# Sustained exposure to fact-checks can inoculate citizens against misinformation in the Global South

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**We evaluate whether sustained exposure to fact-checks reduces citizens' susceptibility to misinformation and, in turn, promotes accurate beliefs that guide informed behaviors. In partnership with a major fact-checking organization in South Africa, we evaluated a six-month intervention that delivered biweekly fact-checks via WhatsApp. Experimental estimates show that the intervention increased participants' capacity to discern true from false news and doubt conspiracy theories, and reduced their propensity to share social media posts. In line with inoculation theories, sustained access to fact-checks increased awareness of how to verify information and reduced trust in social media content, but had little effect on media consumption behaviors or active efforts to verify information. Our post-intervention surveys suggest that some modes of regular fact-check delivery shifted attitudes and behaviors connected to common targets of misinformation: these treated participants took more precautions against COVID-19 and increased their trust in, and appraisal of, their government. Leveraging variation in the mode of delivery, we find that the results are primarily driven by treatment variants that delivered fact-checks as a text message or an empathetic podcast. These findings show that sustained and scalable fact-checks can inoculate citizens upon exposure to misinformation and reduce its spread, while also highlighting the difficulties of changing citizens' consumption and verification behaviors.**

# Introduction

Misinformation about political issues, public health, and science is a growing concern across the globe (*1*). Such content—defined by its potential to generate misperceptions about the true state of the world (*2, 3*)—has been linked to harmful individual and collective behaviors in the Global North, including citizen responses to the COVID-19 pandemic, the Capitol Hill riots following the 2020 US Presidential election, and Brexit (*4, 5*). However, the challenges posed by misinformation may be especially acute in the Global South, where citizens' digital literacy is lower, experience with independent media is more limited, and dependence on increasingly-accessible social media platforms for information may be greater (*4, 6*). Indeed, misinformation on social media has been linked to genocide in Myanmar (*7*), lynchings and mass electoral mobilization in India (*8*), and vaccine hesitancy throughout developing country contexts (*9, 10*).

Fact-checking institutions have been established across the world to combat these challenges. The International Fact-Checking Network now includes more than 100 member organizations, while Facebook, Twitter, Instagram, and TikTok have integrated such fact-checks into their platforms. Exposure to these fact-checks combines "prebunking" and "debunking." Prebunking, which derives from inoculation theory (*11–13*), entails warning individuals about the impending threat of misinformation through examples and preemptively providing tools—for example, by illustrating how to evaluate a source's credibility or the validity of a particular claim—to help identify and resist misinformation. Debunking instead facilitates accurate learning through retroactively correcting misinformation, often by explaining why it is false (*14*) and providing an alternative explanation (*15, 16*). Both prebunking (*17–22*) and especially debunking (*17, 18, 23–27*) have been shown to increase skepticism of misinformation. Moreover, debunking likely complements prebunking by illustrating when and how to challenge suspicious content.

Amid the constant flow of misinformation, a key feature of institutionalized fact-checking is its potential for *sustained* exposure. Regular engagement with different types of fact-checks and verification methods could train citizens to durably protect themselves against misinformation by internalizing the lessons of both prebunking and debunking interventions. Yet, prior studies have largely consisted of testing *single-shot* efforts to combat misinformation, and are often delivered in artificial research settings such as labs or online surveys. These immediate effects generally attenuate significantly within a few weeks (*2, 5, 19, 28–32*), which may reflect the unsustained structure of these interventions (*21, 33*). Moreover, much of the evidence accumulated thus far pertains to the Global North (*4, 31, 34*), while studies in contexts with lower digital literacy have detected more limited effects (*8, 19*). It is thus critical to assess whether repeated exposure to fact-checks in a naturalistic form that fact-checkers could potentially disseminate at scale—either themselves or via mass media or social media platforms—can effectively combat misinformation in the Global South.

We conducted a field experiment to study the effects of sustained exposure to professionally-produced fact-checks in South Africa, where misinformation about social, political, and health issues is rife (*35, 36*). A majority of the population use Facebook and WhatsApp, through which much misinformation spreads, while high mobile data costs limit access to other news sources on the broader Internet (*37*). Partnering with Africa Check, the first fact-checking organization serving sub-Saharan Africa, we evaluate the impact of sending people topical fact-checks. Treated participants in our large rolling sample of social media users were sent three fact-checks via WhatsApp messages on a biweekly basis over six months. These dissected largely-false stories that were trending on social media in South Africa in the preceding weeks, which pertained to the COVID-19 pandemic, health remedies, politics and society, and other high-profile topics (Supplementary Materials (SM) Figure S4 summarizes the topics of these fact-checks). Control participants were sent no fact-checks.

We further examine whether the mode of conveying fact-checks shapes their effectiveness. Motivated by prior theoretical and empirical insights, treated participants were randomly assigned to one of four variants of the fact-check treatment. First, a baseline condition sent a single-sentence summary of each fact-check, together with a link to the full article on Africa Check's website assessing a disputed claim, via WhatsApp. Second, in the other treatment conditions, the link to the articles was replaced with a 6-8 minute podcast hosted by two narrators who explain how each claim was verified as true, false, misleading, or uncertain in a lively and conversational tone. By conveying the same information in an accessible and entertaining way, the "What's Crap on WhatsApp?" (WCW) podcast draws on studies emphasizing how "edutainment" can increase engagement with informational content (*38*). Third, recognizing that social media users may have short attention spans (*39*) or limited time, we further tested an abbreviated podcast lasting only 4-6 minutes. In the final treatment arm, the full-length podcast was augmented with empathetic language emphasizing the narrators' understanding of how fear and concern about family and friends might lead individuals to be fooled by misinformation. This treatment variant builds on recent scholarship highlighting the role of emotions in driving misinformation internalization (*40*) and the importance of appealing to emotion to correct beliefs in misinformation driven by motivated reasoning (*41–43*). Further information about the treatment arms is provided in SM.

After six months of participation in the study, participants completed an endline survey. The sustained nature of the intervention enables us to assess an unusually broad range of individual outcomes that could take time to shift, including: (i) the capacity to discern true from false information, fact-check claims, and evaluate the credibility of different media sources; (ii) media consumption patterns and content verification and sharing behavior; and (iii) attitudes and behaviors relating to salient topics that feature prominently in viral misinformation, such as COVID-19 and government performance.

We document two core findings. First, sustained exposure to fact-checks helps to inoculate against misinformation *upon exposure*. Receiving any form of treatment modestly but persistently increased respondents' ability to discern between true and false stories and their skepticism towards prominent conspiracy theories. Consistent with inoculation theory, further results suggest that this may be driven by treated participants' greater capacity to verify content for themselves and their reduced trust in social media. However, behaviors that influence exposure to misinformation in the first place were harder to shift: neither social media consumption patterns nor active efforts to verify information were systematically altered. Nevertheless, the treatment increased skepticism upon exposure to suspicious information and ultimately reduced participants' willingness to share social media content. Additionally—and most consistently for the text treatment—treatment shifted attitudes and behaviors relating to COVID-19 and politics away from positions that could be fueled by misinformation. Second, comparisons across treatment variants indicate that less can be more: the simple textual WhatsApp message consistently produced larger effects than the long and short podcasts. Our finding that only the empathetic podcast performed similarly to the text format suggests edutainment can be effective, but such interventions are most effective when including emotive appeals that increase the resonance of corrective information with consumers.

# Research design

## Participant recruitment

Following a brief pilot, online recruitment for the study took place between October 2020 and September 2021, with participants recruited in 21 batches on a rolling basis (typically once every two weeks). Africa Check used Facebook advertisements to recruit adult Facebook users for a research study on misinformation in South Africa (see the ad in SM Figure S1a). Ads were targeted at individuals who did not follow its Facebook page, and were stratified at the

province-gender-age level to increase representativeness. Few users above 50 years old were targeted, given their lower use of social media. Individuals were eligible to participate if they were at least 18 years old, lived in South Africa at the time of recruitment, had a South African phone number, and used WhatsApp.

Eligible participants then completed a baseline survey administered via a WhatsApp chatbot; SM Figure S1b shows an example of the interface. The baseline survey recorded participants' demographic characteristics, attitudes regarding misinformation, baseline knowledge about misinformation and current affairs, trust and consumption of different information sources, information verification and sharing behavior, and COVID-19 knowledge and preventative behavior. Participants were further required to send a WhatsApp message to an Africa Check-managed phone number and add that number to their phone contacts to receive a small financial incentive for completing the survey; this was necessary for Africa Check to be able to deliver treatment information to participants through its WhatsApp broadcast lists. 11,672 individuals completed the baseline survey and 8,947 satisfied the conditions necessary to enroll in the study.

## Treatment conditions

Participants who completed these steps were then randomly assigned to either *Control* or one of the four core *Treatment* arms—*Text* information, *Short* podcast, *Long* podcast, and *Empathetic* podcast—as described above. We block-randomized individuals within each recruitment batch by demographics, social media consumption patterns, trust towards different news sources, and misinformation knowledge. Figure 1 summarizes the research design, noting the share of participants assigned to control and each treatment arm. In addition to the four treatment arms, we cross-randomized whether the WhatsApp messages delivering each treatment variant included text priming the importance of fact-checking for social good. The effects of this further encouragement to consume the fact-checks are reported in SM, where we find that participants

assigned to the social prime generally experienced larger treatment effects on key outcomes.

Once assigned, treated participants were informed which type of fact-checks they would be sent. 7,331 participants saw their treatment assignment, with the residual 1,616 selecting out of continued engagement with the study having fulfilled the conditions for baseline survey remuneration. In that same message, all participants were informed of the type of monthly (optional) quiz to expect over the study duration administered via the WhatsApp chatbot. To encourage fact-check consumption, a randomly selected 83% of participants within each treatment arm received quizzes about the recent fact-checks sent by Africa Check ("fact-check quizzes"). All control participants and the remaining treated participants received quizzes asking about popular culture ("placebo quizzes"). Regardless of quiz type, participants knew in advance that they would receive a slightly larger financial incentive for answering a majority of quiz questions correctly. SM Figure S5 illustrates that, following the initial drop-off after the baseline survey, participants regularly took these interim quizzes. The corresponding treatment information was delivered via WhatsApp every two weeks for six months to each treated participant, while control participants received no further information. Due to their limited engagement with the treatment (see below) and limited effects on post-treatment outcomes, we combine all treated participants who received placebo quiz incentives into a single *Placebo incentives* treatment group in the analysis below.

## Outcome measurement

After six months enrolled in the study, each participant completed an endline survey. In addition to a final quiz (which related to the fact-checks, regardless of a participant's quiz assignment during the study) and other measures of treatment engagement and internalization, the survey elicited our primary outcomes, measuring: discernment of content truth, verification knowledge, and trust in media; information consumption, verification, and sharing patterns; and at-

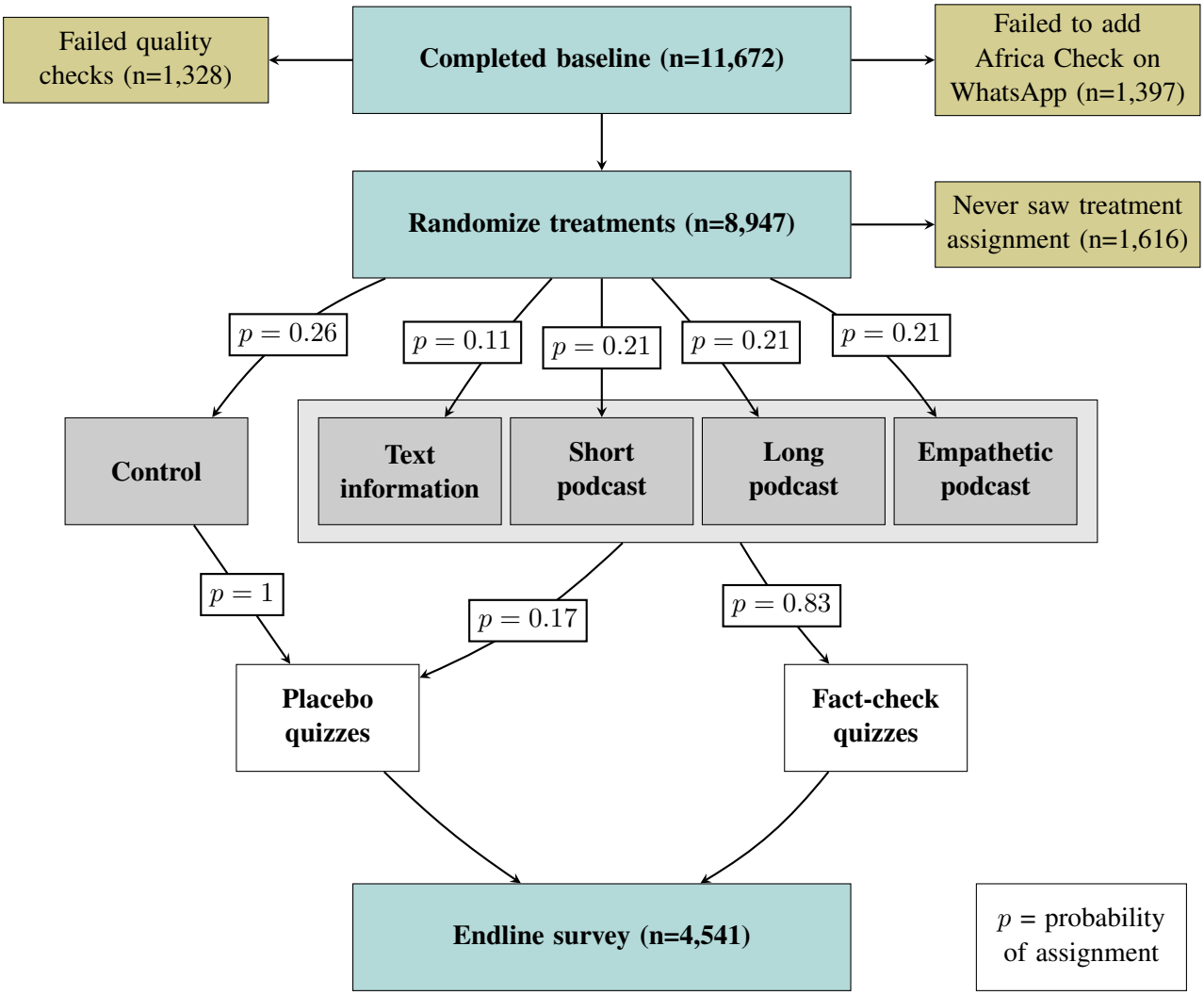



Figure 1: **Overview of treatment assignments.**
The main treatment arms include a pure *Control*, a *Text*-only treatment, a *Short* (4-6min) podcast, a *Long* (6-8min) podcast, and an *Empathetic* variant of the long podcast. Each treatment condition is delivered through WhatsApp with a short message prompting participants to consume the information. Participants are additionally prompted to engage with the study through optional but incentivized monthly quizzes. These quiz participants either on the treatment information (*Fact-check quizzes*) to incentivize consumption, or on pop-culture information (*Placebo quizzes*) to elicit similar engagement with the study across treatment arms. Attrition and pre-treatment covariates are balanced across treatment conditions in the endline survey sample (Tables S3-S4).

titudes and behaviors relating to COVID-19 and politics. We introduce these outcomes—none of which were financially incentivized—as we discuss the results. Wherever possible, we focus on factual outcomes that are less susceptible to survey response biases (see SM for a comprehensive discussion on evidence against demand effects).

The final sample of 4,541 endline survey responses exhibits no differential attrition across treatment arms (Table S3) and is well-balanced across treatment conditions in terms of predetermined covariates (Table S4). Conditional on reaching the endline, participants were highly engaged, taking an average of 88% of the quizzes sent to them throughout the study. On average, endline respondents received a total of 155 Rand (9.74 USD) through all components of the study (see SM for additional information about financial incentives). Furthermore, the endline sample approximates adult South African social media users. SM Figure S3 compares the characteristics of the endline sample with the full sample of respondents in the latest South Africa Afrobarometer survey (from 2018) and shows that they appear very similar in terms of observable characteristics, with only marginal differences in age, gender, and education.

# Results

The following subsections report intent-to-treat effects on four core groups of outcomes. Each outcome within a group aggregates survey responses as an inverse covariance weighted (ICW) index to limit the number of outcomes and increase statistical power (*44*). Treatment effect estimates should therefore be interpreted as standard deviation changes relative to the control group. For each outcome, we first pool all treatment conditions where participants were assigned fact-check quizzes (upper panel) before disaggregating the treatment variants (lower panel). All estimations—which adjust for pre-treatment outcomes, randomization blocks, and LASSO-selected predetermined covariates—and hypotheses were preregistered in our pre-analysis plan (see SM for details). 90% and 95% confidence intervals are plotted, and in the lower panels

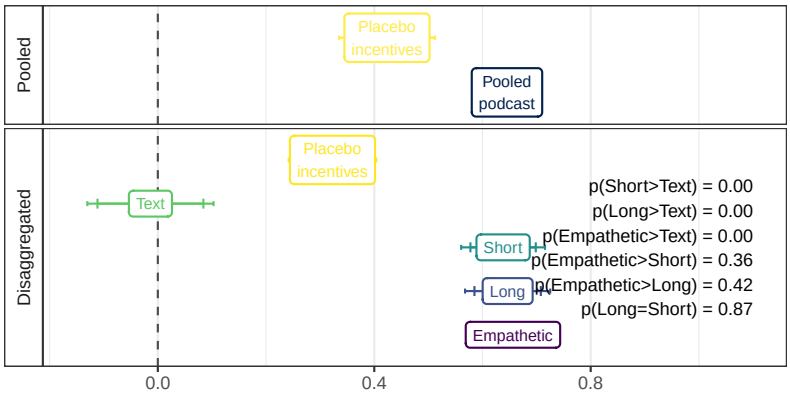
we provide $p$-values from pre-registered tests of differences in the effects between particular treatment arms. Tables S1 and S2 provide definitions for each index component. S5-S17 report unstandardized regression estimates underlying our figures for each index and index component.

## Treatment take-up

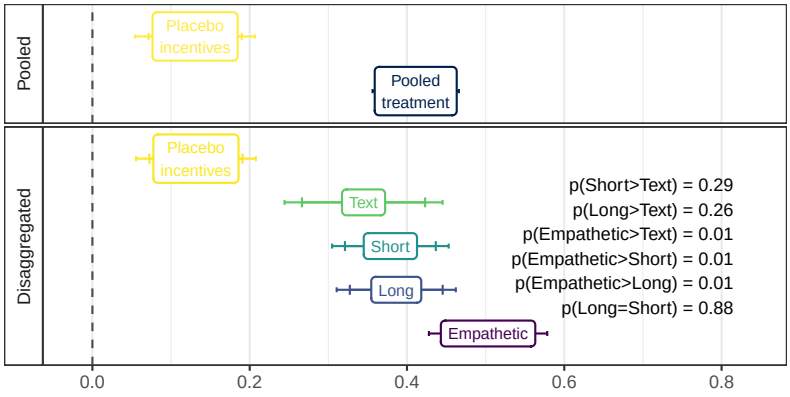
We start by documenting substantial and sustained levels of treatment take-up in Figure 2. The upper panel of Figure 2a demonstrates that podcast listenership increased by 0.65 standard deviations across pooled podcast treatment conditions ($p < 0.01$). For our most direct metric of intervention take-up, Table S5 shows that individuals who were sent podcasts became 36 percentage points more likely to report listening to the WCW podcast relative to the control group mean of 20%. The click-through rate for URLs contained in the text-based fact checks was around 12%, although the fact-check's conclusion was always conveyed in the WhatsApp message comprising the text treatment itself.

To capture treatment internalization, and address the concern that treated respondents over-reported their consumption of the WCW podcast, we consider two behavioral measures of engagement. First, consistent with the debunking aspect of the intervention, Figure 2b demonstrates that the average treated respondent facing fact-check quiz incentives increased the number of questions they answered correctly on the endline survey by 0.41 standard deviations ($p < 0.01$). This equates to increasing the probability of answering a question related to the fact-check content correctly in the endline survey from 0.4 to 0.5.

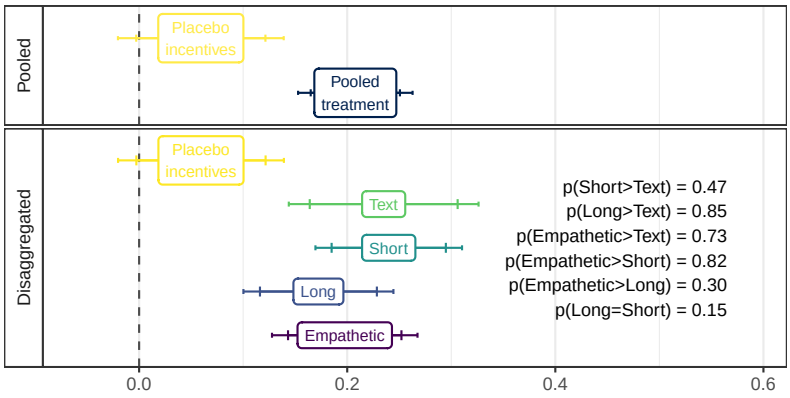
Second, to measure intent to engage with the fact-checks once the modest incentives were removed, we asked participants whether they wished to continue receiving information from Africa Check after the six months of financial incentives concluded. The results in Figure 2c show that treated respondents with incentives to consume fact-checks became 0.2 standard deviations more likely to subscribe to Africa Check's content ($p < 0.01$). Table S7 disaggregates




(a) Podcast take-up




(b) Treatment knowledge




(c) Future take-up

Figure 2: Treatment effects on take-up

*Notes:* All outcomes are standardized inverse covariance-weighted indexes (see Table S1): (a): how often reports listening to podcasts and reports listening to WCW; (b) number of fact-check quiz questions answered correctly out of 6; (c) indicators for wanting future Africa Check (AC) vaccine info, AC fact-checks, AC reminders, and to subscribe to WCW. Estimation adjusts for pre-treatment outcomes; randomization blocks; and LASSO-selected predetermined covariates (see SM). Top panel of Figure 2a excludes *Text* from *Pooled treatment* since they were not sent podcasts. P-values from pre-registered tests of differences between treatment variants indicated in bottom panels. 90% and 95% confidence intervals plotted. Regression tables provided in Tables S5-S7.

the index to show that the probability of treated respondents signing up to receive the WCW podcast after the intervention increased by 14 percentage points, which is 20% greater than the high self-reported levels of interest in the control group.

In contrast, the treatments combined with placebo quiz incentives resulted in significantly smaller increases in self-reported engagement, knowledge of fact-checks, and intended future take-up. These results mirror prior findings suggesting that incentives can play a key role in activating latent demand for politically-salient information (*45, 46*). The limited effects on treatment take-up among participants assigned to placebo incentives motivates our focus on treated respondents with fact-check quiz incentives.

The lower panel within each subfigure indicates that consumption of treatment was fairly uniform across incentivized fact-check treatment conditions. Differences in effects across treatment variants are thus unlikely to reflect differential consumption rates. However, correct quiz responses were notably greater for the empathetic podcast ($p < 0.01$), suggesting that empathetic content increased content internalization.

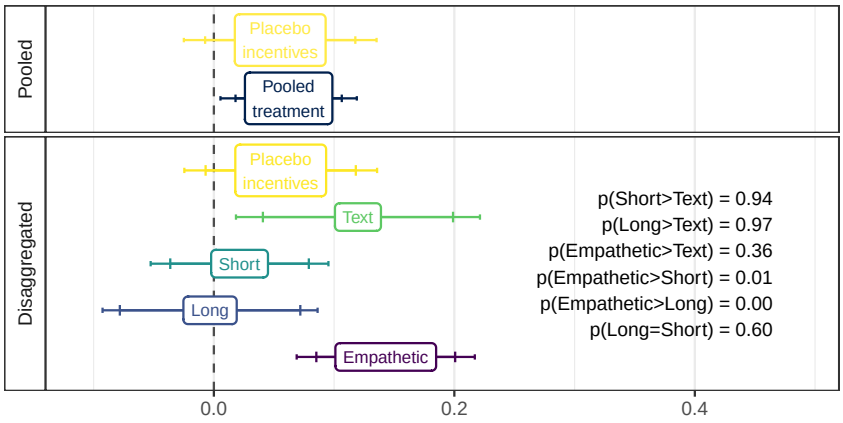
## Discerning fact from fiction

Turning to the consequences of treatment, our first main finding shows that sustained exposure to fact-checks increased treated respondents' ability to discern between true and false content *upon exposure*. First, to measure discernment between truthful and fictitious news, we showed respondents two true and two fake news stories relating to COVID-19 and government policy decisions, which were *not* covered by any Africa Check fact-check during the study period, and asked them to indicate how likely the information is to be correct. Figure 3a's upper panel shows that any treatment with fact-check quiz incentives increased respondents' discernment between true and false information at endline relative to the control group by 0.06 standard deviations ($p < 0.05$); conversely, respondents who received placebo quizzes were unmoved.

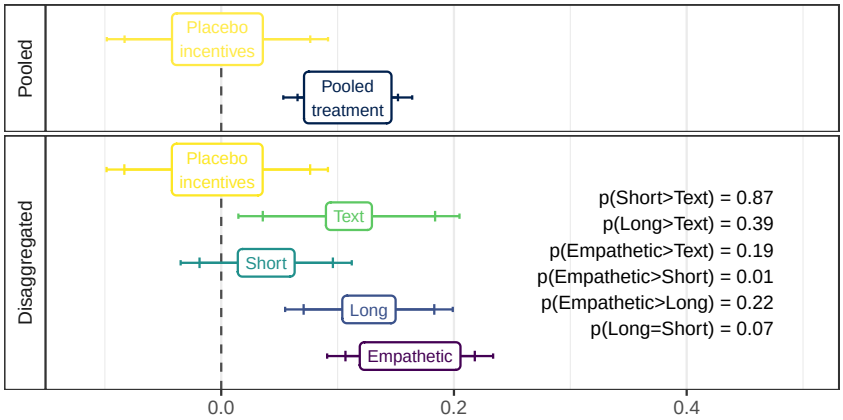
As the treatment variant tests in the lower panel illustrate, the effect of the pooled treatment is driven by the text-only and empathetic podcast conditions.

Second, we presented participants with four conspiracy theories, which were not investigated by Africa Check, and asked respondents to indicate how likely they believed each one to be true. The upper panel of Figure 3b indicates that any treatment with incentives to consume the fact-check quiz increased respondents' skepticism of conspiracy theories by 0.1 standard deviations, or an average of 0.12 units on a five-point scale ($p < 0.01$). Increased discernment is driven by the text message and long and empathetic podcast formats ($p < 0.05$, $p < 0.05$, and $p < 0.01$), which the lower panel shows produced larger effects than the short podcast. Combined with the ability to accurately distinguish true from false stories, these findings show that sustained exposure to fact-checks enhanced inoculation against fake news beyond the immediate content of the fact-checks.

Inoculation theory suggests that generalized discernment is likely to be driven by the broader lessons imparted by Africa Check's fact-checking practices. Supporting this, the upper panel of Figure 4a shows that repeated exposure to fact-checks led respondents to score 0.1 standard deviations higher on our information verification knowledge index ($p < 0.01$), which aggregates 13 items capturing good and bad practices for verifying news. Table S10 breaks down the index to show that the pooled treatment effect principally reflects increases, of several percentage points, in respondents' awareness that individuals can avoid misinformation by relying on reputable sources or experts, can request or consult verification reports from fact-checking institutions, can verify content for themselves by conducting reverse image searches, and cannot effectively verify information simply by asking others. As with our discernment outcomes, the lower panel of Figure 4a shows that the text and short and empathetic podcast modes of delivery were notably more impactful ($p < 0.01$, $p < 0.01$, and $p < 0.05$, respectively) than the long podcast.



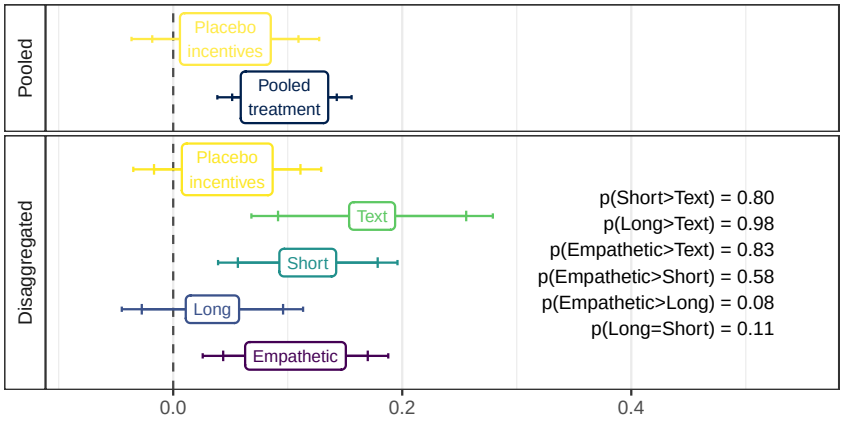

(a) Discernment between true and fake news stories



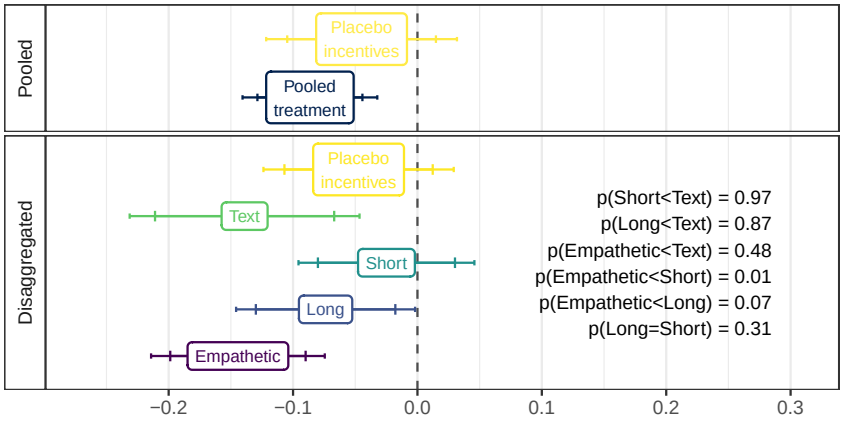

(b) Identification of conspiracy theories

Figure 3: Treatment effects on discernment between fake and true news and belief in conspiracy theories

*Notes:* All outcomes are standardized inverse covariance-weighted indexes (see Table S1): (a): level of confidence in truthful claims and lack of confidence in false claims about how COVID spreads (true), whether matriculation exam scores inflated (false), if alcohol worsens infections (true), and that most workers are immigrants (false); (b) perceived likelihood that AIDS was intentionally created, Mandela died in 1985, COVID-19 vaccines have microchips, and vaccines used to reduce population. Estimation adjusts for pre-treatment outcomes; randomization blocks; and LASSO-selected predetermined covariates (see SM). P-values from pre-registered tests of differences between treatment variants indicated in bottom panels. 90% and 95% confidence intervals plotted. Regression tables provided in Tables S8-S9.




(a) Knowledge of verification methods




(b) Trust in social media (besides WhatsApp)

Figure 4: Treatment effects on news verification knowledge and attitudes towards social media (besides WhatsApp)

*Notes:* All outcomes are standardized inverse covariance-weighted indexes (see Table S1): (a): separate indicators for correctly identifying 2 ways to avoid being misled, correctly identifying 7 methods to verify information, and correctly identifying 4 strategies fact-checkers use to verify information; (b) believes information from social media likely to be true, trusts information on social media, and thinks information on social media is most trustworthy. Estimation adjusts for pre-treatment outcomes; randomization blocks; and LASSO-selected predetermined covariates (see SM). P-values from pre-registered tests of differences between treatment variants indicated in bottom panels. 90% and 95% confidence intervals plotted. Regression tables provided in Tables S10-S12.

In addition to respondents' greater awareness of how information should be verified, effective inoculation ought to also reflect greater skepticism of content on social media—the leading source of misinformation in South Africa. Aggregating respondents' assessments of truth, source credibility, and trust in social media platforms (other than WhatsApp, through which fact-checks were delivered), the upper panel of Figure 4b shows that the treatments incentivizing participants to consume fact-checks reduced trust in social media platforms by 0.09 standard deviations ($p < 0.01$). The effect is driven by each component of the index; for example, treatment reduced the share of respondents believing that social media information sources are credible by 17% ($p < 0.01$). In line with our previous results, the lower panel shows the starkest effects for the text and empathetic podcast delivery formats ($p < 0.01$ and $p < 0.04$, respectively).

