prices. According to the report, a janitor in Delhi saw a stockpile of oxygen tanks in a "secret room" inside his hospital, one of the largest in India. Across the country, citizens continue to be enraged by the lack of oxygen that resulted in thousands of deaths since the covid-19 epidemic began.

Since the report first surfaced, investigative journalists at several of the largest newspapers, including Dainik Bhaskar and The Times of India, have failed to locate the anonymous janitor or find any other support for the collusion claims. These same papers have previously reported on the government's mismanagement of oxygen supply, but they point out that there is no evidence to support the stockpiling claims currently circulating online.

[All respondents]

As far as you know, how accurate is the statement that hospital managers are restricting supply of oxygen tanks in order to increase prices?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[No correction version]

YOU HEARD IT HERE: LEAKED DOCXS SHOW SUPER-WEALTHY CABAL PLOTTING TO RELEASE NEW COVID-19 VARIANTS

Thursday (22:32 IST): Newly released documents suggest a plot by universities, nonprofits, and global elites to release Covid-19 variants on a planned schedule. The website where the documents first appeared claims, "These are the PLANNED COVID-19 VARIANTS - just look at this doc with a table of 'release dates' in different major cities!!" Next to the table, the document included logos of universities and organizations including Johns Hopkins University, the World Health Organization, the World Economic Forum and the Bill and Melinda Gates Foundation.

[Correction version]

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After the story went viral, fact-checkers were quick to point out that table doesn't represent the work of any of the named organizations. The World Health Organization and the Bill and Melinda Gates Foundation both responded to press queries to confirm the documents weren't genuine. The table also falsely claims the delta variant of the coronavirus emerged in June 2021. Finally, the posts ignore that variants occur in the population through random mutations and are not created by humans.

[All respondents]

As far as you know, how accurate is the statement that an international group of powerful people and institutions is working together to release new Covid-19 variants?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[No correction version]

VOTERS DEMAND ANSWERS AFTER REPORT CLAIMS CENTRAL GOVERNMENT PAYING RENT OF MP'S FLAT

News has transpired that the Central Government is paying a monthly rent of Rs. 2 lakhs for MP Chidambaram's rented flat in Delhi's Jor Bagh area, since 2014. In response, voters in Chidambaram's constituency are demanding answers from his aides and the Central Government. As one voter said in a recent interview, this episode shows how ordinary citizens are betrayed on a daily basis by the ruling class using their power to enrich themselves, not looking after the people, which is what they should work for.

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Factly, an online fact-checking organization, today released a report about the story. The Factly investigators concluded "Rajya Sabha MPs are allotted houses by the Central Government. The Central Government does not pay rents to the private houses if an MP chooses to reside in a private house. The photo circulating online is of MP Chidambaram's private home in Jor Bagh. Since the home is private, the Central Government does not pay rent or any other expenses." More thorough explanation of the Rajya Sabha housing allotment policies is available on the organization's website.

[All respondents]

As far as you know, how accurate is the statement that the government pays the rent of the private home of Rajya Sabha MP Chidambaram?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

--- page break ---

That concludes the survey. Thank you for participating.

While taking the survey, we presented you with several news stories. Although these stories were based on real-world issues and events, the stories we showed you were fictional and created for research purposes. Our goal was to learn about how people evaluate the accuracy of factual claims in news stories.

Many of the claims contained in the articles we showed you are FALSE.

Do you understand that many of the claims contained in the articles we showed you are FALSE?

- Yes
- No

--- page break ---

Claims in the following story are TRUE:

-EXTREME WEATHER EVENTS LINKED TO CLIMATE CHANGE

Claims in the following stories are FALSE:

- GENETICALLY MODIFIED SAID TO CAUSE ALLERGIES
- MORE PARENTS WORRIED ABOUT POSSIBLE MMR VAX/AUTISM LINK
- ACROSS COUNTRY, CITIZENS DEBATE COVID VACCINE SAFETY AND WISDOM OF MANDATES
- EXPLOSIVE NEW REPORT: COVID-19 NASAL SWABS SAID TO IMPLANT TRACKING DEVICES IN BRAIN
- BREAKING NEWS FROM RAJASTHAN: GOVERNMENT TO ISSUE PENALTIES FOR -BLOCKING CONSTRUCTION OF MOSQUES AND MADRASAS
- Outrage over Islamic Studies an optional subject for UPSC exam
- WESTERN PATENT HOLDERS RESTRICT SUPPLY OF CANCER MEDICINES, DRIVING UP PRICES
- NEWS FROM DELHI: HOSPITAL MANAGERS HOARDING SUPPLY OF OXYGEN TANKS, DRIVING UP PRICES

Experts have determined that vaccines against Covid-19, MMR, and other diseases are safe and effective. If you wish to read more about the safety and efficacy of vaccines, you may click on the links below (links will open in new window):

World Health Organization:

USA Centers for Disease Control and Prevention:

--- page break ---

This concludes the survey. Do you have any comments on the survey? Please let us know about any questions that were confusing or difficult to understand.

[Free response]

Study 4 (USA)

This study is being conducted by [REDACTED] and [REDACTED] of [REDACTED] and [REDACTED] of [REDACTED]. The study's purpose is to understand the opinions of U.S. residents about some of the political issues and figures that have been in the news lately. The data that you will provide us when participating in the study will be completely anonymous. You can exit at any time by clicking "exit" at the top of your browser. We will not process any data that can identify you, either alone or in combination with additional information. Your participation is voluntary, and you can withdraw your consent at any time or for any reason.

Do you confirm that you have read the information above regarding participation in this survey?

-Yes

-No

Do you understand that your participation is voluntary and that you are free to withdraw at any time?

-Yes

-No

Do you agree to participate in this study?

-Yes

-No

[Screen out if any of the above are answered "No"]

— page break —

This first set of questions asks for some information about you.

What is your age in years? [Text entry]

Please enter your MTurk ID number carefully below. This information will not be used to identify you. We are asking this in case you encounter technical issues during the survey. [Text entry]

--- page break ---

Please indicate your gender.

-Male

-Female

-Other [Text entry]

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

-Did not graduate from high school

-High school diploma or the equivalent (GED)

-Some college

-Associate degree

-Bachelor's degree

-Master's degree

-Doctorate degree

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

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

Are you of Spanish or Hispanic origin or descent?

- Yes
- No

--- page break ---

When it comes to politics, would you describe yourself as liberal, conservative, or neither liberal nor conservative?

- Very liberal
- Liberal
- Slightly liberal
- Moderate; middle of the road
- Slightly conservative
- Conservative
- Very conservative

--- page break ---

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

- Republican
- Democrat
- Independent
- Something else

[Display if "Democrat" is selected above]

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

- Strong Democrat
- Not very strong Democrat

[Display if "Republican" is selected above]

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

- Strong Republican
- Not very strong Republican

[Display if "Independent" is selected above]

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

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

— page break —

Using the following scale, please tell us to what extent you agree or disagree with the following statements.

[Order of statements randomized]

Politicians in Congress have to follow the will of the people.

The most important decisions should be made by the people and not by politicians.

In politics, agreement is called what it really means to renounce one's own principles.

The political differences between the elite and the people are greater than the differences that exist within the people.

I would rather be represented by an ordinary citizen than by an experienced politician.

Politicians talk a lot and do very little.

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

How interested are you in politics?

- Not at all interested
- A little interested
- Very interested
- Extremely interested

— page break —

Now we'd like to ask you some questions about politics in the US.

[Order of knowledge questions randomized]

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?

- 2
- 4
- 6
- 8

On which of the following does the U.S. federal government currently spend the least?

- Foreign aid
- Medicare
- National defense
- Social Security

Do you happen to know which party currently has the most members in the U.S. House of Representatives?

- Democrats
- Republicans
- Evenly divided
- Don't know

Who is the current U.S. Secretary of State?

- Anthony Blinken
- Mike Pompeo
- Janet Yellen
- Paul Krugman

Who did Donald Trump nominate to the Supreme Court shortly before the 2020 presidential election?

- Diane Sykes
- Amy Coney Barrett
- Marsha Blackburn
- Merrick Garland

— page break —

We're interested in your opinion about how things work in the US. Please read each of the following statements and use the scale to indicate how likely it is that each statement is true. Please remember that there are no "objectively" correct or incorrect answers; we're just interested in your personal opinion.

[Order of statements randomized]

I think a lot of very important things happen in the world that the public is never informed about.

I think politicians generally don't tell us the real reasons for their decisions.

I think government agencies carefully watch over all citizens.

I think events that on the surface seem to be disconnected are often the result of covert activities.

I think there are many secret organizations that influence political decisions.

- 0% - certainly false
- 10%
- 20%
- 30%
- 40%
- 50% - undecided
- 60%
- 70%
- 80%
- 90%
- 100% - certainly true

--- page break ---

Below, we've listed several people and institutions. Using a scale from 0 to 10, where 0 represents "no confidence" and 10 represents "complete confidence," please tell us how much confidence do you have in...

Scientists
Federal government
Public health officials (e.g., FDA, CDC)
Journalists
Fact checkers
Experts
University professors
Economists

- 0 (no confidence)
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 (total confidence)

--- page break ---

Do you use any of the following social networks? Please check all that apply.

-Facebook

- Twitter
- Instagram
- TikTok
- Other networks (Hi5, Google+, etc.)

How often do you use the following sources to read or share political news?

