

# The Demand for Fact-Checking

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## Abstract

Using a large-scale online experiment with more than 8,000 U.S. respondents, we examine how the demand for a politics newsletter changes when the newsletter content is fact-checked. We first document an overall muted demand for fact-checking when the newsletter features stories from an ideologically aligned source, even though fact-checking increases the perceived accuracy of the newsletter. The average impact of fact-checking masks substantial heterogeneity by ideology: fact-checking reduces demand among respondents with strong ideological views and increases demand among ideologically moderate respondents. Furthermore, fact-checking increases demand among all respondents when the newsletter features stories from an ideologically non-aligned source. (*JEL* D83, D91, L82)

**Keywords:** Fact-checking, News Consumption, Information, Media Bias, Belief Polarization

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# 1 Introduction

Misinformation on mass media is becoming increasingly prevalent (Lazer et al., 2018). A recent example are the widespread claims about election fraud in the 2020 US Presidential Election on social media as well as mainstream news outlets (Pennycook and Rand, 2021). Misinformation can be costly for individuals: It has been shown to distort high-stakes financial and economic decisions (Kogan et al., 2020) and to interfere with important health behaviors (Bursztyn et al., 2020a; Carrieri et al., 2019). Misinformation also imposes costs on society at large by threatening the functioning of democracies (Sunstein, 2018). Academics and practitioners alike have suggested fact-checking as one of the main tools to combat misinformation (Sell et al., 2021) and the European Commission has highlighted fact-checking services as ‘essential’ to counter and deter misinformation about public policies.<sup>1</sup>

The extent to which fact-checking can be an effective tool to combat misinformation crucially depends on the demand for fact-checking services. If consumers—as assumed in many models of news consumption—primarily care about the accuracy of the news, news demand should increase when the news content is fact-checked. On the other hand, if consumers also have non-instrumental motives to read news, such as preferences for belief confirmation (Faia et al., 2021; Mullainathan and Shleifer, 2005; Young, 2016), it is theoretically ambiguous how fact-checking affects the demand for news.

In this paper, we provide the first causal evidence on how fact-checking affects the demand for news. In a large-scale experiment with more than 8,000 Americans who voted Democratic in the 2020 U.S. Presidential Election, respondents can sign up for a weekly politics newsletter featuring the top three stories about the “Biden Rescue Plan.” Our key treatment variation is whether respondents are told that we will fact-check all stories featured in the newsletter. We further cross-randomize whether the newsletter features stories from an ideologically aligned or non-aligned news source. We focus on Democrats to make sure that the newsletter is equally ideologically aligned for all respondents.<sup>2</sup>

Turning to results, we first establish that our respondents expect stories featured

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<sup>1</sup>[https://eeas.europa.eu/sites/default/files/action\\_plan\\_against\\_disinformation.pdf](https://eeas.europa.eu/sites/default/files/action_plan_against_disinformation.pdf) (accessed 27 April, 2021).

<sup>2</sup>Furthermore, Democrats are more likely than Republicans to express trust in fact-checking services (Brandtzaeg and Følstad, 2017), making it more likely that the treatment will generate a first stage on perceived accuracy of the newsletter.

in the newsletter to contain factual errors and furthermore believe that fact-checking increases the accuracy of the newsletter. These results hold irrespective of whether the newsletter features stories from an ideologically aligned source or non-aligned source. Our main result is that demand for a newsletter featuring stories from an ideologically aligned source is largely unaffected by the fact-checking treatment. This muted average treatment effect masks substantial heterogeneity by ideology: fact-checking decreases demand for the newsletter among respondents with a strong ideology, while it increases demand among moderate respondents. While these results suggest that fact-checking of politically aligned news creates a trade-off between accuracy and belief utility for respondents with strong ideological views, there should be no such trade-off for fact-checking of politically non-aligned news. Consistent with this, we find that fact-checking increases demand for the newsletter among all respondents when the newsletter features stories from a non-aligned source.

These findings have important implications for the potential of fact-checking to improve the functioning of media markets. Our results demonstrate the potential for fact-checking to reduce political polarization in people's news consumption by increasing the demand for ideologically non-aligned outlets. However, as our results also demonstrate, fact-checking can have the unintended consequence of reducing the demand for ideologically aligned news among consumers with strong ideological views, who plausibly have a stronger preference for belief confirmation. This result underscores the difficulty of evaluating the broader welfare implications of fact-checking services which depend on the general equilibrium effects of fact-checking.

Our paper contributes to several strands of the literature. First, the paper relates to a literature on fact-checking (Barrera et al., 2020), debiasing interventions (Alesina et al., 2018; Banerjee et al., 2018; Galasso et al., 2021; Grigorieff et al., 2020; Pennycook et al., 2020; Pennycook and Rand, 2019), and misinformation on mass media (Bursztyn et al., 2020a; Pennycook and Rand, 2021). Previous work in this literature has assessed how fact-checking or debiasing interventions change people's beliefs and policy views (Barrera et al., 2020; Haaland and Roth, 2021; Haaland et al., 2020; Nyhan and Reifler, 2010; Nyhan et al., 2019), people's trust in fact-checking services (Brandtzaeg and Følstad, 2017; Brandtzaeg et al., 2018), and how fact-checking affects sharing of false news on social media (Henry et al., 2020).<sup>3</sup> While these studies have advanced our

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<sup>3</sup>Work in psychology also studies interventions aiming to reduce the spread of misinformation. For example, attaching warnings to news stories disputed by third-party fact-checkers (Pennycook et al.,

understanding of how fact-checking affects beliefs and policy views, it is important from a policy perspective to also understand how fact-checking affects people’s news consumption. We take the first step in this direction by providing the first causal evidence on how fact-checking affects the demand for news.

Our results also contribute to a literature studying the demand for news (DellaVigna and Ferrara, 2015; Gentzkow and Shapiro, 2006; Gentzkow et al., 2018; Mullainathan and Shleifer, 2005; Prat and Strömberg, 2013; Qin et al., 2018). This literature has debated whether people tend to read ideologically aligned news because they have higher trust in ideologically aligned sources or because they want to confirm their existing beliefs (Druckman and McGrath, 2019; Gentzkow and Shapiro, 2006; Mullainathan and Shleifer, 2005). We contribute to this literature by demonstrating an important role of non-instrumental motives, such as a preference for belief confirmation, in driving the demand for ideologically aligned news.

Finally, we contribute to the literature on information demand (Chopra et al., 2021; Faia et al., 2021; Falk and Zimmermann, 2017; Fuster et al., 2018; Ganguly and Tasoff, 2016; Golman et al., 2017; Nielsen, 2020; Tappin et al., 2020; Thaler, 2019; Zimmermann, 2015). We contribute to this literature by providing evidence on whether people have a preference for more accurate news. Compared to much of the previous literature, our design leverages a more natural outcome, namely people’s decision to sign up for a real newsletter covering current political and economic news.

## 2 Theoretical framework

This section lays out a simple Bayesian model of news consumption where agents face a trade-off between instrumental and non-instrumental concerns. Based on this framework, we generate predictions for how fact-checking could affect the demand for news. There is an unobserved binary state  $\theta \in \{L, R\}$  that captures the desirability of a policy proposed by Democrats, which in our experiment is the *Biden Rescue Plan*. The agent, a Biden voter, has a prior belief  $q \geq 1/2$  that the plan will have positive overall consequences, i.e.,  $\theta = L$ . The agent can read a politically biased newsletter that contains a binary news article  $n \in \{L, R\}$ . We start with the case of a newsletter

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2020) or using crowdsourcing to generate trust ratings can help consumers identify inaccurate claims (Pennycook and Rand, 2019). While the outcomes considered by this research concern beliefs and trust in news, our focus is on the effects of fact-checking services on the demand for news.

featuring articles from a politically aligned news outlet. The agent expects this outlet to always report  $L$  if indeed  $\theta = L$ . However, with probability  $p$ , the agent thinks the newsletter will report  $L$  even if  $\theta = R$ . Thus,  $p$  captures the perceived left-wing bias in reporting.<sup>4</sup>

The agent has to take a binary action  $a \in \{L, R\}$  with incentives to match the state. A relevant action could be how much to save, which depends on the expected stimulus check from the *Biden Rescue Plan*. Specifically, she receives utility  $\alpha$  if her action matches the state.<sup>5</sup> Without reading the newsletter, the agent will always choose  $L$  given her prior belief, which generates expected utility of  $\alpha q$ . Now, reading the newsletter increases the matching probability by  $(1 - q)(1 - p)$ . The newsletter's instrumental value,  $u_I$ , is therefore

$$u_I = \alpha(1 - q)(1 - p). \quad (1)$$

The agent may also receive non-instrumental utility from reading politically aligned news. For example, the agent might have a preference for news that confirm her prior beliefs about the world (Mullainathan and Shleifer, 2005), which might conflict with her preference for more accurate news. In our model, the agent receives utility  $\beta$  from reading news articles that confirm her prior belief that  $\theta = L$ . Given her beliefs, the expected non-instrumental utility is then

$$u_B = \beta(q + (1 - q)p). \quad (2)$$

Now suppose the newsletter is fact-checked by an external party. The fact-checker will flag all inaccurate articles, thereby decreasing the probability of factual inaccuracies,  $p$ , to zero.<sup>6</sup> This has two opposing effects. On the one hand, the instrumental utility increases by  $\alpha(1 - q)p$  because the newsletter now fully reveals the state. On the other hand, the non-instrumental utility from biased reporting decreases by  $\beta(1 - q)p$ ,

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<sup>4</sup>The agent's belief about biased reporting—not the actual probability of distortion—determines the anticipated utility consequences of reading the newsletter. This allows us to also capture cases where respondents have biased beliefs. Moreover, by continuity, our results also hold if  $P(n = L \mid \theta = L) = \tau$  for large  $\tau$ .

<sup>5</sup>An alternative interpretation is that the agent intrinsically cares about learning the truth. Then  $\alpha$  captures the intrinsic value from holding accurate beliefs about the world.

<sup>6</sup>We obtain qualitatively similar results if fact-checking is only able to flag inaccuracies with probability  $\tau$ . Moreover, the results also hold if fact-checking only decreases the non-instrumental utility from inaccurate reports to  $\beta' < \beta$ .

implying a net change of the agent's valuation of the newsletter by

$$\Delta u_{\text{aligned}} = (\alpha - \beta)(1 - q)p. \quad (3)$$

This generates the following prediction:

**Prediction 1.** Fact-checking a newsletter featuring articles from a politically aligned news outlet will, (i), decrease the demand for news among respondents with stronger non-instrumental motives ( $\alpha < \beta$ ) and, (ii), increase the demand for news among respondents with stronger instrumental motives ( $\alpha > \beta$ ).

For example, people with strong ideological views might care more about the non-instrumental utility from belief confirmation than people with moderate views. In this case, we would expect fact-checking to have a polarizing effect on demand.

We finally consider the case of a politically non-aligned news outlet. Here, the agent expects the news outlet to report  $R$  if  $\theta = R$  and to report  $R$  with probability  $p$  if  $\theta = L$ .<sup>7</sup> In this case, it is optimal for the agent to choose  $a = n$  if  $(1 + p)q \leq 1$ , and  $a = L$  otherwise.<sup>8</sup> Again, fact-checking will increase the instrumental value of the newsletter. However, fact-checking now increases the non-instrumental utility as well because factual inaccuracies consist of reporting  $R$  although  $n = L$  would have been correct. In total, the agent's valuation of the newsletter changes by

$$\Delta u_{\text{opposed}} = (\alpha + \beta)qp + \alpha \max\{0, 1 - (1 + p)q\}. \quad (4)$$

due to the fact-checking, which implies:

**Prediction 2.** Fact-checking a newsletter featuring articles from a politically non-aligned news outlet will increase the demand for news.

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<sup>7</sup>Online Appendix Section A provides a more detailed discussion of this case.

<sup>8</sup>The agent's posterior belief that the state is  $L$  is 1 if  $n = L$  and  $qp/(qp + 1 - q)$  if  $n = R$ .

## 3 Experimental design and sample

### 3.1 Sample

We collected the data for the experiment during January and February 2021 in collaboration with Lucid, a data provider commonly used in economic research (Bursztyn et al., 2020b; Haaland et al., 2020). The data was collected in four waves, with around 2,000 respondents per wave and 8,399 respondents in total. To make sure that the newsletter is equally ideologically aligned for all respondents, we only recruited respondents who had voted for Joe Biden during the 2020 presidential election. All waves were pre-specified in the AsPredicted registry (see Table B.1 for an overview and additional registry information). Table B.2 provides summary statistics for our sample.

### 3.2 Experimental design

All four waves feature two base treatments—where we vary between the treatment and control group whether respondents are told that we will fact-check all stories featured in the newsletter—that are constant across the waves. On top of this, each wave includes a second set of treatments to examine the robustness of findings to variations of content in the newsletter. We randomly assigned respondents to our treatments in equal proportion.<sup>9</sup> Section E of the Online Appendix provides screenshots of the full experiment, including all treatment variations.

We first measure basic demographics as well as a range of other background characteristics and political views. In the base treatments, respondents are then informed that Congress is debating whether to pass the *Biden Rescue Plan* (the American Rescue Plan Act of 2021) and that the plan has received strong support from liberals but has been criticized by conservatives. We then ask whether they would like to sign up for our weekly newsletter that contains stories about the plan featured on *MSNBC* during the last week.<sup>10</sup> To fix beliefs about the stories featured in the newsletter between

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<sup>9</sup>Tables B.3–B.10 in the online appendix assess the integrity of randomization for our treatments.

<sup>10</sup>If respondents indicated that they would like to receive our newsletter, we provided them with a link to a website at the end of the survey. The newsletter was published on this website. To accommodate different versions of the newsletter, we created individual websites for each treatment arm (see Figure D.1 for an example). This procedure allowed us to preserve the anonymity of our respondents by circumventing the need to collect email addresses.

treatments, we made it clear to respondents that we would choose the “top three stories” featured on *MSNBC* during the last week.

We chose to focus on the *Biden Rescue Plan* because it was heavily featured in the news at the time of the experiment and demand for stories about the plan was high. Furthermore, since the *Biden Rescue Plan* included a planned \$1,400 stimulus check to all Americans, staying informed about the plan could be instrumentally valuable (e.g. to make optimal saving or investment decisions). We choose to focus on *MSNBC* because it is a well-known liberal outlet that broadly matches the ideological leanings of our respondents. Indeed, in a representative survey, over 90 percent of Americans who identify *MSNBC* as their primary source of political news are Democrats or lean towards the Democratic party, the highest fraction among any news outlet (Grieco, 2020).

Respondents are randomized into the fact-checking condition (treatment) or the non-fact-checking condition (control). Respondents in the fact-checking condition are informed that “we will fact-check all stories featured in the newsletter and flag those with inaccuracies.” Respondents in the non-fact-checking condition are offered the same newsletter but without the fact-checking service.<sup>11</sup>

Our main outcome of interest is whether people would like to receive our newsletter featuring the top three stories about the *Biden Rescue Plan*. We chose to focus on newsletter subscriptions because newsletters are a popular way of staying informed about politics, with 21 percent of Americans receiving news from a newsletter over the course of a week (Newman et al., 2020). Moreover, by including only the top three articles in our newsletter, we reduce the expected cost of our respondents to stay up to date about the debate of the *Biden Rescue Plan*—both in terms of time costs and search efforts. At the same time, administering the newsletter ourselves allows us to retain sufficient control to vary newsletter characteristics across treatment arms.

We also measure a battery of post-treatment beliefs to assess mechanisms, including respondents’ perceptions of the newsletter’s accuracy, the perceived trustworthiness of the newsletter, as well the newsletter’s entertainment value, political bias, quality, and complexity. We measure these beliefs using five-point Likert scales. Finally, we elicit perceptions about how many articles featured in the newsletter would contain any

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<sup>11</sup>Figure C.1 of the Online Appendix provides screenshots of the treatment and control condition. Section D provides further details about our fact-checking efforts.



factual errors, how many articles they expect to be flagged for inaccuracies, and how much they trust our ability to fact-check the news articles.