Together, these results indicate that sustained access to fact-checks—especially when expressed in a simple text form or conversationally with empathy—increased respondents' capacity to discern misinformation, verify suspicious information, and generally doubt content on social media. In SM Figures S6a and S6b, we show no effects on participants' perception that misinformation is an important problem or that verification is important, nor any changes in their perception about the ease of fact-checking. This suggests that treated individuals became more capable of discerning fact from fiction, but not necessarily more motivated to do so.

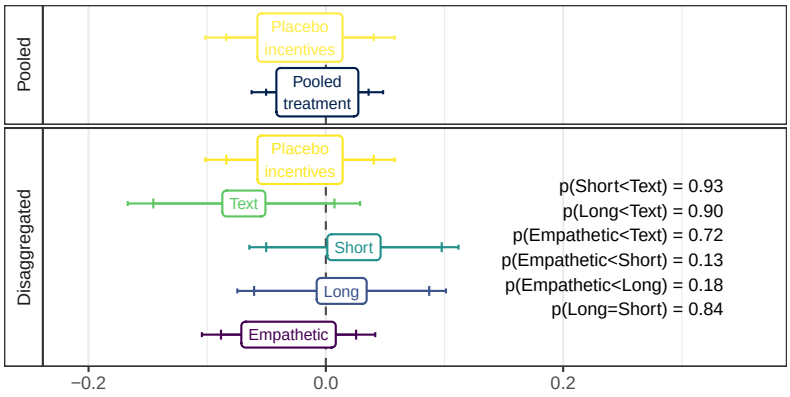
## Information consumption, verification, and sharing

Moving beyond efforts to inoculate participants upon exposure to misinformation, we next assess whether sustained exposure to fact-checks altered participants' behaviors relating to consuming, verifying, and sharing information more broadly. We first examine treatment effects on a self-reported index of social media consumption (besides WhatsApp). Across the pooled and disaggregated estimations, Figure 5a reports substantively small and generally statistically

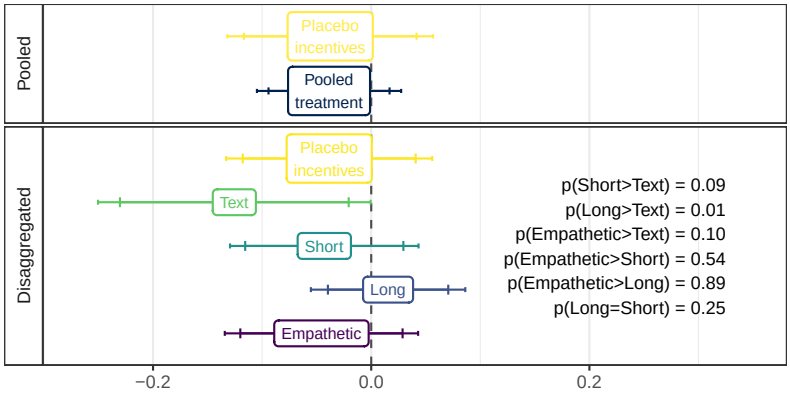
insignificant treatment effects. Thus, while individuals learned to scrutinize suspect claims, the intervention did not shift *where* individuals got their news overall. Given that social media are consumed for many purposes beyond acquiring news, this highlights the supply-side challenge of limiting exposure to misinformation in the first place.

We similarly observe limited effects on respondents' active efforts to verify the truth of claims encountered outside the study. Specifically, Figure 5b shows that we fail to detect an increase in how often respondents reported trying to actively verify information they received through social media. SM Figure S7 indicates that, while verification through Africa Check did increase, verification through traditional media was crowded out for all treated participants ($p < 0.01$) and verification via online and social media was crowded out for respondents who were sent fact-checks by text ($p < 0.01$). Since the fact-checks administered during the intervention only addressed a reasonably limited number of suspect claims overall, these negligible treatment effects on respondents' active verification behavior imply that limited *capacity* to verify news stories might not be the only driver of citizens' limited *efforts* to do so.

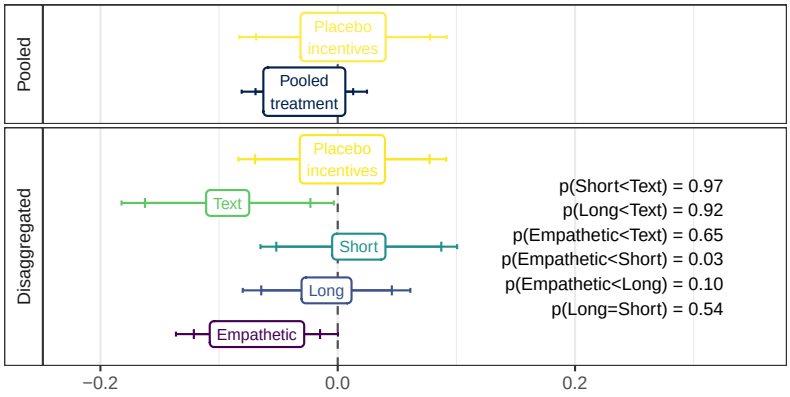
While sustained exposure to fact-checks did not affect costly decisions to alter media consumption patterns or actively verify information, greater discernment upon exposure to potential misinformation did translate—for participants that received fact-checks via text or the empathetic podcast—into a lower propensity of sharing suspected misinformation. The lower panel of Figure 5c shows that these participants became around 0.1 standard deviations less likely to report sharing information received via social media ($p < 0.05$), or a 0.1 unit reduction on our five-point scale capturing the frequency with which respondents share news stories they encounter on social media with others. This demonstrates that, in addition to becoming more discerning, sustained treatment may limit viral misinformation outbreaks by making individuals more conscientious about the risks of sharing misinformation.




(a) Social media consumption




(b) Active verification




(c) Sharing

Figure 5: Treatment effects on information consumption, verification and sharing

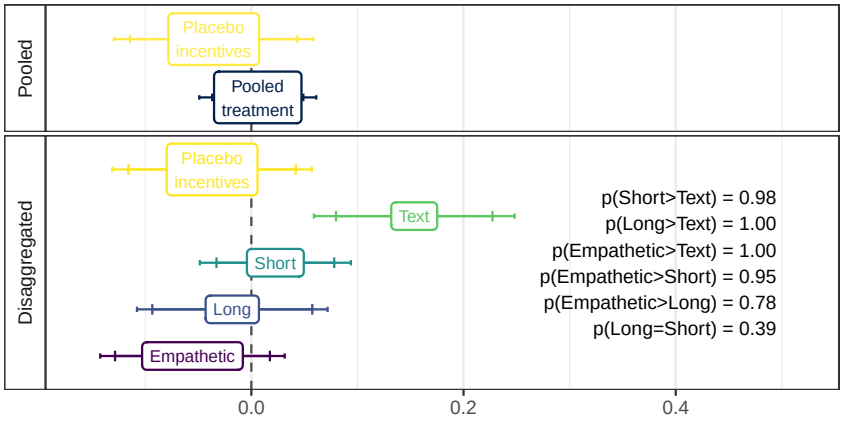
*Notes:* All outcomes are standardized (see Table S1): (a): how often gets news from non-WhatsApp social media; (b) how often actively verifies information; (c) how often shares stories on social media. Estimation adjusts for pre-treatment outcomes; randomization blocks; and LASSO-selected predetermined covariates (see SM). P-values from pre-registered tests of differences between treatment variants indicated in bottom panels. 90% and 95% confidence intervals plotted. Regression tables provided in Tables S13-S15.

## Attitudes and behaviors relating to COVID-19 and government

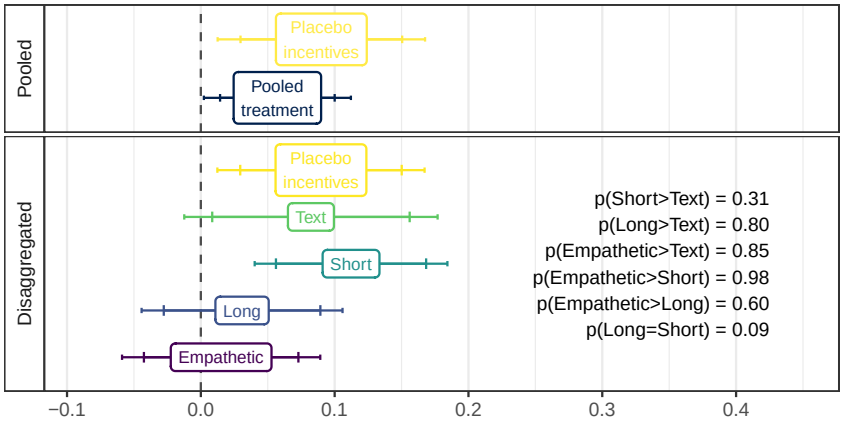
Much of Africa Check's fact-checking content addressed misinformation concerning the COVID-19 pandemic, government officials and policies, and politically-salient social phenomena (see SM Figure S4). These fact-checks generally corrected false medical claims about COVID-19 transmission and vaccines and often portrayed incumbent politicians' performance in a more favorable light by casting doubt on outlandish falsehoods. For our final set of outcomes, we therefore evaluate effects on indexes of attitudes and behaviors relating to COVID-19 and politics to assess whether the treatment mitigated the negative downstream consequences typically associated with misinformation. Since these outcomes are not connected directly to the fact-checks, this enables us to test whether Africa Check's general efforts to combat salient misinformation influenced participants' perspectives on public health and politics more broadly.

Overall, we detect some modest effects after six months of regular access to fact-checks on such beliefs and behaviors. Figure 6a generally reports no treatment effect on COVID-19 beliefs and preventative behavior for the three podcast treatments with fact-check quiz incentives. However, we find that fact-checks delivered by short and simple text messages increased an index of health-conscious outcomes associated with COVID-19 by 0.14 standard deviations ($p < 0.01$). Particularly encouragingly, Table S16 indicates that the effects of the text-only treatment are driven by significant increases in respondents' willingness to get vaccinated, mask-wearing, and skepticism that COVID-19 is a hoax, as well as decreased indoor activity.

Figure 6b reports an increase in favorable views toward the government—measured in terms of government performance appraisals, trust in government, and intentions to vote for their region's incumbent party—across treatment conditions. The pooled treatment effect of 0.06 standard deviations ($p < 0.1$) is largely driven by the text format—although the coefficient is not quite statistically significant ($p = 0.11$)—and short podcast format ($p < 0.05$). Table S17 shows that these effects are primarily driven by significant increases in the extent to which




(a) COVID-19 beliefs and preventative behavior




(b) Views and attitudes about the government

Figure 6: Treatment effects on COVID-19 beliefs and preventative, and views and attitudes about the government

*Notes:* All outcomes are standardized inverse covariance-weighted indexes (see Table S1): (a): how many days stayed home in the last week, how many days visited other people indoors in the last week (reversed), how many days wore a mask in the last week, believes COVID-19 is a hoax (reversed), thinks lockdowns are necessary, trusts vaccines, and would get vaccinated; (b) central government performance appraisal, believes government handled COVID-19 well, faith in truth of information from politicians, trusts government/politicians most for information, level of trust in information from politicians, and would vote for regional incumbent party. Estimation adjusts for pre-treatment outcomes; randomization blocks; and LASSO-selected predetermined covariates (see SM). P-values from pre-registered tests of differences between treatment variants indicated in bottom panels. 90% and 95% confidence intervals plotted. Regression tables provided in Tables S16-S17.

respondents trust information from politicians and the government.

These results, interpreted cautiously, show that broader beliefs and behaviors are harder to move. Nevertheless, our findings suggest that the greater discernment and verification knowledge inspired by sustained exposure to fact-checks may start to push individuals to make fact-based judgments in their private and political lives.

# Discussion

Our evaluation of a sustained fact-checking intervention yields several key conclusions. First, it is feasible to stimulate citizens to consume fact-checking content delivered through WhatsApp. Modest financial incentives helped to induce consumption in our South African sample; however, other individuals with greater intrinsic interest in similar information may not require such incentives. Indeed, once the incentives were removed, treated participants expressed their desire to continue receiving Africa Check's content.

Second, while treated participants did not report changes in information consumption patterns that would alter exposure to misinformation or changes in active verification efforts, the robust effects on participants' capacity to discern fact from fiction—and willingness to act on this by not sharing unverified online content—indicate that the intervention contributed to participants' inoculation against misinformation *upon exposure*. Since participants did not became more motivated to seek out more credible content or to verify claims for themselves, it is imperative to increase the efficacy of inoculation efforts beyond the effects we document in this study. Different types of interventions, perhaps addressing access or production incentives in the broader media environment or consumption patterns within social networks, may be required to alter broader media consumption patterns.

Third, not all treatment arms performed equally: the simple text-only treatment and the empathetic podcast treatments were consistently the most effective delivery mechanisms for

information uptake and retention. Our results thus suggest that repeated, short, and sharply-presented factual proclamations from a credible source are more likely to train people to approach information more critically than longer-form edutainment, unless such content goes out of its way to empathize with consumers. The combined implication is that short but empathetic fact-checking may be the most effective means of inoculating people against misinformation. While multiple forms of journalistic content can prove effective, the next challenge is to ensure the scalability of producing and disseminating such content.

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# Supplementary materials

## Materials and Methods

### Recruitment

To target a reasonably representative sample of the adult population of Facebook users in South Africa, recruitment ads on Facebook were stratified at the province-gender-age level, generating a total of 54 different ads that targeted on the basis of the user's: (i) province (of which there are 9); (ii) reported gender; and (iii) age bracket (18-29, 30-49, or above 50 years old). Figure S1a provides an example of a recruitment ad, explaining that participants will receive airtime for participating in a social media study in South Africa. Interested participants had to message the project WhatsApp bot to start a baseline survey. These potential participants were then screened to include only WhatsApp users aged 18 or above with a South African phone number. Figure S3 presents the characteristics of our endline sample relative to the nationally-representative Afrobarometer 2018 survey sample (*47*) considering both *all* Afrobarometer respondents and only those respondents who report using social media.

### Low-quality responses

Low-quality respondents were removed during the recruitment process using three attention-checking questions that randomly appeared throughout the baseline survey. These attention-checking questions were designed to be easy to respond to if respondents read the question somewhat carefully (e.g. "What year is it?"). We further restricted the sample to respondents who completed the baseline in more than eight minutes, which our own pilots of the baseline survey suggested was the minimum time required for the baseline survey to be comprehended and completed. Respondents who did not pass either check were excluded from the randomization process; consequently, dropped respondents are not correlated with treatment assignment. Their phone numbers were also prevented from restarting the baseline survey.

### Randomization

We blocked-randomized individuals approximately once every two weeks by demographics, social media consumption, trust towards different news sources, and knowledge about misinformation. Figure 1 indicates the probabilities that participants were assigned to control and each treatment arm. We assigned more of the sample to the podcast treatments relative to the text information treatment to improve our statistical power to detect differences across the more similar podcast treatment conditions. We used the `R` package `blocktools` to assign blocks,

batch by batch, based on a greedy algorithm using Mahalanobis distance over seven predetermined baseline covariates. Our nested blocking strategy involved first creating blocks of size 38 (to ensure whole numbers of respondents were assigned across the various treatment combinations within a block) and then creating smaller sub-blocks of size 19 within each block. Our regression analyses use the blocks of size 38 rather than 19 because attrition often leaves the sub-blocks with missing treatment arms at endline. Whether we use the larger or smaller block fixed effects, results remain substantively unchanged.

### Financial incentives

We administered small financial incentives—in the form of mobile airtime credits—to induce participation in, and continued engagement with, the study. Respondents who fulfilled all conditions for study enrollment (see above) received R30 (1.90 USD) in airtime. For each quiz, regardless of quiz type, respondents were provided R10 (0.62 USD) if they completed the quiz and an additional R10 if they answered a majority of the quiz questions correctly. For a short midline survey, the results of which we do not report in the manuscript due to their broad similarity with the endline survey but with a much smaller set of outcomes, respondents were provided R30 (1.90 USD) for completion and an additional R10 if they answered a majority of the quiz questions embedded in the midline survey correctly. For the endline survey, respondents received R40 (2.50 USD) and an additional R10 if they answered a majority of the quiz questions embedded in the endline survey correctly. On average, endline respondents received a total of R155 (9.74 USD) through all components of the study. Figure S5a documents the share of participants completing each interim quiz during a given batch's study period, and the share of those completing each quiz who answered a majority of the questions correctly.

### Pre-specified hypotheses

We preregistered the following hypotheses for pooled treatment effects, which correspond to the outcomes we presented in the main text and in the top panel of each subfigure:

- **Treatment take-up:** Access to treatment increases both exposure to, and knowledge about, information covered by the treatment deliveries (H1).
- **Discerning fact from fiction:** We hypothesized that treatment would increase participants' capacity to identify, and express skepticism on the basis of, characteristics of misinformation (H6); reduce trust in social media information (H3); and increase the perceived extent of misinformation on social media (H2).
- **Information consumption, verification, and sharing:** We hypothesized that the treatment would decrease information consumption and sharing from social media (H4), in-

crease awareness and attention paid to information on social media (H5), and increase active fact-checking behavior (H7).

- **COVID-19 and political attitudes and behavior:** We hypothesized two secondary treatment effects. First, that treatment would increase participants' knowledge and beliefs in the severity of COVID-19 and their willingness to take preventative measures (H9). Second, that treatment would improve participants' perceptions of government performance (H8).

The corresponding hypothesis from our pre-analysis plan is noted in parentheses. Overall, we find evidence consistent with H1, H3, H4 (with regard to sharing), H6, H8, and H9.

In addition to the pooled effects, we hypothesized that treatment would be more effective for incentivized ("fact-check quizzes") rather than unincentivized ("placebo quizzes") treatments, which we find strong support for. Between treatment arms, we hypothesized that (1) effects would be greater for podcasts rather than text messages, and (2) *Empathetic* podcasts rather than *Long* podcasts, but (3) we made no directional predictions for differences between the *Long* and *Short* podcasts. We find evidence consistent with (2) but not (1), since the text treatment was ultimately highly effective. Finally, we preregistered an expectation of greater treatment effects for treatments delivered using a social prime that highlighted the importance of fact-checking for social good, which we also found to be the case (see below).

### Outcome measurement

All our main outcomes are inverse covariance weighted (ICW) indexes (*44*). Each such outcome aggregates individual survey items in line with the families outlined in our pre-analysis plan, and is standardized with respect to the control group mean and standard deviation. Each grouping of outcomes contains several ICW outcome indexes capturing different types of outcome within the family. These groupings are provided in Tables S1 and S2.

Missing responses were imputed as follows. "Don't know" responses to specific questions were coded as "negative" responses relative to the expected treatment effect sign, which were all normalized to positive; e.g. when the respondents were asked about listening to podcasts, "Don't know" is coded as "Never." Similarly for the importance of an issue, "Don't know" is coded as "Not at all important"). In turn, when "Don't know" relates to a Likert scale, "Don't know" is coded as the median/neutral option (e.g. as "neither agree not disagree").

The final indexes we settled on largely conform with the indexes specified in the pre-analysis plan. However, we note below some deviations designed to focus attention on theoretically-relevant outcomes. We provide treatment effect estimates relating to all outcomes excluded from the indexes ultimately used in the main paper (references provided below).

First, for exposure to the intervention, we examine podcast take-up and knowledge of the

content of the podcast separately to distinguish self-reported attention from internalization; we cut an index item about the frequency with which participants report being alerted to fake news on social media because it was originally designed to test a distinct mechanism proposed in the literature (*39*), but we found limited support for it (see Figure S8 and Table S24). We further added future take-up as an additional indicator of treatment take-up once the small financial incentives to participate in the study had been removed.

Second, for trust in social media, the index focuses on Facebook, Instagram, and Twitter. We exclude WhatsApp because the fact-checking intervention was delivered via WhatsApp and hence results are difficult to interpret. Figure S10b and Table S27 shows that trust in WhatsApp modestly increases, likely due to the mode of delivery of the intervention; on the other hand, Figure S10c and Table S28 show that trust in information from close ties, including information sent from WhatsApp, modestly decreases. Third, for consumption of social media, we exclude WhatsApp for the same reason (see Figures S11b and S11c, and Tables S30 and S31). We also examine the consumption and sharing of information separately to examine effects on both important outcomes.

Fourth, our discernment outcomes relating to conspiracy theories were not pre-registered, but provide a valuable check on citizen evaluations of claims that could be the subject of misinformation. Fifth, we distinguish between active verification efforts and knowledge about the correct way to verify information. For active verification, we solely focus on the frequency with which a respondent reports fact-checking information (see Figure 5b and Table S14). We use the following variables for knowledge on how to verify: the perceived importance of fact-checking, verifying by seeking out dedicated fact-checkers, and levels of knowledge about how and where to check misinformation (see Figure 4a and Table S10). We exclude the variable on whether they share fact-checks with friends and family, as that does not fall appropriately into either active verification or knowledge of how to verify information (see Figure S9 and Table S25). Finally, for attitudes toward the government, we deviate from the pre-analysis plan in three ways to focus on trust in and appraisals of government politicians and performance: (i) we add items relating to trust in government and politicians and the information they provide (see Figure 6b and Table S17); (ii) we exclude two questions eliciting perceptions of government capacity (see Figure S12 and Table S32 for results) and two questions on populism-related beliefs (see Figure S13 and Table S33 for results), on the basis that these questions were worded to capture beliefs about how government *ought* to behave rather than concrete government appraisals.

### Estimation and inference

We estimate intent-to-treat effects of different combinations of treatment arms relative to the control group using the following pre-specified OLS regression:

$$Y_{ib} = \alpha_b + \beta Y_{ib}^{pre} + \boldsymbol{\gamma}\mathbf{X}_{ib}^{pre} + \boldsymbol{\tau}\mathbf{T}_{ib} + \varepsilon_{ib}, \tag{S1}$$

where $Y_{ib}$ is an outcome for respondent $i$ from block $b$, $\mathbf{T}_{ib}$ is the vector of individual treatment assignments (which we pooled across some treatment conditions in various ways to increase statistical power), $\alpha_b$ are randomization block fixed effects, $Y_{ib}^{pre}$ is the baseline analog of the outcome (where feasible), and $\mathbf{X}_{ib}^{pre}$ is a vector of predetermined baseline covariates selected via LASSO. For each outcome variable, we used cross-validated LASSO to select the conditioning variables for inclusion in Equation (S1). The vector $\boldsymbol{\tau}$ captures the effect of each treatment condition. We focus on two pre-specified approaches to pooling treatment conditions: (i) pooling all text and podcast conditions; and (ii) examining text, short podcast, long podcast, and empathetic podcast separately (i.e. pooling across factual and social prime encouragements). Several further pre-specified approaches to pooling yielded similar results. Reflecting the individual-level assignment to treatment, robust standard errors are used throughout.

For inference, we use one-sided $t$ tests to evaluate hypotheses where we pre-specified a directional hypothesis (see above for pre-specified hypotheses). Otherwise, or in cases where the pre-specified direction is the opposite of the estimated treatment effect, we use two-sided $t$ tests to evaluate whether the null hypothesis of no difference between a treatment arm and the control group or another treatment arm can be rejected.

The principal deviation from our pre-analysis plan is our decision to pool the individuals that received placebo quiz incentives into a single group (*Placebo incentives*). We had pre-specified that such individuals would be pooled with groups receiving the *Text*, *Short*, *Long*, or *Empathetic* treatment arm. However, this ultimately made less sense due to the low engagement with the treatment among participants assigned to placebo quizzes (see Figure 2). Because less than 20% of treated individuals received placebo quiz incentives, the decision to pool together the results of placebo quiz participants across treatment groups does not substantively affect the estimates of the effect of each treatment group individually.

### Identification tests

Unbiased estimation of average treatment effects rests on two core assumptions: ignorability of treatment assignment and the stable unit treatment value assumption (SUTVA). While treatments were randomly assigned, ignorable treatment assignment could be violated by chance imbalances or selective attrition.

We validate our identifying assumptions in two ways. First, we examine differences in the probability of completing the endline survey by treatment arm. Table S3 shows that attrition is also well-balanced across treatment conditions. Second, we conduct balance tests across baseline survey (pre-randomization) covariates in the endline sample; a joint $F$ test only fails to reject the null hypothesis that the mean of each characteristic is equal across each treatment condition at the 10% significance level in 1 of 37 tests in our pooled specification and 0 of 37 tests in our disaggregated specification. With respect to SUTVA, because participants are scattered across the country and make up a tiny fraction of the South African population, there

is little reason to believe that interference between units is driving the results.

### Demand effects

In the context of our study, we may be concerned with demand effects. Because our outcomes are derived from survey measures, participants who were assigned to treatment arms may have responded to questions based on perceptions of what answers were more desirable. We provide evidence against social desirability bias in three ways.

First, social desirability bias is unlikely to account for differences across treatment arms. Consistent differences in treatment effects across the treatment arms suggest that particular components of the intervention did elicit real change in participant knowledge and beliefs about information from online news media. This interpretation of our findings is bolstered by results from questions that test participants' capacity to discern true from false news and their ability to identify conspiracy theories. The information in these two sets of questions were *not* covered by the information Africa Check delivered weekly. These knowledge questions are difficult to falsify, as they require participants to be aware of current events and better adjudicate a piece of news' credibility. Moreover, treated participants were better able to recall treatment content and identify plausible verification methods—other outcomes that are less susceptible to social desirability bias.

Second, demand effects are unlikely to explain our set of results, which show differences between the intervention's success in increasing participants' knowledge and awareness versus actual behavioral change. If participants who were assigned to treatment arms selected socially desirable survey responses, we would expect participants to also report greater behavioral changes with respect to social media consumption and active verification of online content. Our findings in Figure 5c indicate that this is not the case: estimated treatment effects suggest that actual behavior with respect to social media interaction is hard to shift despite consistent exposure to Africa Check's content.

Third, we examine a behavioral outcome that is unlikely to be affected by social desirability bias. Every treatment delivery from Africa Check also included a message that encouraged participants to submit fact-checking requests to discern true participant interest in the fact-checking information. Participants could submit text or forward videos, pictures, or links to the Africa Check phone number for fact-checking. Estimates in Figure S14 show that treated participants were indeed more likely to submit fact-check requests. Importantly, the incentivized *Text* treatment participants were the most likely to send in fact-checking requests in comparison to all other treatment arms ($p < 0.01$). The particular effectiveness of the *Text* treatment, in comparison to the other treatment arms, is consistent with our other survey outcomes and assuages concerns about demand effects across the study.

## Supplementary text

### Examples of fact-checks

Africa Check's fact-checks delivered to treated participants are deemed True, False, Misleading, or Uncertain (unsubstantiated). The content of these fact-checks cover (broadly) 8 families of issues but often touch upon more than one set of issues (see Figure S4). Examples of each type of issue are provided below:

- **Politics:** "Did a R200m Covid-19 vaccine tender go to the daughter of South African premier? This is incorrect!"
- **Economy:** "Beware of false job adverts for the South African police. It's a job scam."
- **Race/Xenophobia:** "Did a recent tweet by Julius Malema encourage attacks on 'racist farms'? No, it's fake!"
- **COVID-19:** "No, a World Health Organization head didn't say Covid vaccines kill kids."
- **Other Health:** "There is no scientific evidence that a mixture of bitter gourd leaves and snails is a remedy for stroke."
- **Crime:** "Has the murder rate for the North West nearly doubled from 2020 to 2021? Yes, but the Covid-19 lockdown skewed the comparison."
- **Society:** "Are there 5.6 billion women in the world to just 2.2 billion men? Nope, not even close!"
- **Miscellaneous fun facts:** "There is no elephant-shaped mountain in Oregon, US – the image that has been circulating was photoshopped by an artist."

### Examples of empathetic addition to podcast

Below, we provide three examples of the distinctive text included in the empathetic variant of the podcast:

- "Misinformation about vaccine and vaccine mandates can be scary. Especially when it suggests that we may be forced to do something or the vaccines could have side effects. So it's really important that we check claims like this before we pass them on."
- "With the rising number of daily COVID-19 positive cases and of course the new variant, many people may be feeling anxious about an onset of cold or flu symptoms. Even seasonal allergies. And the panic around this may lead you to fall for misinformation on

how to mitigate symptoms as well as unverified remedies on how to get better quicker. Which is the case with this claim."

- "You may have seen pictures or videos shared on social media of gas or paraffin heater incidents that led to serious burn-related injuries. And this first claim may make you feel anxious or fear for the safety of your friends or family members who regularly use these appliances. And you might want to share safety hacks to protect your loved ones and to caution them to take extra care to avoid danger with appliances this winter. But sometimes, these aren't entirely true..."

**Treatment delivery message primes**

All four treatment arms were accompanied by a short message that accompanied the delivery of the treatment (see Figure S2 for examples). Within each treatment arm, a random half of the participants received a message that simply introduced the fact-check information being delivered (*Factual*), while the other half received a message that additionally primed participants about the information's importance in order to encourage consumption of the fact-check material (*Prime*). We expected treatment effects to be particularly concentrated among participants assigned to *Prime* rather than *Factual* messages.

For our main analysis, we focus on the preregistered approach of pooling the *Factual* and *Prime* messages within each form of treatment. We now examine potential complementarities between these treatments and a short message priming the importance of fact-checking. We return to examine the outcomes for which *Text* and all podcast treatments produced significant impacts: discernment between fake and true information; identification of conspiracy theories; and verification knowledge. The variation in treatment delivery message does not induce clear differential effects on our other outcomes.

Figure S16a provides evidence that the message priming the social importance of misinformation increases discernment. Across two treatment arms—*Text* and *Empathetic* podcast paired with *Fact-check* quizzes—messages with the social *Prime* significantly increased the likelihood that participants were able to discern between fake and true information. While the incentivized *Long* podcast also performed better when paired with a *Prime* message, the treatment combination is not statistically distinguishable from the *Control* condition.

We similarly find that the *Prime* message amplified the impact of other treatments on the likelihood of doubting conspiracy theories. Figure S16b shows that, when primed, participants were likely to identify conspiracy theories than when they received the *Factual* message across three incentivized treatment arms: the *Text* treatment, the *Long* podcast, and the *Empathetic podcast*. Moreover, Figure S16c shows evidence that the *Prime* message—when paired with the incentivized *Text*, *Short* podcast, and *Empathetic* podcast—was once again significantly more likely to help participants identify correct strategies for verifying information.

Overall, we find robust and positive effects for the inclusion of a *Prime* message when encouraging participants to consume their assigned treatments—particularly for the incentivized *Text* and *Empathetic* podcasts. These originally identified effects are then amplified by a *Prime* message which repeatedly reminded participants of fact-checking's importance. Because the prime did not increase reported exposure to the podcast but did increase knowledge about its content (see Figure S15), the results are primarily driven by participants paying greater attention conditional upon exposure.