Facebook
Twitter
Instagram
TikTok
Media pages (journals, radios, etc.)

- More than once a day
- Once a day
- Once every few days
- Once a week
- Once a month
- Less than once a month
- Never

— page break —

We are interested in knowing how often you do certain activities. We're also interested in whether people are reading survey questions carefully. To make sure you're paying attention to the questions, please disregard the question below and select both "a few times per day" and "never."

How often do you search for political news on Twitter?

- A few times per day
- Once per day
- A few times per week
- A few times per month
- Never

— page break —

[Random assignment into one of the following two conditions (control/no populism activation or dispositional activation treatment)]

[Control/no populism activation]

At the moment, how intensely do you feel the following emotions?

Boredom
Disgust
Dread
Happiness
Enthusiasm
Interest

Sadness

Hope

Anger

-Very little or not at all

-A little

-Moderately

-Quite a bit

-A lot

— page break —

[Dispositional activation treatment]

Below we've listed a set of problems that currently exist in the US. Please order them from the most severe (1) to least severe (10). If you believe that the list below is not complete, please add the problem that is missing in the "Other" box.

_____ Unemployment or under-employment

_____ LGBTQ rights

_____ Immigration

_____ Economic inequality

_____ Voting rights/election security

_____ Abortion

_____ Covid-19 and vaccines

_____ Education

_____ Climate change

_____ Other (please write) [Text entry]

We want to ask you some questions about [pipe in top ranked problem from previous question], the problem you rated as the most serious. Which groups or individuals do you believe are primarily responsible for causing this problem? (Please limit your answer to a few words).

[Text entry]

In at least a few sentences, why do you believe these groups or individuals are responsible? And how should we handle them?

[Text entry]

At the moment, how intensely do you feel the following emotions?

Boredom

Disgust

Dread

Happiness

Enthusiasm

Interest

Sadness

Hope

Anger

- Very little or not at all
- A little
- Moderately
- Quite a bit
- A lot

— page break —

On the next few pages, we'll show you some text from articles that have appeared in the news lately. Please read the articles carefully before answering the questions that follow.

— page break —

[Random assignment into one of the following]

On the next few pages, we'll show you some text from articles that have appeared in the news lately. Please read the articles carefully before answering the questions that follow.

—

On the next few pages, we'll show you some text from articles that have appeared in the news lately. Please read the articles carefully before answering the questions that follow. As you read them, keep in mind that some people argue that society is dominated by small groups of powerful elites who pursue their own interests to the detriment of ordinary people. While it is true that some members of society have more power than others, it is important to approach reports that blame these groups for major social or economic problems without credible evidence with skepticism.

— page break —

EXTREME WEATHER EVENTS LINKED TO CLIMATE CHANGE

Climate scientists agree that human activity is causing extreme weather events, such as hurricanes, tornadoes, droughts, and forest fires, to occur more often.

As far as you know,, how accurate is the statement that human activity is causing extreme climate events to occur more often?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[Note: Respondents were randomly assigned to 4 of the following fake news blurbs following the procedure explained in Appendix C.]

— page break —

[No correction version]

GENETICALLY MODIFIED FOODS SAID TO CAUSE ALLERGIES

Sales of genetically modified foods declined rapidly in the third quarter of 2021 as consumers are increasingly worried about product safety. Recent reports indicate that many consumers are concerned about potential links with allergies, especially in children. Industry observers noted that consumers are increasingly turning towards organics or non-organics with prominent "NO GMO" labels.

[Correction version]

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Despite increased fears, several peer-reviewed scientific studies have concluded that genetically modified foods were either not allergenic or no more allergenic than their nongenetically modified counterparts.

[All respondents]

As far as you know,, how accurate is the statement that genetically modified foods are unsafe?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[No correction version]

ANOTHER SCHOOL YEAR, MORE PARENTS WORRIED ABOUT POSSIBLE MMR VAX/AUTISM LINK

According to a new report, more parents are declining to vaccinate their children against MMR because of concerns about a possible link between the vaccine and autism. In some parts of the country, MMR vaccination rates are so low that public health officials are worried that society may lose its so-called "herd immunity" against measles.

[Correction version]

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However, claims of a link between vaccines and autism are not supported by scientific research. According to a recent review of this research, "Many studies have been conducted on a large number of children who have been closely observed for a number of years, and no connection has been found between the MMR vaccine and the occurrence of autism in children."

[All respondents]

As far as you know, how accurate is the statement that the MMR vaccine is linked to autism?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break—

[No correction version]

ACROSS COUNTRY, PARENTS DEBATE COVID VACCINE SAFETY AND MANDATES AT SCHOOL BOARD MEETINGS

The debate over Covid-19 vaccine mandates continued across the country this weekend, as parents on both sides of the debate made their case in front of school boards and county governments. Several speakers cited social media posts claiming that Covid-19 vaccines carry serious side effects, including sterilization, menstrual disorders, and miscarriage during pregnancy.

[Correction version]

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It is important to note that these claims are inconsistent with scientific research and government recommendations. To the contrary, the Food and Drug Administration (FDA) has given full approval to several Covid-19 vaccines after a review of scientific data indicated that serious side effects were exceedingly rare.

[All respondents]

As far as you know, how accurate is the statement that Covid-19 vaccines cause serious side effects?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[No correction version]

EXPLOSIVE NEW REPORT: COVID-19 NASAL SWABS SAID TO IMPLANT TRACKING DEVICES IN BRAIN

A new report getting much attention online claims that nasal swabs used to test for Covid-19 can be used to plant microchips in the brain. According to the report, these chips can be used for multiple purposes, including geographic tracking and the remote electronic signalling, which can affect cognition. The report is spreading rapidly across Facebook, Twitter, and other outlets since it first appeared last week.

[Correction version]

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Since the report went viral, numerous fact-checking organizations have investigated the microchips claim and found no support. As one fact checker summarizes on its website, doctors agree that nasopharyngeal swabs are widely used and do not contain chips. In fact, the smallest microchip in existence is too wide to fit on the tip of a nasal swab.

[All respondents]

As far as you know, how accurate is the statement that Covid-19 nasal swabs implant tracking devices in the brain?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[No correction version]

BIDEN: REPUBLICANS WANT LIMITED VOTING HOURS SO WORKING CLASS CAN'T VOTE

President Joe Biden blasted Georgia Republicans' election reform law at an impromptu interview aboard Air Force One. Specifically, he claimed that the election rules overhaul in Georgia was designed to make it harder for working class voters to cast ballots. Biden said, "Among the outrageous parts of this new [Georgia] law -- you're going to close a polling place at 5 o'clock when working people just get off. This is all about keeping working folks and ordinary folks that I grew up with from being able to vote."

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After the interview, several non-partisan fact checkers pointed out that Biden's claim about the new Georgia law is false. While the law ends early voting at 5pm, voting hours on Election Day will remain unchanged, with polls closing at 7pm. As one election law professor commented, "While many of the provisions in the bill are murky and we'll have to see how they're implemented, it's clear that Biden is wrong in suggesting that no ballots can be cast after 5pm."

[All respondents]

As far as you know, how accurate is the statement that the Georgia election reform law mandates poll closures at 5pm on Election Day?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[No correction version]

GOP CHAIR: DEMOCRAT ELECTION REFORM WILL ALLOW ILLEGAL IMMIGRANTS TO VOTE

Republican National Committee Chair Ronna McDaniel blasted the Democrats' proposed election reform package at a town hall in Wisconsin. Specifically, she claimed that the Democratic bill was designed to make it easier for illegal immigrants to vote and dilute the voting power of US citizens. McDaniel said, "Biden and the radical left want to change election rules so that there is no security, no ID, no nothing ... Illegal immigrants will be voting alongside everyday Americans and legal immigrants who did it the right way."

[Correction version]

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Republican National Committee Chair Ronna McDaniel blasted the Democrats' proposed election reform package at a town hall in Wisconsin. Specifically, she claimed that the Democratic bill was designed to make it easier for illegal immigrants to vote and dilute the voting power of US citizens. McDaniel said, "Biden and the radical left want to change election rules so that there is no security, no ID, no nothing ... Illegal immigrants will be voting alongside everyday Americans and legal immigrants who did it the right way."

After the event, several non-partisan fact checkers pointed out that McDaniel's claim about the Democrats' proposal is false. While the law would make it easier for all voters to obtain IDs necessary to vote, voting eligibility will remain changed, with only US citizens over age 18 eligible to cast ballots. As one election law professor commented, "While many of the provisions in the bill are murky and we'll have to see how they're implemented, it's clear that McDaniel is wrong in suggesting that illegal immigrants will be permitted to vote."

[All respondents]

As far as you know, how accurate is the statement that the Democratic election reform bill would allow illegal immigrants to vote?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[No correction version]

PATENT HOLDERS RESTRICT SUPPLY OF CANCER MEDICINES, DRIVING UP PRICES

According to a new report, cures for several forms of cancer are advancing rapidly, but the availability of these life-saving drugs is being restricted. The report alleges that a network of pharmaceutical patent holders is intentionally restricting supply in order to keep prices high.

[Correction version]

PATENT HOLDERS RESTRICT SUPPLY OF CANCER MEDICINES, DRIVING UP PRICES

According to a new report, cures for several forms of cancer are advancing rapidly, but the availability of these life-saving drugs is being restricted. The report alleges that a network of pharmaceutical patent holders is intentionally restricting supply in order to keep prices high.