**Discussion of the design** Our base treatments exogenously vary the product characteristics of the newsletter similar to conjoint experiments by offering a fact-checking service to a random subset of respondents. This has a few desirable features. First, by providing additional information about the accuracy of the top three *MSNBC* articles on the *Biden Rescue Plan*, our treatment should not affect beliefs about which articles are featured in the newsletter. We are thus holding beliefs about media bias by omission, filtering, or distortion constant between treatment and control. Since our treatment should not affect the expected distribution of articles, our design shuts down mechanisms related to rational delegation of costly information acquisition (Chan and Suen, 2008; Suen, 2004). Second, rational agents should prefer fact-checking because they can freely dispose of the additional information. This allows us to rule out prominent mechanisms based on Bayesian updating about the quality of a source that make it difficult to cleanly identify motives with observational data (Gentzkow and Shapiro, 2006). Third, we deliberately offered the fact-checking service ourselves. We truthfully tell our respondents in the treatment group that we will fact-check the newsletter. Our instructions make it clear that we are independent non-partisan researchers.

## 4 Results

### 4.1 Fact-checking of politically aligned news

**Descriptives** 55.6 percent of control group respondents signed up for the newsletter featuring stories from *MSNBC*. The high baseline demand for the newsletter likely reflects that our respondents were interested in staying informed about the outcome of the *Biden Rescue Plan* and saw the newsletter as a convenient tool to receive the most important information. Newsletter demand correlates strongly with the perceived accuracy, entertainment value, quality, and trust in the newsletter (as shown in Figure C.11).

For fact-checking to be valuable in our setting, respondents have to expect at least some factual inaccuracies in the *MSNBC* stories selected for the newsletter. Importantly, it is people’s subjective expectation of factual inaccuracies—and not the actual preva-

lence of factual inaccuracies—that determines whether fact-checking should increase the valuation of the newsletter. We next use data from control group respondents to provide descriptive evidence on beliefs about factual inaccuracies in news articles from *MSNBC*. Two-thirds of the respondents expect at least one article featured in the newsletter to contain a factual error (Figure C.2a). Furthermore, conditional on expecting at least one error, respondents expect 1.6 articles to contain factual errors on average, or slightly more than 50 percent of all articles.

Another necessary condition for fact-checking to be valuable is that respondents trust our ability to identify potential errors in the reporting. We find high levels of trust in our fact-checking ability with more than 90 percent of the respondents having at least some trust in our ability to fact-check articles from *MSNBC* (as shown in Figure C.2b), suggesting that our fact-checking treatment has scope to change the perceived accuracy of the newsletter.

**Empirical specification** In what follows, we assess how demand for the newsletter changes respondents to fact-checking. For that purpose, we estimate the following regression specification using OLS:

$$y_i = \alpha_0 + \alpha_1 \text{Treatment}_i + \alpha_2 \mathbf{x}_i + \varepsilon_i \quad (5)$$

where  $y_i$  is an indicator taking value one if a respondent signs up for the newsletter and value zero otherwise;  $\text{Treatment}_i$  is an indicator for whether respondent  $i$  is in the fact-checking treatment;  $\mathbf{x}_i$  is a vector of control variables<sup>12</sup>; and  $\varepsilon_i$  is an individual-specific error term. We use robust error terms for inference.

**Main effect** Table 1 presents the main results on how fact-checking affects the demand for news from a politically aligned outlet, pooling observations from all waves. Column 1 of Panel A shows the main result of the paper: demand for the newsletter only increases by a non-significant 0.3 percentage points in response to the fact-checking treatment. This muted effect of fact-checking on newsletter demand is precisely estimated given the sample size of more than 7,000 respondents. Furthermore, as shown in column 2, the muted impact occurs despite a statistically significant treatment effect on perceived

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<sup>12</sup>We include the following control variables: gender, education, employment status, log income, Census region, and race and ethnicity. We include wave fixed effects when pooling observations across waves.

accuracy: respondents in the fact-checking condition think the newsletter has 6.8 percent of a standard deviation higher accuracy ( $p < 0.05$ ). While the treatment affects perceived accuracy, it does not affect the perceived trustworthiness (column 3), quality (column 4), left-wing bias (column 5), complexity (column 6), or entertainment value (column 7) of the newsletter. Our first main result can thus be summarized as follows:

**Result 1.** On average, people have a muted demand for fact-checking of news from politically aligned sources, despite a significant positive effect of fact-checking on the perceived accuracy of the newsletter.

[Insert Table 1 here]

One recurring concern about online studies is potentially lower levels of attention among respondents compared to laboratory experiments. To test for the role of attention, we examine treatment effects separately by whether respondents passed a simple attention check on the beginning of the survey.<sup>13</sup> Panel B and Panel C of Table 1 show results separately for attentive and inattentive respondents, respectively. As shown in column 2, the treatment effect on perceived accuracy is over twice as large for attentive respondents compared to the full sample. Moreover, among attentive respondents, we find a statistically significant treatment effect on higher perceived trustworthiness ( $p < 0.05$ , column 3 of Panel B) and a marginally significant treatment effect on lower perceived left-wing bias ( $p < 0.10$ , column 5 of Panel B). Despite a significant and stronger first stage on both accuracy and trust, we still find a muted effect of fact-checking on demand for the newsletter. These results underscore that the muted impact of demand is unlikely to be driven by weak first-stage effects of the fact-checking treatment on perceptions about the newsletter characteristics. Turning to inattentive respondents (Panel C), we consistently find non-significant effects close to zero for all outcomes, including on newsletter demand, perceived accuracy and trust in the newsletter (columns 1–3). These results strongly suggest lower data quality for the subset of inattentive respondents. We, therefore, focus on attentive respondents for the rest of the paper to circumvent that potential null results are driven by noise created by inattentive respondents.<sup>14</sup>

<sup>13</sup>Online Appendix Section E.1.1 provides a screenshot of the attention check, which 56 percent of our respondents passed.

<sup>14</sup>Indeed, many experimental studies conducted using similar online samples usually screen out inattentive respondents from the outset (e.g., Enke and Graeber, 2019; Haaland and Roth, 2020).

**Robustness** We cross-randomized several treatments to assess the robustness of our findings to differences in the content of the newsletter. Appendix Table B.14 shows that our main result of a muted demand for fact-checking of ideologically aligned news is robust to (i) varying the framing of the *Biden Rescue Plan* (column 1), (ii) varying the perceived salience of the financial implications of the plan for our respondents (column 2), and (iii) varying the type of articles covered in the newsletter (column 3). Appendix Section E contains the full experimental instructions.

**Heterogeneity by ideology** As discussed in Section 2, respondents with strong ideological views might assign a larger weight to non-instrumental motives, such as a preference for belief confirmation, than respondents with moderate views. In this case, we would expect the fact-checking treatment to have an opposite effect on newsletter demand for consumers with strong and moderate ideological views. To categorize the strength of people’s ideological views, we use a pre-treatment question where people report their ideology on a five-point scale from “very liberal” to “very conservative.” Throughout the paper, we refer to “very liberal” respondents as those with strong ideological views and to the remaining respondents as moderate respondents.<sup>15</sup> Respondents with strong ideological views hold significantly more extreme policy attitudes than moderate respondents and are, for instance, over 50 percent more likely to “strongly support” the *Biden Rescue Plan*.

Table 2 shows heterogeneity in treatment effects by ideological views (these effects are also displayed graphically in Panel A of Figure 1). Panel A of Table 2 shows treatment effects for respondents with strong ideological views. These respondents significantly *reduce* their demand for the newsletter by 6.2 percentage points in response to the fact-checking treatment ( $p < 0.05$ , column 1). This effect arises even though these respondents perceive the fact-checked newsletter as 11.8 percent of a standard deviation more accurate ( $p < 0.05$ , column 2). These respondents also perceive the fact-checked newsletter as less left-wing biased ( $p < 0.10$ , column 5), providing suggestive evidence in favor of a mechanism where respondents with strong ideological views trade off accuracy against non-instrumental utility. Panel B of Table 2 shows treatment effects for respondents with moderate views. These respondents significantly increase their

<sup>15</sup>31.8 percent of our sample rated themselves as “very liberal.” Furthermore, consistent with our restriction to focus on respondents who voted for Joe Biden in the 2020 presidential election, 93.7% of our respondents rated themselves as either “liberal” or “very liberal”.

demand for the newsletter by 4.5 percentage points in response to the fact-checking treatment ( $p < 0.05$ , column 1). They also perceive the fact-checked newsletter as 14.6 percent of a standard deviation more accurate ( $p < 0.01$ , column 1) and 9.7 percent of a standard deviation more trustworthy ( $p < 0.05$ , column 3).

Comparing treatment effects in Panel B and Panel C of Table 2 shows that we can reject equality of treatment effects on newsletter demand between respondents with strong and moderate ideological views at any conventional level of statistical significance (column 1). By contrast, there are no statistically significant differences in treatment effects between the two groups on beliefs about newsletter characteristics, such as accuracy and trust (columns 2–7). Our second main result follows.

**Result 2.** Respondents with strong and moderate ideological views respond differently to fact-checking: Despite similar first stage effects on beliefs about newsletter characteristics, respondents with strong ideological views reduce their demand for the newsletter by 6.2 percentage points in response to the fact-checking treatment while moderate respondents increase their demand for the newsletter by 4.5 percentage points.

[Insert Table 2 here]

## 4.2 Fact-checking of politically non-aligned news

We next study how fact-checking affects people’s demand for news from a politically non-aligned outlet. While our theoretical framework shows that fact-checking creates a trade-off between accuracy and non-instrumental motives when news articles are selected from a politically aligned outlet, this trade-off disappears when news articles are selected from a politically non-aligned outlet. We would therefore expect fact-checking to increase demand for a newsletter featuring stories from a politically non-aligned outlet (Prediction 2 of Section 2). To test this prediction, we conducted an experiment where the newsletter features news articles from *Fox News* instead of *MSNBC* while at the same time holding constant all other features of the design (wave 3,  $n = 1,028$ ). We choose to focus on *Fox News* because it is a well-known outlet with a conservative leaning. Indeed, in a representative survey, over 90 percent of Americans who identify *Fox News* as their primary source of political news are Republicans or lean towards the Republican party, the highest fraction among any news outlet (Grieco, 2020).

**Descriptives** As expected, we observe a lower demand for news from *Fox News*: 44.5 percent of control group respondents sign up for the newsletter featuring stories from *Fox News*, compared to 55.6 percent for *MSNBC*.<sup>16</sup> Furthermore, newsletter demand correlates strongly with the perceived accuracy of *Fox News* (as shown in Figure C.12). We next use data from control group respondents to provide descriptive data on beliefs about factual inaccuracies in news articles from *Fox News*. More than two-thirds of the control group respondents expect at least one article to contain factual errors and 40 percent expect every article to contain some errors (Figure C.3a). Furthermore, 60 percent of the respondents express having at least some trust in our ability to fact-check articles from *Fox News* (Figure C.3b).<sup>17</sup> These descriptives demonstrate a large scope for fact-checking to improve the perceived accuracy of the newsletter.

**Main results** Panel A of Table 3 shows the treatment effects on the newsletter featuring stories from *Fox News*. Column 1 shows that the fact-checking treatment increases newsletter demand by 7.9 percentage points ( $p < 0.01$ ). This corresponds to a 18 percent increase in demand relative to a control mean of 44.5 percent. Respondents in the fact-checking condition also perceive the newsletter to be 16.3 of a standard deviation more accurate ( $p < 0.01$ ).

Panel B and C of Table 3, which present results separately for attentive and inattentive respondents, demonstrate that our treatment effects are primarily driven by attentive respondents. Among attentive respondents, the fact-checking treatment increases newsletter demand by 10 percentage points ( $p < 0.05$ , column 1) and the perceived accuracy of the newsletter by 23.1 percent of a standard deviation ( $p < 0.01$ , column 2). By contrast, we observe small and statistically insignificant treatment effects on newsletter demand and perceived accuracy among inattentive respondents.

**Heterogeneity by ideology** Table B.12 present treatment effects for attentive respondents with strong ideology (Panel A) and moderate ideology (Panel B). While this sample restriction substantially reduces our power to detect statistically significant effects, especially for respondents with strong ideology, we find broadly similar patterns

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<sup>16</sup>Among attentive respondents, only 34.3 percent sign up for the newsletter featuring stories from *Fox News* (compared to 49.7 percent for *MSNBC*).

<sup>17</sup>These patterns are more even pronounced if we focus on the subsample of attentive respondents, as shown in Figure C.4c and C.4d.

in both groups. As shown in column 1, treated respondents with strong and moderate ideology increase their demand for the newsletter by 6.4 percentage points and 9.5 percentage points, respectively. These results are consistent with our theoretical framework, which predicts that both groups should increase their demand as there is no trade-off between instrumental and non-instrumental motives with news from a politically non-aligned source (these results are also shown graphically in Panel B of Figure 1). Furthermore, as shown in column 2, the first stage on perceived accuracy is also similar across both groups. This leads to our third main result:

**Result 3.** All respondents, irrespective of their ideological leanings, increase their demand for the newsletter from a politically non-aligned source in response to the fact-checking treatment.

[Insert Figure 1 here]

[Insert Table 3 here]

### 4.3 Alternative mechanisms

In this section, we discuss a series of mechanisms, which might be operating in this experiment, but which are unlikely to explain the patterns in our data.

**Confidence and ideology** Empirically, we find that both respondents with moderate and strong ideology expect a more accurate newsletter if it is fact-checked (column 2 of Table 2). However, respondents with strong ideology, who hold strong prior belief about the world, might be very confident that they can detect any inaccuracies in reporting themselves. While overconfidence might decrease the perceived added-value of fact-checking services, it cannot strictly decrease the valuation of the newsletter. This would require an additional feature such as a large cost of processing information.

**Updating about source quality** People might update about the quality of the underlying source of the newsletter when they learn that the source is fact-checked. For instance, people could think that fact-checking implies that the underlying source is of low quality (hence the need for a fact-check). To address these potential concerns, we elicited expected errors from the underlying source of the newsletter. If anything, we

actually see that our respondents in the fact-check condition expect fewer errors from the underlying source (Table B.16 in the online Appendix).

**Cognitive constraints** Furthermore, since fact-checking in our context does not affect the selection of articles in the newsletter, we can—to the extent that fact-checking itself is not perceived as cognitively costly—change beliefs about accuracy while holding cognitive costs constant. Even if our respondents perceive fact-checking as cognitively costly (which we consider unlikely as column 6 of Table 1 shows that fact-checking does not affect the perceived complexity of the newsletter), the heterogeneity by the strength of people’s ideological views as well as the heterogeneity by the ideological leanings of the outlet suggest that cognitive constraints are not driving the observed patterns in our data.

**Demand effects** While the between-design should not make it salient that we are interested in how fact-checking affects newsletter demand, we cannot rule out that some respondents nonetheless realized that we were studying fact-checking and adjusted their behavior accordingly. However, the heterogeneity in treatment effects by the strength of people’s ideological views as well as the heterogeneity by the ideological leanings of the outlet suggest that demand effects do not play a major role in our experiment. Furthermore, recent evidence suggests that demand effects are not a major concern in online experiments (de Quidt et al., 2018).

