

A. Internet Appendix for “Biases in Information Selection and Processing: Survey Evidence from the Pandemic”

This appendix includes extensions, details, and results omitted from the main text for brevity. Appendix A.1 has definitions of the main variables used in the paper. Appendix A.2 presents a simple model that rationalizes the empirical evidence. Appendix A.3 has additional results. Appendix A.4 presents additional figures. Appendix A.6 presents descriptive evidence on belief dispersion across the political spectrum. Appendix A.7 describes the pilot studies conducted on MTurk. Appendices A.8 and A.9 provide additional detail on the design and question wording of Survey 1 and 2, respectively.

A.1. Variables Definitions

Table A1
Variables Definitions and Sources

This table has definitions of the main variables used in the regressions.

Variable	Definition
<i>Survey/explanatory variables:</i>	
Preferred	Dummy equal to 1 if the participant reads the article she had ranked as preferred (Survey 1).
Pessimistic	Dummy equal to 1 if the participant reads the article with the pessimistic headline. In Survey 1, when individuals who chose the health or the economy domain are pooled, we distinguish between a “Pessimistic - Health” and a “Pessimistic - Economy” dummy.
Source Revealed	A dummy equal to 1 if the participant is revealed the source of each article before making the choice (Survey 2).
Revealed After	A dummy equal to 1 if the participant is revealed the article source after having made the choice (Survey 2).
<i>Measured in prior and posterior stage:</i>	
Forecast Deaths	The participant’s forecast of the number of Covid-related deaths at the end of the year, winsorized at the 2.5% level.
Forecast UR	The participant’s forecast of the unemployment rate at the end of the year, winsorized at the 2.5% level.
Pr. Deaths > 200k	The participant’s estimate of the probability that the number of Covid-related deaths will be higher than 200,000 by the end of the year.
Pr. UR > 20%	The participant’s estimate of the probability that the unemployment rate will be higher than 20% by the end of the year.
Pr. Infection	An estimate of the probability that the participant will be infected by the coronavirus by the end of the year.

Continued on next page

Table A1 – Continued from previous page

Variable	Definition
Pr. Contact Tracing (CT) App	The likelihood that the participant will voluntarily sign up for a contact tracing app (Survey 2).
<i>Measured in prior stage:</i>	
Worried - Health	A measure, on a 1 to 10 scale, of how worried the participant is about the health consequences of the pandemic.
Worried - Economy	A measure, on a 1 to 10 scale, of how worried the participant is about the economic consequences of the pandemic.
Worried H+E	The sum of Worried - Economy and Worried - Health.
Worried H-E	The difference between Worried - Health and Worried - Economy.
Nowcast Deaths	The participant's estimate of the number of deaths related to the Covid pandemic at the moment of the survey, winsorized at the 2.5% level.
Nowcast UR	The participant's estimate of the current unemployment rate, winsorized at the 2.5% level.
PC1	The first principal component of Worried - Health, Worried - Economy, Pr. Deaths > 200k, Pr. UR > 20%, Forecast Deaths, Forecast UR, and Pr. Infection (all measured in prior stage).
Lockdown Support	An evaluation of lockdown measures taken so far, from 1 ("The measures went much too far") to 5 ("The measures did not go nearly far enough").
<i>Measured in posterior stage (after article is shown):</i>	
Informativeness	An assessment of the informativeness of the article read on a scale from 1 to 7.
Reliability	An assessment of the reliability of the article read on a scale from 1 to 7.
Headline Check	A dummy equal to 1 if the participant correctly identifies, among four headlines, the one corresponding to the article just read.
Amount Spent for Advertising	The dollar amount that the participant is willing to spend to advertise the news source on Facebook, from a \$50 budget.
Support	A measure of support for future lockdown policies from 1 ("No intervention, just let the virus run its course") to 5 ("Stricter stay-home orders than this time, even if the economic cost is very large").
Money to WHO	The dollar amount the participant is willing to donate to the World Health Organization, as opposed to FreedomWorks, out of a budget of 20 dollars (Survey 1).

Continued on next page

Table A1 – Continued from previous page

Variable	Definition
<i>Respondent characteristics:</i>	
College	A dummy equal to 1 if the participant has a bachelor, master, or doctoral degree.
Retired	A dummy equal to 1 if the participant is a retiree or an early retiree.
Unemployed	A dummy equal to 1 if the participant is unemployed.
Employment Loss in HH	A dummy equal to 1 if somebody in the participant's household has suffered an employment loss related to the pandemic.
Income	A measure of household income that takes values 0 ("Less than \$10,000"), 1 ("(\$10,000 - \$19,999)"), 2 ("(\$20,000 - \$29,999)"), 3 ("(\$30,000 - \$39,999)"), 4 ("(\$40,000 - \$49,999)"), 5 ("(\$50,000 - \$59,999)"), 6 ("(\$60,000 - \$69,999)"), 7 ("(\$70,000 - \$79,999)"), 8 ("(\$80,000 - \$89,999)"), 9 ("(\$90,000 - \$99,999)"), 10 ("(\$100,000 - \$149,999)"), 11 ("(\$150,000 - \$199,999)"), 12 ("(\$200,000 or more").
Health	Self-assessed overall health, from 1 ("poor") to 5 ("excellent").
Nr Health Conditions	The number of conditions the participant suffers or has suffered from, between (i) Lung disease such as chronic bronchitis or emphysema; (ii) Diabetes or high blood sugar; and (iii) A heart attack, coronary heart disease, angina, congestive heart failure, or other heart problems. The list of conditions is from Allcott et al. (2020).
Already Infected	A dummy equal to 1 if the participant indicates that she has been tested positive for COVID-19 or that she is very likely to have been infected.
Liberal	A dummy equal to 1 if the participant defines herself as "very liberal/democrat," "liberal/democrat," or "leaning liberal/democrat," and 0 otherwise.
Age	The participant's age.
People in HH	Number of individuals in the household, capped at 7.
Nr People above 65 in HH	Number of individuals older than 65 in the household.
Female	A dummy equal to 1 if the participant is a woman.
Married	A dummy equal to 1 if the participant is married.
Black, Asian, Hispanic	Dummies corresponding to the participant's race/ethnicity.
Own Primary Residence	A dummy equal to 1 if the participant owns her primary residence.
Hold Stocks	A dummy equal to 1 if the participant owns stocks.
Health Insurance	A dummy equal to 1 if the participant owns a health insurance.

Continued on next page

Table A1 – *Continued from previous page*

Variable	Definition
Willingness to Take Risks	Self-reported willingness to take risks, from 1 (“Absolutely unwilling to take risks”) to 7 (“Fully prepared to take risks”).
Willingness to Wait	Self-reported willingness to give up something that is beneficial today in order to benefit more from that in the future, from 1 (“Completely unwilling to give up”) to 7 (“Very willing to give up”).
Trust in People	Self-reported trust in other people, from 1 (“Need to be very careful”) to 7 (“Most people can be trusted”).
<i>Local characteristics:</i>	
Stay at Home Order	A dummy equal to 1 if there is a stay at home order in the area where the participant lives.
Cases Per Capita	Number of Covid cases per capita multiplied by 1 million, measured the day before the participant takes the survey.
Deaths Per Capita	Number of Covid-related deaths per capita multiplied by 1 million, measured the day before the participant takes the survey.
County UR	Unemployment rate at the county level as of April, 2020.

A.2. A Model of Confirmatory Biases with Endogenous Information Acquisition

In this appendix, we outline a model that rationalizes our design and the results. The model features two main stages. In stage one, agents choose their desired belief, after observing a signal. In stage zero, they choose which signal they want to see, based on partial information about its content. Technically, we formalize motivations through multiplier preferences.¹ Agents entertain different subjective beliefs, choosing the ones that maximize their (subjectively weighted) expected utility, but minimizing the cost of being wrong. The subjective probability bias, relative to the objective probability, stems from utility gains. The bounds on the extent of bias is obtained by imposing a classical cost on entropy, or a Kullback-Leibler measure on the distance between the desired belief and the correct one. In other words, agents are willing to choose what to believe to the extent that this is not too wrong. For this stage, we build on Caplin and Leahy (2019), who offer a model where motivation twists posterior probabilities toward optimism. We depart from them in that we consider the more general category of confirmatory biases, according to which agents, whether optimist or pessimist, update by reinforcing their prior beliefs. Knowing that in stage one they will choose optimally motivated beliefs, in stage zero agents select a signal that they expect to provide them the highest utility (this stage is solved last by backward induction). Below we provide the main derivations of the model and show how its implications match our empirical evidence.

Stage 1 - Choice of Motivated Beliefs. In stage 1 we derive the choice of the motivated beliefs. Priors are defined as π , the state as ω , the signal as s (which in our design is represented by the content of the articles), agent’s utility as $u(\omega)$,² the objective probability as $\bar{p}(s | \omega)$, and the subjective probability as $p(s | \omega)$.

The agents choose their desired subjective belief so as to maximize their utility, embedding the motivation, while minimizing the distance between their motivated belief and the objective one. As a result, it is never optimal to be “too wrong.” In line with other studies in the decision theory literature (see for instance Ghirardato et al., 2004) or experimental literature (Baillon et al., 2017), we adopt an extended formulation of agents’ value function that embeds both ambiguity aversion and ambiguity seeking.

1 Under certain conditions, they can be mapped into maxmin or variational expectation preferences; see Strzalecki (2011)

2 In general, set-ups with endogenous beliefs also feature an action choice a , after the choice of the optimal belief, so utility is written as $u(a, \omega)$; here we simplify the set-up and assume that utility only depends on the state of the world directly. The underlying motivations might take several forms (individual, political, etc.); we are not explicit about that in the model.