Since the report first appeared, several leading economists have raised serious doubt about the claim, arguing that there is no evidence. In fact, the costs of many cancer treatment drugs has decreased rapidly in recent years.

[All respondents]

As far as you know, how accurate is the statement that the holders of medical patents are restricting supply of life-saving cancer drugs in order to increase prices?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

[No correction version]

YOU HEARD IT HERE: LEAKED DOCXS SHOW SUPER-WEALTHY CABAL PLOTTING TO RELEASE NEW COVID-19 VARIANTS

Thursday (10:30pm EST): Newly released documents suggest a plot by universities, nonprofits, and global elites to release Covid-19 variants on a planned schedule. The website where the documents first appeared claims, "These are the PLANNED COVID-19 VARIANTS - just look at this doc with a table of 'release dates' in different major cities!!" Next to the table, the document included logos of universities and organizations including Johns Hopkins University, the World Health Organization, the World Economic Forum and the Bill and Melinda Gates Foundation.

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After the story went viral, fact checkers were quick to point out that table doesn't represent the work of any of the named organizations. The World Health Organization and the Bill and Melinda Gates Foundation both responded to press queries to confirm the documents weren't genuine. The table also falsely claims the delta variant of the coronavirus emerged in June 2021. Finally, the posts ignore that variants occur in the population through random mutations and are not created by humans.

[All respondents]

As far as you know, how accurate is the statement that an international group of powerful people and institutions is working together to release new Covid-19 variants?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

— page break —

That concludes the survey. Thank you for participating.

While taking the survey, we presented you with several news stories. Although these stories were based on real-world issues and events, the stories we showed you were fictional and created for research purposes. Our goal was to learn about how people evaluate the accuracy of factual claims in news stories.

Many of the claims contained in the articles we showed you are FALSE.

Do you understand that many of the claims contained in the articles we showed you are FALSE?

-Yes

-No

--- page break ---

Claims in the following story are TRUE:

-EXTREME WEATHER EVENTS LINKED TO CLIMATE CHANGE

Claims in the following stories are FALSE:

GENETICALLY MODIFIED SAID TO CAUSE ALLERGIES

ANOTHER SCHOOL YEAR, MORE PARENTS WORRIED ABOUT POSSIBLE MMR VAX/AUTISM LINK

ACROSS COUNTRY, PARENTS DEBATE COVID VACCINE SAFETY AND MANDATES AT SCHOOL BOARD MEETINGS

EXPLOSIVE NEW REPORT: COVID-19 NASAL SWABS SAID TO IMPLANT TRACKING DEVICES IN BRAIN

BIDEN: REPUBLICANS WANT LIMITED VOTING HOURS SO WORKING CLASS CAN'T VOTE

GOP CHAIR: DEMOCRAT ELECTION REFORM WILL ALLOW ILLEGAL IMMIGRANTS TO VOTE

PATENT HOLDERS RESTRICT SUPPLY OF CANCER MEDICINES, DRIVING UP PRICES YOU

HEARD IT HERE: LEAKED DOCXS SHOW SUPER-WEALTHY CABAL PLOTTING TO RELEASE NEW COVID-19 VARIANTS

--- page break ---

Experts have determined that vaccines against Covid-19, MMR, and other diseases are safe and effective. If you wish to read more about the safety and efficacy of vaccines, you may click on the links below (links will open in new window):

Centers for Disease Control and Prevention:
World Health Organization:

— page break —

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

[Text entry]

— page break —

This concludes the survey.

Please click through to the next screen to receive your MTurk completion code.

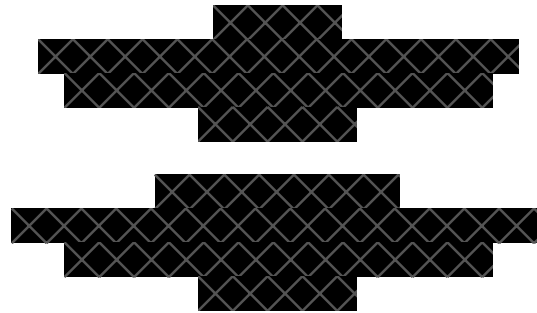
— page break —

Please make note of the following 4-digit code. You will input it through Mechanical Turk to indicate your completion of the HIT. You will not receive credit for completing the HIT unless you enter this code and complete the HIT on the MTurk site. Thank you!

Completion Code: \${e://Field/random}

Online Appendix B: Preregistrations

Pre-analysis plan for
“Populism and the persistence of misinformation: Experimental evidence from Europe”



Background/overview:

Misinformation can distort elections and complicate efforts to address pressing crises from climate change to disease pandemics. These challenges are exacerbated in many countries by populist parties and candidates, who often employ conspiracy theories and other forms of misinformation to attract voters. In this project, we examine when and how misinformation can be effectively corrected in the age of populism. Specifically, we use experiments in Spain and Portugal — countries with similar socioeconomic and cultural characteristics but different levels of elite and mass populism — to study people’s responsiveness to corrective information about a populist and non-populist fake news. Our findings will inform ongoing efforts to correct misinformation by governments, journalists, NGOs, and other important stakeholders.

Note: Translated survey instruments for both studies are attached to this pre-registration.

Hypotheses and research questions:

H1: Fact checks will reduce belief in fake news claims.

H2: Among people with populist predispositions, activating populism will increase belief in populist fake news.

H3: Among people with populist predispositions, activating populism will reduce the effectiveness of fact checks about populist fake news.

We will also consider the following research questions where we have weaker theoretical priors:

RQ1: What are the correlates of fake news belief?

RQ2: Do general warnings or anti-populism warnings decrease belief in false claims?

RQ3: Are expert sources more effective than non-expert sources at reducing fake news belief?

RQ4: Among people with populist predispositions, are non-expert sources more effective than expert sources at reducing belief in false claims?

RQ5: Does activating populism lead to higher levels of negative emotion?

RQ6: Do negative emotions reduce the effectiveness of fact checks?

RQ7: Does pre-existing trust in the source of corrective information enhance the effectiveness of fact checks?

RQ8: Among people with populist predispositions, does activating populism increase belief in non-populist fake news?

RQ9: Among people with populist predispositions, does activating populism reduce the effectiveness of fact checks about non-populist fake news?

Overview of method

We will conduct survey experiments in Spain (study 1) and Portugal (study 2) to examine the effect of populism and corrective information on belief in fake news claims. In both studies, respondents read headlines and brief excerpts from recent fake news stories covering a range of topics. Our experimental treatments --- populism activation and corrective information --- are randomized independently within each story. (We also randomize the source of the fact check in order to test some of the RQs above; see below for more information.) We will examine the effect of fact checks on respondents’ factual beliefs, the effect of activating populism on belief, and the potential moderating effect of populist activation on the effectiveness of fact checks. See the statistical analysis section below for details.

Respondents, data collection, and procedure

In both studies, we will contract with the survey data vendor NetQuest to recruit a sample that resembles the national population on available benchmarks (Spanish benchmarks: sex, age, region, education; Portuguese benchmarks: sex, age, region). In both studies, we recruit the maximum number of respondents possible under the study budget, which is approximately 10,000 in study 1 (Spain) and 3,000 in study 2 (Portugal).

Prior to beginning the study, potential participants will be provided with a description of the survey and reminded that participation in the study is voluntary and that they are free to withdraw at any time. Participants will then be asked to indicate whether or not they agree to participate in the survey. After answering pre-treatment questions about demographics and potential moderating variables, participants will be randomly assigned to read headlines and brief summaries of a series of fake news stories (listed below). Our randomized treatments are contained in these stories.

We randomize three treatment variables: populist rhetoric (designed to activate populist sentiment among respondents with latent populism), a “warning” message (intended to inoculate respondents against subsequent false claims), and exposure to corrective information. The following table presents the treatments included in both studies:

Table 1: Experimental treatments used in study 1 (Spain) and study 2 (Portugal)

	Populism treatments*	Warning treatments	Correction treatments**
Study 1 (Spain)	-No populism activation -Situational populism activation -Dispositional populism activation	-No inoculation -General anti-misinformation inoculation -Anti-populism inoculation	-No correction -Correction
Study 2 (Portugal)	-No populism activation -Dispositional populism activation	-No inoculation -Anti-populism inoculation	-No correction -Correction

*Populism activation is achieved via dispositional blame attribution (see Busby et al. 2019a; 2019b). While we include situational and dispositional attribution treatments for comparison in study 1, the smaller sample size in study 2 requires us to drop non-essential treatments in order to conserve power.

**As mentioned, we also randomize the source of corrections. For purposes of testing our pre-registered hypotheses (H1, H3), we will collapse all correction sources into a single correction dummy.

Here we list the news stories used in both studies. In study 1 (Spain), all respondents read five stories, and in study 2 (Portugal) all respondents read four stories. In both studies, respondents begin with a true story about climate change. Subsequent stories are randomly selected from the categories listed below. In both studies, the order of all stories after the first (climate change) story is randomized.