## 4.4 Expert survey

Lastly, we wanted to examine how experts expect the demand for the newsletter to change in response to fact-checking of the newsletter content. For this purpose, we conducted a survey in March 2021 among leading academic researchers in the area of media and behavioral economics. We compiled a list of 93 experts. Our final sample consists of 65 experts, corresponding to a response rate of 70 percent.<sup>18</sup> After providing the expert participants with information about the sample, design, and the experimental instructions (including screenshots of the key treatment screens), we elicit their predictions about the effect of fact-checking on the demand for news for *MSNBC*

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<sup>18</sup>25% of these experts are Full Professor, 15% are Associate Professor, 34% percent are Assistant Professors, 14% are postdocs, and 12% of respondents in our sample are PhD Students.



and *Fox News*. For both outlets, we inform experts about baseline demand for the newsletter among respondents in the control group and then elicit their beliefs about newsletter demand among respondents in the treatment group.

Figure C.10 of the Online Appendix shows the results from expert survey. As shown in Figure C.10a, we observe a wide dispersion in expert beliefs about the impact of fact-checking on the demand for news with a mean absolute deviation of seven percentage points between expert opinions and actual treatment effects. The heterogeneity in expert beliefs suggests that there is substantial expert disagreement about the relative importance of different motives to read the news, such as the importance of accuracy motives versus belief utility motives. As shown in Figure C.10b, expert beliefs on average closely resemble the actual treatment effects, demonstrating a clear wisdom-of-the-crowds effect among experts.

## 5 Concluding remarks

We study how fact-checking affects the demand for news. Our respondents have a muted demand for fact-checking of politically aligned news, even though fact-checking increases the perceived accuracy of the news. This average effect masks substantial heterogeneity: Fact-checking decreases demand for politically aligned news among respondents with strong ideological views and increases demand among moderate respondents. Furthermore, fact-checking increases the demand for ideologically non-aligned news for all respondents irrespective of their ideological leanings.

Our findings have several implications for policymakers interested in using fact-checking services as a policy tool. If the goal of the fact-checking policy is to increase the demand for news, the campaign is unlikely to be very successful because some consumers face a trade-off between accuracy and utility from belief confirmation. For consumers with strong ideological leanings, who plausibly have a stronger belief utility motive than others, fact-checking services might decrease news demand or even make them switch towards a more slanted news outlet not covered by the fact-checking service. On the other hand, if the goal is to reduce polarization in people's news consumption, the policy might be more successful as fact-checking might make consumers more willing to read news from non-ideologically aligned news outlets. However, whether the policy is successful in reducing polarization depends on whether fact-checking

mainly changes people's news consumption towards more ideologically aligned outlets that are not covered by the fact-checking policy or towards less ideologically aligned outlets covered by the policy. While our study provides a first step in understanding how fact-checking affects the demand for news, we think more research is needed to understand the general equilibrium effects of fact-checking services.

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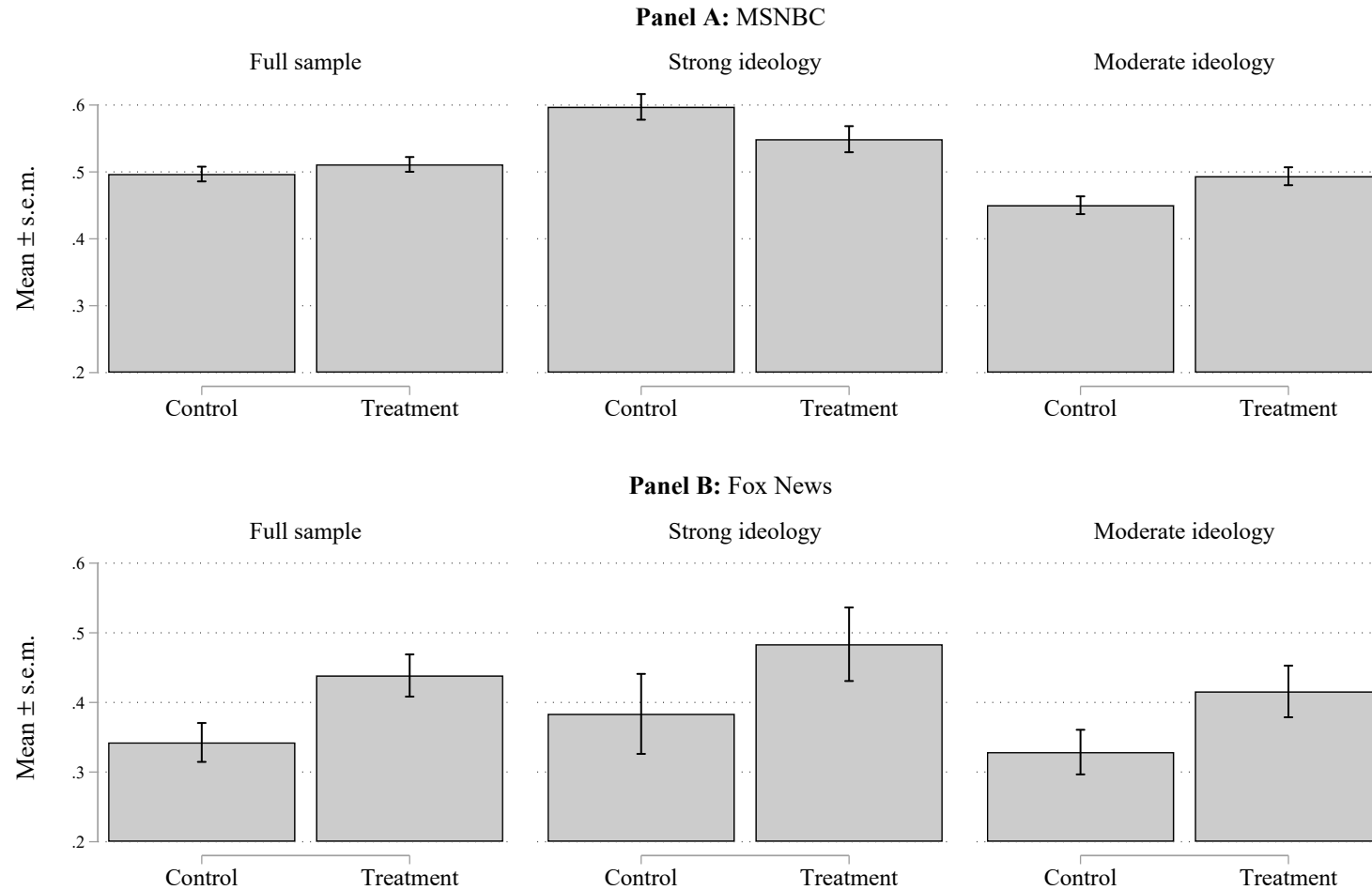
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## **Main Figures and Tables**

Figure 1: Treatment effects on demand for the newsletter



Note: This figure shows newsletter demand for *MSNBC* (Panel A) and *Fox News* (Panel B) among attentive respondents. Newsletter demand is shown separately by treatment group for the full sample, respondents with a strong ideology, and for respondents with a moderate ideology.



Table 1: Main results: MSNBC

	(1) News demand	(2) Accuracy	(3) Trust	(4) Quality	(5) Left-wing bias	(6) Complexity	(7) Entertainment
<b>Panel A: Full sample</b>							
Treatment	0.003 (0.011)	0.068*** (0.023)	0.018 (0.023)	0.021 (0.023)	-0.020 (0.023)	0.014 (0.023)	0.001 (0.022)
N	7,371	7,294	7,294	7,294	7,294	7,294	7,294
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.556	0	0	0	0	0	0
<b>Panel B: Attentive</b>							
Treatment	0.014 (0.016)	0.143*** (0.031)	0.087*** (0.031)	0.049 (0.031)	-0.051* (0.031)	0.035 (0.031)	0.023 (0.030)
N	4,109	4,069	4,069	4,069	4,069	4,069	4,069
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.497	0	0	0	0	0	0
<b>Panel C: Inattentive</b>							
Treatment	-0.009 (0.016)	-0.002 (0.035)	-0.051 (0.036)	-0.000 (0.034)	0.007 (0.034)	-0.005 (0.035)	-0.023 (0.034)
N	3,262	3,225	3,225	3,225	3,225	3,225	3,225
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.631	0	0	0	0	0	0

*Note:* This table shows OLS regression estimates where the dependent variables are demand for the newsletter and different post-treatment beliefs about the newsletter. All regressions use respondents that were offered a newsletter featuring *MSNBC* articles. “Treatment” is a binary variable taking value one if the articles in the newsletter are fact-checked. “Accuracy” of the newsletter is measured on a 5-point scale from “Very inaccurate” to “Very accurate”. “Trust” is the trustworthiness of the newsletter and measured on a 5-point scale from “Not trustworthy at all” to “Very trustworthy”. “Quality” of the newsletter is measured on a 5-point scale from “Very low quality” to “Very high quality”. “Left-wing bias” is measured on a 5-point scale from “Very right-wing biased” to “Very left-wing biased”. “Complexity” of the newsletter articles is measured on a 5-point scale from “Very simple” to “Very complex”. “Entertainment” of the newsletter is measured on a 5-point scale from “Not entertaining at all” to “Very entertaining”.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust standard errors in parentheses.

Table 2: Heterogeneous treatment effects between respondents with strong and moderate views: MSNBC

	(1) News demand	(2) Accuracy	(3) Trust	(4) Quality	(5) Left-wing bias	(6) Complexity	(7) Entertainment
<b>Panel A: Strong ideology</b>							
Treatment (a)	-0.062** (0.027)	0.118** (0.054)	0.043 (0.053)	0.016 (0.052)	-0.094* (0.054)	0.027 (0.055)	0.023 (0.052)
N	1,307	1,299	1,299	1,299	1,299	1,299	1,299
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.597	0	0	0	0	0	0
<b>Panel B: Moderate ideology</b>							
Treatment (b)	0.045** (0.019)	0.146*** (0.038)	0.097** (0.038)	0.051 (0.038)	-0.006 (0.038)	0.051 (0.038)	0.010 (0.037)
N	2,802	2,770	2,770	2,770	2,770	2,770	2,770
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.450	0	0	0	0	0	0
p-value: a = b	0.001	0.806	0.495	0.638	0.141	0.779	0.808

*Note:* This table uses data from attentive respondents and shows OLS regression estimates where the dependent variables are demand for the newsletter and different post-treatment beliefs about the newsletter. All regressions use respondents that were offered a newsletter featuring *MSNBC* articles. Panel A shows results for respondents with a strong ideology and Panel B shows results for respondents with a moderate ideology. “Treatment” is a binary variable taking value one if the articles in the newsletter are fact-checked. “Accuracy” of the newsletter is measured on a 5-point scale from “Very inaccurate” to “Very accurate”. “Trust” is the trustworthiness of the newsletter and measured on a 5-point scale from “Not trustworthy at all” to “Very trustworthy”. “Quality” of the newsletter is measured on a 5-point scale from “Very low quality” to “Very high quality”. “Left-wing bias” is measured on a 5-point scale from “Very right-wing biased” to “Very left-wing biased”. “Complexity” of the newsletter articles is measured on a 5-point scale from “Very simple” to “Very complex”. “Entertainment” of the newsletter is measured on a 5-point scale from “Not entertaining at all” to “Very entertaining”.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust standard errors in parentheses.

Table 3: Main results: Fox News

	(1) News demand	(2) Accuracy	(3) Trust	(4) Quality	(5) Left-wing bias	(6) Complexity	(7) Entertainment
<b>Panel A: Full sample</b>							
Treatment	0.079*** (0.030)	0.163*** (0.060)	0.165*** (0.060)	0.177*** (0.061)	-0.140** (0.060)	-0.113* (0.062)	0.144** (0.061)
N	1,028	1,010	1,010	1,010	1,010	1,010	1,010
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.445	0	0	0	0	0	0
<b>Panel B: Attentive</b>							
Treatment	0.100** (0.041)	0.231*** (0.084)	0.152* (0.084)	0.177** (0.085)	-0.124 (0.081)	-0.076 (0.086)	0.107 (0.087)
N	558	548	548	548	548	548	548
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.343	0	0	0	0	0	0
<b>Panel C: Inattentive</b>							
Treatment	0.048 (0.044)	0.057 (0.088)	0.156* (0.086)	0.151* (0.088)	-0.170* (0.088)	-0.146 (0.091)	0.168* (0.086)
N	470	462	462	462	462	462	462
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.569	0	0	0	0	0	0

*Note:* This table shows OLS regression estimates where the dependent variables are demand for the newsletter and different post-treatment beliefs about the newsletter. All regressions use respondents that were offered a newsletter featuring *Fox News* articles. “Treatment” is a binary variable taking value one if the articles in the newsletter are fact-checked. “Accuracy” of the newsletter is measured on a 5-point scale from “Very inaccurate” to “Very accurate”. “Trust” is the trustworthiness of the newsletter and measured on a 5-point scale from “Not trustworthy at all” to “Very trustworthy”. “Quality” of the newsletter is measured on a 5-point scale from “Very low quality” to “Very high quality”. “Left-wing bias” is measured on a 5-point scale from “Very right-wing biased” to “Very left-wing biased”. “Complexity” of the newsletter articles is measured on a 5-point scale from “Very simple” to “Very complex”. “Entertainment” of the newsletter is measured on a 5-point scale from “Not entertaining at all” to “Very entertaining”.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust standard errors in parentheses.

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## **The Demand for Fact-Checking**

Felix Chopra, Ingar Haaland, and Christopher Roth

Section A provides additional theoretical results.

Section B contains additional tables. Table B.1 provides an overview of the four experimental waves. Table B.2 provides summary statistics for demographic variables by wave. Table B.3, Table B.4, Table B.5, Table B.6, Table B.7, Table B.8, Table B.9 and Table B.10 provide balance tests for our treatment manipulations based on observables. Table B.11 shows treatment effects for the politically aligned outlet for respondents with moderate and strong views. Table B.12 shows treatment effects for the politically non-aligned outlet for respondents with moderate and strong views. Table B.13 shows treatment effects for the politically non-aligned outlet for respondents with moderate and strong views including inattentive ones. Table B.14 shows interaction effects between our base treatment and our additional treatments for attentive and inattentive respondents. Table B.15 shows interaction effects between our base treatment and our additional treatments by wave. Table B.16 shows treatment effects on expected errors. Table B.17 shows differences in covariates between respondents who signed up for the newsletter and those who did not.

Section C contains additional figures. Figure C.1 provides a screenshot of the key treatment screens. Figure C.2 shows the distribution of beliefs about factual errors and trust in our ability to fact-check news articles from the politically aligned outlet. Figure C.3 shows the distribution of beliefs about factual errors and trust in our ability to fact-check news articles from the politically non-aligned outlet (wave 3). Figure C.4 shows the distribution of beliefs about factual errors and trust in our ability to fact-check news articles among respondents who passed the attention check. Figure C.5 shows the distribution of beliefs about factual errors and trust in our ability to fact-check news articles by respondent's ideology and the news outlet. Figure C.6 shows the distribution of beliefs about different newsletter characteristics by ideology and news outlet. Figure C.7 shows the evolution of demand for our newsletter over time. Figure C.8 shows the results from simultaneously interacting our main treatment with respondent ideology and a vector of controls for the politically aligned outlet. Figure C.9 shows the results from simultaneously interacting our main treatment with respondent

ideology and a vector of controls for the politically non-aligned outlet. Figure C.10 shows the distribution of expert forecasts. Figure C.11 and Figure C.12 show correlates of the demand for news from *MSNBC* and *Fox News*, respectively.

Section D provides further details about the newsletter and our fact-checking efforts, including an example of how our newsletter looked like.

Section E provides screenshots of the experimental instructions.

## A Additional theoretical results

This section provides a more detailed derivation of the prediction that the effect of fact-checking on the demand for news should be positive for politically non-aligned outlets. Recall that the politically non-aligned outlet reports  $R$  if  $\theta = R$  and, if  $\theta = L$  reports  $R$  with probability  $p$ . Suppose the agent decides to read the newsletter. In this case, we can derive her posterior belief  $\hat{q}(n)$  that  $\theta = L$  from Bayes' rule:

$$\hat{q}(n) = \begin{cases} 1 & \text{if } n = L \\ \frac{qp}{1-q+pq} & \text{if } n = R \end{cases} \quad (6)$$

The agent will find it optimal to choose  $a = R$  after reading  $n = R$  only if  $\hat{q}(R) \leq \frac{1}{2}$ , which is the case if  $(1+p)q \leq 1$ .