The optimal motivated belief, $p(s | \omega)$, is chosen to maximize the following value function:

$$V(\pi, s) = \begin{cases} \max_p \sum_{\omega \in \Omega} \frac{p(s|\omega)\pi(\omega)}{\sum_{\omega' \in \Omega} p(s|\omega')\pi(\omega')} u(\omega) + \sigma R(p|\omega) & \text{if } \sigma < 0 \\ \sum_{\omega \in \Omega} \frac{p(s|\omega)\pi(\omega)}{\sum_{\omega' \in \Omega} p(s|\omega')\pi(\omega')} u(\omega) & \text{if } \sigma = 0 \\ \min_p \sum_{\omega \in \Omega} \frac{p(s|\omega)\pi(\omega)}{\sum_{\omega' \in \Omega} p(s|\omega')\pi(\omega')} u(\omega) - \sigma R(p|\omega) & \text{if } \sigma > 0, \end{cases} \quad (\text{A.1})$$

where $R(p|\omega) \equiv \sum_{s \in \mathcal{S}} p(s' | \omega) \ln \frac{p(s'|\omega)}{p(s'|\omega)}$ is the Kullback-Leibler measure, and the multiplier σ determines the relative importance of the two terms (and can be interpreted as the penalty term). As σ approaches zero the model delivers rational Bayesian updating, as we show further below. Intuitively, if the cost of being wrong, as captured by $\frac{1}{\sigma}$, approaches infinity, the agent exhibits near-rational beliefs. Importantly, we do not restrict the multiplier σ to be either positive (as it is typically assumed in robust control; see Hansen and Sargent, 2008) or negative (see, for instance, the wishful thinking model of Caplin and Leahy, 2019), but assume that it can vary in the cross-section of respondents. A positive multiplier is typically interpreted as capturing ambiguity aversion, which leads to pessimistic optimal beliefs, meaning that the assign higher probability to low-utility states. A negative value of the multiplier, which one can interpret as ambiguity or opportunity seeking, leads to more optimistic optimal subjective beliefs. As we will show below, respondents in our survey vary widely in how relatively optimistic/pessimistic they are, but the relative optimism in different dimensions (health, economy) is quite strongly positively correlated within a respondent. Within the model, variation in the multiplier σ captures the variation of optimism and pessimism in our population of respondents and, as shown below, also determines asymmetric updating (overweighting of desired signals).³

Taking the first order condition of (A.1) with respect to $p(s | \omega)$ leads to:

$$\frac{dE_\gamma u(\omega)}{dp(\omega)} + \sigma \ln \frac{p(\omega)}{\bar{p}(\omega)} - \sigma - \lambda_\omega = 0, \quad (\text{A.2})$$

where $E_\gamma u(\omega) = \sum_{\omega \in \Omega} \frac{p(s|\omega)\pi(\omega)}{\sum_{\omega' \in \Omega} p(s|\omega')\pi(\omega')} u(\omega)$, with γ denoting the Bayesian posterior, and where, for a given signal realization, we can replace $p(s | \omega)$ with $p(\omega)$ and $\bar{p}(s | \omega)$ with $\bar{p}(\omega)$. Upon solving for the optimal beliefs from (A.2), one obtains:

$$p(\omega) = \bar{p}(\omega) \exp \left[-\frac{1}{\sigma} \left(\frac{\pi(\omega)}{E_p \pi(\omega)} [u(\omega) - E_\gamma u(\omega)] \right) + 1 + \frac{1}{\sigma} \lambda_\omega \right], \quad (\text{A.3})$$

3 There is increasing evidence that σ varies within the population and also over time (e.g., Baillon et al., 2017, 2018). Varying ambiguity attitudes leading to optimism and pessimism are also axiomatized in Ghirardato et al. (2004).

where we have substituted $\frac{dE_\gamma u(\omega)}{dp(s|\omega)} = \frac{\pi(\omega)}{E_p \pi(\omega)} [u(\omega) - E_\gamma u(\omega)] \equiv m$, the “motivational” term.⁴ First, note that (A.3) implies that the bias relates to signals for which the derivative of the expected utility is not zero. At this stage it is useful to define a pessimistic signal as one for which m is negative, i.e. $u(\omega) < E_\gamma u(\omega)$ and, conversely, an optimistic signal as one that delivers $m > 0$. Note that if $\sigma < 0$ the optimal belief underweights pessimistic signals compared to the objective distribution, $\bar{p}(\omega)$, and overweights optimistic ones. The opposite is true when $\sigma > 0$. Next, we derive the updated belief. Given all possible signals, the Bayesian posterior is given by $\gamma(\omega) = \frac{p(\omega)\pi(\omega)}{\sum_{\omega'} p(\omega')\pi(\omega')}$. To fix ideas we consider only two states of the world, ω and ω' , which in our design would correspond to unemployment or deaths being lower or higher than a certain threshold. Computing the optimal posterior through the Bayes rule $\gamma(\omega)$, delivers:

$$\gamma(\omega) = \frac{\bar{p}(\omega) \exp(-\frac{m}{\sigma}) \cdot \pi(\omega)}{\bar{p}(\omega) \exp(-\frac{m}{\sigma}) \cdot \pi(\omega) + (1 - \bar{p}(\omega)) \cdot (1 - \pi(\omega))}. \quad (\text{A.4})$$

First note that for $\frac{1}{\sigma}$ approaching 0, equation (A.4) results in $\gamma(\omega) = \frac{\bar{p}(\omega)\pi(\omega)}{\bar{p}(\omega)\pi(\omega) + (1-\bar{p}(\omega))(1-\pi(\omega))}$, hence the classical rational Bayesian updating, where signals are equally weighted. Consider now a negative signal, $m < 0$. If $\sigma < 0$, the posterior *underweights* pessimistic signals compared to a rational Bayesian updater and *overweights* optimistic signals. The opposite is true with $\sigma > 0$, that is, when the respondent is a pessimist.⁵ Hence, optimists overweight signals that assign higher likelihood to states with utility above the mean (optimistic signals) and underweight pessimistic signals. Conversely, pessimists overweight pessimistic signals and underweight optimistic signals. From now on we define γ^+ as the posterior of an agent with $\sigma < 0$ (an optimist) and γ^- as the posterior of an agent with $\sigma > 0$ (a pessimist).

Stage zero - Choice of Signal. Our survey design also features a stage zero in which the respondent chooses among two headlines with differing tones, an optimistic one and a pessimistic one. The headlines effectively represent “signals of signals,” in that they provide hints on the possible content of the article, which is the signal considered in stage 1.

Anticipating the motivated beliefs that she will choose in stage 1, the agent is now going to choose the signal that she expects to deliver the highest expected utility under the optimal motivated beliefs. The latter is defined as follows: $\tilde{V}^+(\pi, s) = \sum_{\omega \in \Omega} \gamma^+(\omega) u(\omega)$ for an optimist and as $\tilde{V}^-(\pi, s) = \sum_{\omega \in \Omega} \gamma^-(\omega) u(\omega)$ for a pessimist. Let us consider two signals, $\xi_1 \sim \mathcal{N}(\mu^+, \frac{1}{\tau})$ and $\xi_2 \sim \mathcal{N}(\mu^-, \frac{1}{\tau})$, with $\mu^+ > \mu^-$. Assume that a higher value signifies more

4 Note that by imposing the constraint $\sum_{s'} p(s'|\omega) = 1$, the constant term in the first order condition is set to zero.

5 That is to say if there is a pessimistic signal which makes m negative and σ is positive, the result is a positive number and the exponential of a positive number is larger than one; hence, the agent overweights negative signals.

positive news (for example, a higher employment rate or speed in developing an effective care). Since the first signal is more likely to deliver positive news, $\int \tilde{V}^+(\pi, s)d\xi_1 > \int \tilde{V}^+(\pi, s)d\xi_2$, an optimist derives higher expected utility from it, as in expectation she can obtain an optimistic posterior with a smaller cost from belief distortion. The opposite is true for pessimists: for them, $\int \tilde{V}^-(\pi, s)d\xi_2 > \int \tilde{V}^-(\pi, s)d\xi_1$.

Note that the close association between the choice of the signals and the priors is in line with recent arguments in Caplin et al. (2019) who highlighted that consideration sets are in the end confined to pay-off relevant choice probabilities.

Implications. This theoretical framework has several implications:

- (1) The signal choice reveals one's type: optimists prefer the positive headline, pessimists the negative headline.
- (2) Since, in reality, belief updating occurs continuously, we expect the optimists to already enter our survey with more optimistic priors, so that we predict a positive relationship between optimistic priors and the choice of the positive headline.
- (3) Turning to the updating, the model implies that the posterior should put more weight on a signal that an agent wanted to see, and that is more in line with their priors. Thus, both the headline choice and updating display "confirmatory bias."

Our empirical results are in line with these implications.

A.3. Additional Tables

Table A2
Descriptive Statistics

Table A2 has descriptive statistics for the main variables used in the paper.