**Examples of additional prime in delivery message**

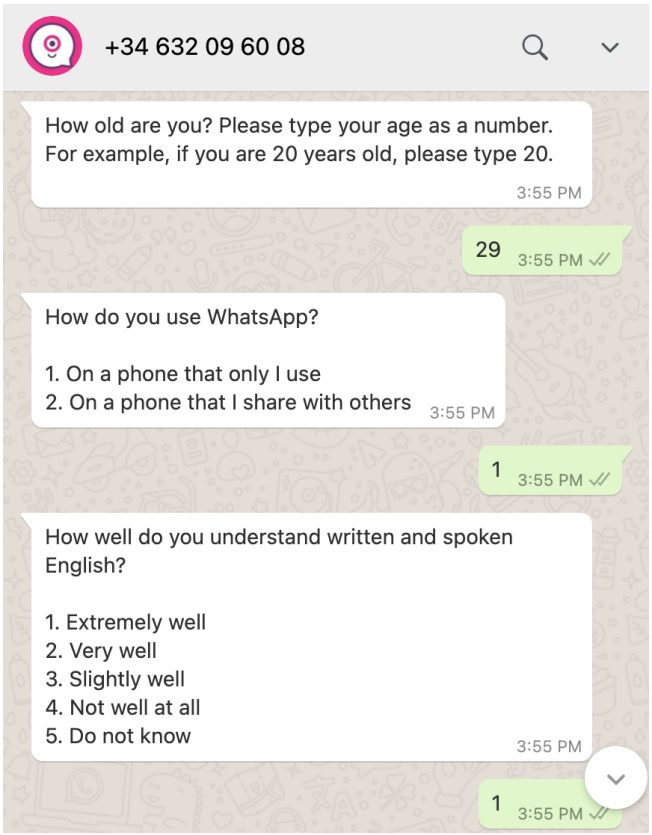
Below, we provide three examples of the additional prime encouraging participants to consume Africa Check fact-check information:

- "Myth busters and fake news debunkers play a vital role in checking the facts online! Here are the facts about three viral online messages so you can prevent your friends and family from being fooled by false information."
- "False information can be dangerous. Sometimes it can be deadly. Play your part in sharing accurate information online to help protect your friends and family. Here are the facts about three viral online messages:"
- "False information can be dangerous. Your friends and family will thank you for checking the facts before you share a message online. We've verified three viral messages for you"
- "False and misleading information can be dangerous. When it comes to health issues, it can be deadly. Verify before you share message online to keep your fiends and family safe. They'll thank you for it! We've fact-checked three viral messages for you:"

# Figures

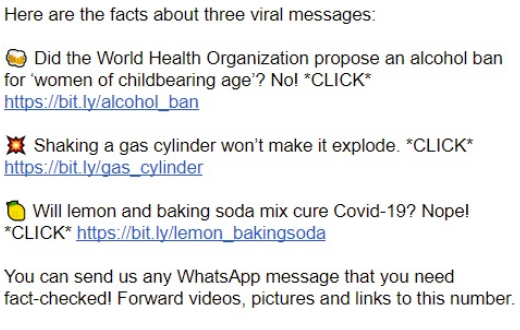
## Study design


(a) Recruitment Facebook ad

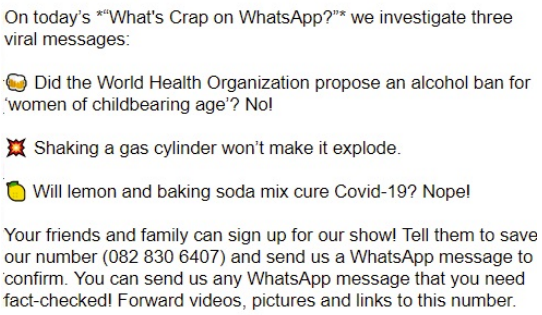



(b) Survey through WhatsApp chatbot

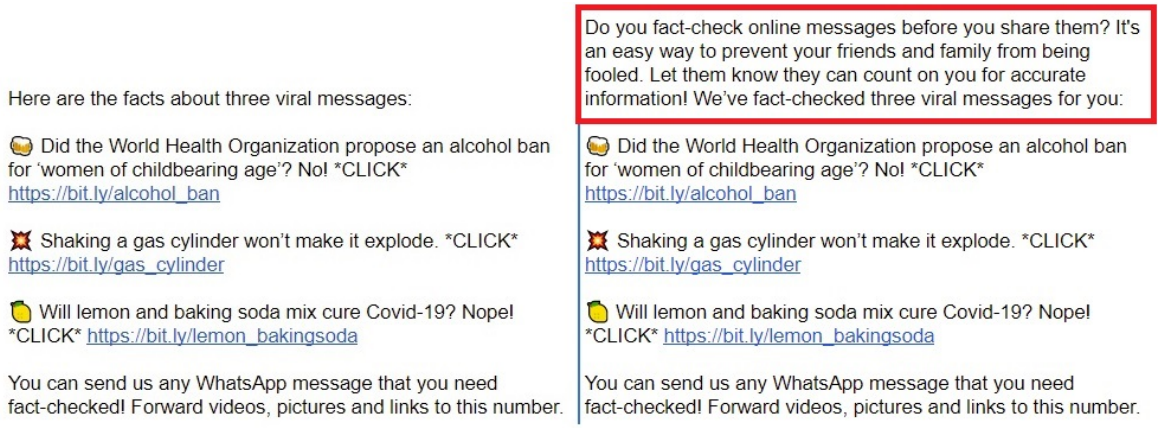
Figure S1: Recruitment and surveying




(a) *Factual* delivery message for *Text* treatment

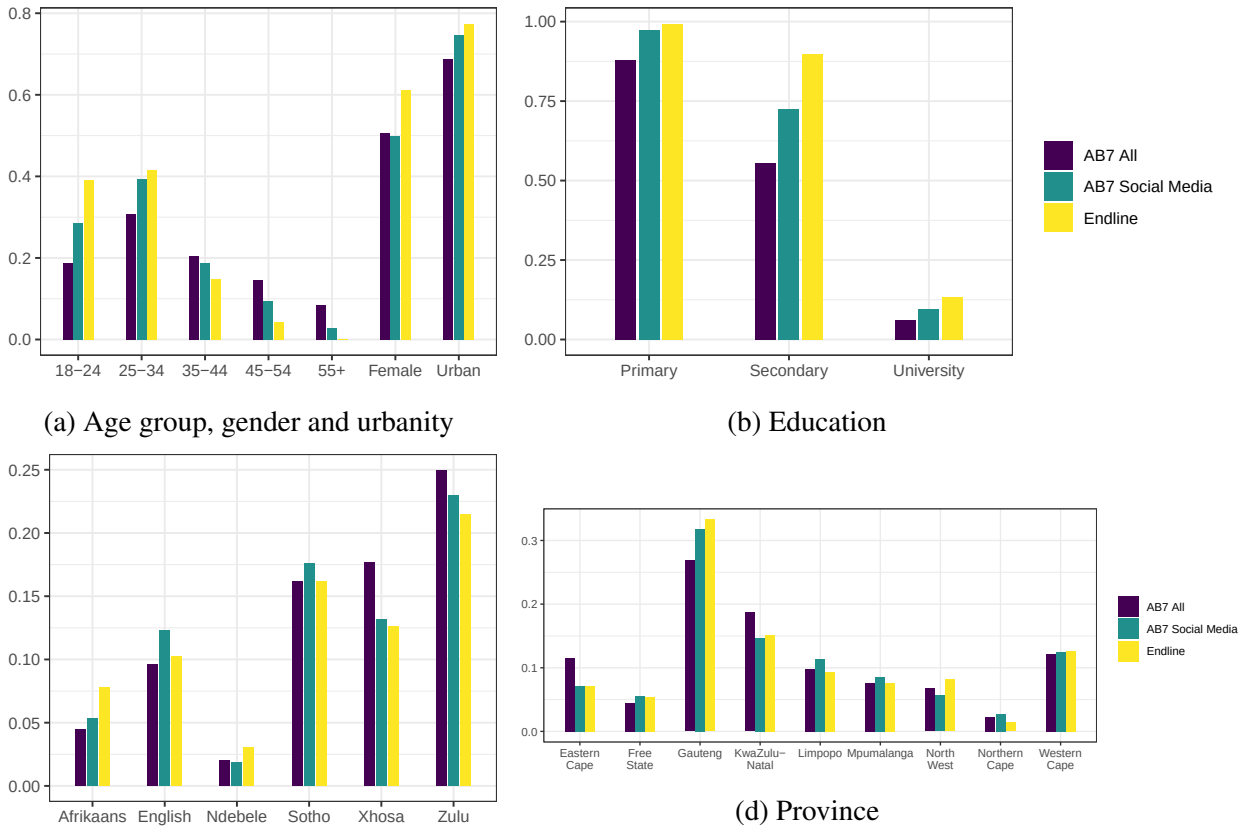



(b) *Factual* delivery message for podcasts




(c) *Factual* and *Prime* delivery messages for *Text* treatment

Figure S2: Examples of messages delivered via WhatsApp



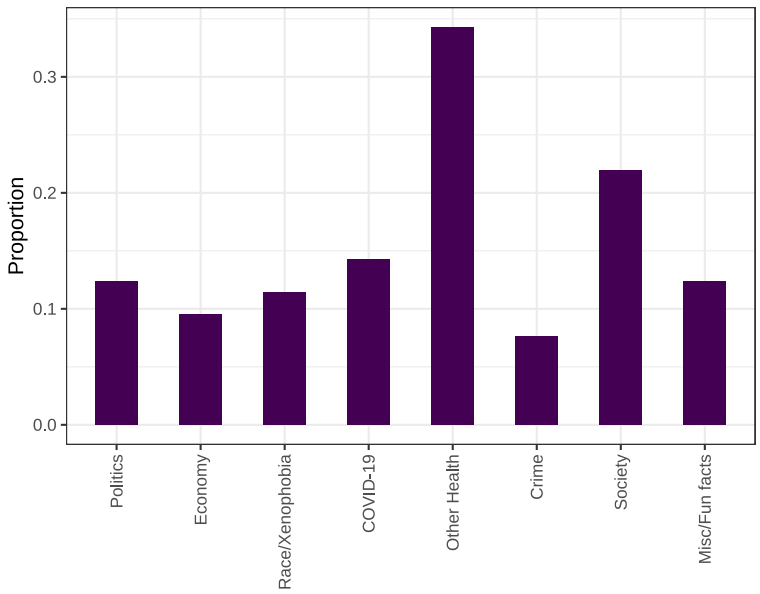

(a) Age group, gender and urbanity

(b) Education

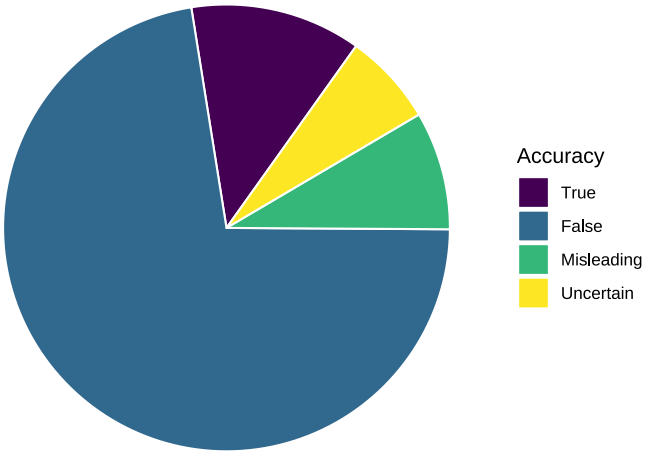
(c) Ethnicity

(d) Province

Figure S3: Comparison of endline sample with Afrobarometer round 7 (2018)

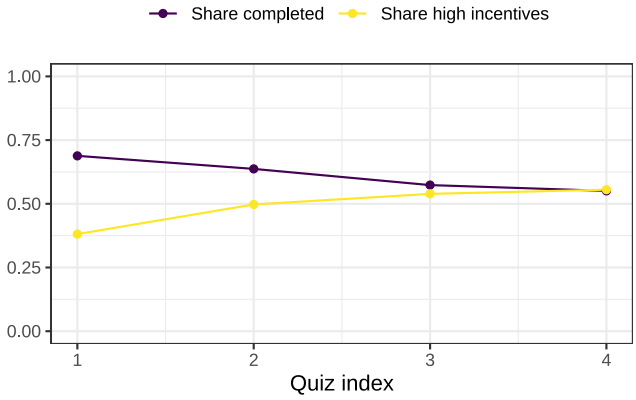



(a) Topics fact-checked

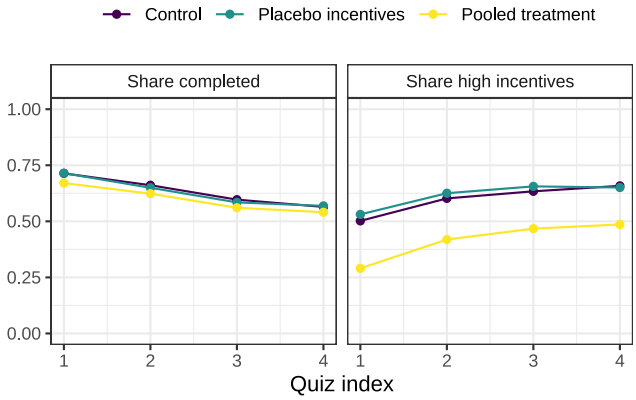



(b) Accuracy of facts checked

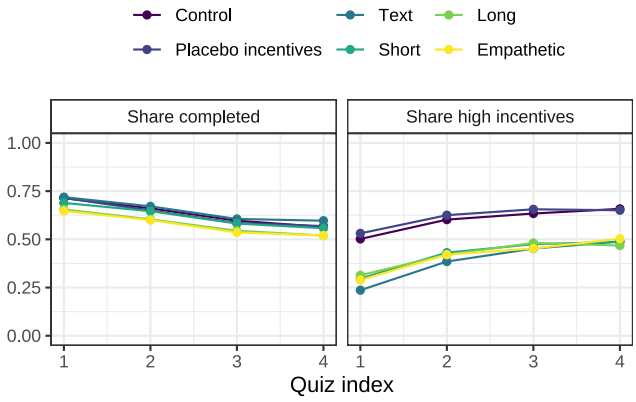
Figure S4: Biweekly fact-checked content




(a) Quiz engagement and incentive payments (overall)




(b) Quiz engagement and incentive payments (pooled treatment)

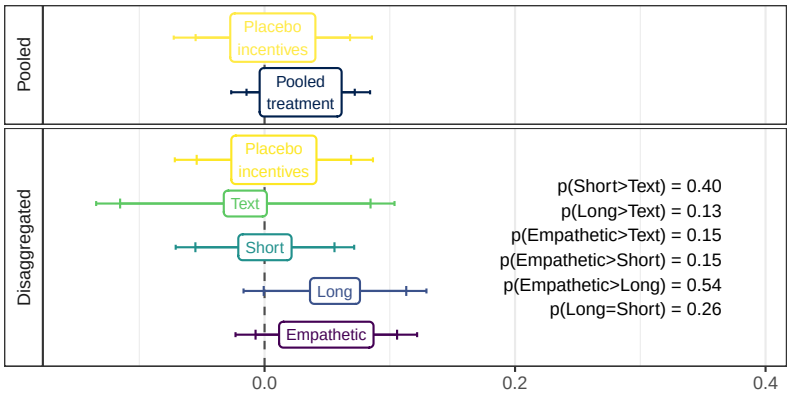



(c) Quiz engagement and incentive payments (disaggregated treatment)

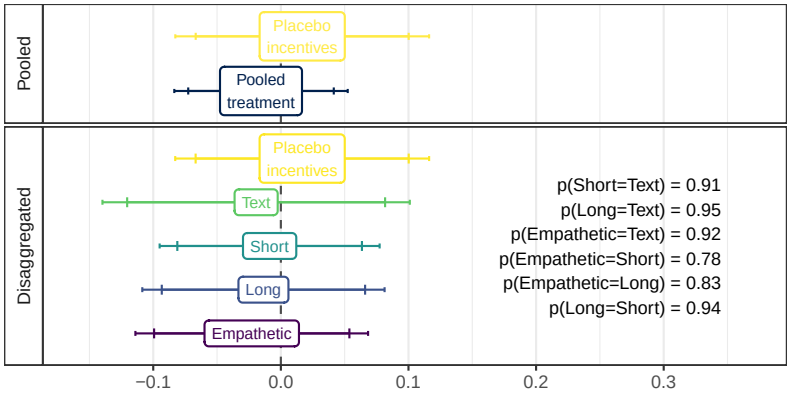
Figure S5: Quiz engagement over study

*Notes:* Figure plots average participation, and average share of participants answering more than 50% of questions correctly, through study quizzes (fact-check or placebo) between baseline and endline.

## Referenced in main text



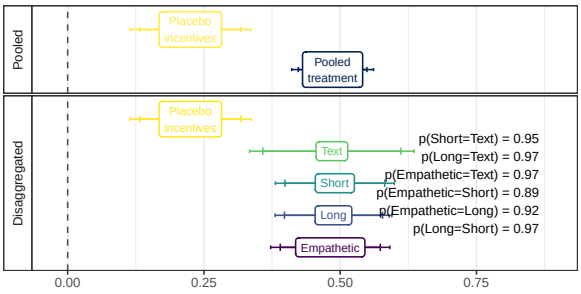

(a) Verification is important



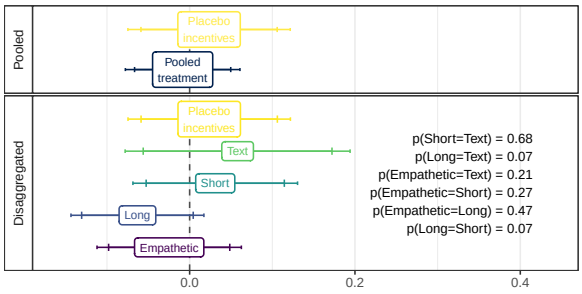

(b) Fact-checking is challenging

Figure S6: Treatment effects on verification and ease of fact-checking

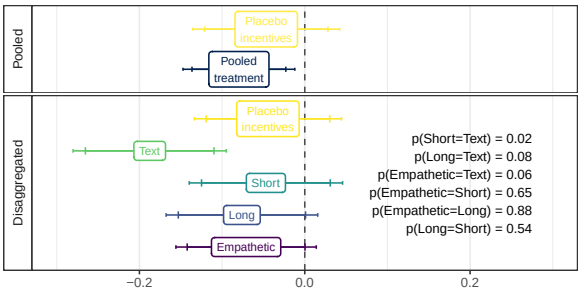
*Notes:* All outcomes are standardized inverse covariance-weighted indexes: (a): thinks it is important to verify information; (b): challenging to verify information due to knowledge, irrelevant fact-checks, distrust fact-checkers, too expensive, overwhelming information, takes too long. Estimation adjusts for pre-treatment outcomes; randomization blocks; and LASSO-selected predetermined covariates (see SM). P-values from pre-registered tests of differences between treatment variants indicated in bottom panels. 90% and 95% confidence intervals plotted. Regression tables provided in Tables S18-S19.



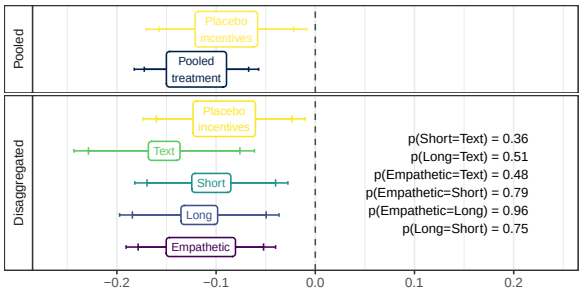

(a) Verify through Africa Check




(b) Verify through other fact-checkers




(c) Verify through online and social media




(d) Verify through traditional media

Figure S7: Treatment effects the use of different information sources for verification

*Notes:* All outcomes are standardized inverse covariance-weighted indexes: (a): lists WCW as a source for fact-checking; (b) lists AFP or Snopes as a source; (c) lists Facebook, Google, Moya, Telegram, Twitter, WhatsApp, or YouTube as a source; (d) lists News24 or SABC as a source. Estimation adjusts for pre-treatment outcomes; randomization blocks; and LASSO-selected predetermined covariates (see SM). P-values from pre-registered tests of differences between treatment variants indicated in bottom panels. 90% and 95% confidence intervals plotted. Regression tables provided in Tables S20-S23.

**Referenced in supplementary materials and pre-analysis plan**

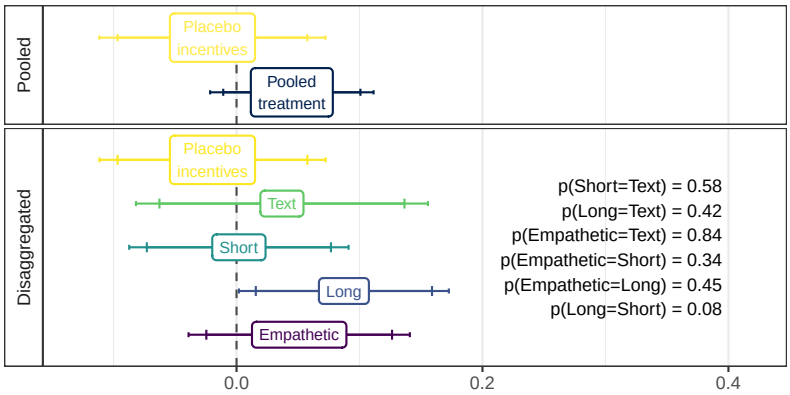



Figure S8: Treatment effects on being alerted about fake news

*Notes:* Outcome is standardized: How often participant is alerted about fake news. Estimation adjusts for pre-treatment outcomes; randomization blocks; and LASSO-selected predetermined covariates (see SM). P-values from pre-registered tests of differences between treatment variants indicated in bottom panels. 90% and 95% confidence intervals plotted. Regression tables provided in Table S24.

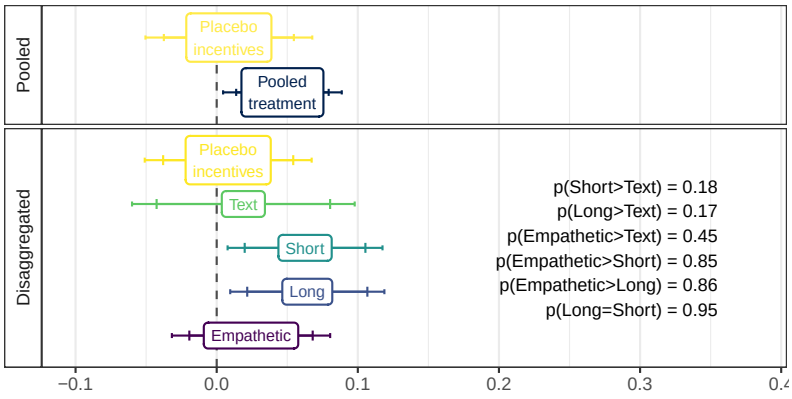
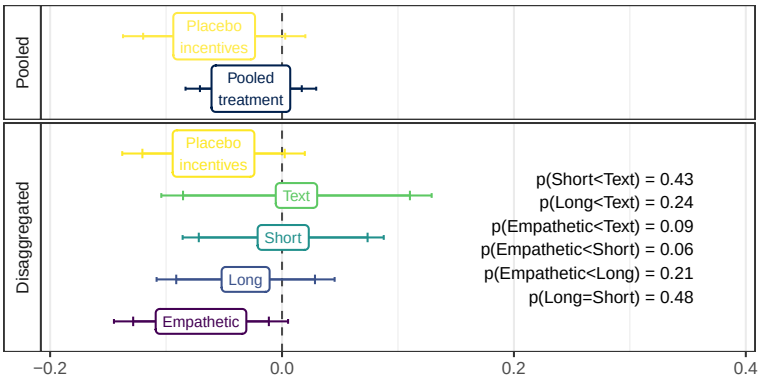
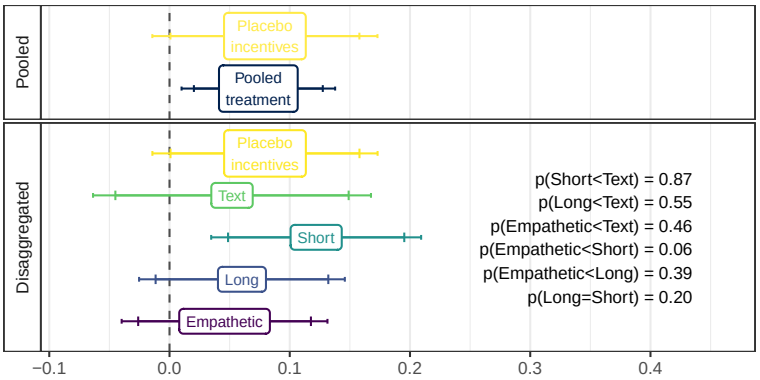



Figure S9: Treatment effects on alerting others about fake news

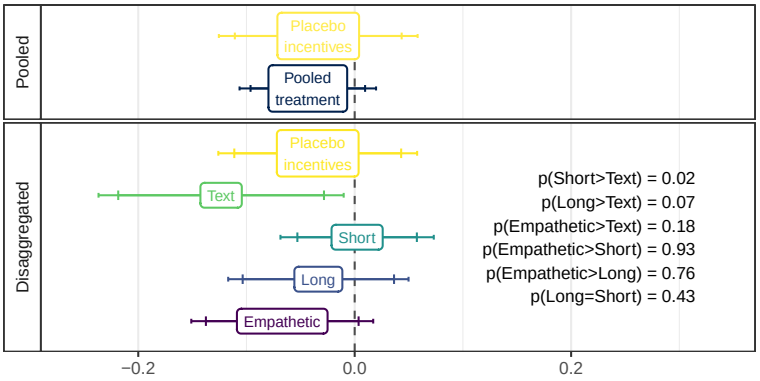
*Notes:* Outcome is standardized: How often participant reports alerting others about misinformation. Estimation adjusts for pre-treatment outcomes; randomization blocks; and LASSO-selected predetermined covariates (see SM). P-values from pre-registered tests of differences between treatment variants indicated in bottom panels. 90% and 95% confidence intervals plotted. Regression tables provided in Table S25.




(a) Trust in traditional media



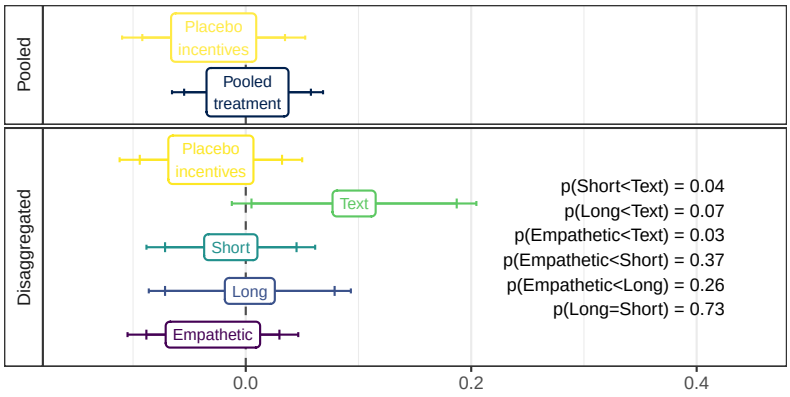

(b) Trust in WhatsApp



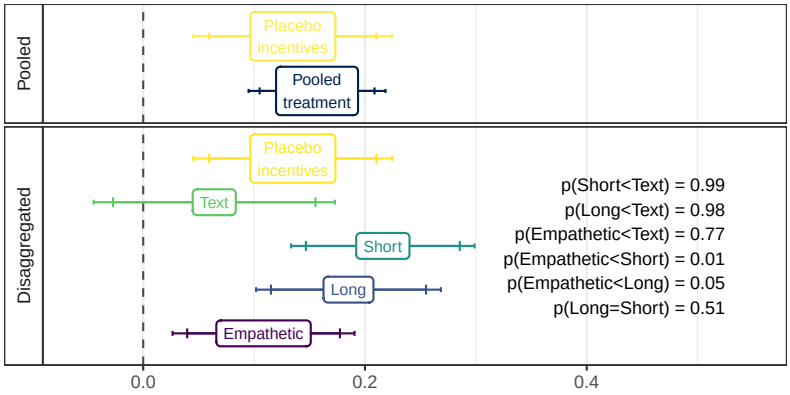

(c) Trust information sent by close ties

Figure S10: Treatment effects on trust in different sources

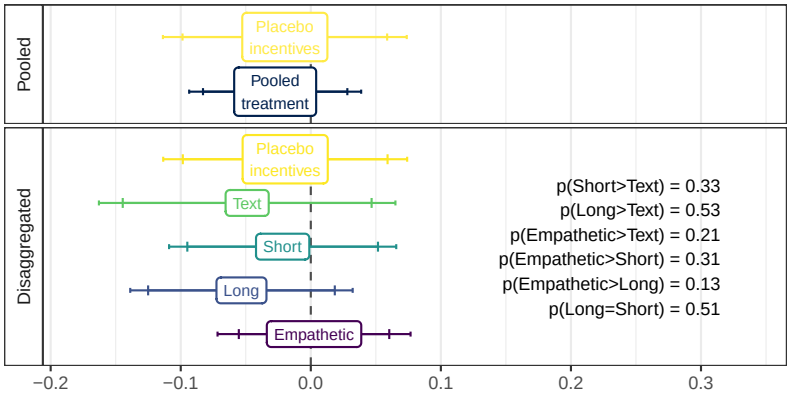
*Notes:* All outcomes are standardized inverse covariance-weighted indexes: (a): how true is info on radio/TV, trusts newspapers most for information, trusts information from radio/TV; (b) how true is info from WhatsApp, trusts information from large WhatsApp groups, trusts information from WhatsApp generally; (c) how true is info from friends and family, trusts info from friends and family, trusts WhatsApp messages from friends and family. Estimation adjusts for pre-treatment outcomes; randomization blocks; and LASSO-selected predetermined covariates (see SM). P-values from pre-registered tests of differences between treatment variants indicated in bottom panels. 90% and 95% confidence intervals plotted. Regression tables provided in Tables S27-S28.




(a) Traditional media consumption




(b) WhatsApp consumption




(c) Consumption of news from close ties

Figure S11: Treatment effects on consumption from different sources

*Notes:* All outcomes are standardized inverse covariance-weighted indexes: (a): how often gets news from radio/TV; (b) how often gets news from WhatsApp, gets news from family on WhatsApp, large groups on WhatsApp, organizations on WhatsApp; (c) how often gets news from friends and family. Estimation adjusts for pre-treatment outcomes; randomization blocks; and LASSO-selected predetermined covariates (see SM). P-values from pre-registered tests of differences between treatment variants indicated in bottom panels. 90% and 95% confidence intervals plotted. Regression tables provided in Tables S30-S31.

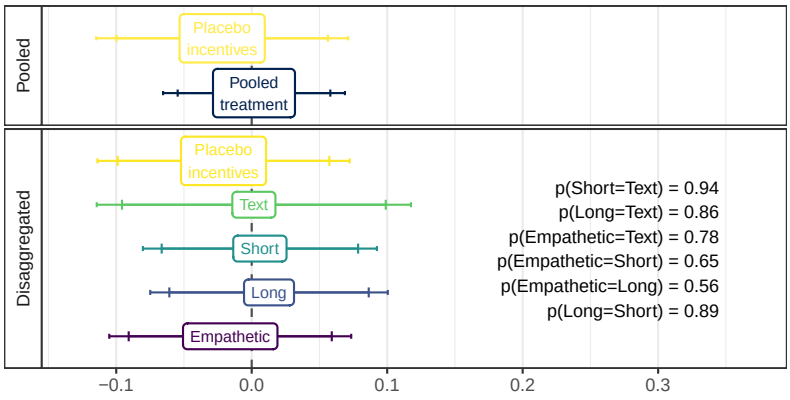



Figure S12: Treatment effects on perceptions of government capacity

*Notes:* Outcome is standardized inverse covariance-weighted index: perception of government capacity to provide roads; perception of government capacity to supply electricity. Estimation adjusts for pre-treatment outcomes; randomization blocks; and LASSO-selected predetermined covariates (see SM). P-values from pre-registered tests of differences between treatment variants indicated in bottom panels. 90% and 95% confidence intervals plotted. Regression tables provided in Table S32.

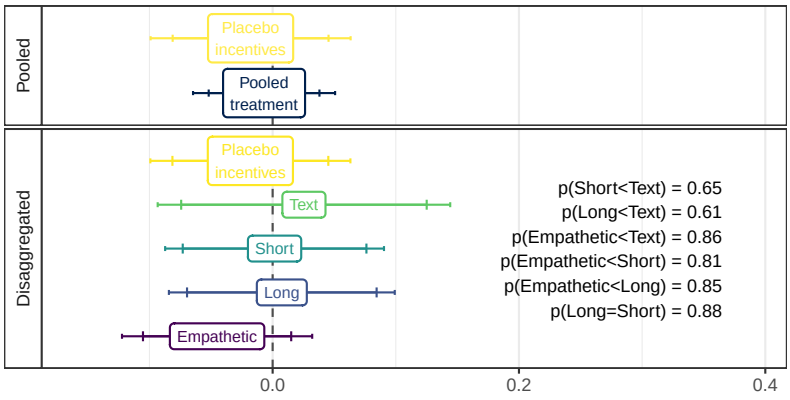



Figure S13: Treatment effects on populist attitudes

*Notes:* Outcome is standardized inverse covariance-weighted index: perception of policies benefit elites; perception that ordinary people have no influence over policy. Estimation adjusts for pre-treatment outcomes; randomization blocks; and LASSO-selected predetermined covariates (see SM). P-values from pre-registered tests of differences between treatment variants indicated in bottom panels. 90% and 95% confidence intervals plotted. Regression tables provided in Table S33.