**Case 1:**  $(1+p)q \leq 1$ . In this case, the agent's action will match the state whenever  $n = \theta$ , which happens with probability  $1 - q + q(1 - p)$ . Relative to always choosing  $a = L$ , the newsletter provides instrumental utility of  $u_I = \alpha(1 - q + q(1 - p))$ , and non-instrumental utility of  $\beta q(1 - p)$ . Now, fact-checking will increase the instrumental value by  $\alpha qp$  and the non-instrumental utility by  $\beta qp$ . In total, the agent's valuation increases by  $\Delta u = (\alpha + \beta)qp$ .

**Case 2:**  $(1+p)q > 1$ . In this case, the agent will always choose  $L$ . Thus, the instrumental value of the newsletter is  $u_I = 0$ . Thus, while the effect of fact-checking on the non-instrumental utility is identical to the previous case, fact-checking will now increase the instrumental value of the newsletter by  $\alpha(1 - q)$  because it is now optimal to choose  $a = n$ . Thus, the total change in the agent's valuation is

$$\Delta u = \alpha(1 - q) + \beta qp = (\alpha + \beta) + \alpha(1 - (1 + p)q), \quad (7)$$

where the last term is positive in the case considered.

Thus, we have shown that for politically non-aligned outlets, the effect of fact-checking on the agent's valuation of a newsletter is positive and given by

$$\Delta u_{\text{opposed}} = (\alpha + \beta) + \alpha \max\{0, 1 - (1 + p)q\}. \quad (8)$$

## B Additional tables

Table B.1: Overview of experimental waves

Wave	Sample	Date	Extra treatments	Pre-analysis plan
Wave 1	$n = 2,086$	Jan 21–22	Non-polarized topic	AsPredicted #56307
Wave 2	$n = 2,097$	Jan 22–26	Instrumental value	AsPredicted #56397
Wave 3	$n = 2,054$	Feb 15–16	Right-wing outlet	AsPredicted #58344
Wave 4	$n = 2,162$	Feb 16–18	Commentary	AsPredicted #58468

*Note:* This table provides an overview of the four experimental waves. All four waves feature the two base treatments (demand for *Biden Rescue Plan* with or without fact-check). In addition, each wave has an extra set of treatments.

Table B.2: Summary statistics

	(1) Full sample	(2) Attentive	(3) Inattentive	(4) Wave 1	(5) Wave 2	(6) Wave 3	(7) Wave 4
Male	0.440	0.400	0.488	0.418	0.474	0.455	0.414
Age	40.033	43.267	35.989	38.894	40.509	43.789	37.101
White	0.661	0.765	0.530	0.683	0.675	0.683	0.604
Log income	10.754	10.834	10.654	10.776	10.769	10.746	10.726
College education	0.810	0.864	0.742	0.811	0.803	0.822	0.805
Full-time work	0.481	0.447	0.524	0.495	0.485	0.424	0.519
Northeast	0.235	0.229	0.242	0.241	0.221	0.227	0.250
Midwest	0.228	0.225	0.230	0.221	0.224	0.258	0.208
West	0.198	0.221	0.169	0.196	0.221	0.177	0.198
South	0.340	0.324	0.359	0.342	0.334	0.337	0.345
Observations	8,399	4,667	3,732	2,086	2,097	2,054	2,162

*Note:* This table displays the mean value of basic covariates for the full sample (column 1), attentive respondents (column 2), inattentive respondents (column 3), and separately for each wave (columns 4–7). “Male” is a binary variable with value one for male respondents. “Age” is age of the respondent. “White” is a binary variable with value one if the respondent selected “Caucasian/White”. “Log income” is coded continuously as the log of the income bracket’s midpoint (Less than \$15,000, \$15,000 to \$24,999, \$25,000 to \$49,999, \$50,000 to \$74,999, \$75,000 to \$99,999, \$100,000 to \$149,999, \$150,000 to \$200,000, \$200,000 or more). “College education” is a binary dummy variable taking value one if the respondent selected “Some college, no degree”, “Associates degree”, “Bachelor’s degree”, or “Post-graduate degree”. “Full-time work” is a binary dummy variable taking value one if the respondent is working full-time. “Northeast”, “Midwest”, “West” and “South” are binary dummy variables with value one if the respondent lives in the respective region.



Table B.3: Test of balance: Treatment vs. control

	Treatment (T)	Control (C)	P-value(T - C)	Observations
Male	0.44	0.44	0.639	8399
Age	40.08	39.98	0.790	8399
Log of income	10.75	10.76	0.858	8399
South	0.33	0.35	0.182	8399
West	0.20	0.20	0.857	8399
Northeast	0.24	0.23	0.065	8399
White	0.65	0.67	0.231	8399
College	0.81	0.81	0.946	8399

*Note:* This table provides a balance test for the fact-checking treatment using observations from all waves. “Male” is a binary variable with value one for male respondents. “Age” is coded as the continuous midpoint of the age bracket (18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 or older). “Log of income” is coded continuously as the logarithm of the income bracket’s midpoint (Less than \$15,000, \$15,000 to \$24,999, \$25,000 to \$49,999, \$50,000 to \$74,999, \$75,000 to \$99,999, \$100,000 to \$149,999, \$150,000 to \$200,000, \$200,000 or more). “South”, “West”, and “Northeast” are binary dummy variables with value one if the respondent lives in the respective region. “White” is a binary variable with value one if the respondent selected “Caucasian/White”. “College education” is a binary dummy variable taking value one if the respondent selected “Some college, no degree”, “Associates degree”, “Bachelor’s degree”, or “Post-graduate degree”.

Table B.4: Test of balance for attentive respondents: Treatment vs. control

	Treatment (T)	Control (C)	P-value(T - C)	Observations
Male	0.40	0.40	0.663	4667
Age	43.31	43.22	0.851	4667
Log of income	10.85	10.82	0.168	4667
South	0.32	0.33	0.227	4667
West	0.22	0.22	0.587	4667
Northeast	0.24	0.22	0.024	4667
White	0.76	0.77	0.392	4667
College	0.87	0.86	0.576	4667

*Note:* This table provides a balance test for the fact-checking treatment using attentive respondents from all waves. “Male” is a binary variable with value one for male respondents. “Age” is coded as the continuous midpoint of the age bracket (18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 or older). “Log of income” is coded continuously as the logarithm of the income bracket’s midpoint (Less than \$15,000, \$15,000 to \$24,999, \$25,000 to \$49,999, \$50,000 to \$74,999, \$75,000 to \$99,999, \$100,000 to \$149,999, \$150,000 to \$200,000, \$200,000 or more). “South”, “West”, and “Northeast” are binary dummy variables with value one if the respondent lives in the respective region. “White” is a binary variable with value one if the respondent selected “Caucasian/White”. “College education” is a binary dummy variable taking value one if the respondent selected “Some college, no degree”, “Associates degree”, “Bachelor’s degree”, or “Post-graduate degree”.

Table B.5: Test of balance for attentive respondents with a strong ideology:  
Treatment vs. control

	Treatment (T)	Control (C)	P-value(T - C)	Observations
Male	0.43	0.38	0.054	1471
Age	40.54	40.26	0.737	1471
Log of income	10.84	10.80	0.405	1471
South	0.34	0.31	0.152	1471
West	0.22	0.21	0.621	1471
Northeast	0.25	0.25	0.822	1471
White	0.76	0.78	0.438	1471
College	0.87	0.87	0.849	1471

*Note:* This table provides a balance test for the fact-checking treatment using attentive respondents with a strong ideology from all waves. “Male” is a binary variable with value one for male respondents. “Age” is coded as the continuous midpoint of the age bracket (18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 or older). “Log of income” is coded continuously as the logarithm of the income bracket’s midpoint (Less than \$15,000, \$15,000 to \$24,999, \$25,000 to \$49,999, \$50,000 to \$74,999, \$75,000 to \$99,999, \$100,000 to \$149,999, \$150,000 to \$200,000, \$200,000 or more). “South”, “West”, and “Northeast” are binary dummy variables with value one if the respondent lives in the respective region. “White” is a binary variable with value one if the respondent selected “Caucasian/White”. “College education” is a binary dummy variable taking value one if the respondent selected “Some college, no degree”, “Associates degree”, “Bachelor’s degree”, or “Post-graduate degree”.

Table B.6: Test of balance for attentive respondents with a moderate ideology: Treatment vs. control

	Treatment (T)	Control (C)	P-value(T - C)	Observations
Male	0.39	0.40	0.428	3196
Age	44.63	44.54	0.894	3196
Log of income	10.86	10.83	0.265	3196
South	0.30	0.34	0.015	3196
West	0.22	0.22	0.744	3196
Northeast	0.24	0.20	0.004	3196
White	0.76	0.77	0.608	3196
College	0.87	0.86	0.428	3196

*Note:* This table provides a balance test for the fact-checking treatment using attentive respondents with a moderate ideology from all waves. “Male” is a binary variable with value one for male respondents. “Age” is coded as the continuous midpoint of the age bracket (18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 or older). “Log of income” is coded continuously as the logarithm of the income bracket’s midpoint (Less than \$15,000, \$15,000 to \$24,999, \$25,000 to \$49,999, \$50,000 to \$74,999, \$75,000 to \$99,999, \$100,000 to \$149,999, \$150,000 to \$200,000, \$200,000 or more). “South”, “West”, and “Northeast” are binary dummy variables with value one if the respondent lives in the respective region. “White” is a binary variable with value one if the respondent selected “Caucasian/White”. “College education” is a binary dummy variable taking value one if the respondent selected “Some college, no degree”, “Associates degree”, “Bachelor’s degree”, or “Post-graduate degree”.

Table B.7: Test of balance: Neutral versus polarized framing

	Treatment (T)	Control (C)	P-value(T - C)	Observations
Male	0.42	0.41	0.690	2086
Age	38.62	39.17	0.426	2086
Log of income	10.75	10.81	0.108	2086
South	0.36	0.33	0.097	2086
West	0.19	0.20	0.741	2086
Northeast	0.23	0.25	0.357	2086
White	0.68	0.69	0.707	2086
College	0.82	0.80	0.434	2086

*Note:* This table provides a balance test for neutral and polarized framing of the policy proposal using respondents from wave 1. “Male” is a binary variable with value one for male respondents. “Age” is coded as the continuous midpoint of the age bracket (18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 or older). “Log of income” is coded continuously as the logarithm of the income bracket’s midpoint (Less than \$15,000, \$15,000 to \$24,999, \$25,000 to \$49,999, \$50,000 to \$74,999, \$75,000 to \$99,999, \$100,000 to \$149,999, \$150,000 to \$200,000, \$200,000 or more). “South”, “West”, and “Northeast” are binary dummy variables with value one if the respondent lives in the respective region. “White” is a binary variable with value one if the respondent selected “Caucasian/White”. “College education” is a binary dummy variable taking value one if the respondent selected “Some college, no degree”, “Associates degree”, “Bachelor’s degree”, or “Post-graduate degree”.

Table B.8: Test of balance: High versus low instrumental value

	Treatment (T)	Control (C)	P-value(T - C)	Observations
Male	0.46	0.49	0.232	2097
Age	41.33	39.69	0.027	2097
Log of income	10.75	10.78	0.439	2097
South	0.33	0.34	0.829	2097
West	0.22	0.22	0.756	2097
Northeast	0.22	0.22	0.748	2097
White	0.69	0.66	0.088	2097
College	0.80	0.80	0.870	2097

*Note:* This table provides a balance test for instrumental value treatment using respondents from wave 2. “Male” is a binary variable with value one for male respondents. “Age” is coded as the continuous midpoint of the age bracket (18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 or older). “Log of income” is coded continuously as the logarithm of the income bracket’s midpoint (Less than \$15,000, \$15,000 to \$24,999, \$25,000 to \$49,999, \$50,000 to \$74,999, \$75,000 to \$99,999, \$100,000 to \$149,999, \$150,000 to \$200,000, \$200,000 or more). “South”, “West”, and “Northeast” are binary dummy variables with value one if the respondent lives in the respective region. “White” is a binary variable with value one if the respondent selected “Caucasian/White”. “College education” is a binary dummy variable taking value one if the respondent selected “Some college, no degree”, “Associates degree”, “Bachelor’s degree”, or “Post-graduate degree”.

Table B.9: Test of balance: *Fox News* versus *MSNBC*

	Treatment (T)	Control (C)	P-value(T - C)	Observations
Male	0.48	0.43	0.046	2054
Age	44.06	43.52	0.515	2054
Log of income	10.75	10.74	0.692	2054
South	0.35	0.33	0.446	2054
West	0.18	0.18	0.833	2054
Northeast	0.22	0.24	0.358	2054
White	0.69	0.68	0.682	2054
College	0.82	0.82	0.789	2054

*Note:* This table provides a balance test for the *Fox News* versus *MSNBC* treatment using respondents from wave 3. “Male” is a binary variable with value one for male respondents. “Age” is coded as the continuous midpoint of the age bracket (18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 or older). “Log of income” is coded continuously as the logarithm of the income bracket’s midpoint (Less than \$15,000, \$15,000 to \$24,999, \$25,000 to \$49,999, \$50,000 to \$74,999, \$75,000 to \$99,999, \$100,000 to \$149,999, \$150,000 to \$200,000, \$200,000 or more). “South”, “West”, and “Northeast” are binary dummy variables with value one if the respondent lives in the respective region. “White” is a binary variable with value one if the respondent selected “Caucasian/White”. “College education” is a binary dummy variable taking value one if the respondent selected “Some college, no degree”, “Associates degree”, “Bachelor’s degree”, or “Post-graduate degree”.

Table B.10: Test of balance: Opinion versus news

	Treatment (T)	Control (C)	P-value(T - C)	Observations
Male	0.41	0.41	0.918	2162
Age	36.66	37.55	0.192	2162
Log of income	10.72	10.73	0.851	2162
South	0.35	0.34	0.375	2162
West	0.19	0.21	0.285	2162
Northeast	0.25	0.25	0.691	2162
White	0.60	0.61	0.647	2162
College	0.81	0.80	0.966	2162

*Note:* This table provides a balance test for the opinion versus news section variation using respondents from wave 4. “Male” is a binary variable with value one for male respondents. “Age” is coded as the continuous midpoint of the age bracket (18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 or older). “Log of income” is coded continuously as the logarithm of the income bracket’s midpoint (Less than \$15,000, \$15,000 to \$24,999, \$25,000 to \$49,999, \$50,000 to \$74,999, \$75,000 to \$99,999, \$100,000 to \$149,999, \$150,000 to \$200,000, \$200,000 or more). “South”, “West”, and “Northeast” are binary dummy variables with value one if the respondent lives in the respective region. “White” is a binary variable with value one if the respondent selected “Caucasian/White”. “College education” is a binary dummy variable taking value one if the respondent selected “Some college, no degree”, “Associates degree”, “Bachelor’s degree”, or “Post-graduate degree”.