Variable	Survey 1 (N=2,440)		Survey 2 (N=1,571)		Difference
	Mean	St. Dev.	Mean	St. Dev.	<i>p</i> -value
College (0/1)	0.51	0.50	0.47	0.50	0.01
Retired (0/1)	0.28	0.45	0.19	0.39	0.00
Unemployed (0/1)	0.06	0.23	0.08	0.26	0.02
Empl. Loss in HH (0/1)	0.29	0.46	0.32	0.47	0.10
HH Income (1–13)	6.36	3.66	6.36	3.58	1.00
Health (1–5)	3.61	0.95	3.47	0.99	0.00
Health Cnds. (0–3)	0.37	0.60	0.45	0.63	0.00
Already Infected (0/1)	0.05	0.22	0.07	0.25	0.06
Liberal (0/1)	0.47	0.50	0.44	0.50	0.09
Age (18–81)	49.13	17.92	45.72	17.29	0.00
Nr. Ppl. above 65 in HH (0/2)	0.40	0.66	0.29	0.57	0.00
Female (0/1)	0.54	0.50	0.51	0.50	0.05
Married (0/1)	0.58	0.49	0.51	0.50	0.00
Black (0/1)	0.09	0.28	0.09	0.28	0.78
Asian (0/1)	0.07	0.26	0.08	0.28	0.21
Hispanic (0/1)	0.07	0.26	0.09	0.29	0.04
Own Primary Residence (0/1)	0.69	0.46	0.62	0.48	0.00
Hold Stocks (0/1)	0.57	0.50	0.49	0.50	0.00
Health Insurance (0/1)	0.91	0.29	0.87	0.34	0.00
Willingness to Take Risks (1–7)	3.89	1.50	3.78	1.62	0.04
Willingness to Wait (1–7)	4.59	1.50	4.61	1.50	0.62
Trust in People (1–7)	3.63	1.70	3.58	1.76	0.42
Stay at Home Order	0.27	0.44	0.19	0.40	0.00
Cases P.C. (×1000) (0–39)	3.84	5.19	4.54	5.54	0.00
Deaths P.C. (×1000) (0–2)	0.21	0.33	0.24	0.36	0.00
County UR (1.7–18.3)	14.77	4.47	14.70	4.57	0.63
Worried - Health (0-10)	6.61	2.90	6.40	2.96	0.02
Worried - Economy (0-10)	6.03	2.98	5.97	2.99	0.55
Lockdown Support (1–5)	3.31	1.08	3.35	1.07	0.25
Pr(Deaths > 200k) (0–100) (Prior)	54.68	26.66	56.88	26.26	0.01
Pr(UR > 20%) (0–100) (Prior)	49.38	27.41	49.42	27.17	0.96
Pr(COVID inf.) (0–100) (Prior)	38.05	24.70	37.84	25.94	0.80

Table A3**Correlation Matrix - Survey 1: Components of PC1**

Table A3 shows a correlation matrix of the following variables: the probability that the unemployment rate will be higher than 20% by the end of the year; the probability that the number of deaths will be higher than 200,000 by the end of the year; the forecasts for the unemployment rate and the number of Covid-19-related deaths by the end of the year; the estimates of the *current* unemployment rate and Covid-19-related deaths; the probability of being infected by the end of the year. In addition, the matrix includes the first principal component of the seven variables (PC1). ***, **, and * indicate statistically different from zero at the 1%, 5%, and 10% level of significance, respectively.

	Pr(Deaths > 200k)	Pr(UR > 20%)	Pr(COVID inf.)	Forecast Deaths	Forecast UR	Nowcast Deaths	Nowcast UR	PC1
Pr(Deaths > 200k)	1.00							
Pr(UR > 20%)	0.49***	1.00						
Pr(COVID inf.)	0.36***	0.31***	1.00					
Forecast Deaths	0.28***	0.11***	0.07***	1.00				
Forecast UR	0.15***	0.45***	0.11***	0.13***	1.00			
Nowcast Deaths	0.18***	0.07***	0.03	0.81***	0.08***	1.00		
Nowcast UR	0.04	0.23***	0.06**	0.08***	0.72***	0.05**	1.00	
PC1	0.62***	0.68***	0.42***	0.59***	0.68***	0.52***	0.55***	1.00

Table A4
Correlation Matrix - Survey 1

Table A3 shows a correlation matrix of the following variables: Worried H+E, Worried H-E, PC1, and Lockdown Support. ***, **, and * indicate statistically different from zero at the 1%, 5%, and 10% level of significance, respectively.

	Worried H+E	Worried H-E	PC1	Lockdown Support
Worried H+E	1.00			
Worried H-E	-0.03	1.00		
PC1	0.35***	0.02	1.00	
Lockdown Support	0.33***	0.30***	0.23***	1.00

Table A5
Determinants of Beliefs (Survey 1)

Table A5 shows regressions where the dependent variable is the sum of Worried Health and Worried Economy (column 1), their difference (column 2), the principal component of the survey participant's prior beliefs (column 3) and a 1 to 5 measure of support for lockdown policies (column 4). The regressions also include date, region, and article domain order fixed effects. (Coefficients not shown.) Heteroskedasticity-consistent standard errors are reported in parentheses. All the regressions include day and region fixed effects. ***, **, and * indicate statistically different from zero at the 1%, 5%, and 10% level of significance, respectively.

Dep. Var.	Worried H+E	Worried H-E	PC1	Lockdown Support
	(1)	(2)	(3)	(4)
College	0.59*** (0.23)	0.10 (0.13)	-0.02 (0.04)	0.05 (0.05)
Retired	-0.33 (0.31)	0.50** (0.21)	-0.09 (0.06)	-0.00 (0.06)
Unemployed	0.64 (0.43)	-0.50** (0.25)	-0.10 (0.09)	0.10 (0.09)
Empl. Loss in HH	1.50*** (0.22)	-0.86*** (0.13)	0.10** (0.05)	0.11** (0.05)
Health Cnds. (0-3)	0.46*** (0.17)	0.39*** (0.11)	0.12*** (0.03)	0.01 (0.04)
Income	-0.08** (0.04)	0.07*** (0.02)	-0.02*** (0.01)	0.01 (0.01)
Health	-0.46*** (0.12)	-0.05 (0.07)	-0.00 (0.02)	-0.06** (0.02)
Already Infected	1.11** (0.45)	-0.36 (0.29)	0.39*** (0.11)	-0.08 (0.11)
Liberal	1.87*** (0.20)	0.68*** (0.12)	0.32*** (0.04)	0.70*** (0.04)
Age (÷100)	-0.97 (0.91)	-0.04 (0.53)	-0.67*** (0.20)	-0.09 (0.20)
Nr Ppl. above 65 in HH	0.11 (0.18)	0.09 (0.12)	0.01 (0.03)	0.10** (0.04)
Female	0.54*** (0.21)	0.00 (0.12)	0.18*** (0.04)	0.09** (0.04)
Married	0.59*** (0.23)	-0.12 (0.13)	0.10** (0.05)	0.01 (0.05)
Black	0.21 (0.40)	-0.07 (0.19)	0.18** (0.09)	0.14* (0.08)

Continued on next page

Table A5 – Continued from previous page

Dep. Var.	Worried H+E	Worried H-E	PC1	Lockdown Support
Asian	0.36 (0.38)	0.10 (0.21)	0.16* (0.09)	0.12 (0.08)
Hispanic	1.59*** (0.38)	0.11 (0.20)	0.07 (0.08)	0.18** (0.09)
Own Primary Residence	0.71*** (0.25)	0.22 (0.14)	0.04 (0.05)	-0.03 (0.05)
Hold Stocks	0.14 (0.25)	-0.41*** (0.14)	-0.05 (0.05)	-0.03 (0.05)
Health Insurance	0.87** (0.38)	0.60*** (0.20)	0.05 (0.07)	-0.03 (0.08)
Willingness to Take Risks	-0.04 (0.08)	-0.25*** (0.04)	0.01 (0.02)	-0.08*** (0.02)
Willingness to Wait	0.15** (0.07)	0.11*** (0.04)	0.04*** (0.01)	0.06*** (0.02)
Trust in People	-0.26*** (0.06)	0.06 (0.04)	-0.00 (0.01)	-0.03** (0.01)
Stay at Home Order	1.05*** (0.23)	-0.28** (0.13)	0.17*** (0.05)	-0.01 (0.05)
Cases P.C. ($\times 1000$)	-0.02 (0.04)	-0.02 (0.02)	-0.01** (0.01)	-0.00 (0.01)
Deaths P.C. ($\times 1000$)	0.61 (0.62)	0.44 (0.36)	0.27** (0.13)	0.18 (0.12)
County UR	-0.01 (0.02)	0.00 (0.01)	-0.00 (0.00)	-0.01*** (0.00)
Observations	2,440	2,440	2,440	2,440
Adj. R ²	0.12	0.11	0.12	0.16
Mean of Dep. Var.	12.64	0.58	-0.00	3.31
St. Dev. of Dep. Var.	5.06	2.99	1.00	1.08

Table A6
Randomization Tests (Survey 1)

The first column of Table A6 displays means of the main variables used in the text for survey participants who were selected to read their preferred article and less preferred article, respectively. The third column displays their difference. The fourth column displays the p -value computed under the null hypothesis that the difference is zero.

	Preferred	Non-Pref.	Difference	p-value
College	0.53	0.50	0.02	0.24
Retired	0.27	0.28	-0.00	0.89
Unemployed	0.06	0.06	0.00	0.74
Empl. Loss in HH	0.28	0.31	-0.03	0.12
HH Income	6.28	6.44	-0.16	0.28
Health	3.65	3.57	0.08	0.04
Health Cnds. (0-3)	0.35	0.38	-0.03	0.28
Already Infected	0.05	0.06	-0.01	0.26
Liberal	0.45	0.48	-0.04	0.07
Age ($\div 100$)	0.49	0.49	-0.00	0.93
Nr Ppl. above 65 in HH	0.37	0.42	-0.05	0.05
Female	0.53	0.55	-0.01	0.53
Married	0.56	0.59	-0.03	0.18
White	0.80	0.80	0.00	0.83
Own Primary Residence	0.70	0.68	0.02	0.26
Hold Stocks	0.57	0.56	0.01	0.75
Health Insurance	0.91	0.91	0.00	0.91
Willingness to Take Risks	3.91	3.87	0.05	0.42
Willingness to Wait	4.62	4.56	0.05	0.41
Trust in People	3.73	3.53	0.20	0.00
Stay at Home Order	0.27	0.27	0.00	0.86
Cases P.C. ($\times 1000$)	3.81	3.87	-0.06	0.78
Deaths P.C. ($\times 1000$)	0.21	0.21	0.00	0.83
County UR	14.77	14.78	-0.01	0.97
Worried H+E	12.20	13.07	-0.87	0.00
Worried H-E	0.64	0.52	0.12	0.32
PC1	-0.02	0.02	-0.05	0.23
Lockdown Support	3.29	3.34	-0.05	0.28
Pr(Deaths > 200k)	54.02	55.33	-1.31	0.23
Pr(UR > 20%)	48.14	50.60	-2.46	0.03
Pr. Infected	37.29	38.80	-1.50	0.13

Table A7
Belief Revision – Robustness Checks (Survey 1)

Table A7 shows regressions where the dependent variable is the revision in the probability that the unemployment rate will be higher than 20% (columns 1 and 4), that the number of COVID-19-related deaths will be higher than 200,000 (columns 2 and 5), and that the respondent will be infected (columns 3 and 6). Preferred is a dummy equal to 1 if the individual reads the preferred article; Pessimistic is a dummy equal to 1 if the individual reads the pessimistic article. Control variables (not shown) are included in all the regressions and are as in Table 1. They also include the participant's prior beliefs, together with dummies for corner choices (0 and 100). Panels (a) and (b) exclude participants in the bottom 10% and 25% with regard to the time spent reading the article, respectively. Heteroskedasticity-consistent standard errors are reported in parentheses. ***, **, and * indicate statistically different from zero at the 1%, 5%, and 10% level of significance, respectively.