Study 1 (Spain):

- Story 1: All respondents receive climate change story
- Story 2: Random assignment to one of the following **science-related stories**:
 - Genetically modified foods are unsafe
 - Vaccines increase risk of autism
- Story 3: Random assignment to one of the following **cultural/religious stories**:
 - Replace language classes with religion
 - Mandatory Islamic studies in public schools
- Story 4: Random assignment to one of the following **partisan-related stories**:
 - Left-wing parties' secret pact
 - Right-wing parties' secret pact
- Story 5: Random assignment to one of the following **conspiracy theories**:
 - Medical patent holders restricting supply
 - NATO secret aerial fumigations conspiracy

Study 2 (Portugal 2):

- Story 1: All respondents receive climate change story
- Story 2: Random assignment to one of the following **science-related stories**:
 - Genetically modified foods are unsafe
 - Vaccines increase risk of autism
- Story 3: Random assignment to one of the following **partisan-related stories**:
 - Left-wing parties' secret pact
 - Right-wing parties' secret pact
- Story 4: All respondents receive medical patent holders story

Respondents will receive a full debriefing at the conclusion of the study. NetQuest will not provide any identifiable information to the investigators about the study participants, nor will we ask about any identifying information.

The nature of data to be obtained:

We will collect individual-level survey data, including questions about demographic/political characteristics, political knowledge, trust in various institutions, and factual beliefs.

Dates of administration:

Study 1: The study was made available to respondents on 26 November 2019 and kept in the field until the study budget was exhausted.

Study 2: The study will be made available to respondents on (approximately) 5 February 2021 and kept in the field until the study budget is exhausted.

Eligibility and exclusion criteria for participants:

All residents of Spain (study 1) and Portugal (study 2) age 18 or older are eligible to participate in the study. Participants must be members of the NetQuest panel to be invited to participate.

Primary and secondary outcome measures:

Study 1 (Spain):

As far as you know, how accurate is the statement that human activity is causing extreme weather events to occur more frequently?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that genetically modified foods are unsafe?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that vaccines increase the risk of autism?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that the government is considering reducing language classes and replacing them with religious studies?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that the government is considering implementing mandatory Islamic studies into the public school curriculum?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that PSOE and Podemos have worked together to limit the debating time of the opposition parties?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that PP and Vox have worked together to limit the debating time of the opposing parties?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that the holders of medical patents are restricting supply of life-saving cancer drugs in order to increase prices?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that NATO is using airplanes to conduct secret aerial fumigations in Spain?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

Study 2 (Portugal):

As far as you know, how accurate is the statement that human activity is causing extreme weather events to occur more frequently?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that genetically modified foods are unsafe?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that vaccines increase the risk of autism?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that the government is considering reducing language classes and replacing them with religious studies?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that the government is considering implementing mandatory Islamic studies into the public school curriculum?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that PPD/PSD and CDS-P [*left-wing parties*] have worked together to limit the debating time of the opposition parties?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that PS and BE [*right-wing parties*] have worked together to limit the debating time of the opposing parties?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that the holders of medical patents are restricting supply of life-saving cancer drugs in order to increase prices?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

Statistical analyses of hypotheses and research questions:

All results will be estimated using OLS and verified for robustness using appropriate GLM estimators (see below). All outcome measures are coded such that higher values = greater belief accuracy (though we may reverse-code these for expositional purposes in some cases). To test H1, H2, and H3, we will estimate models of the following form (in pseudo R code). Unless otherwise noted, we will estimate the same models in both studies.

H1: Fact checks will reduce belief in fake news claims.

Separate (claim-specific) models:

Belief $\sim b_0 + b_1$ fact-check exposure (1 if receive a fact check, 0 otherwise)

We will also estimate a pooled model of the same form, which stacks each respondent's outcomes separately (e.g., respondent #1's beliefs about climate change and the other

claims to which he/she was exposed). These models will include respondent fixed effects and clustered standard errors at the respondent level.

H2: Among people with populist predispositions, activating populism will increase belief in populist fake news.

Separate (claim-specific) models:

Belief $\sim b_0 + b_1$ populist activation (1 if exposed to dispositional populism treatment, 0 otherwise), subset(respondents in top tercile of sample distribution of pre-treatment populist predispositions)

We will also estimate a pooled model of the same form, which stacks each respondent's outcomes separately (e.g., respondent #1's beliefs in all populist claims to which he/she was exposed). These models will include respondent fixed effects and clustered standard errors at the respondent level.

We will restrict this analysis to the subset of populist news stories listed below. These categorizations were made based on the most consistent operationalization of populism in past research, which focuses on secretive actions by powerful elites that contradict the interests of the general public.

- Study 1 (Spain): left-wing secret pact, right-wing secret pact
- Study 2 (Portugal): left-wing secret pact, right-wing secret pact

H3: Among people with populist predispositions, activating populism will reduce the effectiveness of fact checks about populist fake news.

Belief $\sim b_0 + b_1$ fact-check exposure (1 if receive a fact check, 0 otherwise) + b_2 populist activation (1 if receive populist activation treatment, 0 otherwise) + b_3 fact-check exposure*populist activation, subset(respondents in top tercile of sample distribution of pre-treatment populist predispositions)

We will also estimate a pooled model of the same form, which stacks each respondent's outcomes separately (e.g., respondent #1's beliefs in all populist claims to which he/she was exposed). These models will include respondent fixed effects and clustered standard errors at the respondent level.

We will restrict this analysis to the same subset of populist news stories listed above. See above (analysis of H2).

We will also consider the following research questions where we have weaker theoretical priors:

RQ1: What are the correlates of fake news belief?

Claim-specific models:

Belief $\sim b_0 + b_1$ populist predispositions (categorical: bottom tercile, middle tercile, top tercile) + conspiratorial predispositions (categorical: bottom tercile, middle tercile, top tercile) + left-right ideology (1-10, where higher=more conservative) + education (1 if college graduate, 0 otherwise) + heavy social media news consumer (1 if reports getting political

news once daily or more from any of the following sources: Facebook, Twitter, Whatsapp, 0 otherwise) + age (categorical: 18-29, 30-44, 45-59, 60 or above) + sex (1 if male, 0 otherwise) + institutional trust (categorical: bottom tercile, middle tercile, top tercile; continuous score calculated as mean trust in the following institutions: scientists, doctors, politicians in general, the federal government, political parties, media outlets) + political knowledge (categorical: bottom tercile, middle tercile, top tercile)

RQ2: Do general warnings or anti-populism warnings decrease belief in false claims?

Separate (claim-specific) models:

Per Table 1 above, study 1 (Spain) included both inoculation treatments, while study 2 (Portugal) will include only the anti-populist fake news inoculation treatment. We therefore estimate different models across the two studies.

Study 1 (Spain):

Separate (claim-specific) models:

Belief $\sim b_0 + b_1$ general inoculation (1 if exposed to general anti-fake news warning treatment, 0 otherwise) + b_2 populism inoculation (1 if exposed to anti-populism warning treatment, 0 otherwise)

We will also estimate a pooled model of the same form, which stacks each respondent's outcomes separately (e.g., respondent #1's beliefs in all claims to which he/she was exposed). These models will include respondent fixed effects and clustered standard errors at the respondent level.

Study 2 (Portugal):

Separate (claim-specific) models:

Belief $\sim b_0 + b_1$ populism inoculation (1 if exposed to anti-populism warning treatment, 0 otherwise)

We will also estimate a pooled model of the same form, which stacks each respondent's outcomes separately (e.g., respondent #1's beliefs in all claims to which he/she was exposed). These models will include respondent fixed effects and clustered standard errors at the respondent level.

RQ3: Are expert sources more effective than non-expert sources at reducing fake news belief?

Separate (claim-specific) models:

Belief $\sim b_0 + b_1$ expert correction (1 if exposed to correction treatment from expert source, 0 otherwise) + b_2 non-expert correction (1 if exposed to correction treatment from non-expert source, 0 otherwise)

We will conduct a difference-in-coefficients test to examine whether the expert corrections have a more negative effect on belief (b_1) than non-expert corrections (b_2).

We consider the following sources expert and non-expert:

Table 2: Expert and non-expert sources in study 1 (Spain) and study 2 (Portugal)

	News story	Expert correction treatments	Non-expert correction treatments
Study 1 (Spain)	Genetically modified foods are unsafe	Doctors, public health agencies, scientists	
	Vaccines linked to autism	Doctors, public health agencies	Other groups of parents
	Government to replace language classes with religion	Journalists, fact-checking organizations	
	Mandatory Islamic studies in schools	Journalists, fact-checking organizations,	
	Left-wing parties secret pact	Political scholars, parliamentary experts, Civic Association for Democratic Dialogue [fictional]	
	Right-wing parties secret pact	Political scholars, parliamentary experts, Civic Association for Democratic Dialogue [fictional]	
	Medical patent holders restricting supply	Experts, economists, Council of Medical Schools	
	NATO fumigations	Spanish National Meteorological Association (male spokesman), Spanish National Meteorological Association (female spokesman), federal government (male spokesman), federal government (female spokesman), Council of Medical Schools (male spokesman), Council of Medical Schools (female spokesman)	
Study 2 (Portugal)	Genetically modified foods are unsafe	Doctors, public health agencies	
	Vaccines linked to autism	Doctors	Other groups of parents
	Left-wing parties secret pact	Political scholars, Civic Association for Democratic	

		Dialogue [fictional]	
	Right-wing parties secret pact	Political scholars, Civic Association for Democratic Dialogue [fictional]	
	Medical patent holders restricting supply	Experts, economists	Twitter users

We will also estimate a pooled model of the same form, which stacks each respondent's outcomes separately (e.g., respondent #1's beliefs in all claims to which he/she was exposed). These models will include respondent fixed effects and clustered standard errors at the respondent level.

RQ4: Among people with populist predispositions, are non-expert sources more effective than expert sources at reducing belief in false claims?