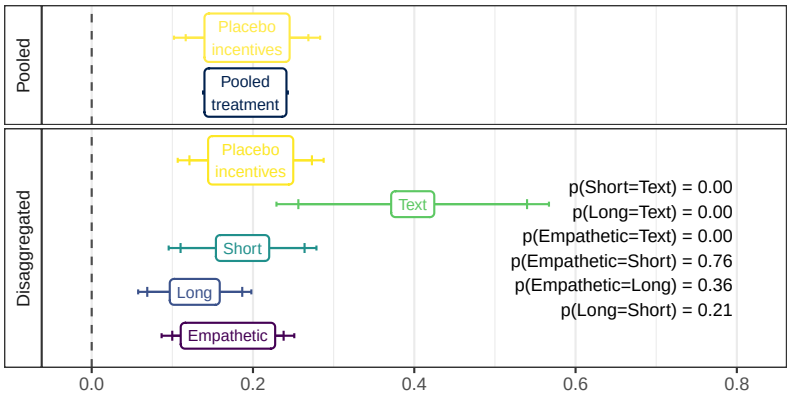
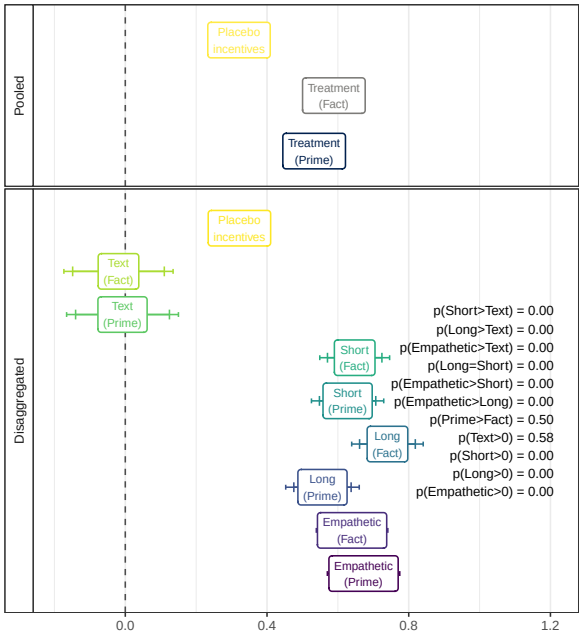
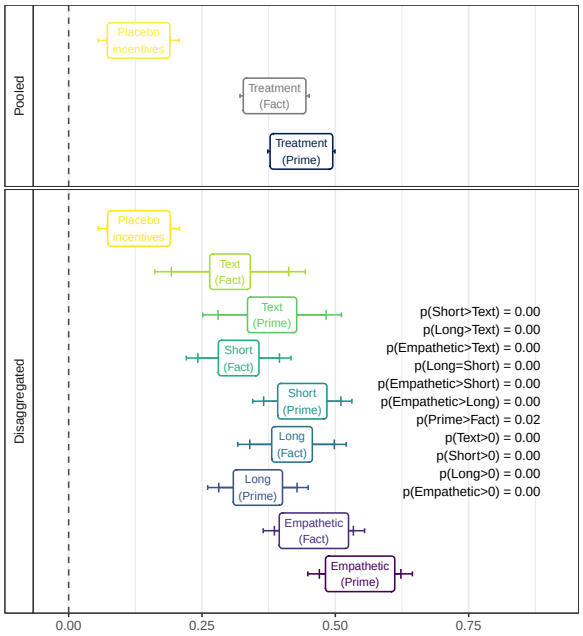



Figure S14: Treatment effects on fact-check requests

*Notes:* Outcome is standardized: indicator for participant submitting a fact-check request to Africa Check. Estimation adjusts for pre-treatment outcomes; randomization blocks; and LASSO-selected predetermined covariates (see SM). P-values from pre-registered tests of differences between treatment variants indicated in bottom panels. 90% and 95% confidence intervals plotted. Regression tables provided in Table S34.



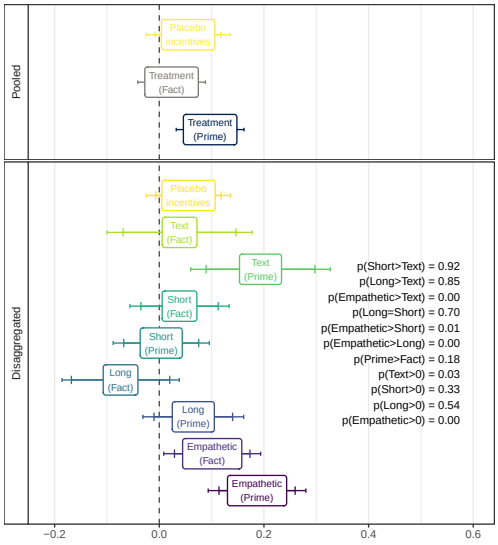

(a) Podcast take-up



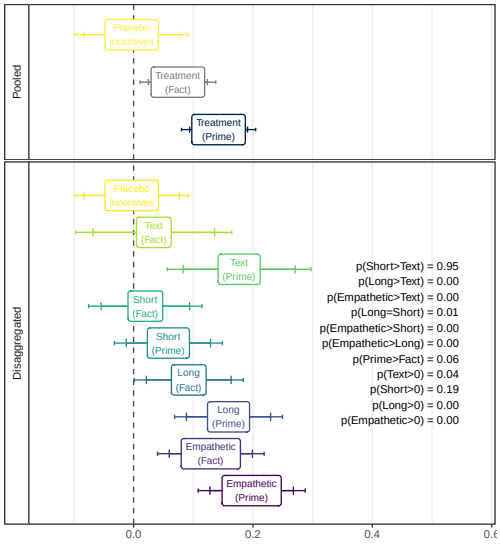

(b) Treatment knowledge

Figure S15: Treatment effects on take-up, by *Factual* and *Prime* messages

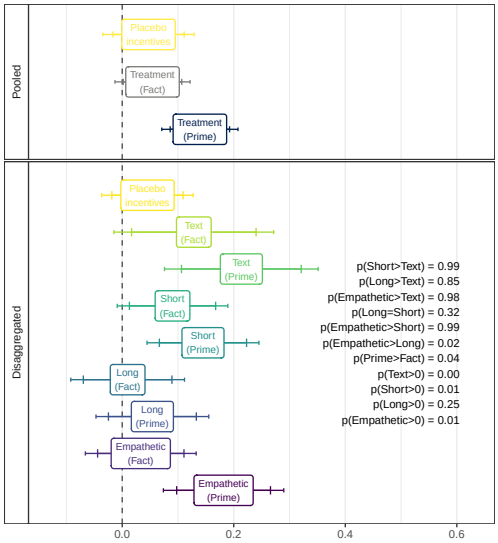
*Notes:* All outcomes are standardized inverse covariance-weighted indexes (see Table S1): (a): how often reports listening to podcasts, reports listening to WCW; (b) number of fact-check quiz questions answered correctly Estimation adjusts for pre-treatment outcomes; randomization blocks; and LASSO-selected predetermined covariates (see SM). P-values from pre-registered tests of differences between treatment variants indicated in bottom panels. 90% and 95% confidence intervals plotted. Regression tables provided in Tables S35-S36.




(a) Discernment between fake and true




(b) Identification of conspiracy theories




(c) Knowledge of verification methods

Figure S16: Treatment effects on discernment between fake and true, identification of conspiracy theories, and knowledge of verification methods, by *Factual* and *Prime* messages

*Notes:* All outcomes are standardized inverse covariance-weighted indexes (see Table S1): (a): how COVID spreads (true), matriculation exam scores inflated (false), alcohol worsens infections (true), most workers are immigrants (false); (b) AIDS intentionally created, Mandela died in 1985, COVID-19 vaccines have microchips, vaccines used to reduce population; (c) correctly identifies 2 ways to avoid being misled, correctly identifies 7 methods to verify information, correctly identifies 4 strategies fact-checkers use to verify information. Estimation adjusts for pre-treatment outcomes; randomization blocks; and LASSO-selected predetermined covariates (see SM). P-values from pre-registered tests of differences between treatment variants indicated in bottom panels. 90% and 95% confidence intervals plotted. Regression tables provided in Tables S37-S40.

# Tables

## Study information

| Outcome variable | Variable definitions |
|---|---|
| **Treatment take-up** | |
| Podcast take-up | How often listen to podcasts |
| | Included "What's Crap on WhatsApp" in selection of podcasts they listened to |
| Treatment knowledge | Number of correct responses from 6 questions on fact-checked content |
| Future take-up | Want vaccine info from Africa Check |
| | Want Africa Check's fact checking content |
| | Want Africa Check reminders to pay attention to misinformation |
| | Stay subscribed (or start subscribing) to "What's Crap on WhatsApp" |
| **Discerning fact from fiction** | |
| Discernment between T/F news | How COVID-19 spreads (true) |
| | Matriculation scores to be inflated (false) |
| | Alcohol decreases ability to fight infections (true) |
| | Almost 100% of workers in SA are foreign (false) |
| Identification of conspiracy theories | Not at all likely to very likely: AIDs intentionally created |
| | Not at all likely to very likely: Nelson Mandela died in 1985 |
| | Not at all likely to very likely: COVID-19 vaccines used to implant chips |
| | Not at all likely to very likely: Vaccines used to reduce world's population |
| **Verification knowledge and trust** | |
| Knowledge of verification methods | To avoid being misled: Seek info from reputable org |
| | To avoid being misled: Ask other people to avoid being misled (reverse) |
| | To verify: Ask people I know in person (reverse) |
| | To verify: Ask people I know through WhatsApp (reverse) |
| | To verify: Ask people I don't know well on WhatsApp group (reverse) |
| | To verify: Go to fact-checker |
| | To verify: Submit a fact-checker request |
| | To verify: Ask people I know by posting on social media (reverse) |
| | To verify: Use the internet to fact-check |
| | Verify strategies: Ask experts |
| | Verify strategies: Check source popularity (reverse) |
| | Verify strategies: Use reverse image searches |
| | Verify strategies: Talk to others (reverse) |
| Trust in social media besides WhatsApp | Likely to be true: Information from other social media (FB, Twitter, Instagram) |
| | Trust: Information received from other social media (FB, Twitter, Instagram) |
| | Trust the most for information: Other social media (FB, Twitter, Instagram) |

Table S1: Outcome variables

| Outcome variable | Variable definitions (continued) |
|---|---|
| **Info consumption, verification, and sharing** | |
| Online and social media consumption | Go to source for news: other social media (Facebook, Twitter, Instagram) |
| Verification | How often verify information seen on social media |
| Sharing | How often share social media info shared by others |
| **COVID-19 and political attitudes and behaviors** | |
| COVID-19 beliefs and preventative behavior | Number of days stayed home in the past week |
| | Number of days visited others indoors in the past week |
| | Number of days wore mask in the past week |
| | Strongly disagree to strongly agree: COVID-19 is a fake disease |
| | Definitely to definitely not: COVID-19 lockdown justified |
| | Strongly disagree to strongly agree: Would take available vaccine |
| | Strongly distrust to strongly trust: COVID-19 vaccines in South Africa are safe |
| Views and attitudes about the government | Trust information from politicians and gov officials |
| | Most trustworthy sources: Selected "Government officials" |
| | Most trustworthy sources: Selected "Politicians and other public figures" |
| | How likely information from politicians and gov officials are true |
| | Vote for regional incumbent (vote tomorrow in parl elections: ANC, DA, EFF, IFP, VF+) |
| | Very badly to very well: National government's general performance |
| | Very badly to very well: National government handling COVID-19 crisis |

Table S2: Outcome variables (continued)

Table S3: Attrition

| | Attrition | |
|---|---|---|
| | (1) | (2) |
| *A. Pooled estimation* | | |
| Placebo incentives | 0.023 | 0.021 |
| | (0.017) | (0.016) |
| | [0.172] | [0.209] |
| Pooled treatment | -0.014 | -0.017 |
| | (0.012) | (0.012) |
| | [0.220] | [0.137] |
| *B. Disaggregated estimation* | | |
| Placebo incentives | 0.023 | 0.021 |
| | (0.017) | (0.017) |
| | [0.171] | [0.197] |
| Text information | −0.022 | −0.026 |
| | (0.021) | (0.021) |
| | [0.302] | [0.215] |
| Short podcast | 0.002 | −0.003 |
| | (0.016) | (0.015) |
| | [0.878] | [0.846] |
| Long podcast | −0.021 | −0.022 |
| | (0.015) | (0.015) |
| | [0.172] | [0.156] |
| Empathetic podcast | −0.021 | −0.022 |
| | (0.016) | (0.015) |
| | [0.171] | [0.145] |
| Controls | × | ✓ |
| Directional hypothesis | × | × |
| Control Mean | 0.51 | 0.51 |
| Control SD | 0.50 | 0.50 |
| $R^2$ | 0.12 | 0.16 |
| Observations | 8947 | 8947 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets.

Table S4: Balance on pre-treatment outcomes

| Variable | $p(\boldsymbol{\tau}_{pooled} = 0)$ | $p(\boldsymbol{\tau}_{disagg.} = 0)$ |
|---|---|---|
| *A. Socio-demographic* | | |
| Gender: Female | [0.990] | [0.666] |
| Locality: Urban | [0.573] | [0.297] |
| Locality: Peri-urban | [0.572] | [0.909] |
| Locality: Rural | [0.558] | [0.796] |
| Age: 18-24 | [0.791] | [0.620] |
| Age: 25-34 | [0.176] | [0.463] |
| Age: 35-44 | [0.518] | [0.761] |
| Age: 45-54 | [0.147] | [0.095] |
| Age: 55+ | [0.371] | [0.441] |
| Education: Primary | [0.495] | [0.204] |
| Education: Secondary | [0.857] | [0.744] |
| Education: University | [0.790] | [0.707] |
| Province: Eastern Cape | [0.328] | [0.643] |
| Province: Free State | [0.629] | [0.898] |
| Province: Gauteng | [0.870] | [0.994] |
| Province: KwaZulu-Natal | [0.796] | [0.388] |
| Province: Limpopo | [0.956] | [0.512] |
| Province: Mpumalanga | [0.499] | [0.138] |
| Province: Northern Cape | [0.032] | [0.204] |
| Province: North West | [0.271] | [0.664] |
| Province: Western Cape | [0.493] | [0.879] |
| *B. Baseline survey responses* | | |
| Verify challenge | [0.430] | [0.783] |
| Consume close friends | [0.784] | [0.917] |
| Consume social media | [0.190] | [0.426] |
| Consume traditional media | [0.257] | [0.345] |
| Consume WhatsApp | [0.409] | [0.834] |
| COVID-19 beliefs and behavior | [0.159] | [0.465] |
| Podcast take-up | [0.877] | [0.905] |
| First stage placebo | [0.609] | [0.603] |
| Misinformation harmful | [0.878] | [0.501] |
| Sharing | [0.962] | [0.715] |
| Trust close friends | [0.663] | [0.806] |
| Trust social media | [0.482] | [0.747] |
| Trust organizations | [0.989] | [0.872] |
| Trust traditional media | [0.850] | [0.930] |
| Trust WhatsApp | [0.562] | [0.903] |
| Active verification | [0.722] | [0.179] |
| Verification knowledge | [0.161] | [0.271] |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including block fixed effects. $p(\boldsymbol{\tau}_{pooled} = 0)$ provides the p-value from a test of joint significance of coefficients in the pooled estimation (control; placebo incentives; pooled treatment); $p(\boldsymbol{\tau}_{disagg.} = 0)$ provides the p-value from a test of joint significance of coefficients in the disaggregated estimation (control; placebo incentives; text; short; long; empathetic).

## Corresponding to figures in main text

Table S5: Podcast take-up

| | ICW: Podcast take-up | | How often listens to podcasts | | Listens to WCW | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| *A. Pooled estimation* | | | | | | |
| Placebo incentives | 0.416 | 0.424 | 0.018 | 0.023 | 0.247 | 0.251 |
| | (0.054) | (0.054) | (0.059) | (0.059) | (0.025) | (0.024) |
| | [0.000] | [0.000] | [0.381] | [0.348] | [0.000] | [0.000] |
| Pooled podcast | 0.651 | 0.646 | 0.132 | 0.123 | 0.361 | 0.360 |
| | (0.036) | (0.035) | (0.041) | (0.041) | (0.015) | (0.015) |
| | [0.000] | [0.000] | [0.001] | [0.001] | [0.000] | [0.000] |
| *B. Disaggregated estimation* | | | | | | |
| Placebo incentives | 0.321 | 0.323 | 0.020 | 0.021 | 0.188 | 0.190 |
| | (0.050) | (0.049) | (0.055) | (0.055) | (0.023) | (0.022) |
| | [0.000] | [0.000] | [0.355] | [0.354] | [0.000] | [0.000] |
| Text information | −0.020 | −0.014 | −0.088 | −0.084 | 0.014 | 0.018 |
| | (0.060) | (0.059) | (0.072) | (0.071) | (0.024) | (0.025) |
| | [0.744] | [0.818] | [0.224] | [0.232] | [0.282] | [0.232] |
| Short podcast | 0.648 | 0.638 | 0.160 | 0.153 | 0.349 | 0.345 |
| | (0.047) | (0.047) | (0.052) | (0.052) | (0.021) | (0.021) |
| | [0.000] | [0.000] | [0.001] | [0.002] | [0.000] | [0.000] |
| Long podcast | 0.646 | 0.646 | 0.120 | 0.114 | 0.360 | 0.361 |
| | (0.048) | (0.048) | (0.054) | (0.054) | (0.021) | (0.021) |
| | [0.000] | [0.000] | [0.013] | [0.017] | [0.000] | [0.000] |
| Empathetic podcast | 0.665 | 0.656 | 0.116 | 0.099 | 0.375 | 0.374 |
| | (0.048) | (0.047) | (0.054) | (0.053) | (0.021) | (0.021) |
| | [0.000] | [0.000] | [0.015] | [0.030] | [0.000] | [0.000] |
| Controls | × | ✓ | × | ✓ | × | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | 3.18 | 3.18 | 0.20 | 0.20 |
| Control SD | 1.00 | 1.00 | 1.25 | 1.25 | 0.40 | 0.40 |
| $R^2$ | 0.22 | 0.25 | 0.22 | 0.26 | 0.20 | 0.23 |
| Observations | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure 2a.

Table S6: Treatment knowledge

| | ICW: Treatment knowledge | | Fact-check quiz knowledge | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| *A. Pooled estimation* | | | | |
| Placebo incentives | 0.112 | 0.133 | 0.159 | 0.186 |
| | (0.047) | (0.046) | (0.067) | (0.066) |
| | [0.009] | [0.002] | [0.009] | [0.002] |
| Pooled treatment | 0.411 | 0.411 | 0.584 | 0.584 |
| | (0.034) | (0.033) | (0.048) | (0.047) |
| | [0.000] | [0.000] | [0.000] | [0.000] |
| *B. Disaggregated estimation* | | | | |
| Placebo incentives | 0.113 | 0.132 | 0.160 | 0.187 |
| | (0.047) | (0.046) | (0.067) | (0.066) |
| | [0.008] | [0.002] | [0.008] | [0.002] |
| Text information | 0.335 | 0.345 | 0.476 | 0.489 |
| | (0.064) | (0.061) | (0.091) | (0.087) |
| | [0.000] | [0.000] | [0.000] | [0.000] |
| Short podcast | 0.388 | 0.379 | 0.551 | 0.538 |
| | (0.046) | (0.045) | (0.065) | (0.064) |
| | [0.000] | [0.000] | [0.000] | [0.000] |
| Long podcast | 0.373 | 0.386 | 0.529 | 0.548 |
| | (0.048) | (0.046) | (0.068) | (0.065) |
| | [0.000] | [0.000] | [0.000] | [0.000] |
| Empathetic podcast | 0.509 | 0.503 | 0.722 | 0.714 |
| | (0.047) | (0.046) | (0.066) | (0.065) |
| | [0.000] | [0.000] | [0.000] | [0.000] |
| Controls | × | ✓ | × | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | 2.40 | 2.40 |
| Control SD | 1.00 | 1.00 | 1.42 | 1.42 |
| $R^2$ | 0.22 | 0.27 | 0.22 | 0.27 |
| Observations | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure 2b.

## Table S7: Future take-up

| | ICW: Future take-up | | Stay subscribed to WCW | | Want AC fact checks | | Want AC reminders | | Want AC vaccine info | |
|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| *A. Pooled estimation* | | | | | | | | | | |
| Placebo incentives | 0.061 | 0.058 | 0.013 | 0.011 | -0.003 | -0.002 | 0.030 | 0.029 | 0.049 | 0.047 |
| | (0.050) | (0.048) | (0.021) | (0.021) | (0.019) | (0.019) | (0.023) | (0.023) | (0.023) | (0.023) |
| | [0.112] | [0.116] | [0.268] | [0.302] | [0.884] | [0.898] | [0.097] | [0.100] | [0.016] | [0.018] |
| Pooled treatment | 0.205 | 0.207 | 0.140 | 0.139 | 0.052 | 0.053 | 0.082 | 0.083 | 0.092 | 0.092 |
| | (0.034) | (0.033) | (0.014) | (0.014) | (0.013) | (0.013) | (0.016) | (0.016) | (0.016) | (0.016) |
| | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] |
| *B. Disaggregated estimation* | | | | | | | | | | |
| Placebo incentives | 0.061 | 0.058 | 0.013 | 0.011 | −0.003 | −0.002 | 0.030 | 0.029 | 0.050 | 0.049 |
| | (0.050) | (0.048) | (0.021) | (0.021) | (0.019) | (0.019) | (0.023) | (0.023) | (0.023) | (0.023) |
| | [0.111] | [0.116] | [0.265] | [0.305] | [0.885] | [0.900] | [0.096] | [0.100] | [0.016] | [0.015] |
| Text information | 0.214 | 0.235 | 0.019 | 0.022 | 0.065 | 0.072 | 0.081 | 0.091 | 0.084 | 0.091 |
| | (0.057) | (0.055) | (0.026) | (0.026) | (0.021) | (0.020) | (0.028) | (0.027) | (0.028) | (0.028) |
| | [0.000] | [0.000] | [0.230] | [0.195] | [0.001] | [0.000] | [0.002] | [0.000] | [0.001] | [0.001] |
| Short podcast | 0.234 | 0.239 | 0.150 | 0.150 | 0.061 | 0.063 | 0.094 | 0.097 | 0.103 | 0.105 |
| | (0.044) | (0.043) | (0.017) | (0.017) | (0.016) | (0.016) | (0.021) | (0.020) | (0.021) | (0.020) |
| | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] |
| Long podcast | 0.172 | 0.171 | 0.168 | 0.166 | 0.039 | 0.040 | 0.069 | 0.068 | 0.085 | 0.085 |
| | (0.045) | (0.044) | (0.016) | (0.016) | (0.017) | (0.016) | (0.021) | (0.021) | (0.021) | (0.021) |
| | [0.000] | [0.000] | [0.000] | [0.000] | [0.009] | [0.008] | [0.001] | [0.001] | [0.000] | [0.000] |
| Empathetic podcast | 0.202 | 0.196 | 0.156 | 0.153 | 0.049 | 0.048 | 0.083 | 0.080 | 0.093 | 0.090 |
| | (0.044) | (0.043) | (0.017) | (0.017) | (0.017) | (0.016) | (0.021) | (0.021) | (0.021) | (0.021) |
| | [0.000] | [0.000] | [0.000] | [0.000] | [0.002] | [0.002] | [0.000] | [0.000] | [0.000] | [0.000] |
| Controls | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | 0.75 | 0.75 | 0.82 | 0.82 | 0.66 | 0.66 | 0.66 | 0.66 |
| Control SD | 1.00 | 1.00 | 0.43 | 0.43 | 0.38 | 0.38 | 0.47 | 0.47 | 0.48 | 0.48 |
| $R^2$ | 0.09 | 0.14 | 0.11 | 0.15 | 0.08 | 0.11 | 0.08 | 0.13 | 0.08 | 0.12 |
| Observations | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure 2c.

## Table S8: Discernment

| | ICW: Discernment | | Alcohol and COVID (true) | | Foreign restaurant workers (false) | | How COVID spreads (true) | | Matric marks (false) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| *A. Pooled estimation* | | | | | | | | | | |
| Placebo incentives | 0.045 | 0.055 | -0.020 | -0.018 | 0.049 | 0.043 | 0.066 | 0.075 | 0.035 | 0.036 |
| | (0.050) | (0.049) | (0.065) | (0.065) | (0.067) | (0.066) | (0.048) | (0.048) | (0.071) | (0.070) |
| | [0.180] | [0.130] | [0.758] | [0.776] | [0.234] | [0.255] | [0.085] | [0.060] | [0.311] | [0.303] |
| Pooled treatment | 0.058 | 0.061 | -0.126 | -0.121 | 0.175 | 0.174 | 0.050 | 0.056 | 0.062 | 0.062 |
| | (0.035) | (0.034) | (0.046) | (0.046) | (0.048) | (0.047) | (0.034) | (0.034) | (0.049) | (0.048) |
| | [0.048] | [0.039] | [0.007] | [0.009] | [0.000] | [0.000] | [0.072] | [0.050] | [0.102] | [0.098] |
| *B. Disaggregated estimation* | | | | | | | | | | |
| Placebo incentives | 0.046 | 0.056 | −0.020 | −0.014 | 0.049 | 0.043 | 0.066 | 0.076 | 0.035 | 0.036 |
| | (0.050) | (0.049) | (0.065) | (0.065) | (0.067) | (0.066) | (0.048) | (0.048) | (0.071) | (0.070) |
| | [0.178] | [0.127] | [0.755] | [0.827] | [0.233] | [0.255] | [0.085] | [0.057] | [0.310] | [0.304] |
| Text information | 0.120 | 0.120 | −0.002 | 0.014 | 0.193 | 0.175 | 0.061 | 0.072 | 0.044 | 0.029 |
| | (0.063) | (0.062) | (0.079) | (0.079) | (0.081) | (0.079) | (0.057) | (0.058) | (0.088) | (0.087) |
| | [0.029] | [0.026] | [0.982] | [0.432] | [0.009] | [0.013] | [0.146] | [0.106] | [0.309] | [0.369] |
| Short podcast | 0.025 | 0.021 | −0.155 | −0.147 | 0.151 | 0.146 | 0.052 | 0.051 | 0.023 | 0.022 |
| | (0.046) | (0.045) | (0.061) | (0.061) | (0.062) | (0.060) | (0.043) | (0.043) | (0.062) | (0.061) |
| | [0.289] | [0.317] | [0.012] | [0.017] | [0.007] | [0.008] | [0.112] | [0.114] | [0.359] | [0.360] |
| Long podcast | −0.018 | −0.003 | −0.161 | −0.153 | 0.085 | 0.092 | 0.047 | 0.057 | −0.020 | −0.012 |
| | (0.046) | (0.046) | (0.063) | (0.063) | (0.064) | (0.063) | (0.046) | (0.046) | (0.066) | (0.065) |
| | [0.691] | [0.945] | [0.010] | [0.015] | [0.092] | [0.073] | [0.151] | [0.106] | [0.767] | [0.854] |
| Empathetic podcast | 0.141 | 0.143 | −0.119 | −0.109 | 0.280 | 0.287 | 0.045 | 0.053 | 0.194 | 0.194 |
| | (0.046) | (0.045) | (0.061) | (0.061) | (0.063) | (0.062) | (0.045) | (0.045) | (0.063) | (0.063) |
| | [0.001] | [0.001] | [0.053] | [0.074] | [0.000] | [0.000] | [0.158] | [0.120] | [0.001] | [0.001] |
| Controls | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | -2.41 | -2.41 | 2.78 | 2.78 | -1.58 | -1.58 | 3.07 | 3.07 |
| Control SD | 1.00 | 1.00 | 1.27 | 1.27 | 1.32 | 1.32 | 0.97 | 0.97 | 1.35 | 1.35 |
| $R^2$ | 0.08 | 0.13 | 0.08 | 0.09 | 0.11 | 0.16 | 0.08 | 0.10 | 0.10 | 0.14 |
| Observations | 4541 | 4541 | 4143 | 4143 | 4143 | 4143 | 4143 | 4143 | 4143 | 4143 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure 3a.

## Table S9: Identification of conspiracy theories

| | ICW: Conspiracy theories | | AIDS intentionally created (reversed) | | Nelson Mandela died in 1985 (reversed) | | Vaccines cause infertility (reversed) | | Vaccines have microchips (reversed) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| *A. Pooled estimation* | | | | | | | | | | |
| Placebo incentives | -0.024 | -0.003 | -0.095 | -0.078 | 0.013 | 0.028 | 0.015 | 0.039 | -0.012 | 0.009 |
| | (0.050) | (0.048) | (0.070) | (0.068) | (0.070) | (0.068) | (0.067) | (0.066) | (0.069) | (0.068) |
| | [0.635] | [0.947] | [0.170] | [0.255] | [0.427] | [0.339] | [0.413] | [0.276] | [0.867] | [0.450] |
| Pooled treatment | 0.104 | 0.109 | 0.071 | 0.079 | 0.093 | 0.098 | 0.177 | 0.183 | 0.110 | 0.110 |
| | (0.035) | (0.034) | (0.048) | (0.048) | (0.048) | (0.047) | (0.048) | (0.047) | (0.047) | (0.047) |
| | [0.001] | [0.001] | [0.071] | [0.048] | [0.026] | [0.018] | [0.000] | [0.000] | [0.010] | [0.009] |
| *B. Disaggregated estimation* | | | | | | | | | | |
| Placebo incentives | −0.024 | −0.003 | −0.095 | −0.079 | 0.013 | 0.029 | 0.015 | 0.041 | −0.012 | 0.009 |
| | (0.050) | (0.049) | (0.070) | (0.068) | (0.070) | (0.068) | (0.068) | (0.066) | (0.069) | (0.068) |
| | [0.637] | [0.954] | [0.170] | [0.248] | [0.426] | [0.336] | [0.411] | [0.269] | [0.868] | [0.448] |
| Text information | 0.106 | 0.110 | 0.103 | 0.108 | 0.085 | 0.088 | 0.132 | 0.132 | 0.133 | 0.134 |
| | (0.058) | (0.058) | (0.085) | (0.084) | (0.080) | (0.079) | (0.082) | (0.082) | (0.078) | (0.079) |
| | [0.034] | [0.029] | [0.113] | [0.100] | [0.143] | [0.134] | [0.053] | [0.054] | [0.045] | [0.045] |
| Short podcast | 0.039 | 0.039 | 0.000 | −0.004 | 0.064 | 0.066 | 0.061 | 0.065 | 0.052 | 0.050 |
| | (0.046) | (0.045) | (0.064) | (0.063) | (0.064) | (0.062) | (0.063) | (0.062) | (0.062) | (0.061) |
| | [0.199] | [0.189] | [1.000] | [0.947] | [0.157] | [0.145] | [0.166] | [0.145] | [0.202] | [0.209] |
| Long podcast | 0.109 | 0.126 | 0.082 | 0.104 | 0.089 | 0.111 | 0.190 | 0.206 | 0.108 | 0.120 |
| | (0.046) | (0.044) | (0.064) | (0.062) | (0.064) | (0.062) | (0.063) | (0.061) | (0.063) | (0.062) |
| | [0.009] | [0.002] | [0.100] | [0.047] | [0.083] | [0.036] | [0.001] | [0.000] | [0.043] | [0.026] |
| Empathetic podcast | 0.166 | 0.163 | 0.119 | 0.126 | 0.132 | 0.124 | 0.306 | 0.301 | 0.163 | 0.152 |
| | (0.045) | (0.043) | (0.063) | (0.062) | (0.063) | (0.062) | (0.060) | (0.059) | (0.061) | (0.060) |
| | [0.000] | [0.000] | [0.029] | [0.021] | [0.018] | [0.022] | [0.000] | [0.000] | [0.004] | [0.006] |
| Controls | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | -2.34 | -2.34 | -2.24 | -2.24 | -2.39 | -2.39 | -2.36 | -2.36 |
| Control SD | 1.00 | 1.00 | 1.38 | 1.38 | 1.36 | 1.36 | 1.35 | 1.35 | 1.35 | 1.35 |
| $R^2$ | 0.09 | 0.16 | 0.08 | 0.12 | 0.08 | 0.15 | 0.08 | 0.12 | 0.07 | 0.12 |
| Observations | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure 3b.