(a) Excluding bottom 10% in time spent reading the article

Dep. Var.	Δ Prob. UR>20%	Δ Prob. Deaths>200k	Δ Prob. Infected	Δ Prob. UR>20%	Δ Prob. Deaths>200k	Δ Prob. Infected
	(1)	(2)	(3)	(4)	(5)	(6)
Preferred	-3.43*** (1.31)	-3.60** (1.46)	-1.96* (1.17)	-4.74** (2.13)	-4.26** (1.87)	-1.61 (1.03)
Pessimistic	-0.54 (1.32)	-0.64 (1.39)	-1.83* (1.01)	-1.17 (2.21)	-5.07*** (1.78)	-0.92 (1.11)
Pess. \times Pref.	6.56*** (1.96)	6.48*** (2.07)	1.72 (1.53)	12.64*** (3.21)	8.84*** (2.81)	2.03 (1.53)
Observations	1,402	1,402	1,402	794	794	794
Adj. R ²	0.07	0.10	0.09	0.19	0.11	0.08
Controls	YES	YES	YES	YES	YES	YES
Domain	Health	Health	Health	Economy	Economy	Economy

(b) Excluding bottom 25% in time spent reading the article

Dep. Var.	Δ Prob. UR>20%	Δ Prob. Deaths>200k	Δ Prob. Infected	Δ Prob. UR>20%	Δ Prob. Deaths>200k	Δ Prob. Infected
	(1)	(2)	(3)	(4)	(5)	(6)
Preferred	-3.04** (1.46)	-3.87** (1.63)	-2.15* (1.23)	-3.06 (2.29)	-3.71* (2.09)	-1.48 (0.97)
Pessimistic	-1.14 (1.50)	-0.11 (1.57)	-1.49 (1.06)	-0.61 (2.46)	-4.07** (1.96)	-0.51 (1.08)
Pess. \times Pref.	6.53*** (2.19)	7.44*** (2.34)	0.67 (1.56)	10.97*** (3.57)	8.57*** (3.13)	1.07 (1.54)
Observations	1,161	1,161	1,161	669	669	669
Adj. R ²	0.06	0.10	0.08	0.19	0.10	0.10
Controls	YES	YES	YES	YES	YES	YES
Domain	Health	Health	Health	Economy	Economy	Economy

Table A8**Political Preferences and Belief Revisions (Survey 1)**

The first four rows of Table A8 shows averages of the revision in the probability that the unemployment rate will be higher than 20%, that the number of COVID-19-related deaths will be higher than 200,000, and that the respondent will be infected for four groups of respondents, depending on their political preferences (liberals or conservative) and on whether they got their preferred article. The fifth row is the difference between the averages of each variables, including only participants who got their less preferred article; the sixth row includes only participants who got their preferred article. The seventh row is the difference between the sixth and the fifth row. The last column reports p -values of the differences.

Political Preferences	Preferred Article?	ΔProb. UR>20%	ΔProb. Deaths>200k	ΔProb. Infected
Liberal	NO	-1.77	-1.24	-0.41
Liberal	YES	0.00	-1.21	0.45
Conservative	NO	-2.39	-3.39	-0.43
Conservative	YES	-3.20	-3.64	-1.72
Liberal – Conservative	NO	0.62	2.15	0.02
Liberal – Conservative	YES	3.19	2.43	2.17
Difference in Differences	–	2.58	0.28	2.15
p -value	–	0.09	0.85	0.07

Table A9
Randomization Tests (Survey 2)

The first, second, and third column of Table A6 display means of the main variables used in the tests for survey participants who were selected in treatment 1 (article source never revealed), 2 (article source revealed after the choice), and 3 (article source revealed immediately). Heteroskedasticity-consistent standard errors are reported in parentheses. The last column displays p -values for χ^2 -statistics computed under the null hypothesis that the means are all equal.

	T1	T2	T3	<i>p</i>-value
College	0.50	0.46	0.46	0.46
Retired	0.20	0.20	0.18	0.67
Unemployed	0.08	0.08	0.08	1.00
Empl. Loss in HH	0.33	0.32	0.31	0.79
HH Income	6.34	6.25	6.48	0.57
Health	3.47	3.51	3.44	0.49
Health Cnds. (0–3)	0.43	0.43	0.48	0.40
Already Infected	0.06	0.07	0.07	0.95
Liberal	0.43	0.45	0.43	0.80
Age ($\div 100$)	0.46	0.45	0.46	0.72
Nr Ppl. above 65 in HH	0.30	0.30	0.26	0.39
Female	0.51	0.48	0.53	0.27
Married	0.54	0.52	0.49	0.30
White	0.79	0.76	0.79	0.46
Own Primary Residence	0.63	0.62	0.63	0.95
Hold Stocks	0.49	0.49	0.48	0.96
Health Insurance	0.88	0.86	0.86	0.69
Willingness to Take Risks	3.79	3.86	3.70	0.25
Willingness to Wait	4.57	4.69	4.59	0.35
Trust in People	3.71	3.52	3.52	0.13
Lockdown Severity	2.98	3.01	2.92	0.16
Cases P.C. ($\times 1000$)	4.66	4.53	4.43	0.82
Deaths P.C. ($\times 1000$)	0.25	0.24	0.23	0.74
County UR	14.72	14.63	14.75	0.92
Worried H+E	12.22	12.66	12.25	0.32
Worried H-E	0.56	0.34	0.37	0.38
PC1	-0.03	0.02	0.01	0.72
Lockdown Support	3.34	3.36	3.36	0.95
Pr(Deaths > 200k)	57.22	58.87	54.63	0.03
Pr(UR > 20%)	49.70	50.22	48.38	0.54

Table A10
Determinants of Beliefs (Survey 2)

Table A10 shows regressions where the dependent variable is the sum of Worried Health and Worried Economy (column 1), their difference (column 2), the principal component of the survey participant's prior beliefs (column 3) and a 1 to 5 measure of support for lockdown policies (column 4). The regressions also include date and region fixed effects. (Coefficients not shown.) Heteroskedasticity-consistent standard errors are reported in parentheses. All the regressions include day and region fixed effects. ***, **, and * indicate statistically different from zero at the 1%, 5%, and 10% level of significance, respectively.

Dep. Var.	Worried H+E	Worried H-E	PC1	Lockdown Support
	(1)	(2)	(3)	(4)
College	0.21 (0.29)	0.15 (0.15)	0.08 (0.06)	0.06 (0.06)
Retired	-0.66 (0.47)	0.53** (0.26)	-0.09 (0.08)	0.02 (0.09)
Unemployed	0.04 (0.49)	-0.20 (0.22)	-0.04 (0.10)	-0.05 (0.09)
Empl. Loss in HH	2.07*** (0.28)	-1.20*** (0.15)	0.19*** (0.05)	0.03 (0.06)
Health Cnds. (0-3)	0.69*** (0.20)	0.33*** (0.11)	0.19*** (0.04)	0.08* (0.04)
Income	0.05 (0.04)	0.08*** (0.02)	-0.02** (0.01)	0.00 (0.01)
Health	-0.42*** (0.15)	-0.19** (0.08)	0.00 (0.03)	-0.09*** (0.03)
Already Infected	0.71 (0.48)	-0.25 (0.28)	0.38*** (0.10)	-0.01 (0.12)
Liberal	1.43*** (0.26)	0.60*** (0.14)	0.30*** (0.05)	0.56*** (0.05)
Age ($\div 100$)	-0.35 (1.10)	-0.19 (0.58)	-0.30 (0.21)	-0.12 (0.23)
Nr Ppl. above 65 in HH	-0.22 (0.26)	0.02 (0.14)	-0.04 (0.04)	-0.05 (0.05)
Female	0.81*** (0.29)	-0.09 (0.15)	0.14** (0.06)	0.07 (0.06)
Married	0.02 (0.29)	0.05 (0.15)	0.01 (0.05)	-0.04 (0.06)
Black	-0.12 (0.49)	-0.61*** (0.22)	0.01 (0.10)	-0.07 (0.09)