Table B.11: Heterogeneous treatment effects between respondents with strong and moderate views: MSNBC

	(1) News demand	(2) Accuracy	(3) Trust	(4) Quality	(5) Left-wing bias	(6) Complexity	(7) Entertainment
<b>Panel A: Strong ideology</b>							
Treatment (a)	-0.024 (0.018)	0.077** (0.038)	-0.012 (0.039)	-0.014 (0.038)	-0.041 (0.037)	-0.040 (0.038)	-0.008 (0.037)
N	2,592	2,571	2,571	2,571	2,571	2,571	2,571
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.657	0	0	0	0	0	0
<b>Panel B: Moderate ideology</b>							
Treatment (b)	0.019 (0.014)	0.068** (0.030)	0.037 (0.030)	0.043 (0.029)	-0.010 (0.029)	0.044 (0.029)	0.008 (0.028)
N	4,779	4,723	4,723	4,723	4,723	4,723	4,723
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.500	0	0	0	0	0	0
p-value: a = b	0.062	0.745	0.320	0.254	0.435	0.089	0.731

*Note:* This table uses data from all respondents (including inattentive ones) and shows OLS regression estimates where the dependent variables are demand for the newsletter and different post-treatment beliefs about the newsletter. All regressions use respondents that were offered a newsletter featuring *MSNBC* articles. “Treatment” is a binary variable taking value one if the articles in the newsletter are fact-checked. “Accuracy” of the newsletter is measured on a 5-point scale from “Very inaccurate” to “Very accurate”. “Trust” is the trustworthiness of the newsletter and measured on a 5-point scale from “Not trustworthy at all” to “Very trustworthy”. “Quality” of the newsletter is measured on a 5-point scale from “Very low quality” to “Very high quality”. “Left-wing bias” is measured on a 5-point scale from “Very right-wing biased” to “Very left-wing biased”. “Complexity” of the newsletter articles is measured on a 5-point scale from “Very simple” to “Very complex”. “Entertainment” of the newsletter is measured on a 5-point scale from “Not entertaining at all” to “Very entertaining”.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust standard errors in parentheses.

Table B.12: Heterogeneous treatment effects between attentive respondents with strong and moderate views: Fox News

	(1) News demand	(2) Accuracy	(3) Trust	(4) Quality	(5) Left-wing bias	(6) Complexity	(7) Entertainment
<b>Panel A: Strong ideology</b>							
Treatment (a)	0.064 (0.079)	0.195 (0.158)	0.117 (0.163)	0.227 (0.172)	-0.208 (0.151)	-0.035 (0.159)	0.265 (0.176)
N	164	163	163	163	163	163	163
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.384	0	0	0	0	0	0
<b>Panel B: Moderate ideology</b>							
Treatment (b)	0.095* (0.049)	0.224** (0.101)	0.141 (0.099)	0.147 (0.097)	-0.062 (0.097)	-0.081 (0.102)	0.022 (0.096)
N	394	385	385	385	385	385	385
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.329	0	0	0	0	0	0
p-value: a = b	0.732	0.953	0.973	0.637	0.381	0.826	0.202

*Note:* This table uses data from attentive respondents and shows OLS regression estimates where the dependent variables are demand for the newsletter and different post-treatment beliefs about the newsletter. All regressions use respondents that were offered a newsletter featuring *Fox News* articles. “Treatment” is a binary variable taking value one if the articles in the newsletter are fact-checked. “Accuracy” of the newsletter is measured on a 5-point scale from “Very inaccurate” to “Very accurate”. “Quality” of the newsletter is measured on a 5-point scale from “Very low quality” to “Very high quality”. “Trust” is the trustworthiness of the newsletter and measured on a 5-point scale from “Not trustworthy at all” to “Very trustworthy”. “Complexity” of the newsletter articles is measured on a 5-point scale from “Very simple” to “Very complex”. “Entertainment” of the newsletter is measured on a 5-point scale from “Not entertaining at all” to “Very entertaining”. “Left-wing bias” is measured on a 5-point scale from “Very right-wing biased” to “Very left-wing biased”.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust standard errors in parentheses.

Table B.13: Heterogeneous treatment effects between respondents with strong and moderate views: Fox News

	(1) News demand	(2) Accuracy	(3) Trust	(4) Quality	(5) Left-wing bias	(6) Complexity	(7) Entertainment
<b>Panel A: Strong ideology</b>							
Treatment (a)	0.099* (0.052)	0.167 (0.104)	0.182* (0.103)	0.241** (0.107)	-0.144 (0.104)	-0.124 (0.104)	0.173* (0.104)
N	329	328	328	328	328	328	328
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.548	0	0	0	0	0	0
<b>Panel B: Moderate ideology</b>							
Treatment (b)	0.062* (0.037)	0.157** (0.074)	0.151** (0.074)	0.146** (0.074)	-0.127* (0.073)	-0.089 (0.078)	0.120 (0.074)
N	699	682	682	682	682	682	682
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.402	0	0	0	0	0	0
p-value: a = b	0.560	0.749	0.659	0.376	0.773	0.696	0.540

*Note:* This table uses data from all respondents (including inattentive ones) and shows OLS regression estimates where the dependent variables are demand for the newsletter and different post-treatment beliefs about the newsletter. All regressions use respondents that were offered a newsletter featuring *Fox News* articles. “Treatment” is a binary variable taking value one if the articles in the newsletter are fact-checked. “Accuracy” of the newsletter is measured on a 5-point scale from “Very inaccurate” to “Very accurate”. “Quality” of the newsletter is measured on a 5-point scale from “Very low quality” to “Very high quality”. “Trust” is the trustworthiness of the newsletter and measured on a 5-point scale from “Not trustworthy at all” to “Very trustworthy”. “Complexity” of the newsletter articles is measured on a 5-point scale from “Very simple” to “Very complex”. “Entertainment” of the newsletter is measured on a 5-point scale from “Not entertaining at all” to “Very entertaining”. “Left-wing bias” is measured on a 5-point scale from “Very right-wing biased” to “Very left-wing biased”.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust standard errors in parentheses.

Table B.14: Interaction analysis: Base versus extra treatments

	Interactant:			
	(1) Neutral frame	(2) Instrumental value frame	(3) Opinion piece	(4) Right-wing outlet
<b>Panel A: Attentive respondents</b>				
Treatment	0.026 (0.016)	0.027* (0.016)	0.029* (0.015)	0.014 (0.016)
Treatment $\times$ Interactant	-0.017 (0.042)	-0.028 (0.043)	-0.060 (0.048)	0.081* (0.044)
Interactant	0.020 (0.035)	-0.016 (0.036)	0.029 (0.038)	-0.145*** (0.035)
N	4,667	4,667	4,667	4,667
Control group mean	0.491	0.491	0.491	0.491
<b>Panel B: Inattentive</b>				
Treatment	-0.006 (0.016)	-0.003 (0.016)	0.001 (0.017)	-0.012 (0.017)
Treatment $\times$ Interactant	0.009 (0.050)	-0.012 (0.049)	-0.039 (0.042)	0.057 (0.046)
Interactant	-0.033 (0.042)	-0.003 (0.039)	0.081** (0.036)	-0.083** (0.039)
N	3,732	3,732	3,732	3,732
Control group mean	0.625	0.625	0.625	0.625

*Note:* This table shows OLS regression where the dependent variable is demand for the newsletter. We pool respondents across waves. “Treatment” is a binary variable taking value one if the articles in the newsletter are fact-checked (base treatment). In each column, we interact the base treatment with a different additional treatment. The interactants are binary variables taking value one if a respondent was assigned to the condition of the additional treatment that differed from the base experiment. In each column, we include indicator variables for the additional treatments that are not explored in the interaction analysis.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust standard errors in parentheses.

Table B.15: Interaction of the base treatment and the additional treatments

	Interactant:			
	(1) Neutral frame	(2) Instrumental value frame	(3) Opinion piece	(4) Right-wing outlet
Treatment (a)	-0.024 (0.031)	0.011 (0.030)	0.019 (0.030)	0.032 (0.030)
Treatment $\times$ Interactant (b)	0.032 (0.043)	-0.023 (0.043)	-0.039 (0.042)	0.043 (0.043)
Interactant	-0.016 (0.030)	-0.018 (0.030)	0.056* (0.030)	-0.102*** (0.030)
N	2,086	2,097	2,162	2,054
Controls	Yes	Yes	Yes	Yes
Control group mean	0.552	0.570	0.549	0.532
P-value: a + b = 0	0.783	0.702	0.481	0.013

*Note:* This table shows OLS regression where the dependent variable is demand for the newsletter. Each column uses only observations from that particular wave, i.e, column  $k$  uses respondents from wave  $k$ . “Treatment” is a binary variable taking value one if the articles in the newsletter are fact-checked (base treatment). In each column, we interact the base treatment with the additional treatment in that particular wave. The interactants are binary variables taking value one if a respondent was assigned to the condition of the additional treatment that differed from the base experiment.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust standard errors in parentheses.

Table B.16: Treatment effect on expected errors

	Full sample		Attentive respondents	
	(1) MSNBC	(2) Fox News	(3) MSNBC	(4) Fox News
Treatment	-0.066*** (0.023)	-0.127* (0.070)	-0.120*** (0.029)	-0.264*** (0.097)
N	7,236	996	4,039	539
Z-scored	No	No	No	No
Controls	Yes	Yes	Yes	Yes
Control group mean	1.072	1.900	0.906	2.152

*Note:* This table shows OLS regression where the dependent variable are the respondent's expectation about the number of articles that contain factual inaccuracies in reporting, which can range from 0 to 3. "Treatment" is a binary variable taking value one if the articles in the newsletter are fact-checked (base treatment). Columns 1 and 3 use respondents that were offered a newsletter featuring *MSNBC* articles, while columns 2 and 4 those that were offered a newsletter featuring *Fox News* articles. Columns 3 and 4 restrict to the subsample of attentive respondents.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust standard errors in parentheses.

Table B.17: Selection

	Newsletter demand	No newsletter demand	P-value	Observations
Male	0.47	0.38	0.000	3673
Age	39.34	39.52	0.751	3673
Log of income	10.81	10.71	0.001	3673
South	0.34	0.35	0.868	3673
West	0.19	0.21	0.074	3673
Northeast	0.25	0.20	0.000	3673
White	0.64	0.70	0.000	3673
College	0.82	0.80	0.344	3673

*Note:* This table shows the characteristics of respondents who signed up for the newsletter (“Newsletter demand”) and those who did not (“No newsletter demand”) among control group respondents who were offered the newsletter featuring articles from *MSNBC*. “Male” is a binary variable with value one for male respondents. “Age” is coded as the continuous midpoint of the age bracket (18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 or older). “Log of income” is coded continuously as the logarithm of the income bracket’s midpoint (Less than \$15,000, \$15,000 to \$24,999, \$25,000 to \$49,999, \$50,000 to \$74,999, \$75,000 to \$99,999, \$100,000 to \$149,999, \$150,000 to \$200,000, \$200,000 or more). “South”, “West”, and “Northeast” are binary dummy variables with value one if the respondent lives in the respective region. “White” is a binary variable with value one if the respondent selected “Caucasian/White”. “College education” is a binary dummy variable taking value one if the respondent selected “Some college, no degree”, “Associates degree”, “Bachelor’s degree”, or “Post-graduate degree”.

## **C Additional figures**



Figure C.1: Experimental instructions: Politics newsletter

## (a) Newsletter: Control group

Congress is currently debating whether to pass the **Biden Rescue Plan** to help America recover from the coronavirus crisis. The proposal has received strong support from liberal voices, but has been criticized by conservative voices.

Our **Weekly Newsletter** is a weekly newsletter that will cover **the three top stories about the Biden Rescue Plan** featured on **MSNBC** during the last week.

By receiving our newsletter, you never risk losing out on the most important news about the Biden Rescue Plan.

The newsletter will be released each Monday in January and February 2021.

Would you like to receive our newsletter?

☐ Yes

☐ No

## (b) Newsletter: Treatment group

Congress is currently debating whether to pass the **Biden Rescue Plan** to help America recover from the coronavirus crisis. The proposal has received strong support from liberal voices, but has been criticized by conservative voices.

Our **Weekly Newsletter** is a weekly newsletter that will cover **the three top stories about the Biden Rescue Plan** featured on **MSNBC** during the last week.

By receiving our newsletter, you never risk losing out on the most important news about the Biden Rescue Plan.

The newsletter will be released each Monday in January and February 2021. **We will fact check all stories and flag those with inaccuracies.**

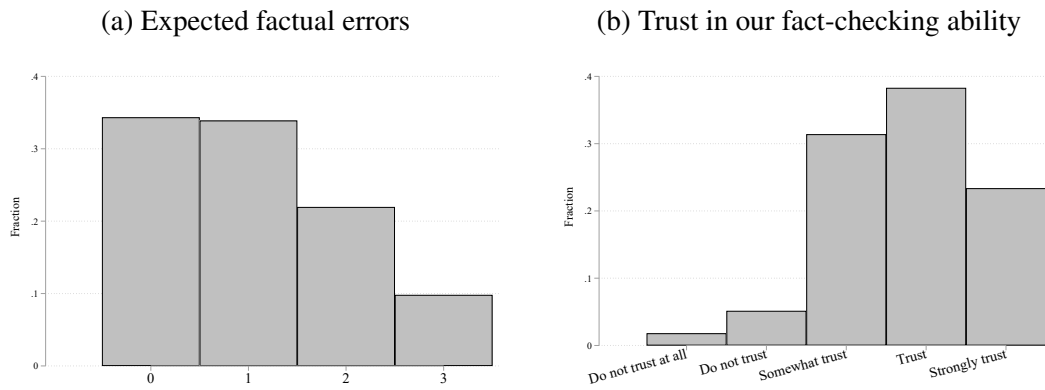
Would you like to receive our newsletter?

☐ Yes

☐ No

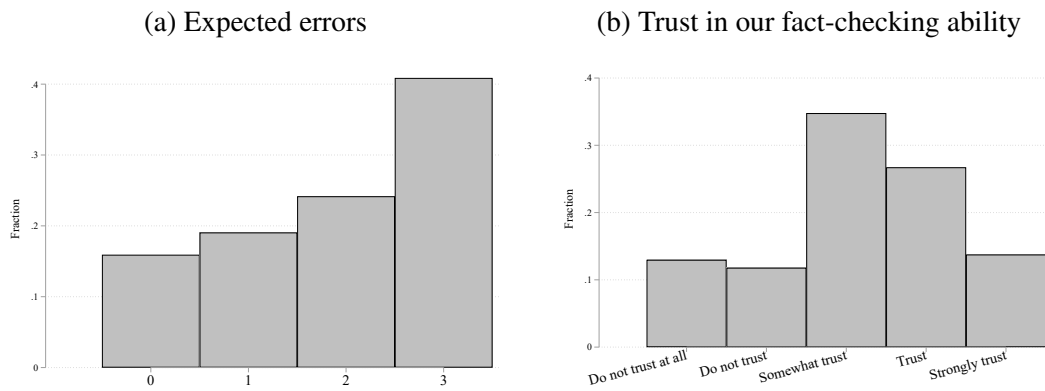
*Note:* This figures provides the experimental instructions used to describe the politics newsletter to respondents in the control group (Panel A) and in the treatment group (Panel B) for the case of a politically aligned outlet. The original instructions did not include the red highlighting in Panel B. For the politically non-aligned outlet, we replaced MSNBC with Fox News.