## Table S10: Knowledge of verification methods (part 1)

| | ICW: Verification knowledge | | Avoid misinfo: Ask others (reversed) | | Avoid misinfo: Seek reputable orgs | | How verify (use sources) | | Strategy: Ask experts | | Strategy: Ask themselves (reversed) | | Strategy: Check popular source (reversed) | | Strategy: Talk to others (reversed) | | Strategy: Use image search | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) |
| *A. Pooled estimation* | | | | | | | | | | | | | | | | | | |
| Placebo incentives | 0.039 | 0.048 | 0.012 | 0.010 | 0.025 | 0.028 | -0.028 | -0.028 | 0.022 | 0.025 | -0.021 | -0.021 | -0.011 | -0.009 | 0.002 | 0.004 | 0.035 | 0.034 |
| | (0.050) | (0.050) | (0.018) | (0.018) | (0.024) | (0.023) | (0.051) | (0.049) | (0.025) | (0.024) | (0.017) | (0.017) | (0.025) | (0.024) | (0.019) | (0.019) | (0.017) | (0.017) |
| | [0.216] | [0.167] | [0.245] | [0.287] | [0.149] | [0.114] | [0.579] | [0.571] | [0.185] | [0.153] | [0.198] | [0.200] | [0.654] | [0.699] | [0.460] | [0.417] | [0.022] | [0.025] |
| Pooled treatment | 0.096 | 0.099 | -0.020 | -0.017 | 0.031 | 0.034 | 0.026 | 0.030 | 0.049 | 0.050 | -0.013 | -0.015 | -0.014 | -0.016 | -0.001 | -0.003 | 0.070 | 0.070 |
| | (0.036) | (0.036) | (0.012) | (0.012) | (0.017) | (0.017) | (0.036) | (0.035) | (0.017) | (0.017) | (0.011) | (0.011) | (0.017) | (0.017) | (0.014) | (0.013) | (0.012) | (0.011) |
| | [0.003] | [0.003] | [0.099] | [0.142] | [0.031] | [0.022] | [0.231] | [0.195] | [0.002] | [0.002] | [0.235] | [0.161] | [0.396] | [0.331] | [0.955] | [0.824] | [0.000] | [0.000] |
| *B. Disaggregated estimation* | | | | | | | | | | | | | | | | | | |
| Placebo incentives | 0.039 | 0.048 | 0.012 | 0.010 | 0.025 | 0.027 | −0.027 | −0.027 | 0.022 | 0.024 | −0.021 | −0.022 | −0.011 | −0.009 | 0.002 | 0.003 | 0.035 | 0.034 |
| | (0.050) | (0.050) | (0.018) | (0.018) | (0.024) | (0.023) | (0.051) | (0.049) | (0.025) | (0.024) | (0.017) | (0.017) | (0.025) | (0.024) | (0.019) | (0.019) | (0.017) | (0.017) |
| | [0.214] | [0.166] | [0.246] | [0.282] | [0.149] | [0.125] | [0.588] | [0.576] | [0.186] | [0.159] | [0.199] | [0.187] | [0.654] | [0.703] | [0.457] | [0.430] | [0.022] | [0.025] |
| Text information | 0.167 | 0.173 | 0.011 | 0.012 | 0.036 | 0.038 | −0.031 | −0.027 | 0.071 | 0.071 | −0.031 | −0.033 | −0.009 | −0.013 | 0.011 | 0.010 | 0.039 | 0.038 |
| | (0.064) | (0.064) | (0.022) | (0.022) | (0.030) | (0.030) | (0.064) | (0.060) | (0.031) | (0.030) | (0.020) | (0.020) | (0.030) | (0.030) | (0.024) | (0.023) | (0.021) | (0.021) |
| | [0.005] | [0.004] | [0.316] | [0.295] | [0.120] | [0.100] | [0.625] | [0.649] | [0.010] | [0.009] | [0.132] | [0.103] | [0.762] | [0.651] | [0.325] | [0.339] | [0.033] | [0.033] |
| Short podcast | 0.124 | 0.118 | −0.003 | −0.002 | 0.010 | 0.008 | 0.061 | 0.054 | 0.034 | 0.032 | 0.001 | 0.001 | −0.006 | −0.006 | −0.010 | −0.010 | 0.076 | 0.074 |
| | (0.048) | (0.048) | (0.016) | (0.016) | (0.022) | (0.022) | (0.047) | (0.046) | (0.023) | (0.022) | (0.014) | (0.014) | (0.022) | (0.022) | (0.018) | (0.018) | (0.016) | (0.016) |
| | [0.005] | [0.007] | [0.872] | [0.893] | [0.320] | [0.351] | [0.098] | [0.117] | [0.069] | [0.075] | [0.469] | [0.916] | [0.804] | [0.790] | [0.597] | [0.594] | [0.000] | [0.000] |
| Long podcast | 0.022 | 0.034 | −0.032 | −0.030 | 0.035 | 0.040 | −0.030 | −0.016 | 0.056 | 0.061 | −0.012 | −0.013 | −0.018 | −0.021 | −0.018 | −0.022 | 0.063 | 0.065 |
| | (0.048) | (0.048) | (0.015) | (0.015) | (0.023) | (0.022) | (0.047) | (0.046) | (0.023) | (0.022) | (0.015) | (0.015) | (0.023) | (0.023) | (0.018) | (0.018) | (0.016) | (0.016) |
| | [0.324] | [0.240] | [0.034] | [0.049] | [0.062] | [0.035] | [0.533] | [0.728] | [0.007] | [0.003] | [0.415] | [0.363] | [0.438] | [0.353] | [0.325] | [0.226] | [0.000] | [0.000] |
| Empathetic podcast | 0.110 | 0.109 | −0.039 | −0.033 | 0.048 | 0.050 | 0.073 | 0.076 | 0.046 | 0.046 | −0.021 | −0.021 | −0.023 | −0.024 | 0.020 | 0.016 | 0.087 | 0.086 |
| | (0.049) | (0.049) | (0.015) | (0.015) | (0.023) | (0.022) | (0.048) | (0.047) | (0.023) | (0.023) | (0.015) | (0.015) | (0.022) | (0.022) | (0.018) | (0.017) | (0.017) | (0.017) |
| | [0.012] | [0.013] | [0.010] | [0.025] | [0.017] | [0.013] | [0.065] | [0.052] | [0.021] | [0.020] | [0.164] | [0.152] | [0.311] | [0.275] | [0.122] | [0.172] | [0.000] | [0.000] |
| Controls | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | 0.14 | 0.14 | 0.34 | 0.34 | 0.00 | 0.00 | 0.39 | 0.39 | -0.11 | -0.11 | -0.36 | -0.36 | -0.18 | -0.18 | 0.11 | 0.11 |
| Control SD | 1.00 | 1.00 | 0.35 | 0.35 | 0.48 | 0.48 | 1.00 | 1.00 | 0.49 | 0.49 | 0.31 | 0.31 | 0.48 | 0.48 | 0.38 | 0.38 | 0.31 | 0.31 |
| $R^2$ | 0.09 | 0.11 | 0.06 | 0.09 | 0.06 | 0.09 | 0.07 | 0.15 | 0.07 | 0.12 | 0.07 | 0.10 | 0.06 | 0.08 | 0.06 | 0.09 | 0.09 | 0.14 |
| Observations | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure 4a.

## Table S11: Knowledge of verification methods (part 2)

| | ICW: Verification knowledge | | To verify: Ask family on WA (reversed) | | To verify: Ask in person (reversed) | | To verify: Ask others on WA (reversed) | | To verify: Post on social media (reversed) | | To verify: Submit fact-check request | | To verify: Use fact-checker | | To verify: Use internet | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) |
| *A. Pooled estimation* | | | | | | | | | | | | | | | | |
| Placebo incentives | 0.039 | 0.046 | 0.006 | 0.008 | 0.000 | 0.003 | 0.008 | 0.011 | -0.017 | -0.013 | 0.017 | 0.020 | 0.026 | 0.025 | -0.023 | -0.019 |
| | (0.050) | (0.050) | (0.019) | (0.018) | (0.023) | (0.023) | (0.015) | (0.015) | (0.017) | (0.017) | (0.020) | (0.019) | (0.025) | (0.024) | (0.024) | (0.024) |
| | [0.216] | [0.177] | [0.370] | [0.334] | [0.991] | [0.452] | [0.283] | [0.222] | [0.321] | [0.431] | [0.190] | [0.150] | [0.144] | [0.150] | [0.338] | [0.417] |
| Pooled treatment | 0.096 | 0.098 | -0.014 | -0.013 | 0.027 | 0.025 | 0.005 | 0.005 | 0.007 | 0.006 | 0.050 | 0.049 | 0.053 | 0.055 | -0.012 | -0.007 |
| | (0.036) | (0.036) | (0.013) | (0.013) | (0.016) | (0.016) | (0.010) | (0.010) | (0.012) | (0.011) | (0.014) | (0.014) | (0.017) | (0.017) | (0.017) | (0.017) |
| | [0.003] | [0.003] | [0.315] | [0.316] | [0.045] | [0.055] | [0.311] | [0.317] | [0.275] | [0.300] | [0.000] | [0.000] | [0.001] | [0.001] | [0.495] | [0.681] |
| *B. Disaggregated estimation* | | | | | | | | | | | | | | | | |
| Placebo incentives | 0.039 | 0.046 | 0.006 | 0.008 | 0.000 | 0.003 | 0.008 | 0.011 | −0.017 | −0.014 | 0.017 | 0.020 | 0.026 | 0.026 | −0.023 | −0.020 |
| | (0.050) | (0.050) | (0.019) | (0.018) | (0.023) | (0.023) | (0.015) | (0.015) | (0.017) | (0.017) | (0.020) | (0.019) | (0.025) | (0.024) | (0.024) | (0.024) |
| | [0.214] | [0.176] | [0.370] | [0.339] | [0.991] | [0.451] | [0.281] | [0.223] | [0.319] | [0.405] | [0.189] | [0.155] | [0.144] | [0.142] | [0.342] | [0.415] |
| Text information | 0.167 | 0.174 | −0.007 | −0.007 | 0.056 | 0.055 | 0.010 | 0.009 | 0.026 | 0.028 | 0.075 | 0.074 | 0.087 | 0.089 | −0.016 | −0.008 |
| | (0.064) | (0.064) | (0.024) | (0.023) | (0.027) | (0.026) | (0.018) | (0.017) | (0.019) | (0.019) | (0.026) | (0.026) | (0.030) | (0.030) | (0.030) | (0.030) |
| | [0.005] | [0.003] | [0.765] | [0.748] | [0.020] | [0.019] | [0.294] | [0.308] | [0.085] | [0.071] | [0.002] | [0.002] | [0.002] | [0.001] | [0.592] | [0.780] |
| Short podcast | 0.124 | 0.119 | −0.011 | −0.011 | 0.002 | 0.001 | 0.004 | 0.003 | 0.010 | 0.010 | 0.059 | 0.056 | 0.053 | 0.050 | 0.001 | 0.003 |
| | (0.048) | (0.048) | (0.018) | (0.018) | (0.021) | (0.021) | (0.013) | (0.013) | (0.015) | (0.015) | (0.019) | (0.019) | (0.023) | (0.023) | (0.023) | (0.022) |
| | [0.005] | [0.006] | [0.552] | [0.536] | [0.469] | [0.474] | [0.397] | [0.423] | [0.244] | [0.256] | [0.001] | [0.001] | [0.011] | [0.014] | [0.487] | [0.446] |
| Long podcast | 0.022 | 0.033 | −0.019 | −0.020 | 0.017 | 0.014 | −0.008 | −0.006 | 0.007 | 0.005 | 0.027 | 0.028 | 0.046 | 0.052 | −0.034 | −0.026 |
| | (0.048) | (0.048) | (0.018) | (0.018) | (0.021) | (0.021) | (0.014) | (0.014) | (0.015) | (0.015) | (0.018) | (0.018) | (0.023) | (0.023) | (0.023) | (0.022) |
| | [0.324] | [0.245] | [0.293] | [0.267] | [0.206] | [0.250] | [0.560] | [0.663] | [0.327] | [0.367] | [0.071] | [0.058] | [0.025] | [0.012] | [0.133] | [0.251] |
| Empathetic podcast | 0.110 | 0.109 | −0.014 | −0.013 | 0.050 | 0.048 | 0.018 | 0.017 | −0.005 | −0.007 | 0.052 | 0.050 | 0.046 | 0.050 | 0.000 | 0.000 |
| | (0.049) | (0.049) | (0.018) | (0.017) | (0.021) | (0.020) | (0.013) | (0.013) | (0.015) | (0.015) | (0.019) | (0.019) | (0.024) | (0.023) | (0.023) | (0.023) |
| | [0.012] | [0.014] | [0.432] | [0.467] | [0.007] | [0.009] | [0.087] | [0.095] | [0.724] | [0.635] | [0.003] | [0.004] | [0.024] | [0.016] | [1.000] | [0.496] |
| Controls | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | -0.18 | -0.18 | -0.31 | -0.31 | -0.1 | -0.1 | -0.13 | -0.13 | 0.18 | 0.18 | 0.46 | 0.46 | 0.47 | 0.47 |
| Control SD | 1.00 | 1.00 | 0.38 | 0.38 | 0.46 | 0.46 | 0.30 | 0.30 | 0.33 | 0.33 | 0.38 | 0.38 | 0.50 | 0.50 | 0.50 | 0.50 |
| $R^2$ | 0.09 | 0.10 | 0.08 | 0.11 | 0.09 | 0.14 | 0.08 | 0.10 | 0.07 | 0.09 | 0.07 | 0.11 | 0.08 | 0.11 | 0.11 | 0.14 |
| Observations | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure 4a.

Table S12: Trust in social media (besides WhatsApp)

| | ICW: Trust social media | | How true: Info from other social media | | Trust most for info: Other social media | | Trust: Info from other social media | |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| *A. Pooled estimation* | | | | | | | | |
| Placebo incentives | -0.035 | -0.045 | 0.004 | -0.005 | -0.023 | -0.023 | -0.014 | -0.027 |
| | (0.047) | (0.047) | (0.038) | (0.036) | (0.019) | (0.018) | (0.050) | (0.049) |
| | [0.226] | [0.168] | [0.910] | [0.450] | [0.111] | [0.101] | [0.387] | [0.294] |
| Pooled treatment | -0.088 | -0.086 | -0.049 | -0.043 | -0.035 | -0.031 | -0.049 | -0.050 |
| | (0.034) | (0.033) | (0.026) | (0.025) | (0.014) | (0.013) | (0.035) | (0.035) |
| | [0.004] | [0.004] | [0.028] | [0.043] | [0.005] | [0.009] | [0.083] | [0.073] |
| *B. Disaggregated estimation* | | | | | | | | |
| Placebo incentives | −0.036 | −0.046 | 0.004 | −0.005 | −0.023 | −0.023 | −0.015 | −0.027 |
| | (0.047) | (0.047) | (0.038) | (0.036) | (0.019) | (0.018) | (0.050) | (0.050) |
| | [0.226] | [0.163] | [0.912] | [0.446] | [0.111] | [0.111] | [0.385] | [0.290] |
| Text information | −0.153 | −0.138 | −0.102 | −0.085 | −0.055 | −0.049 | −0.066 | −0.054 |
| | (0.058) | (0.056) | (0.044) | (0.043) | (0.022) | (0.022) | (0.062) | (0.061) |
| | [0.004] | [0.007] | [0.011] | [0.023] | [0.007] | [0.012] | [0.144] | [0.185] |
| Short podcast | −0.023 | −0.024 | −0.024 | −0.015 | −0.010 | −0.006 | −0.007 | −0.015 |
| | (0.044) | (0.043) | (0.034) | (0.032) | (0.018) | (0.018) | (0.046) | (0.045) |
| | [0.303] | [0.289] | [0.234] | [0.318] | [0.278] | [0.369] | [0.439] | [0.367] |
| Long podcast | −0.067 | −0.071 | −0.023 | −0.027 | −0.033 | −0.031 | −0.030 | −0.039 |
| | (0.045) | (0.044) | (0.035) | (0.034) | (0.018) | (0.017) | (0.047) | (0.047) |
| | [0.065] | [0.052] | [0.253] | [0.212] | [0.032] | [0.038] | [0.262] | [0.199] |
| Empathetic podcast | −0.148 | −0.142 | −0.076 | −0.068 | −0.052 | −0.048 | −0.103 | −0.099 |
| | (0.043) | (0.043) | (0.034) | (0.032) | (0.017) | (0.017) | (0.046) | (0.045) |
| | [0.000] | [0.000] | [0.012] | [0.018] | [0.001] | [0.002] | [0.013] | [0.014] |
| Controls | × | ✓ | × | ✓ | × | ✓ | × | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | 2.87 | 2.87 | 0.19 | 0.19 | 2.91 | 2.91 |
| Control SD | 1.00 | 1.00 | 0.73 | 0.73 | 0.39 | 0.39 | 1.04 | 1.04 |
| $R^2$ | 0.14 | 0.18 | 0.10 | 0.18 | 0.07 | 0.10 | 0.14 | 0.17 |
| Observations | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure 4b.

Table S13: Social media consumption

| | ICW: Consume social media | | Get news from: Other social media | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| *A. Pooled estimation* | | | | |
| Placebo incentives | -0.015 | -0.022 | -0.015 | -0.015 |
| | (0.049) | (0.048) | (0.024) | (0.024) |
| | [0.381] | [0.326] | [0.265] | [0.270] |
| Pooled treatment | -0.004 | -0.007 | -0.008 | -0.007 |
| | (0.034) | (0.034) | (0.017) | (0.017) |
| | [0.453] | [0.416] | [0.323] | [0.335] |
| *B. Disaggregated estimation* | | | | |
| Placebo incentives | −0.015 | −0.022 | −0.015 | −0.015 |
| | (0.049) | (0.048) | (0.024) | (0.024) |
| | [0.381] | [0.327] | [0.266] | [0.271] |
| Text information | −0.071 | −0.069 | −0.037 | −0.036 |
| | (0.060) | (0.060) | (0.030) | (0.030) |
| | [0.120] | [0.123] | [0.107] | [0.112] |
| Short podcast | 0.022 | 0.024 | 0.008 | 0.010 |
| | (0.045) | (0.045) | (0.023) | (0.022) |
| | [0.622] | [0.599] | [0.732] | [0.663] |
| Long podcast | 0.023 | 0.013 | 0.002 | 0.000 |
| | (0.045) | (0.045) | (0.023) | (0.022) |
| | [0.607] | [0.767] | [0.940] | [0.989] |
| Empathetic podcast | −0.028 | −0.031 | −0.020 | −0.019 |
| | (0.045) | (0.044) | (0.022) | (0.022) |
| | [0.263] | [0.240] | [0.185] | [0.195] |
| Controls | × | ✓ | × | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | 0.43 | 0.43 |
| Control SD | 1.00 | 1.00 | 0.50 | 0.50 |
| $R^2$ | 0.12 | 0.14 | 0.10 | 0.13 |
| Observations | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for preregistered direction when relevant) in square brackets. ICW estimate plotted in Figure 5a.

Table S14: Active verification

| | ICW: Active verification | | How often verify | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| *A. Pooled estimation* | | | | |
| Placebo incentives | -0.039 | -0.038 | -0.043 | -0.042 |
| | (0.048) | (0.048) | (0.054) | (0.053) |
| | [0.419] | [0.435] | [0.419] | [0.435] |
| Pooled treatment | -0.038 | -0.039 | -0.042 | -0.043 |
| | (0.034) | (0.034) | (0.038) | (0.037) |
| | [0.271] | [0.252] | [0.271] | [0.252] |
| *B. Disaggregated estimation* | | | | |
| Placebo incentives | −0.039 | −0.040 | −0.044 | −0.042 |
| | (0.048) | (0.048) | (0.054) | (0.053) |
| | [0.417] | [0.403] | [0.417] | [0.434] |
| Text information | −0.127 | −0.126 | −0.141 | −0.141 |
| | (0.065) | (0.064) | (0.072) | (0.071) |
| | [0.050] | [0.048] | [0.050] | [0.046] |
| Short podcast | −0.042 | −0.043 | −0.046 | −0.047 |
| | (0.045) | (0.044) | (0.049) | (0.049) |
| | [0.351] | [0.334] | [0.351] | [0.336] |
| Long podcast | 0.016 | 0.015 | 0.018 | 0.015 |
| | (0.043) | (0.043) | (0.048) | (0.048) |
| | [0.357] | [0.364] | [0.357] | [0.375] |
| Empathetic podcast | −0.046 | −0.047 | −0.051 | −0.052 |
| | (0.046) | (0.045) | (0.051) | (0.050) |
| | [0.312] | [0.303] | [0.312] | [0.300] |
| Controls | × | ✓ | × | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | 3.86 | 3.86 |
| Control SD | 1.00 | 1.00 | 1.11 | 1.11 |
| $R^2$ | 0.11 | 0.14 | 0.11 | 0.14 |
| Observations | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for preregistered direction when relevant) in square brackets. ICW estimate plotted in Figure 5b.

Table S15: Sharing

| | ICW: Sharing | | How often share stories | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| *A. Pooled estimation* | | | | |
| Placebo incentives | 0.022 | 0.004 | 0.023 | 0.001 |
| | (0.046) | (0.045) | (0.054) | (0.051) |
| | [0.630] | [0.928] | [0.673] | [0.495] |
| Pooled treatment | -0.027 | -0.029 | -0.033 | -0.033 |
| | (0.033) | (0.032) | (0.039) | (0.037) |
| | [0.206] | [0.184] | [0.194] | [0.182] |
| *B. Disaggregated estimation* | | | | |
| Placebo incentives | 0.022 | 0.004 | 0.023 | −0.001 |
| | (0.046) | (0.045) | (0.054) | (0.051) |
| | [0.630] | [0.932] | [0.675] | [0.991] |
| Text information | −0.101 | −0.093 | −0.118 | −0.104 |
| | (0.057) | (0.054) | (0.065) | (0.062) |
| | [0.038] | [0.044] | [0.034] | [0.046] |
| Short podcast | 0.022 | 0.017 | 0.025 | 0.021 |
| | (0.044) | (0.042) | (0.051) | (0.049) |
| | [0.613] | [0.687] | [0.628] | [0.658] |
| Long podcast | −0.001 | −0.010 | 0.006 | −0.009 |
| | (0.044) | (0.043) | (0.051) | (0.049) |
| | [0.487] | [0.410] | [0.900] | [0.429] |
| Empathetic podcast | −0.070 | −0.068 | −0.095 | −0.085 |
| | (0.043) | (0.041) | (0.050) | (0.048) |
| | [0.050] | [0.050] | [0.029] | [0.037] |
| Controls | × | ✓ | × | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | 2.85 | 2.85 |
| Control SD | 1.00 | 1.00 | 1.13 | 1.13 |
| $R^2$ | 0.17 | 0.24 | 0.12 | 0.22 |
| Observations | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for preregistered direction when relevant) in square brackets. ICW estimate plotted in Figure 5c.

# Table S16: COVID-19 beliefs and preventative behavior

| | ICW: COVID-19 beliefs and behavior | | Behavior: Stayed home | | Behavior: Visited indoors (reversed) | | Behavior: Wore mask | | COVID is a hoax (reversed) | | Lockdowns unnecessary (reversed) | | Trust vaccines | | Would get vaccinated | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) |
| *A. Pooled estimation* | | | | | | | | | | | | | | | | |
| Placebo incentives | -0.041 | -0.037 | -0.068 | -0.075 | -0.108 | -0.099 | 0.169 | 0.175 | 0.068 | 0.081 | -0.041 | -0.028 | -0.043 | -0.029 | -0.031 | -0.028 |
| | (0.048) | (0.048) | (0.107) | (0.106) | (0.103) | (0.101) | (0.114) | (0.114) | (0.055) | (0.054) | (0.045) | (0.045) | (0.068) | (0.067) | (0.078) | (0.077) |
| | [0.389] | [0.443] | [0.527] | [0.479] | [0.295] | [0.327] | [0.070] | [0.062] | [0.109] | [0.068] | [0.367] | [0.529] | [0.531] | [0.671] | [0.691] | [0.715] |
| Pooled treatment | 0.003 | 0.006 | -0.030 | -0.026 | -0.027 | -0.023 | 0.049 | 0.054 | 0.084 | 0.091 | -0.017 | -0.009 | 0.025 | 0.030 | 0.041 | 0.045 |
| | (0.034) | (0.033) | (0.076) | (0.076) | (0.071) | (0.070) | (0.080) | (0.080) | (0.040) | (0.039) | (0.032) | (0.032) | (0.049) | (0.048) | (0.055) | (0.054) |
| | [0.469] | [0.432] | [0.696] | [0.728] | [0.703] | [0.745] | [0.273] | [0.251] | [0.017] | [0.010] | [0.594] | [0.788] | [0.304] | [0.267] | [0.231] | [0.206] |
| *B. Disaggregated estimation* | | | | | | | | | | | | | | | | |
| Placebo incentives | −0.042 | −0.035 | −0.068 | −0.078 | −0.108 | −0.100 | 0.167 | 0.174 | 0.068 | 0.080 | −0.040 | −0.029 | −0.043 | −0.029 | −0.032 | −0.029 |
| | (0.048) | (0.048) | (0.107) | (0.107) | (0.103) | (0.101) | (0.114) | (0.114) | (0.055) | (0.054) | (0.045) | (0.045) | (0.068) | (0.067) | (0.078) | (0.077) |
| | [0.384] | [0.463] | [0.524] | [0.464] | [0.294] | [0.323] | [0.071] | [0.063] | [0.109] | [0.072] | [0.372] | [0.523] | [0.528] | [0.668] | [0.684] | [0.708] |
| Text information | 0.142 | 0.153 | 0.054 | 0.052 | 0.265 | 0.275 | 0.271 | 0.295 | 0.093 | 0.096 | −0.063 | −0.049 | 0.048 | 0.073 | 0.121 | 0.142 |
| | (0.057) | (0.057) | (0.131) | (0.130) | (0.124) | (0.122) | (0.129) | (0.128) | (0.067) | (0.067) | (0.057) | (0.056) | (0.084) | (0.082) | (0.093) | (0.092) |
| | [0.007] | [0.004] | [0.341] | [0.345] | [0.016] | [0.012] | [0.018] | [0.011] | [0.084] | [0.076] | [0.266] | [0.383] | [0.284] | [0.186] | [0.096] | [0.062] |
| Short podcast | 0.019 | 0.022 | −0.003 | 0.002 | −0.033 | −0.027 | 0.090 | 0.087 | 0.114 | 0.116 | 0.040 | 0.045 | 0.054 | 0.054 | 0.053 | 0.054 |
| | (0.044) | (0.043) | (0.101) | (0.101) | (0.094) | (0.093) | (0.105) | (0.104) | (0.051) | (0.050) | (0.042) | (0.041) | (0.064) | (0.063) | (0.072) | (0.072) |
| | [0.330] | [0.303] | [0.973] | [0.494] | [0.726] | [0.767] | [0.195] | [0.201] | [0.012] | [0.010] | [0.167] | [0.135] | [0.198] | [0.195] | [0.230] | [0.225] |
| Long podcast | −0.025 | −0.018 | −0.016 | −0.019 | −0.126 | −0.111 | 0.067 | 0.073 | 0.060 | 0.074 | −0.057 | −0.046 | 0.044 | 0.050 | 0.089 | 0.090 |
| | (0.047) | (0.046) | (0.101) | (0.101) | (0.099) | (0.097) | (0.106) | (0.106) | (0.052) | (0.052) | (0.043) | (0.043) | (0.065) | (0.064) | (0.072) | (0.071) |
| | [0.599] | [0.694] | [0.875] | [0.848] | [0.201] | [0.253] | [0.264] | [0.245] | [0.125] | [0.076] | [0.186] | [0.284] | [0.252] | [0.219] | [0.109] | [0.103] |
| Empathetic podcast | −0.051 | −0.056 | −0.108 | −0.102 | −0.055 | −0.064 | −0.116 | −0.111 | 0.072 | 0.072 | −0.015 | −0.006 | −0.034 | −0.036 | −0.058 | −0.056 |
| | (0.045) | (0.044) | (0.101) | (0.101) | (0.095) | (0.094) | (0.109) | (0.108) | (0.052) | (0.051) | (0.042) | (0.042) | (0.064) | (0.063) | (0.073) | (0.072) |
| | [0.253] | [0.206] | [0.282] | [0.313] | [0.562] | [0.494] | [0.288] | [0.307] | [0.082] | [0.079] | [0.720] | [0.882] | [0.594] | [0.572] | [0.427] | [0.441] |
| Controls | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | 4.25 | 4.25 | -1.75 | -1.75 | 5.23 | 5.23 | -1.7 | -1.7 | -1.77 | -1.77 | 3.37 | 3.37 | 3.46 | 3.46 |
| Control SD | 1.00 | 1.00 | 2.25 | 2.25 | 2.05 | 2.05 | 2.41 | 2.41 | 1.14 | 1.14 | 0.92 | 0.92 | 1.39 | 1.39 | 1.57 | 1.57 |
| $R^2$ | 0.11 | 0.15 | 0.15 | 0.16 | 0.10 | 0.13 | 0.14 | 0.15 | 0.08 | 0.11 | 0.09 | 0.11 | 0.07 | 0.11 | 0.06 | 0.09 |
| Observations | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure 6a.

## Table S17: Views and attitudes about the government

| | ICW: Government attitudes | | General gov performance | | Gov handled COVID well | | How true: Info from pols | | Trust most for info: Gov | | Trust most for info: Pols | | Trust: Info from politicians | | Vote: Local incumbent | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) |
| *A. Pooled estimation* | | | | | | | | | | | | | | | | |
| Placebo incentives | 0.097 | 0.090 | 0.079 | 0.074 | 0.026 | 0.022 | -0.030 | -0.034 | 0.009 | 0.009 | 0.019 | 0.018 | -0.013 | -0.024 | 0.060 | 0.057 |
| | (0.050) | (0.047) | (0.059) | (0.056) | (0.061) | (0.060) | (0.048) | (0.046) | (0.023) | (0.022) | (0.017) | (0.017) | (0.059) | (0.056) | (0.021) | (0.021) |
| | [0.027] | [0.028] | [0.089] | [0.096] | [0.334] | [0.353] | [0.525] | [0.466] | [0.343] | [0.339] | [0.132] | [0.139] | [0.827] | [0.671] | [0.002] | [0.003] |
| Pooled treatment | 0.061 | 0.058 | 0.051 | 0.042 | 0.027 | 0.029 | -0.033 | -0.032 | 0.021 | 0.021 | 0.020 | 0.020 | -0.035 | -0.035 | 0.020 | 0.020 |
| | (0.035) | (0.033) | (0.042) | (0.040) | (0.043) | (0.042) | (0.033) | (0.032) | (0.016) | (0.016) | (0.012) | (0.011) | (0.041) | (0.040) | (0.014) | (0.014) |
| | [0.039] | [0.041] | [0.109] | [0.150] | [0.264] | [0.244] | [0.323] | [0.326] | [0.090] | [0.096] | [0.046] | [0.040] | [0.396] | [0.378] | [0.081] | [0.081] |
| *B. Disaggregated estimation* | | | | | | | | | | | | | | | | |
| Placebo incentives | 0.097 | 0.090 | 0.079 | 0.072 | 0.027 | 0.024 | −0.030 | −0.034 | 0.009 | 0.009 | 0.019 | 0.018 | −0.013 | −0.024 | 0.059 | 0.056 |
| | (0.050) | (0.047) | (0.059) | (0.057) | (0.061) | (0.060) | (0.048) | (0.046) | (0.023) | (0.022) | (0.017) | (0.017) | (0.059) | (0.056) | (0.021) | (0.021) |
| | [0.027] | [0.028] | [0.089] | [0.103] | [0.331] | [0.344] | [0.528] | [0.459] | [0.342] | [0.341] | [0.131] | [0.139] | [0.827] | [0.669] | [0.003] | [0.004] |
| Text information | 0.075 | 0.083 | 0.033 | 0.032 | −0.062 | −0.048 | 0.037 | 0.050 | 0.047 | 0.049 | 0.000 | 0.004 | −0.009 | 0.006 | 0.055 | 0.059 |
| | (0.061) | (0.058) | (0.069) | (0.068) | (0.074) | (0.072) | (0.057) | (0.056) | (0.030) | (0.029) | (0.020) | (0.020) | (0.076) | (0.074) | (0.026) | (0.026) |
| | [0.111] | [0.075] | [0.316] | [0.319] | [0.405] | [0.509] | [0.258] | [0.187] | [0.057] | [0.046] | [0.492] | [0.424] | [0.910] | [0.468] | [0.017] | [0.011] |
| Short podcast | 0.121 | 0.114 | 0.095 | 0.085 | 0.118 | 0.112 | 0.015 | 0.016 | 0.032 | 0.028 | 0.026 | 0.027 | 0.017 | 0.013 | 0.032 | 0.029 |
| | (0.046) | (0.044) | (0.055) | (0.053) | (0.056) | (0.055) | (0.043) | (0.042) | (0.021) | (0.021) | (0.015) | (0.015) | (0.054) | (0.052) | (0.019) | (0.019) |
| | [0.004] | [0.005] | [0.043] | [0.055] | [0.017] | [0.021] | [0.361] | [0.349] | [0.067] | [0.093] | [0.046] | [0.039] | [0.377] | [0.399] | [0.050] | [0.064] |
| Long podcast | 0.040 | 0.030 | 0.032 | 0.014 | −0.013 | −0.013 | −0.098 | −0.108 | 0.000 | 0.001 | 0.020 | 0.019 | −0.062 | −0.073 | 0.034 | 0.032 |
| | (0.048) | (0.046) | (0.056) | (0.055) | (0.057) | (0.056) | (0.045) | (0.044) | (0.021) | (0.021) | (0.016) | (0.016) | (0.056) | (0.055) | (0.020) | (0.019) |
| | [0.203] | [0.257] | [0.283] | [0.397] | [0.822] | [0.822] | [0.028] | [0.014] | [0.993] | [0.484] | [0.103] | [0.117] | [0.270] | [0.183] | [0.041] | [0.049] |
| Empathetic podcast | 0.015 | 0.017 | 0.034 | 0.031 | 0.013 | 0.019 | −0.049 | −0.044 | 0.020 | 0.020 | 0.021 | 0.022 | −0.075 | −0.066 | −0.023 | −0.020 |
| | (0.047) | (0.045) | (0.055) | (0.053) | (0.056) | (0.055) | (0.045) | (0.044) | (0.021) | (0.021) | (0.016) | (0.015) | (0.055) | (0.053) | (0.018) | (0.018) |
| | [0.376] | [0.354] | [0.269] | [0.278] | [0.407] | [0.366] | [0.276] | [0.316] | [0.169] | [0.173] | [0.085] | [0.078] | [0.173] | [0.213] | [0.219] | [0.276] |
| Controls | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | 2.33 | 2.33 | 3.07 | 3.07 | 3.04 | 3.04 | 0.29 | 0.29 | 0.12 | 0.12 | 2.91 | 2.91 | 0.21 | 0.21 |
| Control SD | 1.00 | 1.00 | 1.21 | 1.21 | 1.24 | 1.24 | 0.94 | 0.94 | 0.45 | 0.45 | 0.32 | 0.32 | 1.20 | 1.20 | 0.40 | 0.40 |
| $R^2$ | 0.10 | 0.20 | 0.11 | 0.17 | 0.08 | 0.13 | 0.08 | 0.13 | 0.07 | 0.11 | 0.07 | 0.09 | 0.09 | 0.18 | 0.08 | 0.12 |
| Observations | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure 6b.