Table A10 – *Continued from previous page*

Dep. Var.	Worried H+E	Worried H-E	PC1	Lockdown Support
Asian	1.21*** (0.44)	-0.02 (0.20)	0.06 (0.09)	0.18** (0.09)
Hispanic	0.39 (0.44)	0.03 (0.21)	0.09 (0.09)	0.17* (0.09)
Own Primary Residence	0.45 (0.30)	-0.01 (0.16)	0.08 (0.06)	-0.03 (0.06)
Hold Stocks	0.23 (0.29)	-0.09 (0.16)	-0.04 (0.05)	0.03 (0.06)
Health Insurance	0.03 (0.38)	0.13 (0.21)	0.05 (0.08)	-0.04 (0.08)
Willingness to Take Risks	-0.24** (0.10)	-0.27*** (0.05)	-0.01 (0.02)	-0.10*** (0.02)
Willingness to Wait	0.47*** (0.10)	0.15*** (0.05)	0.05*** (0.02)	0.11*** (0.02)
Trust in People	-0.08 (0.08)	0.07* (0.04)	-0.02 (0.02)	-0.01 (0.02)
Stay at Home Order	1.51*** (0.34)	0.09 (0.16)	0.25*** (0.07)	0.04 (0.07)
Cases P.C. ($\times 1000$)	0.12** (0.05)	0.01 (0.02)	0.01 (0.01)	0.01 (0.01)
Deaths P.C. ($\times 1000$)	-1.74** (0.72)	0.02 (0.39)	-0.02 (0.13)	-0.09 (0.12)
County UR	0.03 (0.11)	0.14** (0.07)	-0.02 (0.03)	0.01 (0.02)
Observations	1,572	1,572	1,571	1,572
Adj. R ²	0.12	0.13	0.09	0.14
Mean of Dep. Var.	12.37	0.42	-0.00	3.35
St. Dev. of Dep. Var.	5.28	2.75	1.00	1.07

Table A11**Pessimistic Article Choice (Unknown Source) - Survey 2**

Table A11 presents regressions where the dependent variable is a dummy equal to 1 if the participant chooses the article with the pessimistic headline. The sample only includes participants that were not shown the source before choosing the article. Worried H+E is the sum of Worried Health and Worried Economy, Worried H-E is their difference, PC1 is the first principal component of the survey participant's prior beliefs, and lockdown support is a 1 to 5 measure of support for lockdown policies. Control variables (not shown) are included in columns 5 through 8 and are as in Table 1 (except for the domain order dummies). All the coefficients are multiplied by 100. Heteroskedasticity-consistent standard errors are reported in parentheses. ***, **, and * indicate statistically different from zero at the 1%, 5%, and 10% level of significance, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Worried H+E	0.71**			0.05	0.56*			0.12
	(0.29)			(0.32)	(0.30)			(0.33)
Worried H-E	-0.08			-0.92	-0.11			-0.73
	(0.55)			(0.57)	(0.56)			(0.59)
PC1		5.92***		4.29**		4.56***		3.36*
		(1.55)		(1.72)		(1.61)		(1.76)
Lockdown Support			5.83***	5.60***			4.55***	4.29***
			(1.41)	(1.56)			(1.49)	(1.63)
Observations	1,039	1,038	1,039	1,038	1,039	1,038	1,039	1,038
Adj. R ²	0.00	0.01	0.02	0.02	0.04	0.05	0.05	0.05
Mean of Dep. Var.	38.79	38.73	38.79	38.73	38.79	38.73	38.79	38.73
St. Dev. of Dep. Var.	48.75	48.74	48.75	48.74	48.75	48.74	48.75	48.74
Controls	NO	NO	NO	NO	YES	YES	YES	YES

Table A12
Beliefs about Article Sources

Table A12 reports, for each article tone (pessimistic or optimistic) the average estimate of the probability that the article comes from a conservative source (Breitbart, Fox News, and The Wall Street Journal), from a liberal source (CNN, The New York Times, MSNBC, and The Washington Post), from The New York Times, and from Fox News. These values are labeled Pr(Liberal), Pr(Conservative), Pr(NYT), and Pr(Fox), respectively. The table also reports the difference between Pr(Liberal) and Pr(Conservative) and the difference between Pr(NYT) and PR(Fox). The statistics are reported for participants in Survey 1 who chose the health domain, participants in Survey 1 who chose the economy domain, and participants in Survey 2.

Article Tone	Prob(Lib.)	Prob(Cons.)	Prob(Lib.) - Prob(Cons.)	Prob(NYT)	Prob(Fox)	Prob(NYT) - Prob(Fox)
<i>Survey 1 (Health Domain)</i>						
Pessimistic	55.49	27.37	28.12	14.82	10.39	4.43
Optimistic	37.83	38.41	-0.58	10.53	22.76	-12.23
Pessimistic - Optimistic	17.66	-11.03	28.69	4.29	-12.36	16.65
<i>Survey 1 (Economy Domain)</i>						
Pessimistic	51.44	23.59	27.84	14.07	10.75	3.32
Optimistic	29.85	38.60	-8.75	7.59	24.32	-16.73
Pessimistic - Optimistic	21.58	-15.00	36.59	6.49	-13.57	20.06
<i>Survey 2</i>						
Pessimistic	57.51	22.73	34.78	14.32	11.74	2.57
Optimistic	44.74	34.19	10.55	11.93	20.18	-8.25
Pessimistic - Optimistic	12.77	-11.46	24.24	2.39	-8.43	10.82

Table A13
Article Assessment - Survey 2

Table A13 shows regressions where the dependent variables are: a 1 to 7 assessment of the informativeness of the article (column 1), a 1 to 7 assessment of the reliability of the article (column 2), a dummy equal to 1 if the participant correctly identifies, among four headlines, the one of the article just read (column 3) the dollar amount spent to advertise the article source (column 4). The sample only includes participants who were not shown the source before choosing the article. Pessimistic is a dummy equal to 1 if the individual is shown the article with the pessimistic headline. Revealed After is a dummy equal to 1 if the participant is shown the article source after having made the choice. Preferred is a dummy equal to 1 if the participant is assigned the preferred article to read. Liberal is a dummy equal to 1 if the participants defines herself as being “very liberal/democrat,” “liberal/democrat,” or “leaning liberal/democrat,” and zero otherwise. Control variables (not shown) are as in Table A10. Heteroskedasticity-consistent standard errors are reported in parentheses. ***, **, and * indicate statistically different from zero at the 1%, 5%, and 10% level of significance, respectively.

Dep. Var.	Inform.	Reliability	Headline Check	Money
	(1)	(2)	(3)	(4)
Pessimistic	0.40** (0.16)	0.32** (0.16)	3.43 (4.02)	-0.99 (2.21)
Rev. After	0.13 (0.13)	0.09 (0.14)	-0.06 (3.21)	1.38 (1.83)
Liberal	-0.18 (0.19)	-0.28 (0.19)	1.30 (4.86)	-1.29 (2.55)
Pess. × Liberal	0.01 (0.23)	0.18 (0.23)	2.10 (5.28)	2.91 (3.23)
Pess. × Rev.	-0.46** (0.23)	-0.27 (0.24)	-0.38 (5.68)	0.24 (3.18)
Liberal × Rev.	-0.07 (0.20)	0.20 (0.21)	4.78 (4.73)	2.56 (2.84)
Liberal × Rev. × Pess.	-0.19 (0.33)	-0.48 (0.34)	-4.65 (7.38)	-16.81*** (4.58)
Observations	1,039	1,039	1,039	1,039
Adj. R ²	0.08	0.09	0.12	0.06
Mean of Dep. Var.	5.42	5.05	89.32	27.82
St. Dev. of Dep. Var.	1.30	1.37	30.91	18.14
Controls	YES	YES	YES	YES

Table A14

Belief Revision, Lockdown Support and Covid Tracing App - Survey 2

Table A14 shows regressions where the dependent variables are: the revision in the probability that the unemployment rate will be higher than 20% (column 1), that the number of COVID-19-related deaths will be higher than 200,000 (column 2), that the respondent will be infected (column 3), that the respondent will sign up for a Covid tracing app (column 4), and a 1 to 5 measure of lockdown support (column 5). The sample only includes participants who were not shown the source before choosing the article. Pessimistic is a dummy equal to 1 if the individual is shown the article with the pessimistic headline. Revealed After is a dummy equal to 1 if the participant is shown the article source after having made the choice. Liberal is a dummy equal to 1 if the participants defines herself as being “very liberal/democrat,” “liberal/democrat,” or “leaning liberal/democrat,” and zero otherwise. Control variables (not shown) are as in Table A11. Columns 1 through 4 also includes the priors of each measure and dummies for the corner choices (0% and 100%). Column 5 also includes a 1 to 5 measure of support for lockdown measures in the area where the respondent lives. Heteroskedasticity-consistent standard errors are reported in parentheses. ***, **, and * indicate statistically different from zero at the 1%, 5%, and 10% level of significance, respectively.

Dep. Var.	Δ Prob. UR>20%	Δ Prob. Deaths>200k	Δ Prob. Infected	Δ Prob. CT app	Lockdown Support
	(1)	(2)	(3)	(4)	(5)
Pessimistic	5.98** (2.33)	6.40*** (2.27)	4.78*** (1.73)	-0.01 (1.86)	0.07 (0.14)
Rev. After	-0.50 (1.51)	3.46** (1.76)	0.49 (1.40)	0.38 (1.35)	0.05 (0.11)
Liberal	0.48 (2.47)	-0.04 (2.63)	1.90 (2.32)	1.88 (2.15)	0.08 (0.15)
Pess. \times Liberal	-1.17 (3.31)	0.19 (3.26)	-2.15 (2.46)	2.29 (2.75)	-0.25 (0.20)
Pess. \times Rev.	-3.84 (3.12)	-3.35 (3.15)	-3.31 (2.57)	-0.85 (2.69)	-0.29 (0.20)
Liberal \times Rev.	-0.80 (2.67)	-2.35 (2.58)	0.85 (2.47)	0.19 (2.38)	-0.16 (0.16)
Liberal \times Rev. \times Pess.	1.82 (4.54)	0.03 (4.32)	-1.28 (3.82)	-1.00 (3.83)	0.63** (0.27)
Observations	1,039	1,039	1,039	1,039	1,039
Adj. R ²	0.10	0.10	0.10	0.03	0.34
Mean of Dep. Var.	-0.53	-1.50	-0.32	-0.96	3.47
St. Dev. of Dep. Var.	17.71	17.60	15.24	14.64	1.26
Controls	YES	YES	YES	YES	YES

A.4. Additional Figures

Figure A1
Determinants of Headline Choice - Survey 1

The histograms in Figure A1 plot the fraction of participants who, in Survey 1, chose the pessimistic headline in the health domain (green bars) and economy domain (red bars). The bins are quintiles of the variables Worried H+E, (Panel a), Worried H-E (Panel b), PC1 (Panel c), and the level of support for lockdown policies (Panel d).