We will conduct the same analyses as in RQ3 (above) but limit our sample to respondents in the top tercile of pre-treatment populist predispositions.

RQ5: Does activating populism lead to higher levels of negative emotion?

Study 1 (Spain):

Separate (emotion-specific) models:

Anger ~ $b_0 + b_1$ situational populism activation (1 if exposed, 0 otherwise) + b_2 dispositional populism activation (1 if exposed, 0 otherwise)

Disgust ~ $b_0 + b_1$ situational populism activation (1 if exposed, 0 otherwise) + b_2 dispositional populism activation (1 if exposed, 0 otherwise)

Fear ~ $b_0 + b_1$ situational populism activation (1 if exposed, 0 otherwise) + b_2 dispositional populism activation (1 if exposed, 0 otherwise)

Sadness ~ $b_0 + b_1$ situational populism activation (1 if exposed, 0 otherwise) + b_2 dispositional populism activation (1 if exposed, 0 otherwise)

Overall negative emotions index model:

Average negative emotion (calculated as mean across above listed emotions) ~ $b_0 + b_1$ situational populism activation (1 if exposed, 0 otherwise) + b_2 dispositional populism activation (1 if exposed, 0 otherwise)

Study 2 (Portugal):

Same models as above, but we will omit the b_1 term since situational populism activation was not used in study 2.

RQ6: Do negative emotions reduce the effectiveness of fact checks?

Separate (emotion-specific) models:

Belief $\sim b_0 + b_1$ fact-check exposure (1 if receive a fact check, 0 otherwise) + b_2 anger + b_3 fact-check exposure*anger

Belief $\sim b_0 + b_1$ fact-check exposure (1 if receive a fact check, 0 otherwise) + b_2 disgust + b_3 fact-check exposure*disgust

Belief $\sim b_0 + b_1$ fact-check exposure (1 if receive a fact check, 0 otherwise) + b_2 fear + b_3 fact-check exposure*fear

Belief $\sim b_0 + b_1$ fact-check exposure (1 if receive a fact check, 0 otherwise) + b_2 sadness + b_3 fact-check exposure*sadness

Overall negative emotions index model:

Belief $\sim b_0 + b_1$ fact-check exposure (1 if receive a fact check, 0 otherwise) + b_2 average negative emotion (calculated as mean across above listed emotions) + b_3 fact-check exposure*average negative emotion

We will also estimate pooled models of the same form, which stack each respondent's outcomes separately (e.g., respondent #1's beliefs in all claims to which he/she was exposed). These models will include respondent fixed effects and clustered standard errors at the respondent level.

RQ7: Does pre-existing trust in the source of corrective information enhance the effectiveness of fact checks?

We will estimate a series of models that interact fact-check exposure with pre-existing trust in the relevant source listed below. We will estimate separate models for each correction X source interaction.

Table 3: Institutional sources in study 1 (Spain) and study 2 (Portugal)

	News story	Treatment	Relevant pre-treatment trust question
Study 1 (Spain)	Genetically modified foods are unsafe	Doctors..... Public health agencies..... Scientists.....	Doctors Consejo General de Colegios de Médicos Scientists
	Vaccines linked to autism	Doctors Public health agencies	Doctors Consejo General de Colegios de Médicos
	Government to replace language classes with religion	Journalists	Journalists
	Mandatory Islamic studies in schools	Journalists	Journalists

	Left-wing parties secret pact	Political scholars, parliamentary experts, Civic Association for Democratic Dialogue [fictional]	[No test]
	Right-wing parties secret pact	Political scholars, parliamentary experts, Civic Association for Democratic Dialogue [fictional]	[No test]
	Medical patent holders restricting supply	Council of Medical Schools	Consejo General de Colegios de Médicos
	NATO fumigations	Spanish National Meteorological Association [we will collapse both male and female spokespeople into one dummy] Federal government [we will collapse both male and female spokespeople into one dummy] Council of Medical Schools [we will collapse both male and female spokespeople into one dummy]	Scientists Federal government Consejo General de Colegios de Médicos
Study 2 (Portugal)	Genetically modified foods are unsafe	Doctors Public health agencies	Doctors Consejo General de Colegios de Médicos
	Vaccines linked to autism	Doctors	Doctors
	Left-wing parties secret pact	Political scholars, Civic Association for Democratic Dialogue [fictional]	[No test]
	Right-wing parties secret pact	Political scholars, Civic Association for Democratic Dialogue [fictional]	[No test]
	Medical patent holders restricting supply	Twitter users	Interpersonal trust

In both studies, we will also estimate a pooled model of the same form, which stack each respondent's outcomes separately (e.g., respondent #1's beliefs in all claims to which he/she

was exposed). These models will include respondent fixed effects and clustered standard errors at the respondent level.

RQ8: Among people with populist predispositions, does activating populism increase belief in non-populist fake news?

Study 1 (Spain):

Separate (claim-specific) models:

Belief $\sim b_0 + b_1$ situational populism activation (1 if exposed, 0 otherwise) + b_2 dispositional populism activation (1 if exposed, 0 otherwise), subset(non-populist fake news claims based on the categorizations above)

We will also estimate a pooled model of the same form, which stack each respondent's outcomes separately (e.g., respondent #1's beliefs in all claims to which he/she was exposed). These models will include respondent fixed effects and clustered standard errors at the respondent level.

Study 2 (Portugal):

Same models as above, but we will omit the b_1 term since situational populism activation was not used in study 2.

R9: Among people with populist predispositions, does activating populism reduce the effectiveness of fact checks about non-populist fake news?

Same models as H3 above but limited to the subset of non-populist fake news stories (based on the categorizations above).

Notes:

- Several of the tests above indicate that we will use tercile categories for relevant pre-treatment moderators (e.g., conspiratorial and populist predispositions). We will verify robustness using a simple median split.
- For interaction terms, scales, and moderators, if results are consistent using a median/tercile split or indicators rather than a continuous scale, we may present the latter in the main text for ease of exposition and include the continuous scale results in an appendix. We will compute all marginal effects appropriate to test the hypotheses of interest from the models described below.
- We will compute and report appropriate auxiliary quantities from our models, including treatment effects by subgroup and differences in marginal effects between subgroups.
- We will compute all marginal effects appropriate to test the hypotheses of interest from any interaction models. In some cases, we may present treatment effects estimated on different subsets of the data for expositional clarity. If so, we will verify that we can reject the null of no difference in treatment effects in a more complex interactive model reported in an appendix when possible.
- We will also compute and report summary statistics for our samples.
- The order of hypotheses and analyses in the final manuscript may be altered for expositional clarity.

-Regression results for individual ordered dependent variables will be verified for robustness using ordered logit.

IRB information:

This project was approved by the IRB at

Power analysis:

N/A (none conducted).

Cooperation/publication agreement:

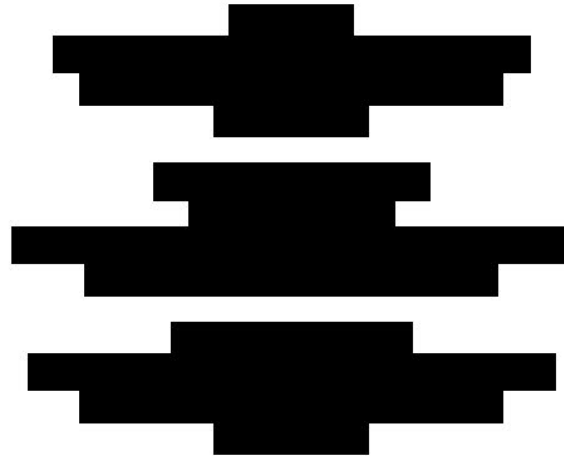
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Busby, Ethan C., David Doyle, Kirk A. Hawkins and Nina Wiesehomeier (2019b). "Activating populist attitudes: the role of corruption." In:
Kirk A. Hawkins, Ryan E. Carlin, Levente Littvay, Cristóbal Rovira Kaltwasser.
The ideational approach to populism: concept, theory and analysis. Routledge: 374-395.

Busby, Ethan C., Joshua R. Gubler, and Kirk A. Hawkins (2019a). "Framing and Blame Attribution in Populist Rhetoric." *Journal of Politics* 81(2): 616-630.

Pre-analysis plan for “Populism and the persistence of misinformation: Experimental evidence from four countries”



Note: this is an extension of a previous pre-registration that covered two studies that are part of the same project (EGAP Registration ID [REDACTED]). This version contains two additional studies (referred to as studies 3 and 4 below). New text in blue.

Background/overview:

Misinformation can distort elections and complicate efforts to address pressing crises from climate change to disease pandemics. These challenges are exacerbated in many countries by populist parties and candidates, who often employ conspiracy theories and other forms of misinformation to attract voters. In this project, we examine when and how misinformation can be effectively corrected in the age of populism. Specifically, we use experiments in Spain, Portugal, [India](#), and [the United States](#) — countries with different levels of elite and mass populism — to study people's responsiveness to corrective information about populist and non-populist fake news. Our findings will inform ongoing efforts to correct misinformation by governments, journalists, NGOs, and other stakeholders.

Hypotheses and research questions:

H1: Fact checks will reduce belief in fake news claims.

H2: Among people with populist predispositions, activating populism will increase belief in populist fake news.

H3: Among people with populist predispositions, activating populism will reduce the effectiveness of fact checks about populist fake news.