Figure C.2: Expected factual errors and trust in fact-checking: *MSNBC*



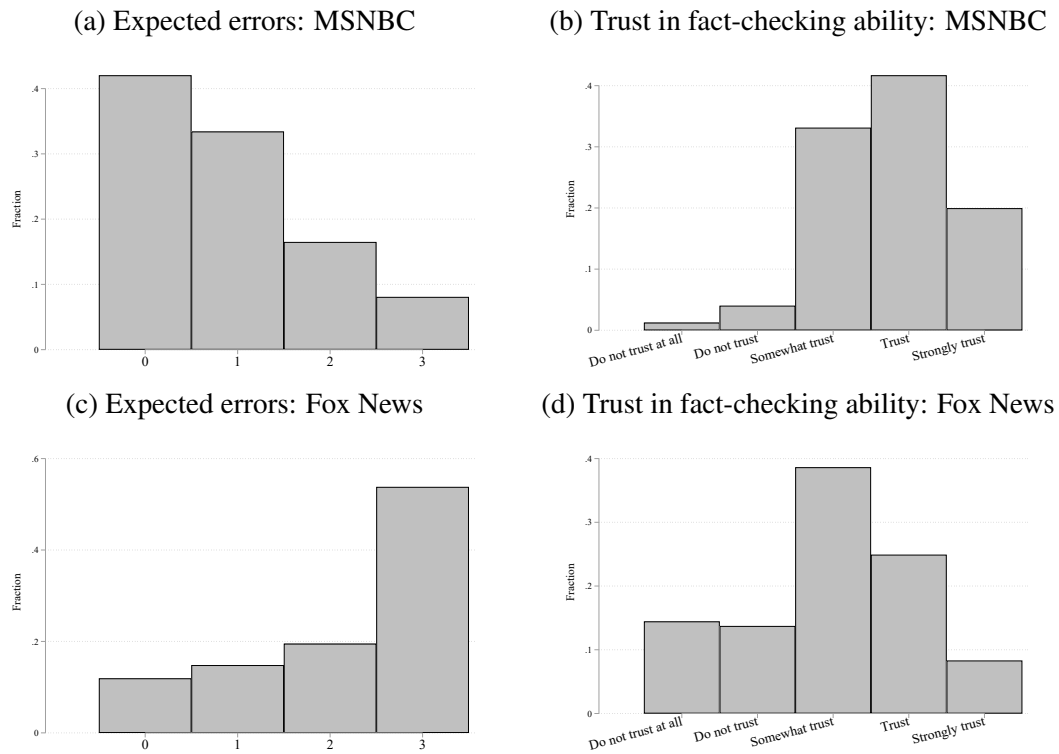
*Note:* This figure uses data from control group respondents ( $n = 3,673$ ). Panel C.2a shows the distribution of responses to the question “How many of the top three articles from *MSNBC* selected for the newsletter do you expect to contain factual errors?” Panel C.2b shows the distribution of responses to the question “How much do you trust our ability to fact check articles from *MSNBC*?”

Figure C.3: Expected factual errors and trust in fact-checking: Fox News



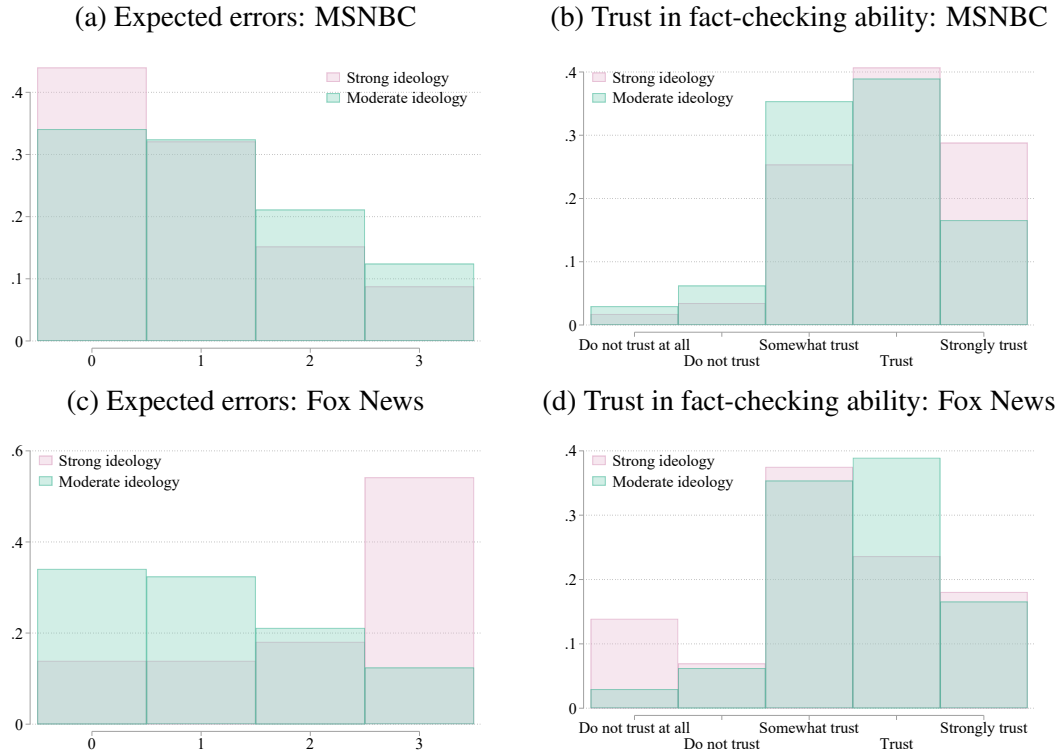
*Note:* This figure uses data from control group respondents in wave 3. Panel C.3a shows the distribution of responses to the following question: “How many of the top three articles from FOX selected for the newsletter do you expect to contain factual errors?” Panel C.3b shows distribution of responses to the following question: “How much do you trust our ability to fact check articles from Fox News?”

Figure C.4: Expected factual errors and trust in fact-checking: Attentive respondents



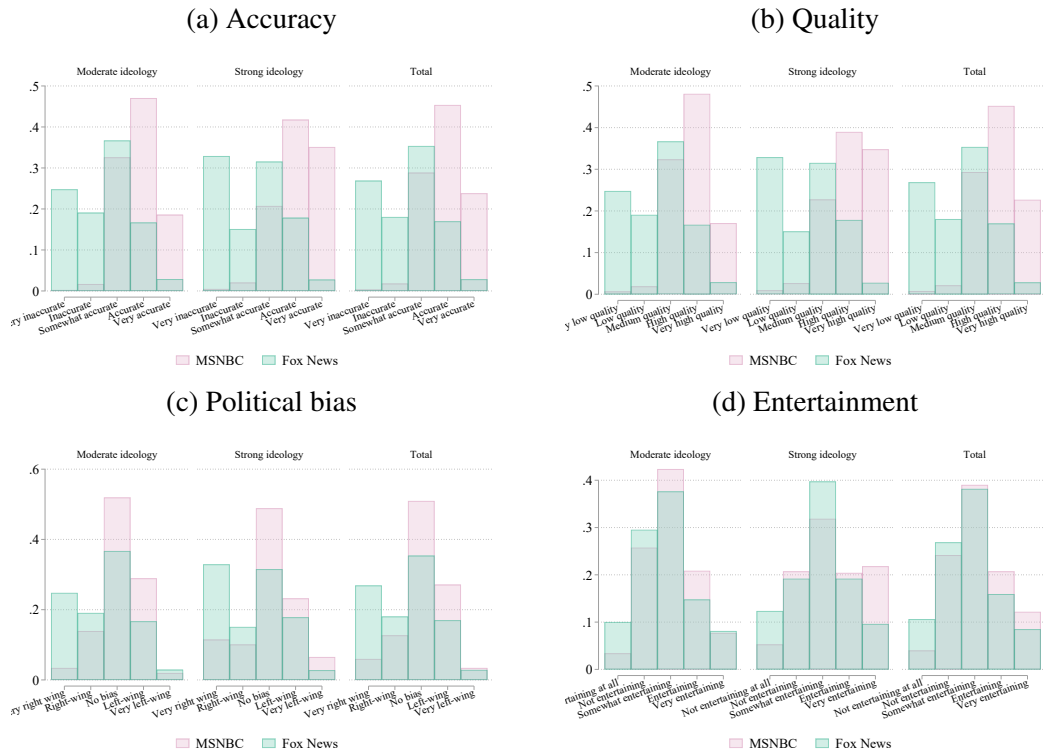
**Note:** This figure uses data from control group respondents who passed the attention check. Panel C.4a shows the distribution of responses to the question “How many of the top three articles from MSNBC selected for the newsletter do you expect to contain factual errors?” Panel C.4b shows the distribution of responses to the question “How much do you trust our ability to fact check articles from MSNBC?” Panel C.4c and Panel C.4d show the corresponding figures for *Fox News*.

Figure C.5: Expected factual errors and trust in fact-checking ability separately by ideology



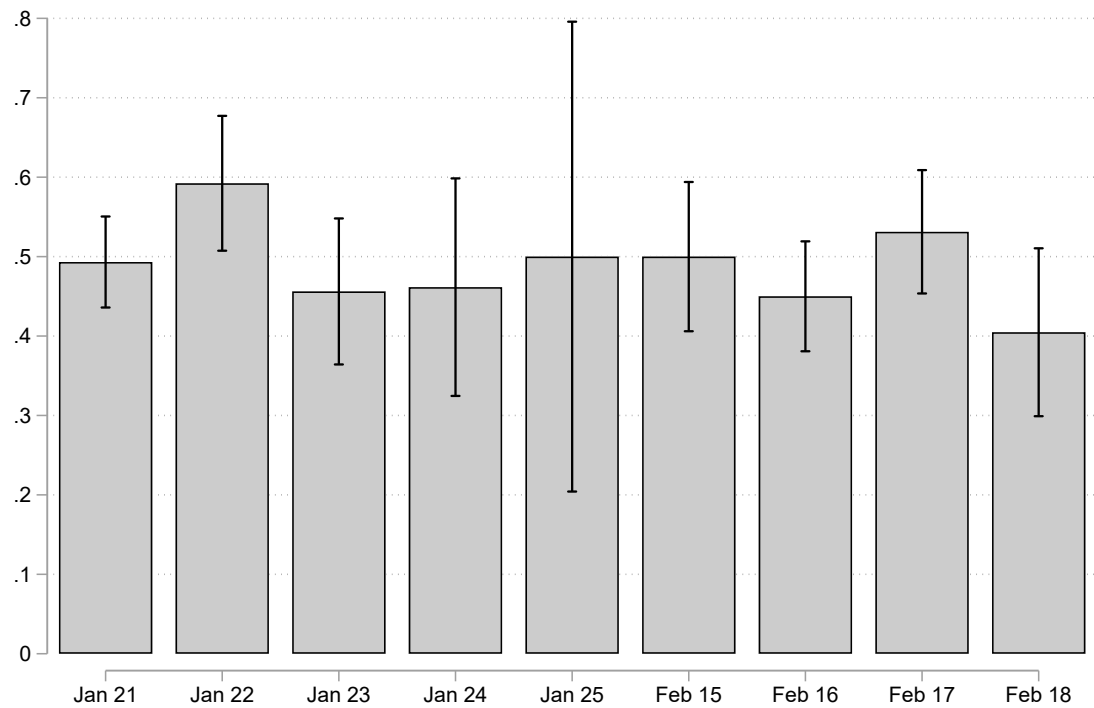
*Note:* This figure uses data from control group respondents who passed the attention check. Panel C.5a shows the distribution of responses to the question “How many of the top three articles from MSNBC selected for the newsletter do you expect to contain factual errors?” Panel C.5b shows the distribution of responses to the question “How much do you trust our ability to fact check articles from MSNBC?” Panel C.5c and Panel C.5d show the corresponding figures for Fox News.

Figure C.6: Beliefs about newsletter characteristics



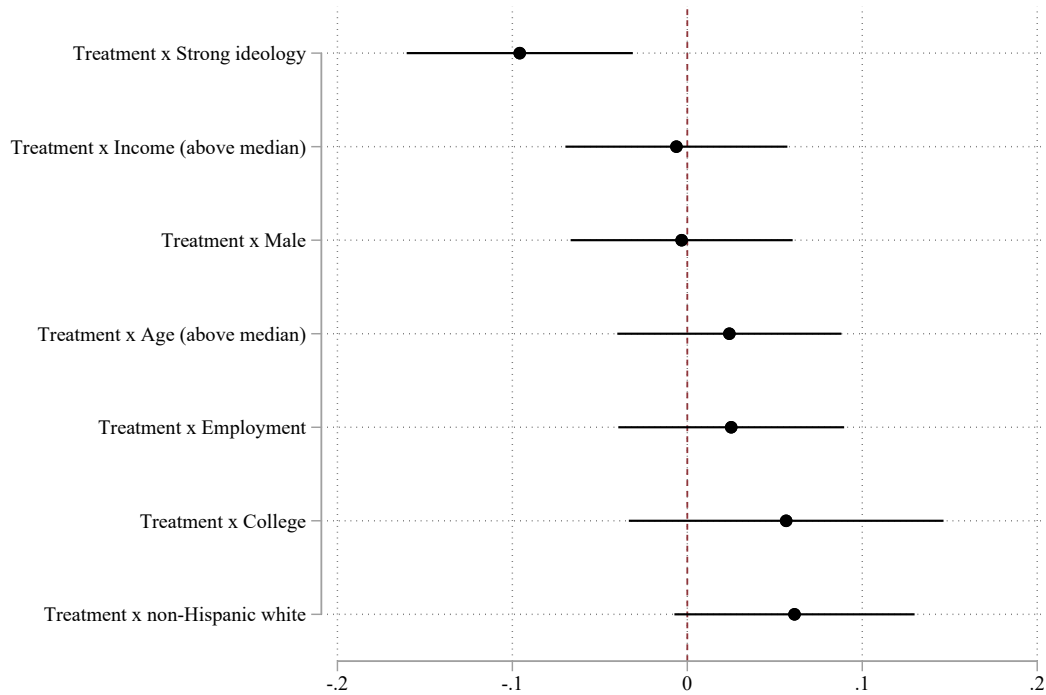
**Note:** This figure uses data from control group respondents who passed the attention check. Figure C.6a shows the distribution of responses to the question “How accurate do you expect the newsletter to be?”. Figure C.6b shows the distribution of responses to the question “What quality would you expect the newsletter to have?”. Figure C.6c shows the distribution of responses to the question “What kind of political bias do you expect the newsletter to have?”. Figure C.6d shows the distribution of responses to the question “How entertaining do you expect the newsletter to be?”. Each panel separately shows the distribution of responses for respondents with a strong ideology, moderate ideology and the full sample.

Figure C.7: Newsletter demand over time



*Note:* This figure uses data from control group respondents in the base treatment who passed the attention check. The vertical bars indicate the fraction of respondents who signed up for the newsletter. 95 percent confidence intervals are indicated.

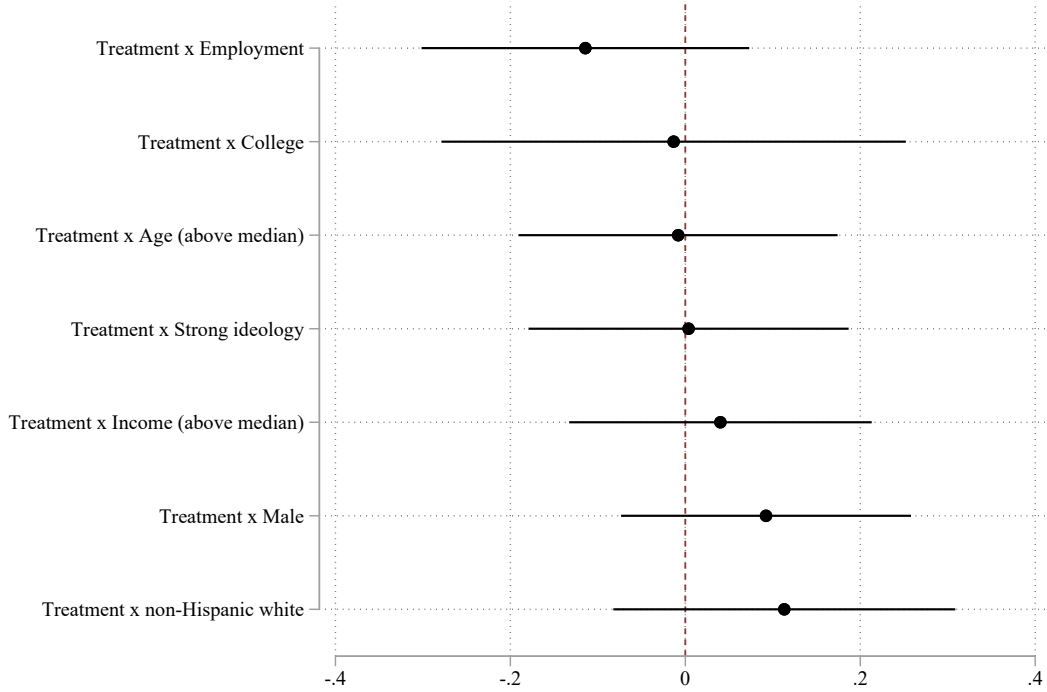
Figure C.8: Heterogeneity in treatment effects on newsletter demand with MSNBC: Simultaneous interactions



*Note:* This figure plots interaction coefficients ( $\beta_2$ ) from a regression including our fact-check treatment, a vector of demographic controls and their interaction with the treatment indicator, i.e., a regression of the form  $y = \beta_0 + \beta_1 \text{Tr} + \beta_2 \text{Tr} \times \mathbf{X}_i + \beta_3 \mathbf{X}_i + \varepsilon_i$  where  $\mathbf{X}_i$  is a vector of demographic variables. 95 percent confidence intervals are indicated. The regression includes respondents who passed the attention check and were offered a newsletter featuring articles from *MSNBC*. “Strong ideology” is a binary variable taking value one for respondents with a strong ideology. “Income (above median)” is a binary variable taking value one if a respondent has above-median income. “Male” is a binary variable taking value one if a respondent is male. “Age (above median)” is a binary variable taking value one if a respondent has above-median age. “Employment” is a binary variable taking value one if a respondent is working full-time. “College” is a binary variable taking value one if a respondent has at least some college experience. “non-Hispanic White” is a binary variable taking value one if a respondent selected “Caucasian/White” and is of non-Hispanic origin.