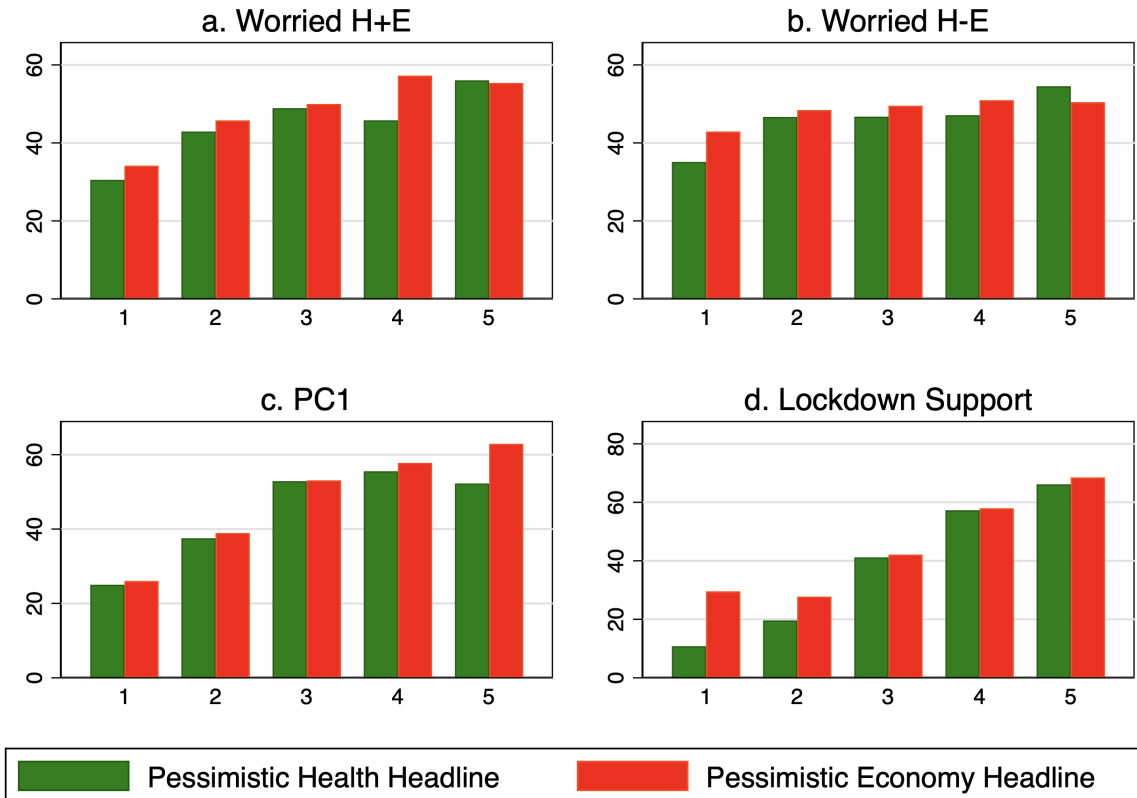
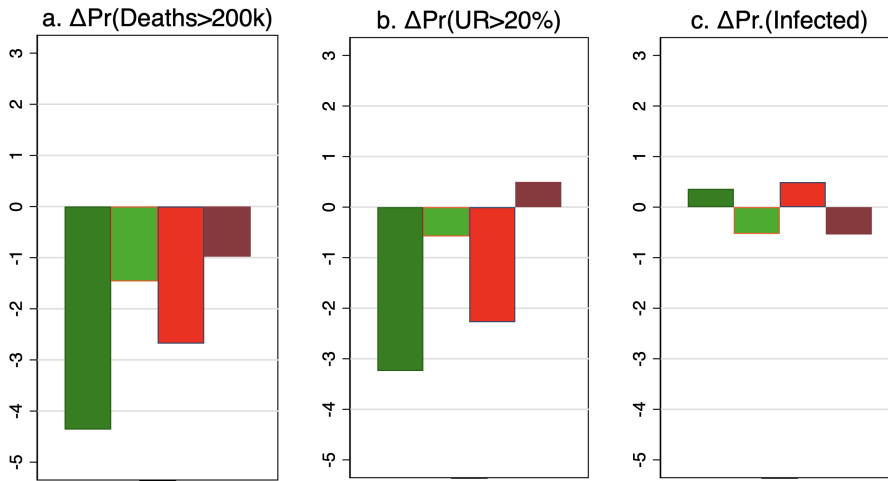


Figure A2
Belief Revision - Survey 1

The histograms in Figure A2 plot the average of each of the variables indicated in the panels' titles for four participants' subgroups, depending on whether they chose the pessimistic or the optimistic article, and whether they were assigned the preferred or less preferred article. The variables are: the revision in the probability that the number of deaths will be higher than 200,000 by the end of the year, the revision in the probability that the unemployment rate will be higher than 20% by the end of the year, and the change in the probability of being infected by the coronavirus. Panel (a) includes participants who chose the health domain, and Panel (b) includes participants who chose the economy domain.

(a) Health Domain



(b) Economy Domain

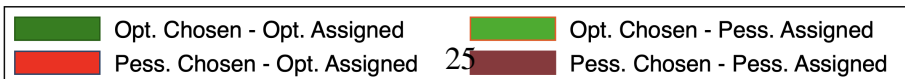
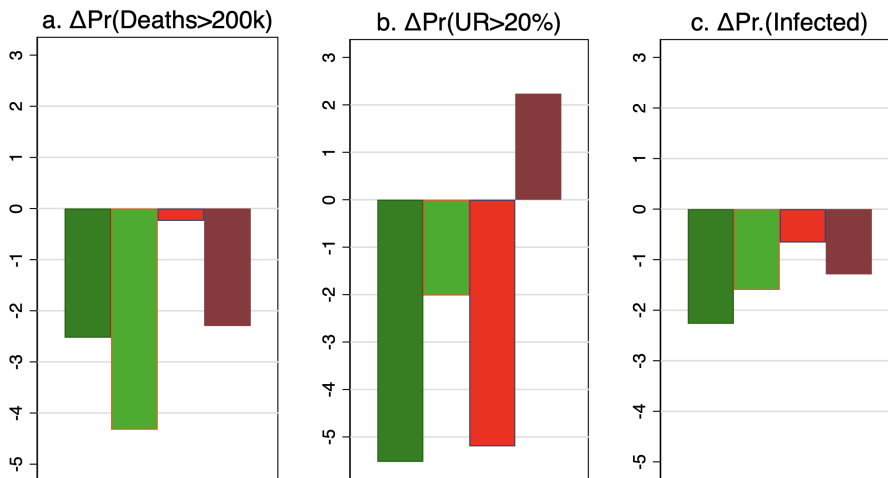
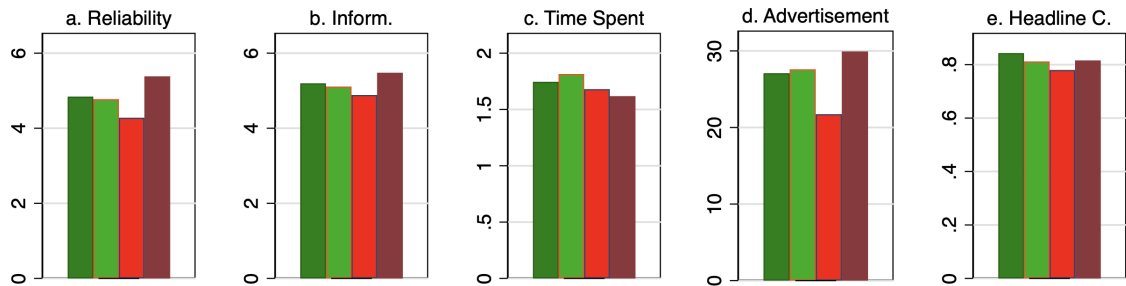


Figure A3
Article Assessment - Survey 1

The histograms in Figure A3 plot the average of each of the variables indicated in the panels' titles for four participants' subgroups, depending on whether they chose the pessimistic or the optimistic article, and whether they were assigned the preferred or less preferred article. The variables are: a 1 to 7 measure of the article reliability, a 1 to 7 measure of informativeness, the time spent reading the article in minutes, the amount spent to advertise the news source, out of a \$50 budget, and a dummy equal to 1 if the individual identifies the headline of the article just read, out of four options. Panel (a) includes participants who chose the health domain and Panel (b) includes participants who chose the economy domain.