We will also consider the following research questions where we have weaker theoretical priors:

RQ1: What are the correlates of fake news belief?

RQ2: Do general warnings or anti-populism warnings decrease belief in false claims?*

RQ3: Are expert sources more effective than non-expert sources at reducing fake news belief?*

RQ4: Among people with populist predispositions, are non-expert sources more effective than expert sources at reducing belief in false claims?*

RQ5: Does activating populism lead to higher levels of negative emotion?

RQ6: Do negative emotions reduce the effectiveness of fact checks?

RQ7: Does pre-existing trust in the source of corrective information enhance the effectiveness of fact checks?
RQ8: Among people with populist predispositions, does activating populism increase belief in non-populist fake news?
RQ9: Among people with populist predispositions, does activating populism reduce the effectiveness of fact checks about non-populist fake news?

*We have simplified the experimental design in studies 3 (India) and 4 (USA), and, as a result, we will not test RQ3 or RQ4 in those studies. We will test the effects of anti-populist warnings, but not general warnings, in these new studies (RQ2).

Overview of method

We conduct survey experiments in Spain (study 1), Portugal (study 2), India (study 3) and the US (study 4) to study the effects of populism and corrective information on belief in fake news claims. The studies on Spain (study 1) and Portugal (study 2) were completed in 2019, while the surveys on India (study 3) and the US (study 4) will be completed in November/December 2021. In all studies, respondents read headlines and brief excerpts from recent fake news stories covering a range of topics. We then randomize three factors: exposure to an inoculation message, a populism activation message, and corrective information specific to each story. In studies 1 and 2, we also randomize the source of the fact check in order to test some of the RQs above (see below for more information). We will examine the effect of fact checks on respondents' factual beliefs, the effect of activating populism on belief, and the potential moderating effect of populist activation on the effectiveness of fact checks. See the statistical analysis section below for details.

Respondents, data collection, and procedure

For studies 1 (Spain) and 2 (Portugal), we contracted with the survey data vendor NetQuest to recruit a sample that resembles the national population on available benchmarks (Spanish benchmarks: sex, age, region, education; Portuguese benchmarks: sex, age, region). In all studies, we recruited the maximum number of respondents possible under the study budget, which is approximately 10,000 in study 1 (Spain) and 3,000 in study 2 (Portugal). For studies 3 (India) and 4 (USA), we recruit subjects from Amazon.com's Mechanical Turk (MTurk; Berinsky et al. 2012). We again recruit the maximum number of subjects possible under the budget, which is approximately 2960 respondents in both countries.

Prior to beginning the study, potential participants will be provided with a description of the survey and reminded that participation in the study is voluntary and that they are free to withdraw at any time. Participants will then be asked to indicate whether or not they agree to participate in the survey. After answering pre-treatment questions about demographics and potential moderating variables, participants will be randomly assigned to read headlines and brief summaries of a series of fake news stories (listed below). Our randomized treatments are contained in these stories.

We randomize three treatment variables: populist rhetoric (designed to activate populist sentiment among respondents with latent populism), a "warning" message (intended to inoculate respondents against subsequent false claims), and exposure to corrective information. The following table presents the treatments included in all studies:

Table 1: Experimental treatments used in studies 1-4

	Populism treatments*	Warning treatments	Correction treatments**
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Study 1 (Spain)	-No populism activation -Situational populism activation -Dispositional populism activation	-No inoculation -General anti-misinformation inoculation -Anti-populism inoculation	-No correction -Correction
Study 2 (Portugal)	-No populism activation -Dispositional populism activation	-No inoculation -Anti-populism inoculation	-No correction -Correction
Study 3 (India)	-No populism activation -Dispositional populism activation	-No inoculation -Anti-populism inoculation	-No correction -Correction
Study 4 (USA)	-No populism activation -Dispositional populism activation	-No inoculation -Anti-populism inoculation	-No correction -Correction

*Populism activation is achieved via dispositional blame attribution (see Busby et al. 2019a; 2019b). While we include situational and dispositional attribution treatments for comparison in study 1, the smaller sample sizes in [studies 2-4](#) require us to drop non-essential treatments in order to conserve power.

**As mentioned, we also randomize the source of corrections. For purposes of testing our pre-registered hypotheses (H1, H3), we will collapse all correction sources into a single correction dummy. [Note: this does not apply to studies 3 \(India\) and 4 \(US\), where we do not randomize correction sources.](#)

Here we list the news stories used in all studies. In study 1 (Spain), all respondents read five stories, in study 2 (Portugal) all respondents read four stories, [in study 3 \(India\) all respondents read six stories and in study 4 \(the US\) all respondents read six stories.](#) In all studies, respondents begin with a true story about climate change. Subsequent stories are randomly selected from the categories listed below. In all studies, the order of all stories after the first (climate change) story is randomized.

Study 1 (Spain):

- Story 1: All respondents receive climate change story
- Story 2: Random assignment to one of the following **science-related stories**:
 - Genetically modified foods are unsafe
 - Vaccines increase risk of autism
- Story 3: Random assignment to one of the following **cultural/religious stories**:
 - Replace language classes with religion
 - Mandatory Islamic studies in public schools
- Story 4: Random assignment to one of the following **partisan-related stories**:
 - Left-wing parties' secret pact
 - Right-wing parties' secret pact
- Story 5: Random assignment to one of the following **conspiracy theories**:
 - Medical patent holders restricting supply
 - NATO secret aerial fumigations conspiracy

Study 2 (Portugal 2):

- Story 1: All respondents receive climate change story
- Story 2: Random assignment to one of the following **science-related stories**:
 - Genetically modified foods are unsafe
 - Vaccines increase risk of autism
- Story 3: Random assignment to one of the following **partisan-related stories**:
 - Left-wing parties' secret pact
 - Right-wing parties' secret pact
- Story 4: All respondents receive medical patent holders story

We include the following claims in the two new studies (studies 3 and 4) being added to this version of the pre-registration. While we strove to maximize similarity between categories in the previous studies, after consulting with country experts we discovered that some categories were not as meaningful or credible in India and the US. We therefore settled on the following claims:

Study 3 (India):

- Story 1: All respondents receive climate change story
- Stories 2 and 3: Random assignment to two of the following **science-related stories**:
 - Vaccines increase risk of autism
 - COVID vaccine serious side effects
 - Coronavirus testing swabs plant substances in the brain
- Story 4: Random assignment to one of the following **religion-related stories**:
 - State of Rajasthan passed new law establishing penalties for blocking mosque/madrassa construction
 - Islamic studies an optional subject on UPSC exam
- Story 5: Random assignment to one of the following **conspiracy theories (which are highly similar)**:
 - Medical patent holders restricting supply
 - Hospitals restricting supply of oxygen tanks
- Story 6: Random assignment to one of the following **conspiracy theories**:
 - International elites releasing COVID variants
 - Government paying rent in MPs' private homes

Study 4 (USA):

- Story 1: All respondents receive climate change story
- Stories 2 and 3: Random assignment to two of the following **science-related stories**:
 - Genetically modified foods are unsafe
 - Vaccines increase risk of autism
 - COVID vaccine serious side effects
 - Coronavirus testing swabs plant substances in the brain
- Story 4: Random assignment to one of the following **partisan-related stories**:
 - Democrats lie about voting laws
 - Republicans lie about voting laws
- Stories 5 and 6: all respondents receive:
 - Medical patent holders restricting supply
 - International elites releasing COVID variants

In all studies, respondents will receive a full debriefing at the conclusion of the study.

The nature of data to be obtained:

We will collect individual-level survey data, including questions about demographic/political characteristics, political knowledge, trust in various institutions, and factual beliefs.

Dates of administration:

Study 1: The study was made available to respondents on 26 November 2019 and kept in the field until the study budget was exhausted.

Study 2: The study was made available to respondents on (approximately) 5 February 2021 and kept in the field until the study budget is exhausted.

Study 3: The study will be made available to respondents on (approximately) 15 December 2021 and kept in the field until the study budget is exhausted.

Study 4: The study will be made available to respondents on (approximately) 15 December 2021 and kept in the field until the study budget is exhausted.

Eligibility and exclusion criteria for participants:

All residents of Spain (study 1) and Portugal (study 2) age 18 or older are eligible to participate in the study. Participants must be members of the NetQuest panel to be invited to participate.

All residents of India (study 3) and the US (study 4) age 18 or older are eligible to participate in the study. Participants must have MTurk "worker" accounts in order to participate. Both studies 3 and 4 are offered in English.

Primary and secondary outcome measures:

Study 1 (Spain):

As far as you know, how accurate is the statement that human activity is causing extreme weather events to occur more frequently?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that genetically modified foods are unsafe?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that vaccines increase the risk of autism?

- Totally accurate
- Very accurate
- Not very accurate

-Not at all accurate

As far as you know, how accurate is the statement that the government is considering reducing language classes and replacing them with religious studies?

-Totally accurate

-Very accurate

-Not very accurate

-Not at all accurate

As far as you know, how accurate is the statement that the government is considering implementing mandatory Islamic studies into the public school curriculum?

-Totally accurate

-Very accurate

-Not very accurate

-Not at all accurate

As far as you know, how accurate is the statement that PSOE and Podemos have worked together to limit the debating time of the opposition parties?

-Totally accurate

-Very accurate

-Not very accurate

-Not at all accurate

As far as you know, how accurate is the statement that PP and Vox have worked together to limit the debating time of the opposing parties?