## Corresponding to figures in SM

Table S18: Verification is important

| | ICW: How important to verify | | How important to verify | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| *A. Pooled estimation* | | | | |
| Placebo incentives | 0.001 | 0.007 | 0.002 | 0.009 |
| | (0.049) | (0.048) | (0.061) | (0.060) |
| | [0.488] | [0.439] | [0.488] | [0.438] |
| Pooled treatment | 0.029 | 0.028 | 0.037 | 0.036 |
| | (0.035) | (0.034) | (0.043) | (0.042) |
| | [0.198] | [0.201] | [0.198] | [0.197] |
| *B. Disaggregated estimation* | | | | |
| Placebo incentives | 0.002 | 0.006 | 0.002 | 0.008 |
| | (0.049) | (0.048) | (0.061) | (0.060) |
| | [0.487] | [0.448] | [0.487] | [0.447] |
| Text information | −0.029 | −0.015 | −0.036 | −0.019 |
| | (0.063) | (0.061) | (0.079) | (0.076) |
| | [0.645] | [0.811] | [0.645] | [0.802] |
| Short podcast | 0.011 | 0.000 | 0.013 | 0.001 |
| | (0.045) | (0.043) | (0.056) | (0.054) |
| | [0.406] | [0.498] | [0.406] | [0.496] |
| Long podcast | 0.050 | 0.057 | 0.062 | 0.069 |
| | (0.046) | (0.044) | (0.057) | (0.055) |
| | [0.137] | [0.100] | [0.137] | [0.107] |
| Empathetic podcast | 0.055 | 0.050 | 0.069 | 0.062 |
| | (0.045) | (0.044) | (0.057) | (0.055) |
| | [0.112] | [0.130] | [0.112] | [0.129] |
| Controls | × | ✓ | × | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | 4.04 | 4.04 |
| Control SD | 1.00 | 1.00 | 1.25 | 1.25 |
| $R^2$ | 0.07 | 0.14 | 0.07 | 0.14 |
| Observations | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for preregistered direction when relevant) in square brackets. ICW estimate plotted in Figure S6a.

## Table S19: Fact-checking is challenging

| | ICW: Verify challenge | | Challenge: DNK where | | Challenge: Fact-checks are irrelevant | | Challenge: Mistrust fact-checkers | | Challenge: Too expensive | | Challenge: Too much info | | Challenge: Too time consuming | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| *A. Pooled estimation* | | | | | | | | | | | | | | |
| Placebo incentives | 0.027 | 0.022 | 0.018 | 0.017 | 0.011 | 0.011 | 0.004 | 0.002 | 0.001 | 0.003 | -0.005 | -0.003 | -0.029 | -0.029 |
| | (0.051) | (0.051) | (0.014) | (0.014) | (0.016) | (0.016) | (0.010) | (0.010) | (0.024) | (0.024) | (0.018) | (0.018) | (0.018) | (0.018) |
| | [0.595] | [0.660] | [0.215] | [0.243] | [0.499] | [0.495] | [0.725] | [0.829] | [0.953] | [0.896] | [0.400] | [0.430] | [0.060] | [0.054] |
| Pooled treatment | -0.012 | -0.013 | 0.000 | 0.001 | -0.009 | -0.009 | 0.004 | 0.003 | 0.006 | 0.009 | -0.014 | -0.014 | 0.008 | 0.007 |
| | (0.035) | (0.035) | (0.010) | (0.010) | (0.010) | (0.010) | (0.007) | (0.007) | (0.017) | (0.017) | (0.012) | (0.012) | (0.013) | (0.013) |
| | [0.361] | [0.354] | [0.964] | [0.893] | [0.193] | [0.202] | [0.604] | [0.658] | [0.726] | [0.613] | [0.122] | [0.128] | [0.567] | [0.588] |
| *B. Disaggregated estimation* | | | | | | | | | | | | | | |
| Placebo incentives | 0.027 | 0.017 | 0.018 | 0.019 | 0.011 | 0.010 | 0.004 | 0.002 | 0.001 | 0.003 | −0.004 | −0.003 | −0.028 | −0.029 |
| | (0.051) | (0.051) | (0.014) | (0.014) | (0.016) | (0.016) | (0.010) | (0.010) | (0.024) | (0.024) | (0.018) | (0.018) | (0.018) | (0.018) |
| | [0.596] | [0.741] | [0.213] | [0.194] | [0.502] | [0.530] | [0.731] | [0.825] | [0.953] | [0.893] | [0.401] | [0.432] | [0.060] | [0.055] |
| Text information | −0.021 | −0.019 | −0.009 | −0.010 | 0.030 | 0.030 | 0.007 | 0.008 | −0.014 | −0.009 | −0.018 | −0.017 | −0.022 | −0.021 |
| | (0.062) | (0.061) | (0.017) | (0.017) | (0.020) | (0.020) | (0.013) | (0.013) | (0.030) | (0.030) | (0.022) | (0.021) | (0.022) | (0.022) |
| | [0.365] | [0.376] | [0.287] | [0.272] | [0.132] | [0.129] | [0.571] | [0.558] | [0.324] | [0.381] | [0.207] | [0.217] | [0.157] | [0.162] |
| Short podcast | −0.006 | −0.009 | 0.009 | 0.009 | −0.014 | −0.015 | 0.000 | 0.001 | 0.010 | 0.009 | −0.005 | −0.005 | −0.001 | −0.003 |
| | (0.045) | (0.044) | (0.013) | (0.013) | (0.013) | (0.013) | (0.009) | (0.009) | (0.022) | (0.022) | (0.016) | (0.016) | (0.017) | (0.017) |
| | [0.443] | [0.421] | [0.508] | [0.488] | [0.143] | [0.139] | [0.495] | [0.886] | [0.646] | [0.675] | [0.370] | [0.376] | [0.470] | [0.434] |
| Long podcast | −0.009 | −0.014 | −0.004 | −0.003 | −0.018 | −0.018 | 0.012 | 0.010 | 0.014 | 0.017 | −0.022 | −0.021 | 0.014 | 0.015 |
| | (0.049) | (0.048) | (0.013) | (0.013) | (0.014) | (0.014) | (0.010) | (0.010) | (0.022) | (0.022) | (0.016) | (0.016) | (0.018) | (0.018) |
| | [0.430] | [0.389] | [0.367] | [0.392] | [0.098] | [0.094] | [0.246] | [0.348] | [0.543] | [0.443] | [0.079] | [0.088] | [0.434] | [0.383] |
| Empathetic podcast | −0.019 | −0.023 | 0.001 | 0.002 | −0.013 | −0.013 | −0.002 | −0.004 | 0.003 | 0.006 | −0.014 | −0.015 | 0.024 | 0.024 |
| | (0.046) | (0.046) | (0.013) | (0.013) | (0.014) | (0.014) | (0.009) | (0.009) | (0.023) | (0.022) | (0.016) | (0.016) | (0.018) | (0.018) |
| | [0.345] | [0.312] | [0.929] | [0.902] | [0.170] | [0.177] | [0.404] | [0.350] | [0.901] | [0.793] | [0.190] | [0.181] | [0.180] | [0.178] |
| Controls | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | 0.08 | 0.08 | 0.10 | 0.10 | 0.04 | 0.04 | 0.45 | 0.45 | 0.15 | 0.15 | 0.17 | 0.17 |
| Control SD | 1.00 | 1.00 | 0.27 | 0.27 | 0.30 | 0.30 | 0.20 | 0.20 | 0.50 | 0.50 | 0.36 | 0.36 | 0.38 | 0.38 |
| $R^2$ | 0.08 | 0.10 | 0.07 | 0.08 | 0.07 | 0.08 | 0.08 | 0.10 | 0.13 | 0.14 | 0.07 | 0.09 | 0.11 | 0.12 |
| Observations | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure S6b.

Table S20: Verify through Africa Check

| | ICW: Lists WCW/AC as source | | Lists WCW/AC as source | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| *A. Pooled estimation* | | | | |
| Placebo incentives | 0.213 | 0.225 | 0.068 | 0.072 |
| | (0.059) | (0.057) | (0.019) | (0.018) |
| | [0.000] | [0.000] | [0.000] | [0.000] |
| Pooled treatment | 0.495 | 0.486 | 0.159 | 0.156 |
| | (0.039) | (0.038) | (0.013) | (0.012) |
| | [0.000] | [0.000] | [0.000] | [0.000] |
| *B. Disaggregated estimation* | | | | |
| Placebo incentives | 0.213 | 0.225 | 0.068 | 0.072 |
| | (0.059) | (0.057) | (0.019) | (0.018) |
| | [0.000] | [0.000] | [0.000] | [0.000] |
| Text information | 0.481 | 0.485 | 0.154 | 0.156 |
| | (0.079) | (0.077) | (0.025) | (0.025) |
| | [0.000] | [0.000] | [0.000] | [0.000] |
| Short podcast | 0.508 | 0.490 | 0.163 | 0.157 |
| | (0.057) | (0.056) | (0.018) | (0.018) |
| | [0.000] | [0.000] | [0.000] | [0.000] |
| Long podcast | 0.480 | 0.488 | 0.154 | 0.156 |
| | (0.056) | (0.055) | (0.018) | (0.018) |
| | [0.000] | [0.000] | [0.000] | [0.000] |
| Empathetic podcast | 0.504 | 0.482 | 0.162 | 0.155 |
| | (0.057) | (0.056) | (0.018) | (0.018) |
| | [0.000] | [0.000] | [0.000] | [0.000] |
| Controls | × | ✓ | × | ✓ |
| Directional hypothesis | × | × | × | × |
| Control Mean | 0.00 | 0.00 | 0.12 | 0.12 |
| Control SD | 1.00 | 1.00 | 0.32 | 0.32 |
| $R^2$ | 0.12 | 0.19 | 0.12 | 0.19 |
| Observations | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure S7.

Table S21: Verify through other fact-checkers

| | ICW: Lists other fact-checkers as source | | Lists AFP as source | | Lists Snopes as source | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| *A. Pooled estimation* | | | | | | |
| Placebo incentives | 0.022 | 0.023 | 0.000 | 0.000 | 0.002 | 0.002 |
| | (0.050) | (0.050) | (0.005) | (0.005) | (0.004) | (0.004) |
| | [0.663] | [0.642] | [0.939] | [0.989] | [0.525] | [0.551] |
| Pooled treatment | -0.006 | -0.009 | 0.000 | 0.000 | -0.001 | -0.001 |
| | (0.036) | (0.035) | (0.004) | (0.004) | (0.002) | (0.002) |
| | [0.862] | [0.803] | [0.976] | [0.995] | [0.825] | [0.774] |
| *B. Disaggregated estimation* | | | | | | |
| Placebo incentives | 0.022 | 0.024 | 0.000 | 0.000 | 0.002 | 0.002 |
| | (0.050) | (0.050) | (0.005) | (0.005) | (0.004) | (0.004) |
| | [0.661] | [0.637] | [0.943] | [0.986] | [0.526] | [0.555] |
| Text information | 0.059 | 0.058 | 0.007 | 0.007 | 0.001 | 0.000 |
| | (0.070) | (0.069) | (0.008) | (0.008) | (0.004) | (0.004) |
| | [0.401] | [0.403] | [0.363] | [0.350] | [0.851] | [0.916] |
| Short podcast | 0.036 | 0.031 | 0.002 | 0.002 | 0.002 | 0.001 |
| | (0.051) | (0.051) | (0.005) | (0.005) | (0.004) | (0.004) |
| | [0.485] | [0.542] | [0.636] | [0.643] | [0.609] | [0.733] |
| Long podcast | −0.066 | −0.063 | −0.007 | −0.006 | −0.002 | −0.002 |
| | (0.041) | (0.041) | (0.004) | (0.004) | (0.003) | (0.003) |
| | [0.106] | [0.124] | [0.071] | [0.091] | [0.579] | [0.604] |
| Empathetic podcast | −0.019 | −0.025 | 0.001 | 0.000 | −0.003 | −0.002 |
| | (0.045) | (0.045) | (0.005) | (0.005) | (0.003) | (0.003) |
| | [0.668] | [0.579] | [0.862] | [0.933] | [0.378] | [0.385] |
| Controls | × | ✓ | × | ✓ | × | ✓ |
| Directional hypothesis | × | × | × | × | × | × |
| Control Mean | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 |
| Control SD | 1.00 | 1.00 | 0.10 | 0.10 | 0.07 | 0.07 |
| $R^2$ | 0.05 | 0.07 | 0.05 | 0.06 | 0.06 | 0.07 |
| Observations | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure S7.

## Table S22: Verify through online and social media

| | ICW: Lists web/social media as source | | Lists Facebook as source | | Lists Google as source | | Lists Moya as source | | Lists Telegram as source | | Lists Twitter as source | | Lists WhatsApp as source | | Lists YouTube as source | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) |
| *A. Pooled estimation* | | | | | | | | | | | | | | | | |
| Placebo incentives | -0.043 | -0.046 | 0.001 | 0.001 | -0.050 | -0.052 | -0.002 | -0.002 | 0.001 | 0.000 | -0.016 | -0.016 | 0.049 | 0.047 | -0.010 | -0.010 |
| | (0.045) | (0.045) | (0.017) | (0.016) | (0.024) | (0.023) | (0.003) | (0.003) | (0.002) | (0.002) | (0.010) | (0.010) | (0.014) | (0.014) | (0.006) | (0.006) |
| | [0.345] | [0.309] | [0.956] | [0.936] | [0.032] | [0.027] | [0.491] | [0.565] | [0.635] | [0.796] | [0.114] | [0.116] | [0.000] | [0.001] | [0.089] | [0.089] |
| Pooled treatment | -0.080 | -0.083 | -0.030 | -0.028 | -0.100 | -0.101 | -0.002 | -0.002 | 0.001 | 0.001 | -0.011 | -0.011 | 0.049 | 0.048 | -0.013 | -0.013 |
| | (0.035) | (0.035) | (0.012) | (0.012) | (0.017) | (0.016) | (0.002) | (0.002) | (0.001) | (0.001) | (0.008) | (0.008) | (0.009) | (0.009) | (0.005) | (0.005) |
| | [0.021] | [0.017] | [0.010] | [0.014] | [0.000] | [0.000] | [0.418] | [0.408] | [0.378] | [0.457] | [0.155] | [0.159] | [0.000] | [0.000] | [0.006] | [0.006] |
| *B. Disaggregated estimation* | | | | | | | | | | | | | | | | |
| Placebo incentives | −0.043 | −0.046 | 0.001 | 0.002 | −0.050 | −0.053 | −0.002 | −0.002 | 0.001 | 0.001 | −0.016 | −0.017 | 0.050 | 0.048 | −0.010 | −0.010 |
| | (0.045) | (0.045) | (0.017) | (0.016) | (0.024) | (0.023) | (0.003) | (0.003) | (0.002) | (0.002) | (0.010) | (0.010) | (0.014) | (0.014) | (0.006) | (0.006) |
| | [0.348] | [0.309] | [0.951] | [0.927] | [0.032] | [0.023] | [0.492] | [0.574] | [0.633] | [0.622] | [0.115] | [0.106] | [0.000] | [0.001] | [0.089] | [0.089] |
| Text information | −0.188 | −0.186 | −0.061 | −0.058 | −0.109 | −0.111 | −0.005 | −0.005 | −0.001 | −0.001 | −0.010 | −0.008 | −0.018 | −0.018 | −0.009 | −0.009 |
| | (0.048) | (0.047) | (0.018) | (0.018) | (0.028) | (0.027) | (0.002) | (0.002) | (0.001) | (0.001) | (0.013) | (0.013) | (0.014) | (0.014) | (0.007) | (0.007) |
| | [0.000] | [0.000] | [0.001] | [0.001] | [0.000] | [0.000] | [0.032] | [0.032] | [0.281] | [0.285] | [0.448] | [0.552] | [0.171] | [0.179] | [0.203] | [0.203] |
| Short podcast | −0.047 | −0.047 | −0.022 | −0.021 | −0.110 | −0.111 | 0.001 | 0.001 | 0.002 | 0.002 | −0.008 | −0.008 | 0.073 | 0.072 | −0.018 | −0.018 |
| | (0.047) | (0.047) | (0.015) | (0.015) | (0.021) | (0.021) | (0.003) | (0.003) | (0.002) | (0.002) | (0.010) | (0.010) | (0.014) | (0.014) | (0.005) | (0.005) |
| | [0.319] | [0.321] | [0.142] | [0.146] | [0.000] | [0.000] | [0.792] | [0.790] | [0.371] | [0.397] | [0.441] | [0.434] | [0.000] | [0.000] | [0.000] | [0.000] |
| Long podcast | −0.073 | −0.076 | −0.029 | −0.028 | −0.087 | −0.089 | −0.002 | −0.002 | 0.001 | 0.001 | −0.019 | −0.019 | 0.048 | 0.047 | −0.012 | −0.012 |
| | (0.047) | (0.047) | (0.015) | (0.015) | (0.022) | (0.022) | (0.003) | (0.003) | (0.002) | (0.002) | (0.010) | (0.010) | (0.013) | (0.013) | (0.006) | (0.006) |
| | [0.120] | [0.101] | [0.050] | [0.059] | [0.000] | [0.000] | [0.494] | [0.487] | [0.478] | [0.486] | [0.047] | [0.047] | [0.000] | [0.000] | [0.042] | [0.042] |
| Empathetic podcast | −0.071 | −0.069 | −0.025 | −0.023 | −0.101 | −0.101 | −0.003 | −0.003 | 0.001 | 0.001 | −0.007 | −0.007 | 0.056 | 0.055 | −0.010 | −0.010 |
| | (0.044) | (0.043) | (0.015) | (0.015) | (0.021) | (0.021) | (0.002) | (0.002) | (0.002) | (0.002) | (0.010) | (0.010) | (0.013) | (0.013) | (0.006) | (0.006) |
| | [0.104] | [0.113] | [0.094] | [0.132] | [0.000] | [0.000] | [0.203] | [0.191] | [0.608] | [0.615] | [0.519] | [0.506] | [0.000] | [0.000] | [0.098] | [0.098] |
| Controls | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | × | × | ✓ | × | ✓ | × | × |
| Directional hypothesis | × | × | × | × | × | × | × | × | × | × | × | × | × | × | × | × |
| Control Mean | 0.00 | 0.00 | 0.13 | 0.13 | 0.38 | 0.38 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 0.06 | 0.06 | 0.06 | 0.02 | 0.02 |
| Control SD | 1.00 | 1.00 | 0.34 | 0.34 | 0.49 | 0.49 | 0.06 | 0.06 | 0.03 | 0.03 | 0.23 | 0.23 | 0.23 | 0.23 | 0.15 | 0.15 |
| $R^2$ | 0.07 | 0.08 | 0.08 | 0.10 | 0.09 | 0.12 | 0.06 | 0.06 | 0.06 | 0.06 | 0.05 | 0.06 | 0.07 | 0.09 | 0.07 | 0.07 |
| Observations | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure S7.

Table S23: Verify through traditional media

| | ICW: Lists trad media as source | | Lists News24 as source | | Lists SABC as source | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| *A. Pooled estimation* | | | | | | |
| Placebo incentives | -0.089 | -0.090 | -0.013 | -0.014 | -0.013 | -0.013 |
| | (0.041) | (0.041) | (0.009) | (0.009) | (0.007) | (0.007) |
| | [0.032] | [0.029] | [0.171] | [0.130] | [0.070] | [0.066] |
| Pooled treatment | -0.118 | -0.119 | -0.020 | -0.020 | -0.015 | -0.015 |
| | (0.032) | (0.032) | (0.007) | (0.007) | (0.006) | (0.006) |
| | [0.000] | [0.000] | [0.003] | [0.003] | [0.008] | [0.008] |
| *B. Disaggregated estimation* | | | | | | |
| Placebo incentives | −0.089 | −0.090 | −0.012 | −0.014 | −0.013 | −0.013 |
| | (0.042) | (0.041) | (0.009) | (0.009) | (0.007) | (0.007) |
| | [0.032] | [0.030] | [0.175] | [0.133] | [0.069] | [0.067] |
| Text information | −0.152 | −0.154 | −0.027 | −0.028 | −0.018 | −0.018 |
| | (0.046) | (0.046) | (0.010) | (0.010) | (0.008) | (0.009) |
| | [0.001] | [0.001] | [0.008] | [0.007] | [0.032] | [0.039] |
| Short podcast | −0.105 | −0.107 | −0.014 | −0.014 | −0.016 | −0.016 |
| | (0.040) | (0.039) | (0.009) | (0.009) | (0.007) | (0.007) |
| | [0.008] | [0.007] | [0.100] | [0.096] | [0.018] | [0.017] |
| Long podcast | −0.117 | −0.120 | −0.031 | −0.031 | −0.006 | −0.006 |
| | (0.041) | (0.041) | (0.008) | (0.008) | (0.008) | (0.008) |
| | [0.004] | [0.003] | [0.000] | [0.000] | [0.460] | [0.464] |
| Empathetic podcast | −0.117 | −0.116 | −0.012 | −0.012 | −0.021 | −0.020 |
| | (0.039) | (0.038) | (0.009) | (0.009) | (0.006) | (0.006) |
| | [0.002] | [0.003] | [0.181] | [0.184] | [0.001] | [0.001] |
| Controls | × | ✓ | × | ✓ | × | ✓ |
| Directional hypothesis | × | × | × | × | × | × |
| Control Mean | 0.00 | 0.00 | 0.04 | 0.04 | 0.03 | 0.03 |
| Control SD | 1.00 | 1.00 | 0.21 | 0.21 | 0.18 | 0.18 |
| $R^2$ | 0.05 | 0.07 | 0.05 | 0.07 | 0.05 | 0.07 |
| Observations | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure S7.

Table S24: Treatment effects on being alerted about fake news

| | ICW: How often alerted to fake news | | How often alerted fake news | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| *A. Pooled estimation* | | | | |
| Placebo incentives | -0.021 | -0.020 | -0.024 | -0.023 |
| | (0.048) | (0.047) | (0.056) | (0.054) |
| | [0.669] | [0.676] | [0.669] | [0.664] |
| Pooled treatment | 0.045 | 0.045 | 0.052 | 0.052 |
| | (0.035) | (0.034) | (0.040) | (0.039) |
| | [0.191] | [0.185] | [0.191] | [0.185] |
| *B. Disaggregated estimation* | | | | |
| Placebo incentives | −0.021 | −0.020 | −0.024 | −0.022 |
| | (0.048) | (0.047) | (0.056) | (0.054) |
| | [0.667] | [0.677] | [0.667] | [0.677] |
| Text information | 0.017 | 0.037 | 0.020 | 0.042 |
| | (0.062) | (0.061) | (0.071) | (0.070) |
| | [0.781] | [0.542] | [0.781] | [0.542] |
| Short podcast | 0.008 | 0.002 | 0.009 | 0.002 |
| | (0.046) | (0.046) | (0.053) | (0.052) |
| | [0.862] | [0.967] | [0.862] | [0.967] |
| Long podcast | 0.087 | 0.087 | 0.100 | 0.100 |
| | (0.045) | (0.044) | (0.051) | (0.050) |
| | [0.052] | [0.045] | [0.052] | [0.045] |
| Empathetic podcast | 0.055 | 0.051 | 0.064 | 0.059 |
| | (0.047) | (0.046) | (0.054) | (0.053) |
| | [0.235] | [0.267] | [0.235] | [0.267] |
| Controls | × | ✓ | × | ✓ |
| Directional hypothesis | × | × | × | × |
| Control Mean | 0.00 | 0.00 | 3.28 | 3.28 |
| Control SD | 1.00 | 1.00 | 1.15 | 1.15 |
| $R^2$ | 0.09 | 0.14 | 0.09 | 0.14 |
| Observations | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for preregistered direction when relevant) in square brackets. ICW estimate plotted in Figure S8.

Table S25: Treatment effects on alerting others about fake news

| | ICW: Alert fake news | | How often alerted others fake news | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| *A. Pooled estimation* | | | | |
| Placebo incentives | 0.006 | 0.007 | 0.009 | 0.011 |
| | (0.037) | (0.036) | (0.054) | (0.053) |
| | [0.437] | [0.418] | [0.437] | [0.418] |
| Pooled treatment | 0.044 | 0.047 | 0.065 | 0.070 |
| | (0.026) | (0.026) | (0.039) | (0.038) |
| | [0.047] | [0.033] | [0.047] | [0.033] |
| *B. Disaggregated estimation* | | | | |
| Placebo incentives | 0.006 | 0.013 | 0.009 | 0.011 |
| | (0.037) | (0.036) | (0.054) | (0.053) |
| | [0.438] | [0.360] | [0.438] | [0.417] |
| Text information | 0.001 | 0.021 | 0.002 | 0.029 |
| | (0.049) | (0.048) | (0.073) | (0.071) |
| | [0.489] | [0.329] | [0.489] | [0.342] |
| Short podcast | 0.062 | 0.064 | 0.091 | 0.093 |
| | (0.034) | (0.033) | (0.050) | (0.050) |
| | [0.035] | [0.027] | [0.035] | [0.030] |
| Long podcast | 0.063 | 0.066 | 0.094 | 0.096 |
| | (0.034) | (0.033) | (0.050) | (0.049) |
| | [0.031] | [0.024] | [0.031] | [0.026] |
| Empathetic podcast | 0.024 | 0.027 | 0.036 | 0.037 |
| | (0.035) | (0.034) | (0.051) | (0.051) |
| | [0.242] | [0.216] | [0.242] | [0.232] |
| Controls | × | ✓ | × | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | 2.65 | 2.65 |
| Control SD | 1.00 | 1.00 | 1.48 | 1.48 |
| $R^2$ | 0.50 | 0.53 | 0.50 | 0.53 |
| Observations | 4543 | 4543 | 4543 | 4543 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for preregistered direction when relevant) in square brackets. ICW estimate plotted in Figure S9.

Table S26: Trust in traditional media

| | ICW: Trust traditional media | | How true: Info from radio/TV | | Trust most for info: Newspapers | | Trust: Info from radio/TV | |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| *A. Pooled estimation* | | | | | | | | |
| Placebo incentives | -0.068 | -0.059 | -0.020 | -0.011 | -0.043 | -0.035 | -0.036 | -0.039 |
| | (0.048) | (0.048) | (0.038) | (0.037) | (0.024) | (0.023) | (0.057) | (0.057) |
| | [0.079] | [0.110] | [0.299] | [0.378] | [0.036] | [0.069] | [0.263] | [0.246] |
| Pooled treatment | -0.035 | -0.027 | -0.009 | -0.002 | -0.039 | -0.036 | 0.017 | 0.023 |
| | (0.035) | (0.034) | (0.027) | (0.026) | (0.017) | (0.016) | (0.040) | (0.040) |
| | [0.153] | [0.216] | [0.364] | [0.470] | [0.009] | [0.013] | [0.674] | [0.563] |
| *B. Disaggregated estimation* | | | | | | | | |
| Placebo incentives | −0.068 | −0.059 | −0.020 | −0.012 | −0.043 | −0.034 | −0.036 | −0.042 |
| | (0.048) | (0.048) | (0.038) | (0.037) | (0.024) | (0.023) | (0.057) | (0.057) |
| | [0.079] | [0.109] | [0.301] | [0.369] | [0.035] | [0.071] | [0.263] | [0.230] |
| Text information | 0.003 | 0.012 | 0.004 | 0.023 | −0.022 | −0.020 | 0.041 | 0.052 |
| | (0.060) | (0.059) | (0.047) | (0.046) | (0.029) | (0.029) | (0.072) | (0.071) |
| | [0.956] | [0.834] | [0.935] | [0.620] | [0.228] | [0.238] | [0.568] | [0.465] |
| Short podcast | −0.003 | 0.001 | 0.017 | 0.013 | −0.040 | −0.041 | 0.065 | 0.067 |
| | (0.045) | (0.044) | (0.035) | (0.034) | (0.022) | (0.022) | (0.051) | (0.050) |
| | [0.472] | [0.982] | [0.618] | [0.692] | [0.033] | [0.032] | [0.204] | [0.185] |
| Long podcast | −0.046 | −0.031 | −0.045 | −0.034 | −0.023 | −0.014 | −0.006 | 0.001 |
| | (0.047) | (0.047) | (0.036) | (0.035) | (0.022) | (0.022) | (0.054) | (0.053) |
| | [0.164] | [0.250] | [0.104] | [0.163] | [0.153] | [0.258] | [0.458] | [0.983] |
| Empathetic podcast | −0.076 | −0.070 | −0.007 | 0.001 | −0.063 | −0.062 | −0.021 | −0.018 |
| | (0.046) | (0.046) | (0.035) | (0.035) | (0.022) | (0.022) | (0.054) | (0.053) |
| | [0.050] | [0.063] | [0.425] | [0.978] | [0.002] | [0.003] | [0.346] | [0.365] |
| Controls | × | ✓ | × | ✓ | × | ✓ | × | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | 3.86 | 3.86 | 0.66 | 0.66 | 3.94 | 3.94 |
| Control SD | 1.00 | 1.00 | 0.75 | 0.75 | 0.47 | 0.47 | 1.16 | 1.16 |
| $R^2$ | 0.11 | 0.14 | 0.08 | 0.13 | 0.09 | 0.13 | 0.10 | 0.12 |
| Observations | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure S10a.