(a) Health Domain



(b) Economy Domain

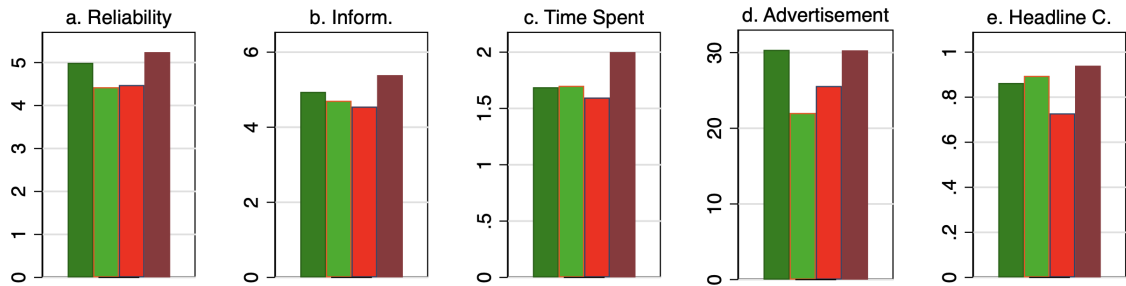
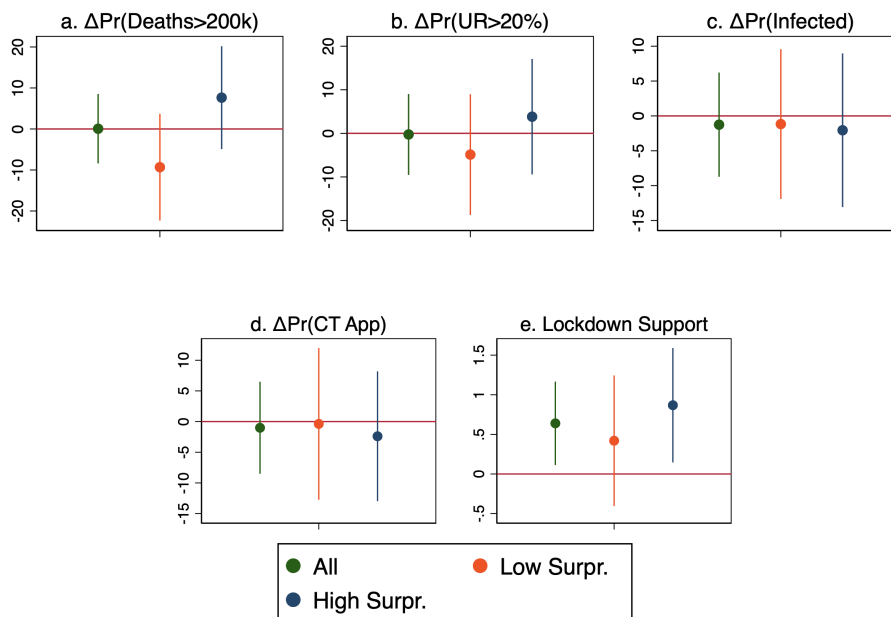


Figure A4
Additional Outcomes - Survey 2

Figure A4 shows coefficients on the triple interaction term (Liberal \times Revealed After \times Pessimistic) from equation 3. The dependent variable for each regression is indicated at the top of each panel. We compute, for each participant, a proxy capturing how surprised individuals might be to realize that the pessimistic article comes from Fox News, given by the perceived probability that to the article chosen comes from a liberal source minus the perceived probability that the article assigned comes from a conservative source. Individuals are then sorted into two halves, depending on this measure. Coefficients for individuals in the bottom half are in blue, together with confidence intervals; coefficients for individuals in the top half are in red.



A.5. Instrumental Variable Analysis of Article Choice in Survey 1

Table 3 of the main text shows that respondents that are more concerned about the health and economic consequences of the pandemic, who have more pessimistic priors, and who are more supportive of lockdowns tend to prefer the article with the pessimistic headline. However, as discussed in the main text, there could be an omitted variable or reverse causality issue. To address this point and show a plausible *causal* link from Covid-worries/-pessimism to article tone preference, we instrument for the covariates of interest using “predetermined/exogenous” factors that affect worries and pessimism, namely whether the respondent’s household had experienced a job loss since the onset of Covid, and the number of pre-existing health conditions. Both of these variables were found in Table 1 to be strongly correlated with worries and prior beliefs (though with less of an effect on lockdown support). Also, intuitively, having experienced an employment loss has stronger effects on worries about economic consequences, while pre-existing health conditions have stronger effects on health worries. Some caution is warranted in interpreting the IV estimates, since pre-existing health conditions could be affected by some omitted variable that also affects the individual’s innate optimism (that is, the exclusion restriction may be violated). Employment loss, on the other hand, should be less likely to be affected by a respondent’s general optimism.

Results are shown in Appendix-Table A15. The proposed instruments do provide meaningful variation as shown by the first-stage Kleibergen-Paap F -statistics. However, they are not very high and around the rule-of-thumb value of 10 (except for Lockdown Support, where the first stage is weaker). Our results are very similar if we instead use a limited information maximum likelihood (LIML) estimator, which is more robust in the presence of weak instruments.⁶ The instrumented covariates are generally statistically and economically significant. Exceptions are the imprecise estimate in column 3, and the effects of Worried H-E.⁷ Coefficient magnitudes are larger than in the corresponding OLS regressions in Table 3, which could reflect measurement error in the worry measures and prior beliefs, or the fact that the IV provides a LATE.

In sum, we can conclude that there is a plausibly causal effect from stronger baseline worries and pessimism on the preference for news articles with a pessimistic tone.

6 We further note that for the 2SLS regressions where PC1 is instrumented, the effective F-statistic of Montiel Olea and Pflueger (2013) of 8.43 exceeds the critical values at which the null of weak instruments can be rejected at the 1% confidence level, for the most conservative threshold τ (5%) reported according to the Stata routine of Pflueger and Wang (2015).

7 Interestingly, Worried H-E enters positively in column 1, meaning those more worried about health more strongly prefer the pessimistic health headline, but negatively in column 4, meaning those more worried about the economy prefer the pessimistic economy headline. However, both effects are imprecisely estimated.

Table A15
Pessimistic Article Choice - Survey 1 - IV

Table A15 presents instrumental variables regressions where the dependent variable is a dummy equal to 1 if the participant chooses the article with the pessimistic headline in the health domain (columns 1-3) or in the economy domain (columns 4-6). Worried H+E is the sum of Worried Health and Worried Economy, Worried H-E is their difference, PC1 is the principal component of the survey participant's prior beliefs, and lockdown support is a 1 to 5 measure of support for lockdown policies. Control variables (not shown) are as in Table 1. The instruments are a dummy equal to 1 if the individual experienced an employment loss in the household and a 0 to 3 measure of health conditions. All the coefficients are multiplied by 100. Heteroskedasticity-consistent standard errors are reported in parentheses. ***, **, and * indicate statistically different from zero at the 1%, 5%, and 10% level of significance, respectively.

<i>Dep. Var.:</i>	<i>Pessimistic Article Choice in</i>					
	<i>Health Domain</i>			<i>Economy Domain</i>		
	(1)	(2)	(3)	(4)	(5)	(6)
Worried H+E	4.02**			4.49**		
	(1.74)			(1.83)		
Worried H-E	3.47			-1.70		
	(2.90)			(3.04)		
PC1		27.94**			32.17**	
		(12.80)			(13.00)	
Lockdown Support			31.56			75.94**
			(21.59)			(35.57)
Observations	2,440	2,440	2,440	2,440	2,440	2,440
Adj. R ²	0.02	-0.07	-0.02	-0.04	-0.08	-1.68
First Stage F-Stat	11.27	8.46	2.63	11.27	8.46	2.63
Mean of Dep. Var.	44.63	44.63	44.63	47.75	47.75	47.75
St. Dev. of Dep. Var.	49.72	49.72	49.72	49.96	49.96	49.96
Controls	YES	YES	YES	YES	YES	YES

A.6. Suggestive Evidence on Source Dependence and Polarization

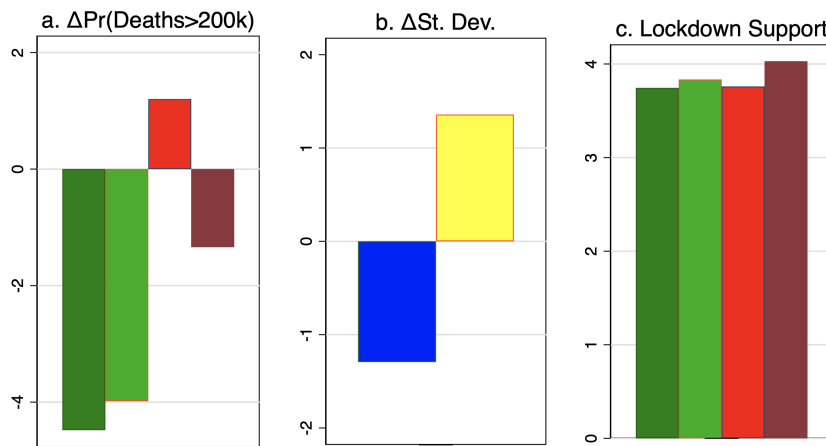
In this Appendix we discuss how source revelation may lead to greater polarization in beliefs. This can be seen in the left-most panels of Figure A5 which show the mean revisions in the probability of deaths exceeding 200,000 for self-identified liberals and conservatives separately, for the four subgroups (whether they chose the pessimistic or the optimistic article, and whether the source was revealed). For liberals, when assigned the pessimistic article, the red bar shows that their beliefs turn more pessimistic (that is, are revised upwards) when they do not learn about the source, whereas they are revised downward (become less pessimistic) when they learn that this information has been disseminated by Fox News (brown bar). On the other hand, the reverse patterns are found for conservatives: upward revisions are larger for conservatives assigned to the pessimistic article when they know the source of the article (brown bar) than when they do not (red bar). In fact, mean revisions are very similar for conservatives and liberals who chose the pessimistic article when the source is not revealed. However, dispersion in beliefs between liberals and conservatives (and, hence, polarization) increases when they know the source. It should be pointed out that the magnitudes are economically small (and none of the differences are statistically significant).

The increased polarization can also be seen in the mid-panels of Figure A5, which show the difference in disagreement (more specifically, standard deviation) in posterior beliefs for conservatives and liberals, conditional on article choice, for the who were revealed the source and those who were not (that is, the difference in standard deviations of posterior beliefs is presented for those who are shown the source versus those who are not, conditional on article choice and political ideology). We see that disagreement goes up for those liberals who had chosen the pessimistic article when they are informed of the source (relative to those who were not). The opposite is the case amongst the conservatives who had chosen the pessimistic article: being informed that the article came from Fox News leads to lower dispersion in beliefs in this subgroup (relative to their conservative counterparts who were not informed about the source). These patterns are reversed when we look at the set of respondents who had chosen the optimistic article: disagreement goes down (up) for liberals (conservatives) upon learning that the source of the optimistic article was the New York Times, relative to when the source is not revealed. That is, being exposed to an article misaligned with one's political ideology leads to greater disagreement among respondents.