-Totally accurate

-Very accurate

-Not very accurate

-Not at all accurate

As far as you know, how accurate is the statement that the holders of medical patents are restricting supply of life-saving cancer drugs in order to increase prices?

-Totally accurate

-Very accurate

-Not very accurate

-Not at all accurate

As far as you know, how accurate is the statement that NATO is using airplanes to conduct secret aerial fumigations in Spain?

-Totally accurate

-Very accurate

-Not very accurate

-Not at all accurate

Study 2 (Portugal):

As far as you know, how accurate is the statement that human activity is causing extreme weather events to occur more frequently?

-Totally accurate

-Very accurate

-Not very accurate

-Not at all accurate

As far as you know, how accurate is the statement that genetically modified foods are unsafe?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that vaccines increase the risk of autism?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that the government is considering reducing language classes and replacing them with religious studies?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that the government is considering implementing mandatory Islamic studies into the public school curriculum?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that PPD/PSD and CDS-P *[left-wing parties]* have worked together to limit the debating time of the opposition parties?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that PS and BE *[right-wing parties]* have worked together to limit the debating time of the opposing parties?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that the holders of medical patents are restricting supply of life-saving cancer drugs in order to increase prices?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

Study 3 (India):

As far as you know, how accurate is the statement that human activity is causing extreme weather events to occur more frequently?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that the MMR vaccine is linked to autism?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that Covid-19 vaccines cause serious side effects?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that Covid-19 nasal swabs implant tracking devices in the brain?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that the Rajasthan government implemented new penalties against people who block the construction of mosques and madrasas?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that Islamic Studies is an optional subject for the UPSC exam?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that the holders of medical patents are restricting supply of life-saving cancer drugs in order to increase prices?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that hospital managers are restricting supply of oxygen tanks in order to increase prices?

- Totally accurate
- Very accurate
- Not very accurate

As far as you know, how accurate is the statement that an international group of powerful people and institutions is working together to release new COVID variants?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that the government pays the rent of the private home of Rajya Sabha MP Chidambaram?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

Study 4 (USA):

As far as you know, how accurate is the statement that human activity is causing extreme weather events to occur more frequently?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that genetically modified foods are unsafe?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that the MMR vaccine is linked to autism?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that Covid-19 vaccines cause serious side effects?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that Covid-19 nasal swabs implant tracking devices in the brain?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that the Georgia election reform law mandates poll closures at 5pm on Election Day?

- Totally accurate
- Very accurate
- Not very accurate
- Not at all accurate

As far as you know, how accurate is the statement that the Democratic election reform bill would allow illegal immigrants to vote?

- Totally accurate
- Very accurate
- Not very accurate

-Not at all accurate

As far as you know, how accurate is the statement that the holders of medical patents are restricting supply of life-saving cancer drugs in order to increase prices?

-Totally accurate

-Very accurate

-Not very accurate

-Not at all accurate

As far as you know, how accurate is the statement that an international group of powerful people and institutions is working together to release new COVID variants?

-Totally accurate

-Very accurate

-Not very accurate

-Not at all accurate

Statistical analyses of hypotheses and research questions:

All results will be estimated using OLS and verified for robustness using appropriate GLM estimators (see below). All outcome measures are coded such that higher values = greater belief accuracy (though we may reverse-code these for expositional purposes in some cases). To test H1, H2, and H3, we will estimate models of the following form (in pseudo R code). Unless otherwise noted, we will estimate the same models in all studies.

H1: Fact checks will reduce belief in fake news claims.

Separate (claim-specific) models:

Belief ~ $b_0 + b_1$ fact-check exposure (1 if receive a fact check, 0 otherwise)

We will also estimate a pooled model of the same form, which stacks each respondent's outcomes separately (e.g., respondent #1's beliefs about climate change and the other claims to which he/she was exposed). These models will include respondent fixed effects and clustered standard errors at the respondent level.

H2: Among people with populist predispositions, activating populism will increase belief in populist fake news.

Separate (claim-specific) models:

Belief ~ $b_0 + b_1$ populist activation (1 if exposed to dispositional populism treatment, 0 otherwise), subset(respondents in top tercile of sample distribution of pre-treatment populist predispositions)

We will also estimate a pooled model of the same form, which stacks each respondent's outcomes separately (e.g., respondent #1's beliefs in all populist claims to which he/she was exposed). These models will include respondent fixed effects and clustered standard errors at the respondent level.

We will restrict this analysis to the subset of populist news stories listed below. These categorizations were made based on the most consistent operationalization of populism in past research, which focuses on secretive actions by powerful political elites that contradict the interests of the general public.

- Study 1 (Spain): left-wing secret pact, right-wing secret pact

- Study 2 (Portugal): left-wing secret pact, right-wing secret pact
- Study 3 (India): Islamic studies on UPSC exam, new law establishing penalties for blocking mosque/madrassa construction, government paying MPs' rent
- Study 4 (the US): Democrats lie about election law, Republicans lie about election law

H3: Among people with populist predispositions, activating populism will reduce the effectiveness of fact checks about populist fake news.

Belief $\sim b_0 + b_1$ fact-check exposure (1 if receive a fact check, 0 otherwise) + b_2 populist activation (1 if receive populist activation treatment, 0 otherwise) + b_3 fact-check exposure*populist activation, subset(respondents in top tercile of sample distribution of pre-treatment populist predispositions)

We will also estimate a pooled model of the same form, which stacks each respondent's outcomes separately (e.g., respondent #1's beliefs in all populist claims to which he/she was exposed). These models will include respondent fixed effects and clustered standard errors at the respondent level.

We will restrict this analysis to the same subset of populist news stories listed above. See above (analysis of H2).

We will also consider the following research questions where we have weaker theoretical priors:

RQ1: What are the correlates of fake news belief?

Claim-specific models:

Belief $\sim b_0 + b_1$ populist predispositions (categorical: bottom tercile, middle tercile, top tercile) + conspiratorial predispositions (categorical: bottom tercile, middle tercile, top tercile) + left-right ideology (1-10, where higher=more conservative) + education (1 if college graduate, 0 otherwise) + heavy social media news consumer (1 if reports getting political news once daily or more from any of the following sources: Facebook, Twitter, Whatsapp, 0 otherwise) + age (categorical: 18-29, 30-44, 45-59, 60 or above) + sex (1 if male, 0 otherwise) + institutional trust (categorical: bottom tercile, middle tercile, top tercile; continuous score calculated as mean trust in the following institutions: scientists, doctors, politicians in general, the federal government, political parties, media outlets) + political knowledge (categorical: bottom tercile, middle tercile, top tercile)

RQ2: Do general warnings or anti-populism warnings decrease belief in false claims?

Separate (claim-specific) models:

Per Table 1 above, study 1 (Spain) included both inoculation treatments, while studies 2-4 include only the anti-populist fake news inoculation treatment. We therefore estimate different models across studies.

Study 1 (Spain):

Separate (claim-specific) models:

Belief $\sim b_0 + b_1$ general inoculation (1 if exposed to general anti-fake news warning treatment, 0 otherwise) + b_2 populism inoculation (1 if exposed to anti-populism warning treatment, 0 otherwise)

We will also estimate a pooled model of the same form, which stacks each respondent's outcomes separately (e.g., respondent #1's beliefs in all claims to which he/she was exposed). These models will include respondent fixed effects and clustered standard errors at the respondent level.

Studies 2-4:

Separate (claim-specific) models:

Belief $\sim b_0 + b_1$ populism inoculation (1 if exposed to anti-populism warning treatment, 0 otherwise)

We will also estimate a pooled model of the same form, which stacks each respondent's outcomes separately (e.g., respondent #1's beliefs in all claims to which he/she was exposed). These models will include respondent fixed effects and clustered standard errors at the respondent level.

RQ3: Are expert sources more effective than non-expert sources at reducing fake news belief?

Studies 1 and 2 only:

Separate (claim-specific) models:

Belief $\sim b_0 + b_1$ expert correction (1 if exposed to correction treatment from expert source, 0 otherwise) + b_2 non-expert correction (1 if exposed to correction treatment from non-expert source, 0 otherwise)

We will conduct a difference-in-coefficients test to examine whether the expert corrections have a more negative effect on belief (b_1) than non-expert corrections (b_2).

We consider the following sources expert and non-expert:

Table 2: Expert and non-expert sources in study 1 (Spain) and study 2 (Portugal)

	News story	Expert correction treatments	Non-expert correction treatments
Study 1 (Spain)	Genetically modified foods are unsafe	Doctors, public health agencies, scientists	
	Vaccines linked to autism	Doctors, public health agencies	Other groups of parents
	Government to replace language classes with religion	Journalists, fact-checking organizations	
	Mandatory Islamic studies in schools	Journalists, fact-checking organizations,	

	Left-wing parties secret pact	Political scholars, parliamentary experts, Civic Association for Democratic Dialogue [fictional]	
	Right-wing parties secret pact	Political scholars, parliamentary experts, Civic Association for Democratic Dialogue [fictional]	
	Medical patent holders restricting supply	Experts, economists, Council of Medical Schools	
	NATO fumigations	Spanish National Meteorological Association (male spokesman), Spanish National Meteorological Association (female spokesman), federal government (male spokesman), federal government (female spokesman), Council of Medical Schools (male spokesman), Council of Medical Schools (female spokesman)	
Study 2 (Portugal)	Genetically modified foods are unsafe	Doctors, public health agencies	
	Vaccines linked to autism	Doctors	Other groups of parents
	Left-wing parties secret pact	Political scholars, Civic Association for Democratic Dialogue [fictional]	
	Right-wing parties secret pact	Political scholars, Civic Association for Democratic Dialogue [fictional]	
	Medical patent holders restricting supply	Experts, economists	Twitter users

We will also estimate a pooled model of the same form, which stacks each respondent's outcomes separately (e.g., respondent #1's beliefs in all claims to which he/she was exposed). These models will include respondent fixed effects and clustered standard errors at the respondent level.