## Table S27: Trust in WhatsApp

| | ICW: Trust WhatsApp | | How true on WA: Large groups | | How true: Info from WhatsApp | | Trust most for info: Large WA groups | | Trust on WA: Large groups | | Trust: Info from WhatsApp | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
| *A. Pooled estimation* | | | | | | | | | | | | |
| Placebo incentives | 0.105 | 0.079 | 0.095 | 0.073 | 0.046 | 0.039 | 0.014 | 0.013 | 0.063 | 0.030 | 0.075 | 0.063 |
| | (0.050) | (0.048) | (0.043) | (0.041) | (0.039) | (0.037) | (0.014) | (0.014) | (0.056) | (0.052) | (0.051) | (0.049) |
| | [0.036] | [0.097] | [0.027] | [0.070] | [0.235] | [0.289] | [0.316] | [0.354] | [0.259] | [0.562] | [0.142] | [0.197] |
| Pooled treatment | 0.075 | 0.073 | 0.038 | 0.040 | 0.054 | 0.058 | 0.017 | 0.018 | 0.007 | 0.007 | 0.027 | 0.030 |
| | (0.034) | (0.033) | (0.029) | (0.027) | (0.027) | (0.025) | (0.009) | (0.009) | (0.038) | (0.036) | (0.036) | (0.035) |
| | [0.029] | [0.024] | [0.197] | [0.137] | [0.044] | [0.023] | [0.072] | [0.052] | [0.863] | [0.856] | [0.460] | [0.398] |
| *B. Disaggregated estimation* | | | | | | | | | | | | |
| Placebo incentives | 0.105 | 0.079 | 0.095 | 0.072 | 0.046 | 0.039 | 0.014 | 0.013 | 0.063 | 0.032 | 0.075 | 0.065 |
| | (0.050) | (0.048) | (0.043) | (0.041) | (0.039) | (0.037) | (0.014) | (0.014) | (0.056) | (0.052) | (0.051) | (0.049) |
| | [0.036] | [0.097] | [0.028] | [0.076] | [0.233] | [0.288] | [0.316] | [0.360] | [0.261] | [0.546] | [0.141] | [0.188] |
| Text information | 0.041 | 0.052 | 0.026 | 0.044 | −0.018 | −0.005 | 0.020 | 0.021 | −0.034 | −0.015 | 0.001 | 0.013 |
| | (0.061) | (0.059) | (0.051) | (0.047) | (0.047) | (0.045) | (0.017) | (0.017) | (0.068) | (0.065) | (0.064) | (0.062) |
| | [0.505] | [0.378] | [0.616] | [0.353] | [0.353] | [0.458] | [0.238] | [0.214] | [0.308] | [0.408] | [0.988] | [0.834] |
| Short podcast | 0.124 | 0.122 | 0.046 | 0.049 | 0.100 | 0.104 | 0.021 | 0.022 | 0.033 | 0.032 | 0.092 | 0.093 |
| | (0.046) | (0.045) | (0.039) | (0.036) | (0.036) | (0.034) | (0.013) | (0.013) | (0.051) | (0.048) | (0.048) | (0.046) |
| | [0.008] | [0.006] | [0.236] | [0.179] | [0.005] | [0.002] | [0.094] | [0.078] | [0.520] | [0.495] | [0.052] | [0.044] |
| Long podcast | 0.074 | 0.060 | 0.068 | 0.056 | 0.048 | 0.039 | 0.015 | 0.016 | 0.049 | 0.029 | −0.003 | −0.007 |
| | (0.046) | (0.044) | (0.039) | (0.037) | (0.036) | (0.034) | (0.013) | (0.013) | (0.051) | (0.048) | (0.048) | (0.047) |
| | [0.110] | [0.168] | [0.080] | [0.131] | [0.181] | [0.259] | [0.243] | [0.199] | [0.336] | [0.544] | [0.472] | [0.443] |
| Empathetic podcast | 0.041 | 0.046 | 0.003 | 0.014 | 0.044 | 0.057 | 0.013 | 0.014 | −0.044 | −0.030 | 0.000 | 0.011 |
| | (0.046) | (0.044) | (0.038) | (0.036) | (0.035) | (0.033) | (0.013) | (0.012) | (0.051) | (0.048) | (0.048) | (0.046) |
| | [0.374] | [0.295] | [0.933] | [0.696] | [0.207] | [0.085] | [0.304] | [0.277] | [0.193] | [0.269] | [0.997] | [0.819] |
| Controls | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | 2.90 | 2.90 | 2.84 | 2.84 | 0.07 | 0.07 | 2.82 | 2.82 | 2.81 | 2.81 |
| Control SD | 1.00 | 1.00 | 0.83 | 0.83 | 0.76 | 0.76 | 0.25 | 0.25 | 1.12 | 1.12 | 1.07 | 1.07 |
| $R^2$ | 0.16 | 0.25 | 0.10 | 0.22 | 0.11 | 0.20 | 0.07 | 0.09 | 0.12 | 0.23 | 0.17 | 0.23 |
| Observations | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure S10b.

Table S28: Trust information sent by close ties

| | ICW: Trust close friends | | How true on WA: Family members | | How true: Info from family | | Trust most for info: Family | | Trust on WA: Family members | | Trust: Info from family | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
| *A. Pooled estimation* | | | | | | | | | | | | |
| Placebo incentives | -0.029 | -0.034 | 0.036 | 0.034 | -0.001 | -0.007 | -0.019 | -0.024 | 0.002 | -0.003 | -0.076 | -0.089 |
| | (0.049) | (0.047) | (0.041) | (0.039) | (0.037) | (0.036) | (0.025) | (0.024) | (0.052) | (0.051) | (0.050) | (0.049) |
| | [0.553] | [0.463] | [0.192] | [0.196] | [0.976] | [0.849] | [0.452] | [0.313] | [0.486] | [0.948] | [0.127] | [0.068] |
| Pooled treatment | -0.050 | -0.044 | -0.014 | -0.007 | -0.029 | -0.025 | -0.013 | -0.009 | -0.039 | -0.037 | -0.068 | -0.067 |
| | (0.033) | (0.032) | (0.029) | (0.028) | (0.026) | (0.025) | (0.018) | (0.017) | (0.036) | (0.034) | (0.035) | (0.034) |
| | [0.138] | [0.170] | [0.626] | [0.796] | [0.256] | [0.321] | [0.448] | [0.573] | [0.273] | [0.281] | [0.050] | [0.046] |
| *B. Disaggregated estimation* | | | | | | | | | | | | |
| Placebo incentives | −0.029 | −0.034 | 0.036 | 0.032 | −0.001 | −0.007 | −0.019 | −0.023 | 0.002 | −0.003 | −0.076 | −0.090 |
| | (0.049) | (0.047) | (0.041) | (0.039) | (0.037) | (0.036) | (0.025) | (0.024) | (0.052) | (0.051) | (0.050) | (0.049) |
| | [0.555] | [0.472] | [0.190] | [0.204] | [0.978] | [0.851] | [0.451] | [0.323] | [0.486] | [0.949] | [0.127] | [0.065] |
| Text information | −0.130 | −0.122 | −0.084 | −0.070 | −0.061 | −0.054 | −0.045 | −0.047 | −0.035 | −0.032 | −0.152 | −0.141 |
| | (0.061) | (0.058) | (0.051) | (0.049) | (0.048) | (0.046) | (0.030) | (0.028) | (0.064) | (0.062) | (0.063) | (0.061) |
| | [0.033] | [0.034] | [0.102] | [0.152] | [0.204] | [0.241] | [0.136] | [0.102] | [0.587] | [0.601] | [0.016] | [0.021] |
| Short podcast | 0.005 | 0.003 | 0.039 | 0.038 | 0.010 | 0.008 | 0.001 | −0.003 | 0.006 | −0.002 | −0.036 | −0.034 |
| | (0.045) | (0.043) | (0.038) | (0.036) | (0.035) | (0.033) | (0.023) | (0.022) | (0.046) | (0.045) | (0.046) | (0.044) |
| | [0.455] | [0.468] | [0.152] | [0.146] | [0.382] | [0.405] | [0.481] | [0.899] | [0.452] | [0.969] | [0.424] | [0.448] |
| Long podcast | −0.042 | −0.033 | −0.022 | −0.019 | −0.034 | −0.030 | 0.001 | 0.010 | −0.056 | −0.049 | −0.045 | −0.051 |
| | (0.044) | (0.042) | (0.039) | (0.038) | (0.035) | (0.033) | (0.023) | (0.022) | (0.047) | (0.046) | (0.046) | (0.045) |
| | [0.342] | [0.433] | [0.568] | [0.615] | [0.331] | [0.369] | [0.478] | [0.330] | [0.237] | [0.281] | [0.333] | [0.257] |
| Empathetic podcast | −0.077 | −0.067 | −0.028 | −0.015 | −0.051 | −0.039 | −0.028 | −0.018 | −0.070 | −0.064 | −0.085 | −0.085 |
| | (0.045) | (0.043) | (0.037) | (0.036) | (0.035) | (0.033) | (0.023) | (0.022) | (0.047) | (0.046) | (0.045) | (0.045) |
| | [0.083] | [0.118] | [0.446] | [0.677] | [0.138] | [0.238] | [0.217] | [0.410] | [0.141] | [0.168] | [0.061] | [0.057] |
| Controls | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | 3.29 | 3.29 | 3.44 | 3.44 | 0.47 | 0.47 | 3.34 | 3.34 | 3.52 | 3.52 |
| Control SD | 1.00 | 1.00 | 0.83 | 0.83 | 0.74 | 0.74 | 0.50 | 0.50 | 1.05 | 1.05 | 1.00 | 1.00 |
| $R^2$ | 0.19 | 0.26 | 0.12 | 0.19 | 0.11 | 0.19 | 0.08 | 0.17 | 0.14 | 0.20 | 0.13 | 0.18 |
| Observations | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure S10c.

Table S29: Traditional media consumption

| | ICW: Consume traditional media | | Get news from: Radio/TV | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| *A. Pooled estimation* | | | | |
| Placebo incentives | -0.034 | -0.029 | -0.013 | -0.011 |
| | (0.050) | (0.049) | (0.018) | (0.018) |
| | [0.246] | [0.281] | [0.246] | [0.281] |
| Pooled treatment | 0.001 | 0.001 | 0.001 | 0.001 |
| | (0.034) | (0.034) | (0.013) | (0.013) |
| | [0.968] | [0.968] | [0.968] | [0.968] |
| *B. Disaggregated estimation* | | | | |
| Placebo incentives | −0.034 | −0.031 | −0.013 | −0.012 |
| | (0.050) | (0.049) | (0.018) | (0.018) |
| | [0.243] | [0.265] | [0.243] | [0.265] |
| Text information | 0.088 | 0.096 | 0.033 | 0.035 |
| | (0.056) | (0.055) | (0.021) | (0.021) |
| | [0.116] | [0.083] | [0.116] | [0.088] |
| Short podcast | −0.003 | −0.013 | −0.001 | −0.005 |
| | (0.046) | (0.045) | (0.017) | (0.017) |
| | [0.478] | [0.385] | [0.478] | [0.391] |
| Long podcast | 0.002 | 0.004 | 0.001 | 0.002 |
| | (0.046) | (0.046) | (0.017) | (0.017) |
| | [0.963] | [0.937] | [0.963] | [0.922] |
| Empathetic podcast | −0.035 | −0.029 | −0.013 | −0.011 |
| | (0.046) | (0.046) | (0.017) | (0.017) |
| | [0.226] | [0.263] | [0.226] | [0.268] |
| Controls | × | ✓ | × | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | 0.83 | 0.83 |
| Control SD | 1.00 | 1.00 | 0.37 | 0.37 |
| $R^2$ | 0.12 | 0.13 | 0.12 | 0.13 |
| Observations | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure S11a.

Table S30: WhatsApp consumption

| | ICW: Consume WhatsApp | | Get news from: WhatsApp | | WA news freq: Family | | WA news freq: Large groups | | WA news freq: Orgs | |
|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| *A. Pooled estimation* | | | | | | | | | | |
| Placebo incentives | 0.136 | 0.135 | 0.072 | 0.066 | -0.055 | -0.053 | 0.088 | 0.070 | 0.127 | 0.120 |
| | (0.047) | (0.046) | (0.022) | (0.022) | (0.049) | (0.047) | (0.053) | (0.051) | (0.051) | (0.050) |
| | [0.004] | [0.003] | [0.001] | [0.002] | [0.128] | [0.131] | [0.097] | [0.172] | [0.013] | [0.016] |
| Pooled treatment | 0.158 | 0.157 | 0.066 | 0.064 | 0.011 | 0.020 | 0.075 | 0.067 | 0.182 | 0.180 |
| | (0.032) | (0.032) | (0.015) | (0.015) | (0.034) | (0.033) | (0.037) | (0.035) | (0.037) | (0.036) |
| | [0.000] | [0.000] | [0.000] | [0.000] | [0.749] | [0.546] | [0.042] | [0.058] | [0.000] | [0.000] |
| *B. Disaggregated estimation* | | | | | | | | | | |
| Placebo incentives | 0.136 | 0.135 | 0.072 | 0.066 | −0.055 | −0.053 | 0.088 | 0.069 | 0.128 | 0.124 |
| | (0.047) | (0.046) | (0.022) | (0.022) | (0.049) | (0.047) | (0.053) | (0.051) | (0.051) | (0.050) |
| | [0.004] | [0.003] | [0.001] | [0.002] | [0.128] | [0.130] | [0.099] | [0.174] | [0.013] | [0.013] |
| Text information | 0.057 | 0.064 | 0.022 | 0.023 | −0.028 | 0.006 | 0.054 | 0.048 | 0.073 | 0.077 |
| | (0.056) | (0.056) | (0.026) | (0.026) | (0.063) | (0.061) | (0.066) | (0.063) | (0.066) | (0.065) |
| | [0.310] | [0.249] | [0.394] | [0.370] | [0.328] | [0.927] | [0.414] | [0.443] | [0.268] | [0.235] |
| Short podcast | 0.219 | 0.216 | 0.094 | 0.091 | 0.044 | 0.036 | 0.076 | 0.081 | 0.243 | 0.229 |
| | (0.043) | (0.042) | (0.020) | (0.020) | (0.045) | (0.043) | (0.048) | (0.046) | (0.048) | (0.047) |
| | [0.000] | [0.000] | [0.000] | [0.000] | [0.329] | [0.399] | [0.117] | [0.078] | [0.000] | [0.000] |
| Long podcast | 0.191 | 0.185 | 0.080 | 0.076 | 0.010 | 0.021 | 0.132 | 0.112 | 0.191 | 0.188 |
| | (0.043) | (0.043) | (0.021) | (0.020) | (0.045) | (0.044) | (0.050) | (0.047) | (0.049) | (0.048) |
| | [0.000] | [0.000] | [0.000] | [0.000] | [0.822] | [0.637] | [0.008] | [0.018] | [0.000] | [0.000] |
| Empathetic podcast | 0.106 | 0.109 | 0.045 | 0.043 | −0.005 | 0.008 | 0.028 | 0.016 | 0.160 | 0.162 |
| | (0.043) | (0.042) | (0.020) | (0.020) | (0.044) | (0.042) | (0.048) | (0.047) | (0.049) | (0.047) |
| | [0.013] | [0.010] | [0.027] | [0.032] | [0.459] | [0.846] | [0.565] | [0.733] | [0.001] | [0.001] |
| Controls | × | ✓ | × | ✓ | × | ✓ | × | ✓ | × | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | 0.25 | 0.25 | 3.28 | 3.28 | 2.93 | 2.93 | 2.99 | 2.99 |
| Control SD | 1.00 | 1.00 | 0.43 | 0.43 | 1.01 | 1.01 | 1.10 | 1.10 | 1.12 | 1.12 |
| $R^2$ | 0.22 | 0.27 | 0.13 | 0.18 | 0.15 | 0.22 | 0.16 | 0.23 | 0.17 | 0.22 |
| Observations | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure S11b.

Table S31: Consumption of news from close ties

| | ICW: Consume news from close friends | | Get news from: Family | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| *A. Pooled estimation* | | | | |
| Placebo incentives | -0.011 | -0.019 | -0.005 | -0.010 |
| | (0.048) | (0.048) | (0.023) | (0.022) |
| | [0.824] | [0.687] | [0.824] | [0.644] |
| Pooled treatment | -0.028 | -0.027 | -0.013 | -0.013 |
| | (0.034) | (0.034) | (0.016) | (0.016) |
| | [0.414] | [0.431] | [0.414] | [0.409] |
| *B. Disaggregated estimation* | | | | |
| Placebo incentives | −0.010 | −0.021 | −0.005 | −0.010 |
| | (0.049) | (0.048) | (0.023) | (0.022) |
| | [0.829] | [0.667] | [0.829] | [0.648] |
| Text information | −0.057 | −0.050 | −0.026 | −0.023 |
| | (0.058) | (0.058) | (0.027) | (0.027) |
| | [0.331] | [0.387] | [0.331] | [0.393] |
| Short podcast | −0.015 | −0.023 | −0.007 | −0.011 |
| | (0.045) | (0.045) | (0.021) | (0.021) |
| | [0.733] | [0.610] | [0.733] | [0.610] |
| Long podcast | −0.060 | −0.054 | −0.028 | −0.026 |
| | (0.044) | (0.044) | (0.021) | (0.020) |
| | [0.176] | [0.216] | [0.176] | [0.209] |
| Empathetic podcast | 0.004 | 0.004 | 0.002 | 0.002 |
| | (0.046) | (0.045) | (0.021) | (0.021) |
| | [0.463] | [0.468] | [0.463] | [0.467] |
| Controls | × | ✓ | × | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | 0.32 | 0.32 |
| Control SD | 1.00 | 1.00 | 0.46 | 0.46 |
| $R^2$ | 0.11 | 0.14 | 0.11 | 0.14 |
| Observations | 4542 | 4542 | 4542 | 4542 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for preregistered direction when relevant) in square brackets. ICW estimate plotted in Figure S11c.

Table S32: Treatment effects on perceptions of government capacity

| | ICW: Government capacity | | Gov capacity: electricity | | Gov capacity: roads | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| *A. Pooled estimation* | | | | | | |
| Placebo incentives | -0.013 | -0.022 | 0.014 | 0.007 | -0.044 | -0.050 |
| | (0.049) | (0.047) | (0.066) | (0.064) | (0.063) | (0.062) |
| | [0.787] | [0.646] | [0.415] | [0.458] | [0.489] | [0.421] |
| Pooled treatment | 0.001 | 0.002 | 0.014 | 0.012 | -0.011 | -0.010 |
| | (0.035) | (0.034) | (0.047) | (0.046) | (0.045) | (0.045) |
| | [0.486] | [0.480] | [0.380] | [0.395] | [0.805] | [0.830] |
| *B. Disaggregated estimation* | | | | | | |
| Placebo incentives | −0.013 | −0.021 | 0.014 | 0.006 | −0.044 | −0.048 |
| | (0.049) | (0.047) | (0.066) | (0.064) | (0.063) | (0.062) |
| | [0.785] | [0.662] | [0.415] | [0.465] | [0.487] | [0.446] |
| Text information | −0.011 | 0.002 | −0.002 | 0.014 | −0.023 | −0.005 |
| | (0.060) | (0.059) | (0.082) | (0.082) | (0.079) | (0.078) |
| | [0.857] | [0.489] | [0.979] | [0.434] | [0.775] | [0.946] |
| Short podcast | 0.004 | 0.006 | −0.006 | 0.001 | 0.015 | 0.016 |
| | (0.045) | (0.044) | (0.061) | (0.060) | (0.059) | (0.058) |
| | [0.465] | [0.445] | [0.925] | [0.993] | [0.402] | [0.394] |
| Long podcast | 0.020 | 0.013 | 0.033 | 0.023 | 0.013 | 0.011 |
| | (0.045) | (0.045) | (0.062) | (0.061) | (0.059) | (0.059) |
| | [0.331] | [0.387] | [0.297] | [0.351] | [0.412] | [0.429] |
| Empathetic podcast | −0.015 | −0.016 | 0.024 | 0.024 | −0.057 | −0.054 |
| | (0.046) | (0.046) | (0.062) | (0.061) | (0.060) | (0.059) |
| | [0.750] | [0.728] | [0.348] | [0.344] | [0.340] | [0.357] |
| Controls | × | ✓ | × | ✓ | × | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | 3.30 | 3.30 | 3.38 | 3.38 |
| Control SD | 1.00 | 1.00 | 1.35 | 1.35 | 1.30 | 1.30 |
| $R^2$ | 0.07 | 0.11 | 0.08 | 0.10 | 0.07 | 0.09 |
| Observations | 4543 | 4543 | 4543 | 4543 | 4543 | 4543 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure S12.

Table S33: Treatment effects on populist attitudes

| | ICW: Populism | | Ordinary people no influence | | Policies benefit elites | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| *A. Pooled estimation* | | | | | | |
| Placebo incentives | -0.020 | -0.016 | -0.030 | -0.026 | -0.010 | -0.011 |
| | (0.050) | (0.049) | (0.061) | (0.061) | (0.056) | (0.055) |
| | [0.347] | [0.371] | [0.309] | [0.335] | [0.430] | [0.423] |
| Pooled treatment | -0.007 | -0.005 | 0.019 | 0.020 | -0.031 | -0.028 |
| | (0.035) | (0.035) | (0.043) | (0.043) | (0.040) | (0.040) |
| | [0.416] | [0.441] | [0.663] | [0.650] | [0.214] | [0.240] |
| *B. Disaggregated estimation* | | | | | | |
| Placebo incentives | −0.020 | −0.017 | −0.031 | −0.026 | −0.010 | −0.011 |
| | (0.050) | (0.049) | (0.061) | (0.061) | (0.056) | (0.056) |
| | [0.345] | [0.365] | [0.308] | [0.334] | [0.427] | [0.421] |
| Text information | 0.019 | 0.028 | 0.009 | 0.018 | 0.028 | 0.034 |
| | (0.061) | (0.061) | (0.077) | (0.077) | (0.070) | (0.070) |
| | [0.755] | [0.649] | [0.903] | [0.815] | [0.690] | [0.627] |
| Short podcast | −0.003 | 0.002 | 0.021 | 0.021 | −0.025 | −0.020 |
| | (0.045) | (0.045) | (0.056) | (0.056) | (0.052) | (0.052) |
| | [0.475] | [0.959] | [0.708] | [0.713] | [0.318] | [0.351] |
| Long podcast | 0.007 | 0.010 | 0.035 | 0.036 | −0.018 | −0.018 |
| | (0.047) | (0.047) | (0.058) | (0.058) | (0.052) | (0.052) |
| | [0.886] | [0.835] | [0.551] | [0.530] | [0.363] | [0.364] |
| Empathetic podcast | −0.039 | −0.040 | 0.005 | 0.003 | −0.079 | −0.075 |
| | (0.047) | (0.047) | (0.058) | (0.058) | (0.053) | (0.053) |
| | [0.206] | [0.195] | [0.925] | [0.962] | [0.068] | [0.078] |
| Controls | × | ✓ | × | ✓ | × | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | 3.68 | 3.68 | 3.57 | 3.57 |
| Control SD | 1.00 | 1.00 | 1.24 | 1.24 | 1.13 | 1.13 |
| $R^2$ | 0.07 | 0.08 | 0.06 | 0.07 | 0.07 | 0.08 |
| Observations | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure S13.

Table S34: Fact check requests (Any)

| | Fact check requests (Any) | |
|---|---|---|
| | (1) | (2) |
| *A. Pooled estimation* | | |
| Placebo incentives | 0.033 | 0.033 |
| | (0.008) | (0.008) |
| | [0.000] | [0.000] |
| Pooled treatment | 0.031 | 0.031 |
| | (0.004) | (0.004) |
| | [0.000] | [0.000] |
| *B. Disaggregated estimation* | | |
| Placebo incentives | 0.033 | 0.033 |
| | (0.008) | (0.008) |
| | [0.000] | [0.000] |
| Text information | 0.066 | 0.066 |
| | (0.014) | (0.014) |
| | [0.000] | [0.000] |
| Short podcast | 0.029 | 0.029 |
| | (0.007) | (0.007) |
| | [0.000] | [0.000] |
| Long podcast | 0.021 | 0.021 |
| | (0.006) | (0.006) |
| | [0.001] | [0.000] |
| Empathetic podcast | 0.027 | 0.028 |
| | (0.007) | (0.007) |
| | [0.000] | [0.000] |
| Controls | × | ✓ |
| Directional hypothesis | × | × |
| Control Mean | 0.00 | 0.00 |
| Control SD | 0.07 | 0.07 |
| $R^2$ | 0.06 | 0.06 |
| Observations | 4543 | 4543 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. Standardizes estimate plotted in Figure S14.

Table S35: Podcast take-up

| | ICW: Podcast take-up | | How often listens to podcasts | | Listens to WCW | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| *A. Pooled estimation* | | | | | | |
| Placebo incentives | 0.320 | 0.320 | 0.020 | 0.020 | 0.188 | 0.188 |
| | (0.050) | (0.049) | (0.055) | (0.055) | (0.023) | (0.022) |
| | [0.000] | [0.000] | [0.359] | [0.357] | [0.000] | [0.000] |
| Treatment-Fact | 0.599 | 0.588 | 0.146 | 0.130 | 0.326 | 0.323 |
| | (0.040) | (0.040) | (0.046) | (0.046) | (0.018) | (0.018) |
| | [0.000] | [0.000] | [0.001] | [0.002] | [0.000] | [0.000] |
| Treatment-Prime | 0.531 | 0.532 | 0.063 | 0.062 | 0.305 | 0.308 |
| | (0.041) | (0.041) | (0.046) | (0.046) | (0.018) | (0.018) |
| | [0.000] | [0.000] | [0.087] | [0.086] | [0.000] | [0.000] |
| *B. Disaggregated estimation* | | | | | | |
| Placebo incentives | 0.321 | 0.324 | 0.020 | 0.020 | 0.188 | 0.191 |
| | (0.050) | (0.049) | (0.055) | (0.055) | (0.023) | (0.022) |
| | [0.000] | [0.000] | [0.357] | [0.355] | [0.000] | [0.000] |
| Text information-Fact | −0.018 | −0.022 | −0.036 | −0.056 | 0.002 | 0.004 |
| | (0.080) | (0.079) | (0.099) | (0.096) | (0.032) | (0.032) |
| | [0.822] | [0.781] | [0.717] | [0.563] | [0.477] | [0.447] |
| Text information-Prime | −0.022 | −0.006 | −0.134 | −0.109 | 0.025 | 0.028 |
| | (0.082) | (0.080) | (0.094) | (0.092) | (0.033) | (0.033) |
| | [0.788] | [0.941] | [0.154] | [0.238] | [0.227] | [0.194] |
| Short podcast-Fact | 0.665 | 0.648 | 0.236 | 0.226 | 0.339 | 0.332 |
| | (0.060) | (0.060) | (0.066) | (0.065) | (0.027) | (0.027) |
| | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] |
| Short podcast-Prime | 0.631 | 0.626 | 0.086 | 0.081 | 0.359 | 0.360 |
| | (0.062) | (0.062) | (0.066) | (0.066) | (0.027) | (0.027) |
| | [0.000] | [0.000] | [0.096] | [0.108] | [0.000] | [0.000] |
| Long podcast-Fact | 0.750 | 0.738 | 0.191 | 0.172 | 0.405 | 0.402 |
| | (0.062) | (0.061) | (0.067) | (0.066) | (0.028) | (0.028) |
| | [0.000] | [0.000] | [0.002] | [0.005] | [0.000] | [0.000] |
| Long podcast-Prime | 0.546 | 0.557 | 0.053 | 0.059 | 0.317 | 0.323 |
| | (0.064) | (0.063) | (0.070) | (0.070) | (0.028) | (0.027) |
| | [0.000] | [0.000] | [0.225] | [0.200] | [0.000] | [0.000] |
| Empathetic podcast-Fact | 0.652 | 0.640 | 0.089 | 0.071 | 0.375 | 0.373 |
| | (0.062) | (0.061) | (0.069) | (0.067) | (0.027) | (0.027) |
| | [0.000] | [0.000] | [0.097] | [0.144] | [0.000] | [0.000] |
| Empathetic podcast-Prime | 0.677 | 0.672 | 0.144 | 0.128 | 0.374 | 0.374 |
| | (0.064) | (0.062) | (0.068) | (0.066) | (0.028) | (0.028) |
| | [0.000] | [0.000] | [0.017] | [0.027] | [0.000] | [0.000] |
| Controls | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | 3.18 | 3.18 | 0.20 | 0.20 |
| Control SD | 1.00 | 1.00 | 1.25 | 1.25 | 0.40 | 0.40 |
| $R^2$ | 0.22 | 0.26 | 0.23 | 0.26 | 0.20 | 0.23 |
| Observations | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure S15a.

Table S36: Treatment knowledge

| | ICW: Treatment knowledge | | Fact-check quiz knowledge | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| *A. Pooled estimation* | | | | |
| Placebo incentives | 0.112 | 0.133 | 0.159 | 0.186 |
| | (0.047) | (0.046) | (0.067) | (0.066) |
| | [0.009] | [0.002] | [0.009] | [0.002] |
| Treatment-Fact | 0.397 | 0.385 | 0.564 | 0.548 |
| | (0.040) | (0.039) | (0.057) | (0.056) |
| | [0.000] | [0.000] | [0.000] | [0.000] |
| Treatment-Prime | 0.425 | 0.436 | 0.603 | 0.620 |
| | (0.039) | (0.038) | (0.056) | (0.054) |
| | [0.000] | [0.000] | [0.000] | [0.000] |
| *B. Disaggregated estimation* | | | | |
| Placebo incentives | 0.113 | 0.132 | 0.160 | 0.187 |
| | (0.047) | (0.046) | (0.067) | (0.066) |
| | [0.008] | [0.002] | [0.008] | [0.002] |
| Text information-Fact | 0.300 | 0.302 | 0.427 | 0.427 |
| | (0.089) | (0.086) | (0.126) | (0.122) |
| | [0.000] | [0.000] | [0.000] | [0.000] |
| Text information-Prime | 0.366 | 0.382 | 0.519 | 0.541 |
| | (0.084) | (0.079) | (0.119) | (0.112) |
| | [0.000] | [0.000] | [0.000] | [0.000] |
| Short podcast-Fact | 0.318 | 0.319 | 0.451 | 0.451 |
| | (0.061) | (0.060) | (0.087) | (0.085) |
| | [0.000] | [0.000] | [0.000] | [0.000] |
| Short podcast-Prime | 0.458 | 0.438 | 0.650 | 0.623 |
| | (0.058) | (0.057) | (0.082) | (0.080) |
| | [0.000] | [0.000] | [0.000] | [0.000] |
| Long podcast-Fact | 0.423 | 0.419 | 0.601 | 0.593 |
| | (0.064) | (0.062) | (0.090) | (0.088) |
| | [0.000] | [0.000] | [0.000] | [0.000] |
| Long podcast-Prime | 0.325 | 0.355 | 0.461 | 0.503 |
| | (0.060) | (0.057) | (0.085) | (0.081) |
| | [0.000] | [0.000] | [0.000] | [0.000] |
| Empathetic podcast-Fact | 0.494 | 0.460 | 0.701 | 0.653 |
| | (0.059) | (0.058) | (0.083) | (0.082) |
| | [0.000] | [0.000] | [0.000] | [0.000] |
| Empathetic podcast-Prime | 0.523 | 0.546 | 0.742 | 0.774 |
| | (0.061) | (0.060) | (0.087) | (0.085) |
| | [0.000] | [0.000] | [0.000] | [0.000] |
| Controls | ✓ | ✓ | ✓ | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | 2.40 | 2.40 |
| Control SD | 1.00 | 1.00 | 1.42 | 1.42 |
| $R^2$ | 0.22 | 0.27 | 0.22 | 0.27 |
| Observations | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure S15b.