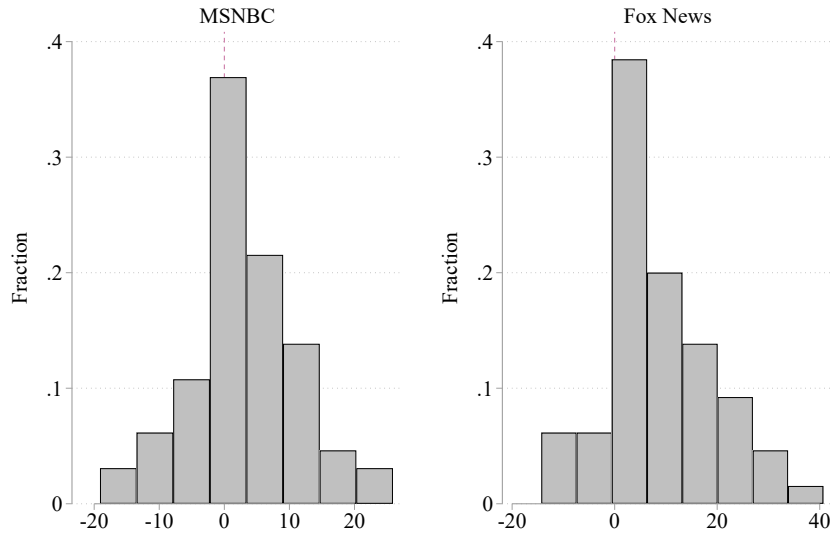
Figure C.9: Heterogeneity in treatment effects on newsletter demand with Fox News: Simultaneous interactions



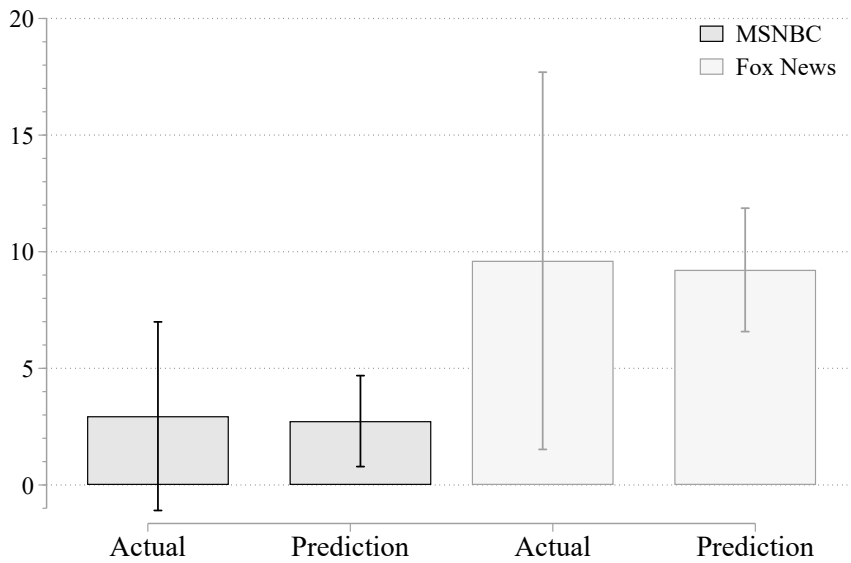
*Note:* This figure plots interaction coefficients ( $\beta_2$ ) from a regression including our fact-check treatment, a vector of demographic controls and their interaction with the treatment indicator, i.e., a regression of the form  $y = \beta_0 + \beta_1 \text{Tr} + \beta_2 \text{Tr} \times \mathbf{X}_i + \beta_3 \mathbf{X}_i + \varepsilon_i$  where  $\mathbf{X}_i$  is a vector of demographic variables. 95 percent confidence intervals are indicated. The regression includes respondents who passed the attention check and were offered a newsletter featuring articles from *Fox News*. “Strong ideology” is a binary variable taking value one for respondents with a strong ideology. “Income (above median)” is a binary variable taking value one if a respondent has above-median income. “Male” is a binary variable taking value one if a respondent is male. “Age (above median)” is a binary variable taking value one if a respondent has above-median age. “Employment” is a binary variable taking value one if a respondent is working full-time. “College” is a binary variable taking value one if a respondent has at least some college experience. “non-Hispanic White” is a binary variable taking value one if a respondent selected “Caucasian/White” and is of non-Hispanic origin.

Figure C.10: Expert survey

(a) Distribution of expert forecasts

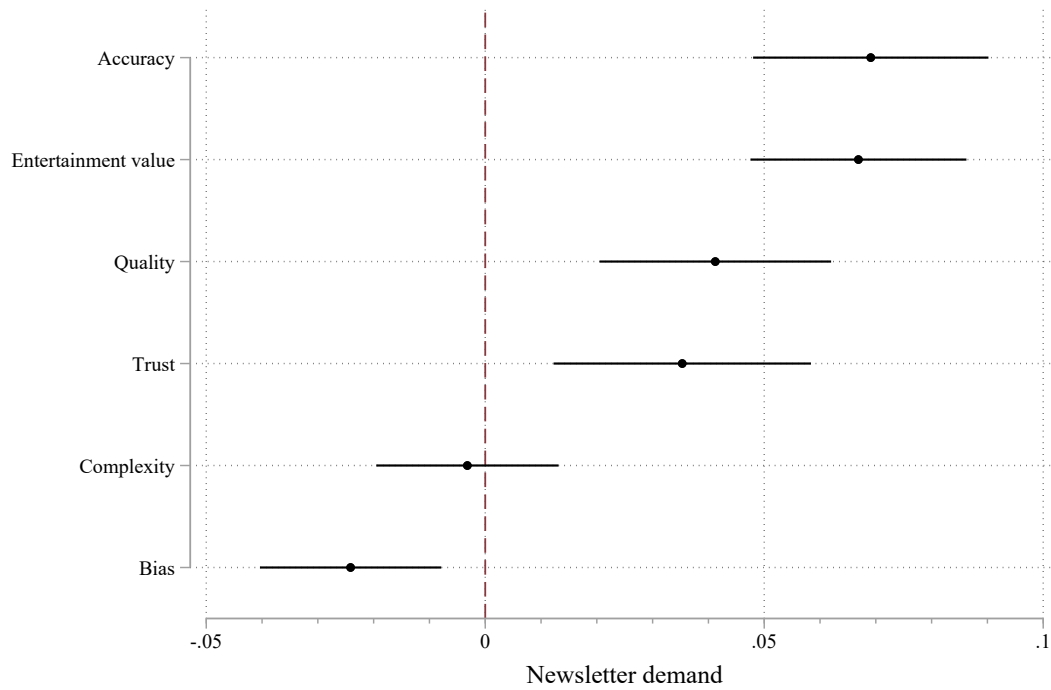


(b) Mean expert forecasts vs actual treatment effects



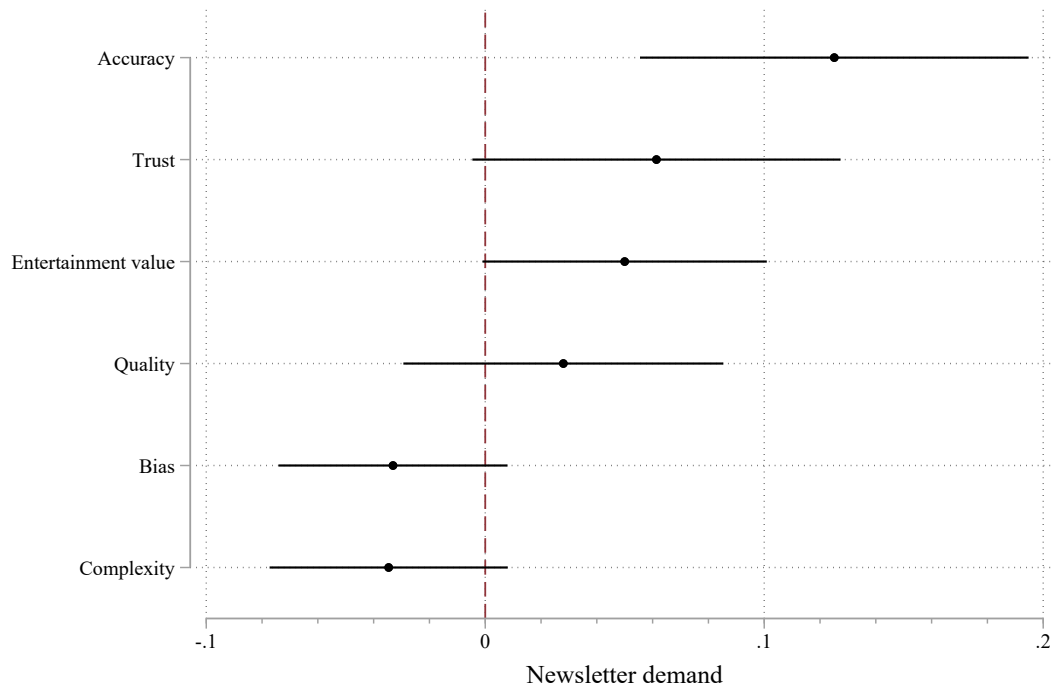
*Note:* This figure uses data from the expert survey. Panel C.10a shows the distribution of beliefs about treatment effects for *MSNBC* (left histogram) and *Fox News* (right histogram). Panel C.10b shows the mean expert forecast of the treatment effects for *MSNBC* and *Fox News* contrasted with the actual treatment effects from the main experiment (estimated without controls but with wave fixed effects). 95 percent confidence intervals are indicated.

Figure C.11: Determinants of demand: MSNBC



*Note:* This figure plots the correlations between newsletter demand and a battery of z-scored beliefs about the newsletter from a joint regression that also controls for demographic characteristics. We use control group respondents that were offered a newsletter featuring articles from *MSNBC*. 95% confidence intervals are shown.

Figure C.12: Determinants of demand: Fox News



*Note:* This figure plots the correlations between newsletter demand and a battery of z-scored beliefs about the newsletter from a joint regression that also controls for demographic characteristics. We use control group respondents that were offered a newsletter featuring articles from *Fox News*. 95% confidence intervals are shown.

## D Fact-checking

While we did not explicitly reveal to our respondents how we selected the top three stories, in practice we used Google News to identify the top three stories about the *Biden Rescue Plan* from *MSNBC* and *Fox News*. We then employed two complementary approaches to fact-check the veracity of information contained in featured articles. First, we fact-checked the articles using the following steps:

- Identify whether a similar news articles appeared in other high-quality outlets (e.g. Reuters). Then search for inconsistencies across these article.
- Identify the primary source of statistical information, assess whether they are accurately represented, and compare the figures to estimates from other, high-quality sources (e.g. government reports, published studies).
- Identify the primary source of quotations and assess whether they are quoted out of context.

Second, we collected information on inaccurate claims from well-known fact-checking organizations to rule out that we missed already identified false claims. Below we provide two examples of false claims.

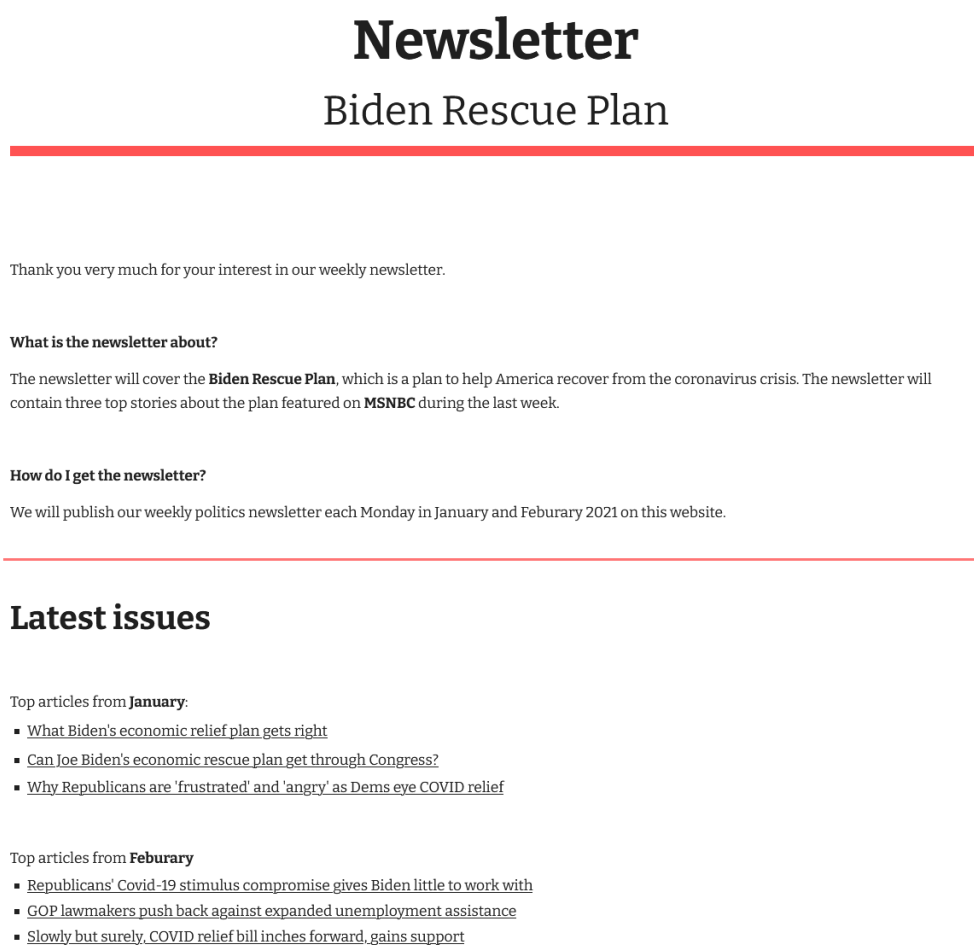
**MSNBC** On March 12, 2021, *MSNBC* published the article “Dems’ COVID relief package already saving tens of thousands of jobs”. In this article, the author claims that independent economic forecasts have “projected the law may create as many as 7 million jobs.”, citing a projection by Gregory Daco. This is misleading because the projection includes both the effect of the fiscal stimulus as well as improving economic conditions. This example illustrates how the ideologically aligned outlet biased their reports towards the beliefs of their readers by making exaggerated claims about the positive consequences of the stimulus plan.