RQ4: Among people with populist predispositions, are non-expert sources more effective than expert sources at reducing belief in false claims?

We will conduct the same analyses as in RQ3 (above) but limit our sample to respondents in the top tercile of pre-treatment populist predispositions.

RQ5: Does activating populism lead to higher levels of negative emotion?

Study 1 (Spain):

Separate (emotion-specific) models:

Anger ~ $b_0 + b_1 \text{ situational populism activation (1 if exposed, 0 otherwise)} + b_2 \text{ dispositional populism activation (1 if exposed, 0 otherwise)}$

Disgust ~ $b_0 + b_1 \text{ situational populism activation (1 if exposed, 0 otherwise)} + b_2 \text{ dispositional populism activation (1 if exposed, 0 otherwise)}$

Fear ~ $b_0 + b_1 \text{ situational populism activation (1 if exposed, 0 otherwise)} + b_2 \text{ dispositional populism activation (1 if exposed, 0 otherwise)}$

Sadness ~ $b_0 + b_1 \text{ situational populism activation (1 if exposed, 0 otherwise)} + b_2 \text{ dispositional populism activation (1 if exposed, 0 otherwise)}$

Overall negative emotions index model:

Average negative emotion (calculated as mean across above listed emotions) ~ $b_0 + b_1 \text{ situational populism activation (1 if exposed, 0 otherwise)} + b_2 \text{ dispositional populism activation (1 if exposed, 0 otherwise)}$

Studies 2-4:

Same models as above, but we will omit the b_1 term since situational populism activation was not used in [these studies](#).

RQ6: Do negative emotions reduce the effectiveness of fact checks?

Separate (emotion-specific) models:

Belief ~ $b_0 + b_1 \text{ fact-check exposure (1 if receive a fact check, 0 otherwise)} + b_2 \text{ anger} + b_3 \text{ fact-check exposure} \times \text{anger}$

Belief ~ $b_0 + b_1 \text{ fact-check exposure (1 if receive a fact check, 0 otherwise)} + b_2 \text{ disgust} + b_3 \text{ fact-check exposure} \times \text{disgust}$

Belief ~ $b_0 + b_1 \text{ fact-check exposure (1 if receive a fact check, 0 otherwise)} + b_2 \text{ fear} + b_3 \text{ fact-check exposure} \times \text{fear}$

Belief ~ $b_0 + b_1 \text{ fact-check exposure (1 if receive a fact check, 0 otherwise)} + b_2 \text{ sadness} + b_3 \text{ fact-check exposure} \times \text{sadness}$

Overall negative emotions index model:

Belief ~ $b_0 + b_1 \text{ fact-check exposure (1 if receive a fact check, 0 otherwise)} + b_2 \text{ average negative emotion (calculated as mean across above listed emotions)} + b_3 \text{ fact-check exposure} \times \text{average negative emotion}$

We will also estimate pooled models of the same form, which stack each respondent's outcomes separately (e.g., respondent #1's beliefs in all claims to which

he/she was exposed). These models will include respondent fixed effects and clustered standard errors at the respondent level.

RQ7: Does pre-existing trust in the source of corrective information enhance the effectiveness of fact checks?

We will estimate a series of models that interact fact-check exposure with pre-existing trust in the relevant source listed below. We will estimate separate models for each correction X source interaction.

Table 3: Institutional sources in study 1 (Spain) and study 2 (Portugal)

	News story	Source of fact check used in treatment	Relevant pre-treatment trust question
Study 1 (Spain)	Genetically modified foods are unsafe	Doctors..... Public health agencies..... Scientists.....	Doctors Consejo General de Colegios de Médicos Scientists
	Vaccines linked to autism	Doctors Public health agencies	Doctors Consejo General de Colegios de Médicos
	Government to replace language classes with religion	Journalists	Journalists
	Mandatory Islamic studies in schools	Journalists	Journalists
	Left-wing parties secret pact	Political scholars, parliamentary experts, Civic Association for Democratic Dialogue [fictional]	[No test]
	Right-wing parties secret pact	Political scholars, parliamentary experts, Civic Association for Democratic Dialogue [fictional]	[No test]
	Medical patent holders restricting supply	Council of Medical Schools	Consejo General de Colegios de Médicos
	NATO fumigations	Spanish National Meteorological Association [we will collapse both male and female spokespeople into one dummy] Federal government [we will collapse both male and female spokespeople into one dummy]	Scientists Federal government

		Council of Medical Schools [we will collapse both male and female spokespeople into one dummy]	Consejo General de Colegios de Médicos
Study 2 (Portugal)	Genetically modified foods are unsafe	Doctors Public health agencies	Doctors Consejo General de Colegios de Médicos
	Vaccines linked to autism	Doctors	Doctors
	Left-wing parties secret pact	Political scholars, Civic Association for Democratic Dialogue [fictional]	[No test]
	Right-wing parties secret pact	Political scholars, Civic Association for Democratic Dialogue [fictional]	[No test]
	Medical patent holders restricting supply	Twitter users	Interpersonal trust
Study 3 (India)	MMR vaccine linked to autism	Scientific research	Scientists
	Covid-19 vaccines serious side effects	"Scientific research and public health guidance"	Scientists World Health Organization
	Nasal swabs implanting tracking devices	Fact checkers	Fact checkers
	New penalties for blocking mosque/madrassa construction	Fact checking organization	Fact checkers
	Islamic studies an optional subject	Education professor	University professors
	Medical patent holders restricting supply	Economists	Economists
	Hospitals restricting oxygen supply	Investigative journalists	Journalists
	Global cabal	Fact checkers	Fact checkers

	releasing covid-19 variants		
	Government paying MPs' rent	Fact-checking organization	Fact checkers
Study 4 (USA)	Genetically modified foods are unsafe	Scientific studies	Scientists
	MMR vaccine linked to autism	Scientific research	Scientists
	Covid-19 vaccines serious side effects	"Scientific research and government recommendations"	Scientists Public health officials (e.g., FDA, CDC)
	Nasal swabs implanting tracking devices	Fact-checking organizations	Fact checkers
	Biden lies about election law	Election law professor	University professors
	GOP Chair lies about election law	Election law professor	University professors
	Medical patent holders restricting supply	Economists	Economists
	Global cabal releasing covid-19 variants	Fact checkers	Fact checkers

In all studies, we will also estimate a pooled model of the same form, which stack each respondent's outcomes separately (e.g., respondent #1's beliefs in all claims to which he/she was exposed). These models will include respondent fixed effects and clustered standard errors at the respondent level.

RQ8: Among people with populist predispositions, does activating populism increase belief in non-populist fake news?

Study 1 (Spain):

Separate (claim-specific) models:

Belief $\sim b_0 + b_1$ situational populism activation (1 if exposed, 0 otherwise) + b_2 dispositional populism activation (1 if exposed, 0 otherwise), subset(non-populist fake news claims based on the categorizations above)

We will also estimate a pooled model of the same form, which stack each respondent's outcomes separately (e.g., respondent #1's beliefs in all claims to which he/she was exposed). These models will include respondent fixed effects and clustered standard errors at the respondent level.

Studies 2-4:

Same models as above, but we will omit the b1 term since situational populism activation was not used in these studies.

RQ9: Among people with populist predispositions, does activating populism reduce the effectiveness of fact checks about non-populist fake news?

Same models as H3 above but limited to the subset of non-populist fake news stories (based on the categorizations above).

Notes:

- Several of the tests above indicate that we will use tercile categories for relevant pre-treatment moderators (e.g., conspiratorial and populist predispositions). We will verify robustness using a simple median split.
- For interaction terms, scales, and moderators, if results are consistent using a median/tercile split or indicators rather than a continuous scale, we may present the latter in the main text for ease of exposition and include the continuous scale results in an appendix. We will compute all marginal effects appropriate to test the hypotheses of interest from the models described below.
- We will compute and report appropriate auxiliary quantities from our models, including treatment effects by subgroup and differences in marginal effects between subgroups.
- We will compute all marginal effects appropriate to test the hypotheses of interest from any interaction models. In some cases, we may present treatment effects estimated on different subsets of the data for expositional clarity. If so, we will verify that we can reject the null of no difference in treatment effects in a more complex interactive model reported in an appendix when possible.
- We will also compute and report summary statistics for our samples.
- The order of hypotheses and analyses in the final manuscript may be altered for expositional clarity.
- Regression results for individual ordered dependent variables will be verified for robustness using ordered logit.

IRB information:

This project was approved by the IRB at [REDACTED]. An amendment including studies 3 and 4 was approved by the same IRB ([REDACTED]).

Power analysis:

N/A (none conducted).

Cooperation/publication agreement:

Studies 1 and 2 were funded by a social research grant from [REDACTED]. Studies 3 and 4 were funded by a collaboration grant from [REDACTED]. Neither [REDACTED] nor [REDACTED] had input into the design or execution of the research.

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