## Table S37: Discernment between fake and true

| | ICW: Discernment | | Alcohol and COVID (true) | | Foreign restaurant workers (false) | | How COVID spreads (true) | | Matric marks (false) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| *A. Pooled estimation* | | | | | | | | | | |
| Placebo incentives | 0.045 | 0.055 | -0.020 | -0.018 | 0.049 | 0.044 | 0.066 | 0.076 | 0.035 | 0.037 |
| | (0.050) | (0.049) | (0.065) | (0.065) | (0.067) | (0.066) | (0.048) | (0.048) | (0.071) | (0.070) |
| | [0.180] | [0.128] | [0.761] | [0.780] | [0.233] | [0.254] | [0.085] | [0.057] | [0.310] | [0.298] |
| Treatment-Fact | 0.023 | 0.025 | -0.160 | -0.153 | 0.164 | 0.163 | 0.034 | 0.038 | 0.040 | 0.040 |
| | (0.040) | (0.039) | (0.053) | (0.053) | (0.054) | (0.053) | (0.039) | (0.039) | (0.055) | (0.054) |
| | [0.281] | [0.264] | [0.003] | [0.004] | [0.001] | [0.001] | [0.195] | [0.166] | [0.234] | [0.234] |
| Treatment-Prime | 0.093 | 0.098 | -0.092 | -0.089 | 0.185 | 0.185 | 0.066 | 0.074 | 0.083 | 0.083 |
| | (0.040) | (0.039) | (0.053) | (0.053) | (0.055) | (0.053) | (0.038) | (0.038) | (0.056) | (0.055) |
| | [0.010] | [0.007] | [0.081] | [0.089] | [0.000] | [0.000] | [0.043] | [0.027] | [0.069] | [0.067] |
| *B. Disaggregated estimation* | | | | | | | | | | |
| Placebo incentives | 0.046 | 0.057 | −0.020 | −0.015 | 0.049 | 0.043 | 0.066 | 0.076 | 0.035 | 0.036 |
| | (0.050) | (0.049) | (0.065) | (0.065) | (0.067) | (0.066) | (0.048) | (0.048) | (0.071) | (0.070) |
| | [0.178] | [0.121] | [0.754] | [0.823] | [0.233] | [0.255] | [0.086] | [0.057] | [0.309] | [0.303] |
| Text information-Fact | 0.045 | 0.038 | −0.039 | −0.035 | 0.202 | 0.189 | 0.034 | 0.046 | −0.082 | −0.090 |
| | (0.086) | (0.084) | (0.103) | (0.103) | (0.104) | (0.103) | (0.081) | (0.081) | (0.113) | (0.112) |
| | [0.302] | [0.327] | [0.706] | [0.730] | [0.026] | [0.033] | [0.338] | [0.284] | [0.465] | [0.421] |
| Text information-Prime | 0.188 | 0.192 | 0.032 | 0.055 | 0.185 | 0.164 | 0.086 | 0.096 | 0.158 | 0.137 |
| | (0.084) | (0.081) | (0.107) | (0.107) | (0.112) | (0.107) | (0.073) | (0.073) | (0.121) | (0.120) |
| | [0.012] | [0.009] | [0.381] | [0.304] | [0.050] | [0.063] | [0.121] | [0.095] | [0.095] | [0.128] |
| Short podcast-Fact | 0.032 | 0.038 | −0.123 | −0.114 | 0.150 | 0.158 | 0.079 | 0.080 | −0.018 | −0.006 |
| | (0.058) | (0.058) | (0.081) | (0.081) | (0.077) | (0.075) | (0.053) | (0.053) | (0.078) | (0.077) |
| | [0.293] | [0.257] | [0.128] | [0.158] | [0.026] | [0.018] | [0.069] | [0.066] | [0.821] | [0.938] |
| Short podcast-Prime | 0.019 | 0.005 | −0.186 | −0.180 | 0.152 | 0.132 | 0.025 | 0.023 | 0.063 | 0.050 |
| | (0.057) | (0.056) | (0.075) | (0.075) | (0.078) | (0.076) | (0.054) | (0.053) | (0.079) | (0.077) |
| | [0.370] | [0.465] | [0.013] | [0.016] | [0.026] | [0.042] | [0.318] | [0.334] | [0.214] | [0.259] |
| Long podcast-Fact | −0.084 | −0.075 | −0.215 | −0.204 | 0.037 | 0.033 | −0.009 | −0.005 | −0.025 | −0.011 |
| | (0.058) | (0.057) | (0.081) | (0.081) | (0.081) | (0.080) | (0.061) | (0.060) | (0.087) | (0.085) |
| | [0.146] | [0.191] | [0.008] | [0.012] | [0.324] | [0.341] | [0.888] | [0.940] | [0.774] | [0.895] |
| Long podcast-Prime | 0.045 | 0.063 | −0.110 | −0.106 | 0.130 | 0.146 | 0.099 | 0.114 | −0.014 | −0.012 |
| | (0.059) | (0.059) | (0.080) | (0.080) | (0.082) | (0.080) | (0.054) | (0.054) | (0.082) | (0.081) |
| | [0.224] | [0.139] | [0.168] | [0.187] | [0.056] | [0.033] | [0.034] | [0.018] | [0.862] | [0.878] |
| Empathetic podcast-Fact | 0.110 | 0.100 | −0.199 | −0.184 | 0.279 | 0.279 | 0.027 | 0.031 | 0.215 | 0.195 |
| | (0.057) | (0.056) | (0.078) | (0.078) | (0.077) | (0.077) | (0.057) | (0.057) | (0.076) | (0.077) |
| | [0.028] | [0.037] | [0.011] | [0.019] | [0.000] | [0.000] | [0.318] | [0.294] | [0.002] | [0.005] |
| Empathetic podcast-Prime | 0.175 | 0.185 | −0.034 | −0.038 | 0.282 | 0.296 | 0.065 | 0.076 | 0.172 | 0.193 |
| | (0.058) | (0.057) | (0.076) | (0.076) | (0.083) | (0.079) | (0.056) | (0.056) | (0.083) | (0.082) |
| | [0.001] | [0.001] | [0.656] | [0.619] | [0.000] | [0.000] | [0.124] | [0.087] | [0.019] | [0.009] |
| Controls | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | -2.41 | -2.41 | 2.78 | 2.78 | -1.58 | -1.58 | 3.07 | 3.07 |
| Control SD | 1.00 | 1.00 | 1.27 | 1.27 | 1.32 | 1.32 | 0.97 | 0.97 | 1.35 | 1.35 |
| $R^2$ | 0.08 | 0.13 | 0.08 | 0.09 | 0.11 | 0.16 | 0.08 | 0.10 | 0.10 | 0.14 |
| Observations | 4541 | 4541 | 4143 | 4143 | 4143 | 4143 | 4143 | 4143 | 4143 | 4143 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure S16a.

## Table S38: Identification of conspiracy theories

| | ICW: Conspiracy theories | | AIDS intentionally created (reversed) | | Nelson Mandela died in 1985 (reversed) | | Vaccines cause infertility (reversed) | | Vaccines have microchips (reversed) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| *A. Pooled estimation* | | | | | | | | | | |
| Placebo incentives | -0.024 | -0.003 | -0.095 | -0.077 | 0.013 | 0.030 | 0.015 | 0.040 | -0.012 | 0.012 |
| | (0.050) | (0.049) | (0.070) | (0.068) | (0.070) | (0.068) | (0.067) | (0.066) | (0.069) | (0.068) |
| | [0.635] | [0.945] | [0.170] | [0.258] | [0.427] | [0.329] | [0.412] | [0.270] | [0.867] | [0.431] |
| Treatment-Fact | 0.077 | 0.074 | 0.081 | 0.086 | 0.071 | 0.072 | 0.100 | 0.098 | 0.071 | 0.061 |
| | (0.040) | (0.039) | (0.055) | (0.054) | (0.055) | (0.054) | (0.054) | (0.054) | (0.054) | (0.053) |
| | [0.026] | [0.027] | [0.070] | [0.057] | [0.098] | [0.092] | [0.033] | [0.034] | [0.094] | [0.124] |
| Treatment-Prime | 0.131 | 0.142 | 0.061 | 0.073 | 0.115 | 0.130 | 0.253 | 0.267 | 0.149 | 0.159 |
| | (0.039) | (0.038) | (0.055) | (0.054) | (0.054) | (0.053) | (0.053) | (0.052) | (0.054) | (0.053) |
| | [0.000] | [0.000] | [0.135] | [0.089] | [0.017] | [0.007] | [0.000] | [0.000] | [0.003] | [0.001] |
| *B. Disaggregated estimation* | | | | | | | | | | |
| Placebo incentives | −0.024 | −0.003 | −0.095 | −0.079 | 0.013 | 0.031 | 0.015 | 0.041 | −0.011 | 0.012 |
| | (0.050) | (0.049) | (0.070) | (0.068) | (0.070) | (0.068) | (0.068) | (0.066) | (0.069) | (0.068) |
| | [0.637] | [0.956] | [0.170] | [0.247] | [0.427] | [0.325] | [0.411] | [0.269] | [0.870] | [0.430] |
| Text information-Fact | 0.028 | 0.034 | 0.018 | 0.028 | 0.095 | 0.102 | −0.027 | −0.030 | 0.033 | 0.039 |
| | (0.079) | (0.079) | (0.116) | (0.117) | (0.111) | (0.109) | (0.112) | (0.113) | (0.105) | (0.105) |
| | [0.360] | [0.332] | [0.440] | [0.406] | [0.196] | [0.175] | [0.809] | [0.793] | [0.376] | [0.356] |
| Text information-Prime | 0.176 | 0.177 | 0.179 | 0.182 | 0.077 | 0.078 | 0.276 | 0.282 | 0.222 | 0.219 |
| | (0.074) | (0.073) | (0.109) | (0.107) | (0.101) | (0.100) | (0.104) | (0.105) | (0.101) | (0.102) |
| | [0.009] | [0.008] | [0.050] | [0.045] | [0.224] | [0.217] | [0.004] | [0.004] | [0.014] | [0.016] |
| Short podcast-Fact | 0.021 | 0.020 | 0.022 | 0.024 | 0.069 | 0.070 | 0.013 | 0.016 | −0.022 | −0.026 |
| | (0.061) | (0.058) | (0.082) | (0.081) | (0.083) | (0.079) | (0.081) | (0.079) | (0.081) | (0.079) |
| | [0.364] | [0.365] | [0.397] | [0.382] | [0.203] | [0.189] | [0.438] | [0.420] | [0.790] | [0.743] |
| Short podcast-Prime | 0.057 | 0.058 | −0.021 | −0.030 | 0.060 | 0.061 | 0.108 | 0.117 | 0.124 | 0.125 |
| | (0.057) | (0.055) | (0.079) | (0.078) | (0.079) | (0.077) | (0.078) | (0.076) | (0.076) | (0.075) |
| | [0.159] | [0.145] | [0.789] | [0.697] | [0.226] | [0.214] | [0.082] | [0.063] | [0.050] | [0.047] |
| Long podcast-Fact | 0.082 | 0.092 | 0.075 | 0.087 | 0.059 | 0.074 | 0.129 | 0.135 | 0.086 | 0.095 |
| | (0.057) | (0.055) | (0.081) | (0.080) | (0.082) | (0.080) | (0.080) | (0.078) | (0.079) | (0.078) |
| | [0.078] | [0.048] | [0.177] | [0.138] | [0.235] | [0.176] | [0.054] | [0.042] | [0.138] | [0.112] |
| Long podcast-Prime | 0.134 | 0.159 | 0.089 | 0.121 | 0.117 | 0.145 | 0.249 | 0.274 | 0.129 | 0.145 |
| | (0.058) | (0.055) | (0.080) | (0.078) | (0.080) | (0.077) | (0.078) | (0.076) | (0.080) | (0.078) |
| | [0.010] | [0.002] | [0.134] | [0.061] | [0.073] | [0.030] | [0.001] | [0.000] | [0.054] | [0.031] |
| Empathetic podcast-Fact | 0.150 | 0.130 | 0.175 | 0.172 | 0.077 | 0.048 | 0.215 | 0.200 | 0.166 | 0.130 |
| | (0.055) | (0.054) | (0.077) | (0.076) | (0.080) | (0.080) | (0.075) | (0.075) | (0.076) | (0.075) |
| | [0.003] | [0.009] | [0.011] | [0.012] | [0.169] | [0.273] | [0.002] | [0.004] | [0.014] | [0.040] |
| Empathetic podcast-Prime | 0.183 | 0.198 | 0.061 | 0.079 | 0.190 | 0.204 | 0.400 | 0.411 | 0.160 | 0.179 |
| | (0.057) | (0.054) | (0.081) | (0.079) | (0.079) | (0.076) | (0.075) | (0.074) | (0.078) | (0.076) |
| | [0.001] | [0.000] | [0.225] | [0.161] | [0.008] | [0.004] | [0.000] | [0.000] | [0.021] | [0.010] |
| Controls | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | -2.34 | -2.34 | -2.24 | -2.24 | -2.39 | -2.39 | -2.36 | -2.36 |
| Control SD | 1.00 | 1.00 | 1.38 | 1.38 | 1.36 | 1.36 | 1.35 | 1.35 | 1.35 | 1.35 |
| $R^2$ | 0.09 | 0.16 | 0.08 | 0.12 | 0.08 | 0.15 | 0.08 | 0.13 | 0.07 | 0.12 |
| Observations | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure S16b.

# Table S39: Knowledge of verification methods (part 1)

| | ICW: Verification knowledge | | Avoid misinfo: Ask others (reversed) | | Avoid misinfo: Seek reputable orgs | | How verify (use sources) | | Strategy: Ask experts | | Strategy: Ask themselves (reversed) | | Strategy: Check popular source (reversed) | | Strategy: Talk to others (reversed) | | Strategy: Use image search | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) |
| *A. Pooled estimation* | | | | | | | | | | | | | | | | | | |
| Placebo incentives | 0.038 | 0.045 | 0.012 | 0.010 | 0.025 | 0.028 | -0.026 | -0.024 | 0.022 | 0.025 | -0.021 | -0.021 | -0.012 | -0.011 | 0.001 | 0.003 | 0.035 | 0.033 |
| | (0.050) | (0.050) | (0.018) | (0.018) | (0.024) | (0.023) | (0.051) | (0.049) | (0.025) | (0.024) | (0.017) | (0.017) | (0.025) | (0.024) | (0.019) | (0.019) | (0.017) | (0.017) |
| | [0.222] | [0.183] | [0.250] | [0.293] | [0.151] | [0.113] | [0.604] | [0.618] | [0.189] | [0.157] | [0.199] | [0.199] | [0.630] | [0.648] | [0.474] | [0.434] | [0.022] | [0.027] |
| Treatment-Fact | 0.056 | 0.055 | -0.017 | -0.014 | 0.041 | 0.041 | 0.010 | 0.006 | 0.032 | 0.028 | -0.019 | -0.020 | -0.013 | -0.016 | -0.001 | -0.003 | 0.075 | 0.073 |
| | (0.041) | (0.041) | (0.014) | (0.014) | (0.019) | (0.019) | (0.041) | (0.040) | (0.020) | (0.019) | (0.013) | (0.013) | (0.019) | (0.019) | (0.016) | (0.015) | (0.014) | (0.013) |
| | [0.085] | [0.089] | [0.224] | [0.288] | [0.017] | [0.016] | [0.400] | [0.440] | [0.052] | [0.074] | [0.137] | [0.114] | [0.504] | [0.420] | [0.936] | [0.838] | [0.000] | [0.000] |
| Treatment-Prime | 0.133 | 0.138 | -0.023 | -0.021 | 0.022 | 0.026 | 0.046 | 0.058 | 0.064 | 0.069 | -0.007 | -0.009 | -0.017 | -0.021 | -0.002 | -0.005 | 0.066 | 0.068 |
| | (0.041) | (0.042) | (0.013) | (0.013) | (0.019) | (0.019) | (0.041) | (0.040) | (0.020) | (0.019) | (0.013) | (0.012) | (0.019) | (0.019) | (0.016) | (0.015) | (0.014) | (0.014) |
| | [0.001] | [0.000] | [0.083] | [0.120] | [0.131] | [0.088] | [0.132] | [0.072] | [0.001] | [0.000] | [0.564] | [0.464] | [0.369] | [0.288] | [0.913] | [0.766] | [0.000] | [0.000] |
| *B. Disaggregated estimation* | | | | | | | | | | | | | | | | | | |
| Placebo incentives | 0.038 | 0.046 | 0.012 | 0.009 | 0.025 | 0.029 | −0.026 | −0.025 | 0.022 | 0.024 | −0.021 | −0.022 | −0.012 | −0.011 | 0.001 | 0.003 | 0.035 | 0.034 |
| | (0.050) | (0.050) | (0.018) | (0.018) | (0.024) | (0.023) | (0.051) | (0.049) | (0.025) | (0.024) | (0.017) | (0.017) | (0.025) | (0.024) | (0.019) | (0.019) | (0.017) | (0.017) |
| | [0.221] | [0.179] | [0.250] | [0.299] | [0.151] | [0.109] | [0.611] | [0.613] | [0.190] | [0.160] | [0.200] | [0.181] | [0.627] | [0.645] | [0.472] | [0.434] | [0.022] | [0.025] |
| Text information-Fact | 0.125 | 0.126 | 0.031 | 0.033 | 0.040 | 0.042 | 0.012 | 0.015 | 0.081 | 0.076 | −0.024 | −0.024 | −0.032 | −0.038 | 0.008 | 0.009 | 0.024 | 0.022 |
| | (0.087) | (0.087) | (0.032) | (0.031) | (0.041) | (0.040) | (0.084) | (0.079) | (0.041) | (0.040) | (0.027) | (0.027) | (0.041) | (0.040) | (0.032) | (0.032) | (0.028) | (0.027) |
| | [0.076] | [0.073] | [0.165] | [0.149] | [0.165] | [0.147] | [0.442] | [0.426] | [0.023] | [0.028] | [0.381] | [0.380] | [0.429] | [0.338] | [0.395] | [0.392] | [0.190] | [0.206] |
| Text information-Prime | 0.204 | 0.213 | −0.008 | −0.006 | 0.032 | 0.038 | −0.068 | −0.062 | 0.061 | 0.066 | −0.037 | −0.042 | 0.010 | 0.006 | 0.011 | 0.010 | 0.052 | 0.053 |
| | (0.085) | (0.084) | (0.028) | (0.028) | (0.040) | (0.039) | (0.085) | (0.080) | (0.041) | (0.041) | (0.027) | (0.027) | (0.040) | (0.039) | (0.031) | (0.031) | (0.029) | (0.029) |
| | [0.008] | [0.006] | [0.777] | [0.817] | [0.214] | [0.166] | [0.427] | [0.438] | [0.069] | [0.053] | [0.178] | [0.125] | [0.396] | [0.438] | [0.358] | [0.378] | [0.039] | [0.035] |
| Short podcast-Fact | 0.088 | 0.090 | −0.025 | −0.027 | 0.027 | 0.028 | 0.049 | 0.045 | 0.006 | 0.006 | −0.009 | −0.010 | 0.018 | 0.016 | −0.011 | −0.008 | 0.082 | 0.083 |
| | (0.061) | (0.060) | (0.019) | (0.019) | (0.028) | (0.028) | (0.060) | (0.058) | (0.029) | (0.028) | (0.019) | (0.018) | (0.028) | (0.028) | (0.023) | (0.023) | (0.022) | (0.021) |
| | [0.073] | [0.068] | [0.193] | [0.162] | [0.165] | [0.155] | [0.206] | [0.220] | [0.412] | [0.412] | [0.647] | [0.573] | [0.264] | [0.283] | [0.622] | [0.732] | [0.000] | [0.000] |
| Short podcast-Prime | 0.158 | 0.144 | 0.020 | 0.022 | −0.007 | −0.011 | 0.074 | 0.062 | 0.060 | 0.057 | 0.011 | 0.012 | −0.030 | −0.031 | −0.009 | −0.012 | 0.069 | 0.065 |
| | (0.061) | (0.061) | (0.021) | (0.021) | (0.028) | (0.028) | (0.059) | (0.057) | (0.029) | (0.028) | (0.018) | (0.018) | (0.029) | (0.028) | (0.023) | (0.023) | (0.021) | (0.021) |
| | [0.005] | [0.009] | [0.180] | [0.145] | [0.814] | [0.700] | [0.104] | [0.141] | [0.018] | [0.021] | [0.273] | [0.255] | [0.297] | [0.271] | [0.696] | [0.586] | [0.001] | [0.001] |
| Long podcast-Fact | −0.001 | 0.010 | −0.016 | −0.016 | 0.027 | 0.027 | −0.029 | −0.038 | 0.029 | 0.022 | −0.017 | −0.015 | −0.007 | −0.007 | −0.007 | −0.008 | 0.077 | 0.074 |
| | (0.062) | (0.062) | (0.020) | (0.020) | (0.029) | (0.029) | (0.061) | (0.059) | (0.029) | (0.029) | (0.020) | (0.019) | (0.029) | (0.029) | (0.023) | (0.023) | (0.022) | (0.021) |
| | [0.991] | [0.435] | [0.436] | [0.436] | [0.176] | [0.177] | [0.640] | [0.524] | [0.165] | [0.221] | [0.397] | [0.438] | [0.819] | [0.802] | [0.772] | [0.717] | [0.000] | [0.000] |
| Long podcast-Prime | 0.042 | 0.055 | −0.048 | −0.044 | 0.042 | 0.055 | −0.028 | 0.009 | 0.081 | 0.097 | −0.008 | −0.012 | −0.029 | −0.037 | −0.030 | −0.036 | 0.049 | 0.057 |
| | (0.061) | (0.062) | (0.018) | (0.018) | (0.029) | (0.028) | (0.059) | (0.056) | (0.029) | (0.028) | (0.018) | (0.018) | (0.029) | (0.029) | (0.024) | (0.023) | (0.021) | (0.020) |
| | [0.248] | [0.188] | [0.007] | [0.013] | [0.070] | [0.026] | [0.635] | [0.438] | [0.002] | [0.000] | [0.672] | [0.503] | [0.316] | [0.200] | [0.202] | [0.123] | [0.010] | [0.002] |
| Empathetic podcast-Fact | 0.049 | 0.033 | −0.030 | −0.021 | 0.069 | 0.069 | 0.008 | 0.001 | 0.041 | 0.036 | −0.030 | −0.031 | −0.042 | −0.046 | 0.010 | 0.002 | 0.087 | 0.083 |
| | (0.060) | (0.060) | (0.019) | (0.019) | (0.029) | (0.029) | (0.061) | (0.059) | (0.029) | (0.029) | (0.019) | (0.019) | (0.028) | (0.028) | (0.022) | (0.022) | (0.021) | (0.021) |
| | [0.209] | [0.291] | [0.124] | [0.277] | [0.008] | [0.008] | [0.446] | [0.491] | [0.081] | [0.103] | [0.115] | [0.100] | [0.140] | [0.107] | [0.324] | [0.472] | [0.000] | [0.000] |
| Empathetic podcast-Prime | 0.169 | 0.182 | −0.051 | −0.050 | 0.026 | 0.030 | 0.147 | 0.161 | 0.051 | 0.054 | −0.011 | −0.012 | −0.006 | −0.005 | 0.029 | 0.030 | 0.087 | 0.089 |
| | (0.065) | (0.066) | (0.018) | (0.018) | (0.029) | (0.028) | (0.062) | (0.060) | (0.029) | (0.029) | (0.019) | (0.019) | (0.029) | (0.028) | (0.022) | (0.022) | (0.023) | (0.022) |
| | [0.005] | [0.003] | [0.004] | [0.005] | [0.188] | [0.142] | [0.009] | [0.004] | [0.041] | [0.028] | [0.555] | [0.519] | [0.843] | [0.855] | [0.090] | [0.088] | [0.000] | [0.000] |
| Controls | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | 0.14 | 0.14 | 0.34 | 0.34 | 0.00 | 0.00 | 0.39 | 0.39 | -0.11 | -0.11 | -0.36 | -0.36 | -0.18 | -0.18 | 0.11 | 0.11 |
| Control SD | 1.00 | 1.00 | 0.35 | 0.35 | 0.48 | 0.48 | 1.00 | 1.00 | 0.49 | 0.49 | 0.31 | 0.31 | 0.48 | 0.48 | 0.38 | 0.38 | 0.31 | 0.31 |
| $R^2$ | 0.09 | 0.11 | 0.06 | 0.09 | 0.06 | 0.10 | 0.07 | 0.15 | 0.07 | 0.12 | 0.07 | 0.10 | 0.06 | 0.08 | 0.06 | 0.09 | 0.10 | 0.14 |
| Observations | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure S16c.

# Table S40: Knowledge of verification methods (part 2)

| | ICW: Verification knowledge | | To verify: Ask family on WA (reversed) | | To verify: Ask in person (reversed) | | To verify: Ask others on WA (reversed) | | To verify: Post on social media (reversed) | | To verify: Submit fact-check request | | To verify: Use fact-checker | | To verify: Use internet | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) |
| *A. Pooled estimation* | | | | | | | | | | | | | | | | |
| Placebo incentives | 0.038 | 0.047 | 0.006 | 0.008 | 0.000 | 0.003 | 0.008 | 0.011 | -0.017 | -0.013 | 0.017 | 0.020 | 0.026 | 0.026 | -0.023 | -0.019 |
| | (0.050) | (0.050) | (0.019) | (0.018) | (0.023) | (0.023) | (0.015) | (0.015) | (0.017) | (0.017) | (0.020) | (0.019) | (0.025) | (0.024) | (0.024) | (0.024) |
| | [0.222] | [0.172] | [0.365] | [0.325] | [0.999] | [0.452] | [0.283] | [0.226] | [0.323] | [0.434] | [0.189] | [0.147] | [0.146] | [0.145] | [0.352] | [0.429] |
| Treatment-Fact | 0.056 | 0.054 | -0.029 | -0.028 | 0.015 | 0.013 | -0.009 | -0.010 | -0.005 | -0.005 | 0.034 | 0.029 | 0.034 | 0.035 | 0.005 | 0.009 |
| | (0.041) | (0.041) | (0.016) | (0.015) | (0.018) | (0.018) | (0.012) | (0.012) | (0.013) | (0.013) | (0.016) | (0.016) | (0.020) | (0.020) | (0.020) | (0.020) |
| | [0.085] | [0.092] | [0.064] | [0.074] | [0.208] | [0.226] | [0.449] | [0.414] | [0.690] | [0.716] | [0.017] | [0.032] | [0.043] | [0.040] | [0.408] | [0.321] |
| Treatment-Prime | 0.133 | 0.139 | 0.002 | 0.001 | 0.040 | 0.036 | 0.019 | 0.019 | 0.019 | 0.017 | 0.066 | 0.068 | 0.072 | 0.076 | -0.026 | -0.022 |
| | (0.041) | (0.042) | (0.015) | (0.015) | (0.018) | (0.018) | (0.011) | (0.011) | (0.013) | (0.013) | (0.016) | (0.016) | (0.020) | (0.020) | (0.020) | (0.019) |
| | [0.001] | [0.000] | [0.440] | [0.460] | [0.014] | [0.021] | [0.048] | [0.050] | [0.071] | [0.089] | [0.000] | [0.000] | [0.000] | [0.000] | [0.182] | [0.267] |
| *B. Disaggregated estimation* | | | | | | | | | | | | | | | | |
| Placebo incentives | 0.038 | 0.045 | 0.006 | 0.008 | 0.000 | 0.003 | 0.008 | 0.011 | −0.017 | −0.013 | 0.017 | 0.018 | 0.026 | 0.026 | −0.022 | −0.019 |
| | (0.050) | (0.050) | (0.019) | (0.018) | (0.023) | (0.023) | (0.015) | (0.015) | (0.017) | (0.017) | (0.020) | (0.019) | (0.025) | (0.024) | (0.024) | (0.024) |
| | [0.221] | [0.182] | [0.365] | [0.324] | [0.500] | [0.455] | [0.281] | [0.231] | [0.320] | [0.431] | [0.189] | [0.170] | [0.147] | [0.146] | [0.356] | [0.427] |
| Text information-Fact | 0.125 | 0.128 | −0.018 | −0.020 | 0.043 | 0.043 | −0.011 | −0.012 | 0.004 | 0.008 | 0.072 | 0.066 | 0.048 | 0.046 | 0.002 | 0.009 |
| | (0.087) | (0.087) | (0.033) | (0.033) | (0.038) | (0.036) | (0.026) | (0.026) | (0.027) | (0.027) | (0.035) | (0.036) | (0.041) | (0.041) | (0.042) | (0.042) |
| | [0.076] | [0.070] | [0.584] | [0.536] | [0.128] | [0.116] | [0.680] | [0.639] | [0.447] | [0.387] | [0.022] | [0.031] | [0.124] | [0.128] | [0.480] | [0.412] |
| Text information-Prime | 0.204 | 0.214 | 0.003 | 0.006 | 0.069 | 0.064 | 0.028 | 0.027 | 0.046 | 0.047 | 0.077 | 0.083 | 0.123 | 0.127 | −0.032 | −0.023 |
| | (0.085) | (0.084) | (0.030) | (0.029) | (0.035) | (0.034) | (0.021) | (0.020) | (0.023) | (0.023) | (0.034) | (0.033) | (0.039) | (0.039) | (0.039) | (0.038) |
| | [0.008] | [0.005] | [0.460] | [0.420] | [0.024] | [0.030] | [0.090] | [0.095] | [0.023] | [0.020] | [0.012] | [0.006] | [0.001] | [0.000] | [0.413] | [0.545] |
| Short podcast-Fact | 0.088 | 0.090 | −0.014 | −0.009 | −0.007 | −0.006 | −0.026 | −0.027 | 0.001 | 0.003 | 0.066 | 0.062 | 0.062 | 0.061 | 0.020 | 0.024 |
| | (0.061) | (0.060) | (0.023) | (0.023) | (0.027) | (0.026) | (0.019) | (0.018) | (0.019) | (0.019) | (0.024) | (0.024) | (0.029) | (0.029) | (0.029) | (0.029) |
| | [0.073] | [0.067] | [0.528] | [0.682] | [0.783] | [0.807] | [0.162] | [0.143] | [0.475] | [0.430] | [0.003] | [0.004] | [0.017] | [0.019] | [0.249] | [0.202] |
| Short podcast-Prime | 0.158 | 0.145 | −0.007 | −0.013 | 0.011 | 0.007 | 0.033 | 0.031 | 0.020 | 0.014 | 0.052 | 0.050 | 0.043 | 0.040 | −0.017 | −0.017 |
| | (0.061) | (0.061) | (0.023) | (0.023) | (0.027) | (0.026) | (0.015) | (0.015) | (0.018) | (0.018) | (0.024) | (0.024) | (0.029) | (0.029) | (0.029) | (0.028) |
| | [0.005] | [0.009] | [0.759] | [0.570] | [0.340] | [0.386] | [0.017] | [0.022] | [0.143] | [0.218] | [0.015] | [0.019] | [0.073] | [0.086] | [0.549] | [0.559] |
| Long podcast-Fact | −0.001 | 0.010 | −0.048 | −0.046 | −0.008 | −0.002 | −0.009 | −0.004 | 0.002 | 0.004 | 0.003 | −0.003 | 0.005 | 0.006 | −0.019 | −0.009 |
| | (0.062) | (0.062) | (0.024) | (0.024) | (0.027) | (0.027) | (0.018) | (0.018) | (0.020) | (0.020) | (0.023) | (0.022) | (0.030) | (0.029) | (0.029) | (0.029) |
| | [0.991] | [0.438] | [0.046] | [0.053] | [0.770] | [0.945] | [0.628] | [0.838] | [0.459] | [0.420] | [0.444] | [0.889] | [0.436] | [0.425] | [0.509] | [0.743] |
| Long podcast-Prime | 0.042 | 0.054 | 0.009 | 0.006 | 0.042 | 0.029 | −0.008 | −0.009 | 0.012 | 0.009 | 0.049 | 0.058 | 0.084 | 0.095 | −0.048 | −0.041 |
| | (0.061) | (0.061) | (0.022) | (0.022) | (0.026) | (0.025) | (0.017) | (0.017) | (0.019) | (0.019) | (0.024) | (0.023) | (0.029) | (0.029) | (0.029) | (0.028) |
| | [0.248] | [0.189] | [0.345] | [0.394] | [0.052] | [0.126] | [0.662] | [0.600] | [0.270] | [0.316] | [0.019] | [0.007] | [0.002] | [0.000] | [0.097] | [0.150] |
| Empathetic podcast-Fact | 0.049 | 0.033 | −0.030 | −0.031 | 0.048 | 0.036 | 0.008 | 0.003 | −0.023 | −0.029 | 0.015 | 0.012 | 0.029 | 0.033 | 0.014 | 0.009 |
| | (0.060) | (0.060) | (0.022) | (0.022) | (0.026) | (0.025) | (0.017) | (0.017) | (0.020) | (0.020) | (0.023) | (0.023) | (0.030) | (0.030) | (0.029) | (0.029) |
| | [0.209] | [0.291] | [0.185] | [0.160] | [0.031] | [0.076] | [0.315] | [0.423] | [0.264] | [0.155] | [0.263] | [0.297] | [0.163] | [0.135] | [0.321] | [0.374] |
| Empathetic podcast-Prime | 0.169 | 0.182 | 0.005 | 0.010 | 0.053 | 0.060 | 0.027 | 0.030 | 0.012 | 0.014 | 0.092 | 0.090 | 0.066 | 0.069 | −0.011 | −0.007 |
| | (0.065) | (0.066) | (0.022) | (0.022) | (0.026) | (0.026) | (0.016) | (0.016) | (0.019) | (0.019) | (0.025) | (0.025) | (0.030) | (0.030) | (0.029) | (0.029) |
| | [0.005] | [0.003] | [0.409] | [0.319] | [0.021] | [0.010] | [0.045] | [0.033] | [0.256] | [0.228] | [0.000] | [0.000] | [0.015] | [0.011] | [0.713] | [0.821] |
| Controls | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Directional hypothesis | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Control Mean | 0.00 | 0.00 | -0.18 | -0.18 | -0.31 | -0.31 | -0.1 | -0.1 | -0.13 | -0.13 | 0.18 | 0.18 | 0.46 | 0.46 | 0.47 | 0.47 |
| Control SD | 1.00 | 1.00 | 0.38 | 0.38 | 0.46 | 0.46 | 0.30 | 0.30 | 0.33 | 0.33 | 0.38 | 0.38 | 0.50 | 0.50 | 0.50 | 0.50 |
| $R^2$ | 0.09 | 0.11 | 0.08 | 0.11 | 0.09 | 0.14 | 0.08 | 0.10 | 0.07 | 0.10 | 0.07 | 0.11 | 0.08 | 0.11 | 0.11 | 0.14 |
| Observations | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 | 4541 |

*Notes*: See Table S1 for variable definitions. Specifications estimated using OLS including randomization block fixed effects. Even-indexed columns include LASSO-selected controls. Heteroskedasticity-robust standard errors in parentheses. P-values (adjusted for pre-registered direction when relevant) in square brackets. ICW estimate plotted in Figure S16c.