**Fox News** On March 7, 2021, *Fox News* published the article “Sen. Blackburn on massive coronavirus package heading to House without GOP support.” This article focuses on the critique of Senator Marsha Blackburn that “only nine percent” of the spending involved in the stimulus plan is related to fighting the coronavirus. While

spending on vaccines and other medical supplies accounts for about nine percent, the stimulus plan also includes financial relief for households affected by the pandemic.

Below is a screenshot of the website where we published our newsletter.

Figure D.1: Newsletter about the *Biden Rescue Plan*

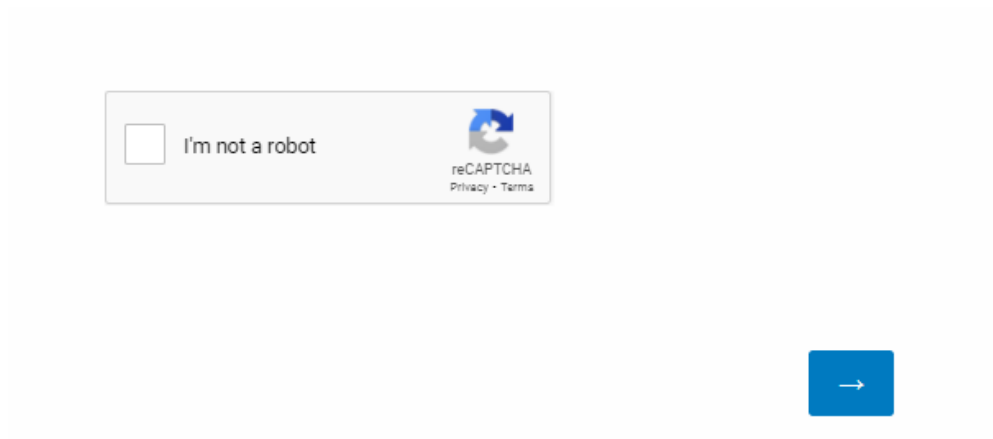


*Note:* This is a screenshot of the website where we published our newsletter.

## E Screenshots

### E.1 Full survey with base treatments (identical across all waves)

#### E.1.1 Pre-treatment questions



The screenshot displays a pre-treatment question screen. At the top, there is a reCAPTCHA widget with a checkbox and the text "I'm not a robot". To the right of the checkbox is the reCAPTCHA logo and the text "reCAPTCHA Privacy - Terms". Below the reCAPTCHA widget, there is a large blue button with a white right-pointing arrow.

The next question is about the following problem. In questionnaires like ours, sometimes there are participants who do not carefully read the questions and just quickly click through the survey. This means that there are a lot of random answers which compromise the results of research studies. To show that you read our questions carefully, please choose both “Extremely interested” and “Not at all interested” as your answer in the next question. How interested are you in sports?

☐ Extremely interested

☐ Very interested

☐ A little bit interested

☐ Almost not interested

☐ Not at all interested





Please indicate your gender.

☐ Male

☐ Female

What is your age?

Which category best describes your highest level of education?

☐ Eighth grade or less

☐ Some high school

☐ High school degree/GED

☐ Some college

☐ 2-year college degree

☐ 4-year college degree

☐ Master's degree

☐ Doctoral degree

☐ Professional degree (JD, MD, MBA)



Which of the following best describes your race or ethnicity?

☐ African American/Black

☐ Asian/Asian American

☐ Caucasian/White

☐ Native American, Inuit or Aleut

☐ Native Hawaiian/Pacific Islander

☐ Other

Are you of Hispanic, Latino, or Spanish origin?

☐ Yes

☐ No

What was your family's gross household income in 2020 in US dollars?

☐ Less than \$15,000

☐ \$15,000 to \$24,999

☐ \$25,000 to \$49,999

☐ \$50,000 to \$74,999

☐ \$75,000 to \$99,999

☐ \$100,000 to \$149,999

☐ \$150,000 to \$200,000

☐ More than \$200,000

Who did you vote for in the 2020 presidential election?

☐ Donald Trump

☐ Joe Biden

☐ Other

☐ Did not vote

In politics, as of today, do you consider yourself a Republican, a Democrat, or an Independent?

☐ Republican

☐ Democrat

☐ Independent



What is your region of residence?

- ☐ **Northeast** (CT, ME, MA, NH, RI, VT, NJ, NY, PA),
- ☐ **Midwest** (IL, IN, MI, OH, WI, IA, KS, MN, MO, NE, ND, SD)
- ☐ **South** (DE, DC, FL, GA, MD, NC, SC, VA, WV, AL, KY, MS, TN, AR, LA, OK, TX)
- ☐ **West** (AZ, CO, ID, NM, MT, UT, NV, WY, AK, CA, HI, OR, WA)

What is your current employment status?

- ☐ Full-time employee
- ☐ Part-time employee
- ☐ Self-employed or small business owner
- ☐ Unemployed and looking for work
- ☐ Student
- ☐ Not in labor force (for example: retired or full-time parent)

Are you liberal or conservative?

- ☐ Very liberal
- ☐ Liberal
- ☐ Neither liberal nor conservative
- ☐ Conservative
- ☐ Very conservative

Which of the following newspapers are you most likely to read?

☐ Breitbart

☐ BuzzFeed News

☐ Chicago Sun-Times

☐ Daily Mail

☐ Drudge Report

☐ InfoWars

☐ Los Angeles Times

☐ New Republic

☐ Newsmax

☐ New York Daily News

☐ New York Post

☐ Palmer Report

☐ The Denver Post

☐ The Huffington Post

☐ The Mercury News

☐ The New York Times

☐ The Wall Street Journal

☐ The Washington Post

☐ The Washington Times

☐ USA Today

☐ I never read any of the newspapers above

### E.1.2 Newsletter without fact-checking

Congress is currently debating whether to pass the **Biden Rescue Plan** to help America recover from the coronavirus crisis. The proposal has received strong support from liberal voices, but has been criticized by conservative voices.

Our **Weekly Newsletter** is a weekly newsletter that will cover **the three top stories about the Biden Rescue Plan** featured on **MSNBC** during the last week.

By receiving our newsletter, you never risk losing out on the most important news about the Biden Rescue Plan.

The newsletter will be released each Monday in January and February 2021.

Would you like to receive our newsletter?

☐ Yes

☐ No



### E.1.3 Newsletter with fact-checking

Congress is currently debating whether to pass the **Biden Rescue Plan** to help America recover from the coronavirus crisis. The proposal has received strong support from liberal voices, but has been criticized by conservative voices.

Our **Weekly Newsletter** is a weekly newsletter that will cover **the three top stories about the Biden Rescue Plan** featured on **MSNBC** during the last week.

By receiving our newsletter, you never risk losing out on the most important news about the Biden Rescue Plan.

The newsletter will be released each Monday in January and February 2021. **We will fact check all stories and flag those with inaccuracies.**

Would you like to receive our newsletter?

☐ Yes

☐ No



## E.1.4 Post-treatment mechanism questions

How accurate do you expect the newsletter to be?

- ☐ Very accurate
- ☐ Accurate
- ☐ Somewhat accurate
- ☐ Inaccurate
- ☐ Very inaccurate

How trustworthy do you expect the newsletter to be?

- ☐ Very trustworthy
- ☐ Trustworthy
- ☐ Somewhat trustworthy
- ☐ Not trustworthy
- ☐ Not trustworthy at all

How entertaining do you expect the newsletter to be?

- ☐ Very entertaining
- ☐ Entertaining
- ☐ Somewhat entertaining
- ☐ Not entertaining
- ☐ Not entertaining at all

What kind of political bias do you expect the newsletter to have?

- ☐ Very right-wing biased
- ☐ Somewhat right-wing biased
- ☐ Not biased
- ☐ Somewhat left-wing biased
- ☐ Very left-wing biased



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What quality would you expect the newsletter to have?

☐ Very high quality

☐ High quality

☐ Medium quality

☐ Low quality

☐ Very low quality

Do you expect the newsletter to have a simple or complex message?

☐ Very simple

☐ Simple

☐ Neither simple nor complex

☐ Complex

☐ Very complex

How much trust do you have in the news media?

☐ Very high trust

☐ High trust

☐ Some trust

☐ Low trust

☐ Very low trust

Which of these platforms are you most likely to use as news sources?

☐ News websites

☐ Social media

☐ Television

☐ Radio

☐ Print newspapers



### E.1.5 Beliefs about fact-checking: condition 1

Now imagine that we would fact check all stories and flag those with inaccuracies.

How many of the top three articles from MSNBC selected for the newsletter do you expect to contain factual errors?

☐ 0

☐ 1

☐ 2

☐ 3

How many of the top three articles from MSNBC selected for the newsletter do you expect to be flagged as inaccurate?

☐ 0

☐ 1

☐ 2

☐ 3

How much do you trust our ability to fact check articles from MSNBC?

☐ Strongly trust

☐ Trust

☐ Somewhat trust

☐ Do not trust

☐ Do not trust at all



### E.1.6 Beliefs about fact-checking: condition 2

How many of the top three articles from MSNBC selected for the newsletter do you expect to contain factual errors?

☐ 0

☐ 1

☐ 2

☐ 3

How many of the top three articles from MSNBC selected for the newsletter do you expect to be flagged as inaccurate?

☐ 0

☐ 1

☐ 2

☐ 3

How much do you trust our ability to fact check articles from MSNBC?

☐ Strongly trust

☐ Trust

☐ Somewhat trust

☐ Do not trust

☐ Do not trust at all



### E.1.7 Demand for fact-checking information

MSNBC has been fact-checked several times by non-partisan fact checkers. Do you want to know how the accuracy of MSNBC has been rated?

☐ Yes

☐ No



### E.1.8 Questions about the Biden Rescue Plan

How strongly do you support the Biden Rescue Plan?

☐ Strongly support

☐ Support

☐ Neither support nor oppose

☐ Oppose

☐ Strongly oppose



Do you think that the Biden Rescue Plan is bipartisan or only supported by one of the parties?

- ☐ Bipartisan
- ☐ Only supported by one of the parties (Republicans)
- ☐ Only supported by one of the parties (Democrats)



## E.2 Wave 1: Topic polarization

### E.2.1 Newsletter without fact-checking

Congress is currently debating whether to pass the **American Rescue Plan** to help America recover from the coronavirus crisis. The proposal has received strong support from both conservative and liberal voices.

Our **Weekly Newsletter** is a weekly newsletter that will cover **the three top stories about the American Rescue Plan** featured on during the last week.

By receiving our newsletter, you never risk losing out on the most important news about the American Rescue Plan.

The newsletter will be released each Monday in January and February 2021.

Would you like to receive our newsletter?

☐ Yes

☐ No



### E.2.2 Newsletter with fact-checking

Congress is currently debating whether to pass the **American Rescue Plan** to help America recover from the coronavirus crisis. The proposal has received strong support from both conservative and liberal voices.

Our **Weekly Newsletter** is a weekly newsletter that will cover **the three top stories about the American Rescue Plan** featured on during the last week.

By receiving our newsletter, you never risk losing out on the most important news about the American Rescue Plan.

The newsletter will be released each Monday in January and February 2021. **We will fact check all stories and flag those with inaccuracies.**

Would you like to receive our newsletter?

☐ Yes

☐ No





## E.3 Wave 2: Instrumental motives

### E.3.1 Newsletter without fact-checking

Congress is currently debating whether to pass the **Biden Rescue Plan**, which includes a **\$1400 stimulus check to most Americans**, to help America recover from the coronavirus crisis. The proposal has received strong support from liberal voices, but has been criticized by conservative voices.

Our **Weekly Newsletter** is a weekly newsletter that will cover **the three top stories about the Biden Rescue Plan** featured on during the last week.

By receiving our newsletter, you never risk losing out on the most important news about the Biden Rescue Plan, including the **latest news about when you could you get your \$1,400 if the plan is approved.**

The newsletter will be released each Monday in January and February 2021.

Would you like to receive our newsletter?

☐ Yes

☐ No



### E.3.2 Newsletter with fact-checking

Congress is currently debating whether to pass the **Biden Rescue Plan**, which includes a **\$1400 stimulus check to most Americans**, to help America recover from the coronavirus crisis. The proposal has received strong support from liberal voices, but has been criticized by conservative voices.

Our **Weekly Newsletter** is a weekly newsletter that will cover **the three top stories about the Biden Rescue Plan** featured on during the last week.

By receiving our newsletter, you never risk losing out on the most important news about the Biden Rescue Plan, including the **latest news about when you could get your \$1,400 if the plan is approved**.

The newsletter will be released each Monday in January and February 2021. **We will fact check all stories and flag those with inaccuracies.**

Would you like to receive our newsletter?

☐ Yes

☐ No



## E.4 Manipulation checks for instrumental motives

How relevant do you expect the newsletter to be for your personal finances?

☐ Very relevant

☐ Relevant

☐ Somewhat relevant

☐ Not relevant

☐ Not relevant at all

How do you expect the Biden Rescue Plan to affect your personal finances?

☐ Affect my personal finances very positively

☐ Affect my personal finances positively

☐ Does not affect my personal finances

☐ Affect my personal finances negatively

☐ Affect my personal finances very negatively

## E.5 Wave 3: Right-wing outlet

### E.5.1 Newsletter without fact-checking

Congress is currently debating whether to pass the **Biden Rescue Plan** to help America recover from the coronavirus crisis. The proposal has received strong support from liberal voices, but has been criticized by conservative voices.

Our **Weekly Newsletter** is a weekly newsletter that will cover **the three top stories about the Biden Rescue Plan** featured on **Fox News** during the last week.

By receiving our newsletter, you never risk losing out on the most important news about the Biden Rescue Plan.

The newsletter will be released each Monday in February and March 2021.

Would you like to receive our newsletter?

☐ Yes

☐ No



### E.5.2 Newsletter with fact-checking

Congress is currently debating whether to pass the **Biden Rescue Plan** to help America recover from the coronavirus crisis. The proposal has received strong support from liberal voices, but has been criticized by conservative voices.

Our **Weekly Newsletter** is a weekly newsletter that will cover **the three top stories about the Biden Rescue Plan** featured on **Fox News** during the last week.

By receiving our newsletter, you never risk losing out on the most important news about the Biden Rescue Plan.

The newsletter will be released each Monday in February and March 2021. **We will fact check all stories and flag those with inaccuracies.**

Would you like to receive our newsletter?

☐ Yes

☐ No



## E.6 Wave 4: Opinion piece

### E.6.1 Newsletter without fact-checking

Congress is currently debating whether to pass the **Biden Rescue Plan** to help America recover from the coronavirus crisis. The proposal has received strong support from liberal voices, but has been criticized by conservative voices.

Our **Weekly Newsletter** is a weekly newsletter that will cover **the three top opinion pieces about the Biden Rescue Plan** featured on **MSNBC** during the last week.

By receiving our newsletter, you never risk losing out on the most newsworthy opinion pieces about the Biden Rescue Plan.

The newsletter will be released each Monday in February and March 2021.

Would you like to receive our newsletter?

☐ Yes

☐ No



### E.6.2 Newsletter with fact-checking

Congress is currently debating whether to pass the **Biden Rescue Plan** to help America recover from the coronavirus crisis. The proposal has received strong support from liberal voices, but has been criticized by conservative voices.

Our **Weekly Newsletter** is a weekly newsletter that will cover **the three top opinion pieces about the Biden Rescue Plan** featured on **MSNBC** during the last week.

By receiving our newsletter, you never risk losing out on the most newsworthy opinion pieces about the Biden Rescue Plan.

The newsletter will be released each Monday in February and March 2021. **We will fact check all stories and flag those with inaccuracies.**

Would you like to receive our newsletter?

☐ Yes

☐ No