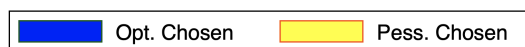
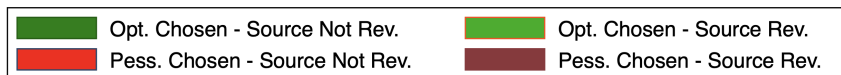
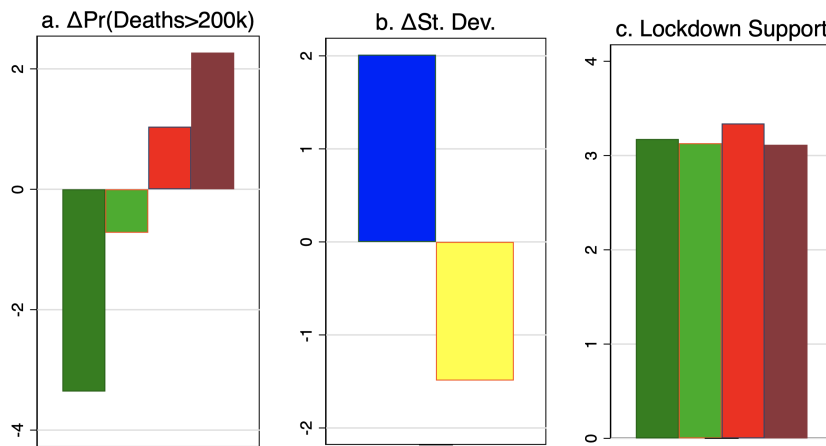
Figure A5
Belief Revision (Survey 2)

The histograms in Figure A5 plot the average of each of the variables indicated in the panels' titles for four participants' subgroups, depending on whether they chose the pessimistic or the optimistic article, and whether they were assigned the preferred or less preferred article. The variables are: a. the revision in the probability that the number of deaths will be higher than 200,000 by the end of the year; b. the difference in the standard deviations of the posterior death forecasts, for those shown the source and those not shown the source, conditional on article choice; c. the revision in lockdown support. Panel (a) includes participants who identify themselves as liberal, and Panel (b) includes participants who identify themselves as conservative.

(a) Liberals



(b) Conservatives



A.7. Headline Choice – Preliminary Tests

Prior to launching the surveys, we conducted pilot studies on Amazon Mechanical Turk to test people's perceptions of the proposed headlines. In order to maximize statistical power of our analysis, we wanted the different headlines to be similarly appealing to respondents. We furthermore wanted to ensure that perceptions of how relatively optimistic/pessimistic the tone of the different headlines was perceived by respondents aligned with our intuition.

Therefore, we fielded two short surveys, each to 100 participants, on Amazon Mechanical Turk. Each respondent was shown either the two health headlines or the two economy headlines for Survey 1 (in each case, the order in which the headlines were shown was randomized). We separately fielded a similar survey to 100 different participants for the two headlines for Survey 2. We then asked four questions comparing the two headlines. Subjects were paid \$0.10 upon completion. The four questions were:

Q1 Which of these two headlines do you think a typical news reader would find more interesting (meaning it will make them want to read the article)?

Q2 Which of these two headlines do you think a typical news reader would find more informative (telling them about the content of the article)?

Q3 Which of these two headlines do you think has a more optimistic/positive tone about the future?

Q4 Which of these two articles would you personally be more likely to read?

Subjects were required to answer on a 5-point scale, where 1 signifies "Definitely article A," 5 signifies "Definitely Article B," and 3 means "Both equally." Below, for each survey and domain the average responses are shown, together with p -values for t -tests computed under the null hypothesis that the mean response is equal to 3 (that is, indifference between the two headlines). In what follows, A corresponds to the optimistic headline and B corresponds to the pessimistic headline (as noted above, in the actual survey subjects were shown the headlines in random order).

Question	Mean Response (<i>p</i> -value of null hypothesis that mean = 3)		
	Survey 1, Health	Survey 1, Economy	Survey 2
Q1	3.24 (0.085)	3.23 (0.075)	2.58 (0.003)
Q2	3.11 (0.419)	3.24 (0.062)	2.76 (0.048)
Q3	1.69 (0.000)	1.70 (0.000)	1.60 (0.000)
Q4	2.75 (0.868)	2.94 (0.677)	2.75 (0.073)

The average responses to questions Q1, Q2, and Q4 cluster quite closely around 3, ranging between 2.58 and 3.24. The null hypothesis of indifference between the two choices cannot be rejected at the 5% significance level, except for Q1 and Q2 of Survey 2. For Q3, instead, participants clearly rate headline A as more positive and optimistic, as expected.

To sum up, the tone differences is clearly perceived by respondents, while the headlines are perceived as comparable with respect to how interesting and informative they are.

A.8. Survey 1 - Motivated Beliefs

This section gives additional details regarding Survey 1. Figure A6 presents a graphical summary of its structure. The survey starts by collecting information on demographics that were targeted by sample quotas, namely the region where the respondent lives, age, and gender. The demographic questions are followed by an attention test to screen out bots or respondents who simply try to complete the survey as quickly as possible (see footnote 15 in the main text); such respondents would add considerable noise to our data.

Next, the survey solicits respondents' priors about their risk of infection, past and future, how worried they are, their "nowcasts" and forecasts of unemployment and Covid-related deaths, and their support for existing containment measures. Specifically, these survey questions read:

- *Do you think you may have already been infected with COVID-19 (also known as Coronavirus)?* (Options: Yes, definitely - confirmed by test; Very likely - did not get tested, but had symptoms; Possible - had some symptoms; Unlikely; Definitely not)
- *On the whole, on a scale from 0 (not worried at all) to 10 (extremely worried), how worried are you about the possible effects of a COVID-19 infection on your own health or the health of close family and friends?*
- *On the whole, on a scale from 0 (not worried at all) to 10 (extremely worried), how worried are you about the effects of COVID-19 and the measures that have been taken to contain it on your personal financial situation or the financial situation of close family and friends?*
- *What do you think is the percent chance (or chances out of 100) that you will become infected by COVID-19 by the end of the year?* (Scale from 0 - Absolutely no chance - to 100 - Absolutely certain. Respondents were first provided with instructions regarding "percent chance" questions, closely following the approach followed by the Federal Reserve Bank of New York's Survey of Consumer Expectations.)
- *What is your best guess regarding the official total number of recorded deaths attributed to COVID-19 in the U.S. as of today?*
- *And what is your best guess regarding the official total number of deaths that will be attributed to COVID-19 in the U.S. by the end of the year?*
- *What do you think is the percent chance that the official total number of deaths that will be attributed to COVID-19 in the U.S. by the end of the year will be more than 200,000?* (Scale from 0 - Absolutely no chance - to 100 - Absolutely certain.)
- *What is your best guess of the current US unemployment rate?*
(The unemployment rate is defined as the number of unemployed people as a percentage of the labor force (which includes people who are either working or actively seeking work). For reference, as of February 2020, the US unemployment rate was 3.5%.)
- *What do you think the US unemployment rate will be at the end of this year?*
- *What do you think is the percent chance the US unemployment rate at the end of this year will*

be higher than 20%? (Scale from 0 - Absolutely no chance - to 100 - Absolutely certain.)

- To reduce the spread of the virus, the US has implemented stay-home orders and social distancing measures. How do you evaluate the measures that have been taken? The measures... (5-point scale, with labels 1 - ...went much too far, 3 - ...were about right, 5 - ...did not go nearly far enough.)

After soliciting these priors we ask the respondents to choose among newspapers articles in the health or economic domain. Specifically, the survey text reads as follows:

- Below, we will ask you further questions about your views regarding the health and economic consequences of the virus.

However, before you do so, you will be given the chance to read a recent news article related to COVID-19.

You first have to decide whether you would prefer the article to be related to the health impacts OR the economic impacts of COVID-19. If given the choice, which kind of article would you prefer to read?

Note that both types of article have approximately the same length.

(Options: I would prefer an article related to the health impacts; I would prefer an article related to the economic impacts)

Independently of the domain choice, every respondent is then asked to choose her preferred headline for articles from both domains:

- Here are two news articles on the economic impacts of COVID-19 that you could read. Both articles are from major U.S. news sites/sources (either top 10 newspaper by circulation, or top 3 news channel organization by viewership). Based on the headlines, which article would you prefer to read? (Options (in random order): Hope for swift economic recovery builds as businesses reopen; Highest unemployment rate since the Depression era, and many jobs may not come back.)

- Here are two news articles on the health impacts of COVID-19 that you could possibly read. Both articles are from major U.S. news sites/sources (either top 10 newspaper by circulation, or top 3 news channel organization by viewership). Based on these headlines, which article would you prefer to read? (Options (in random order): New data suggest the coronavirus is less deadly than we thought; Two influential forecasting models predict sharp rise in coronavirus deaths.)

Following their choice, the assignment of articles is randomized, so that some respondents get their desired article and some do not (though they all get the article from the domain they had ranked as preferred). The survey text reads as follows:

- The computer has randomly chosen which article you will get to see. You will get to see the article with the headline "..."

The article is from a major U.S. news sites/sources (either top 10 newspaper by circulation, or top 3 news channel organization by viewership). We have slightly edited the article for clarity and brevity.

After respondents have read the article, we test whether they remember the headline of the article

they read (asking a multiple choice question with the four article headlines as possible choices). We also ask them whether they found the article informative and reliable:

- *How informative did you find the article you just read?* (7-point scale from 1 – Not informative at all – to 7 – Very informative.)
- *Does this information feel reliable to you?* (7-point scale from 1 – Not reliable at all – to 7 – Completely reliable.)

They are also asked what they think the percent chance is that the article they just read is from each of the following news sources: Breitbart, CNN, Fox News, MSNBC, New York Times, USA Today, Wall Street Journal, Washington Post, Other news sources. Respondents were asked to enter a number greater than or equal to 0 for each news source, with the answers needing to add up to 100.

We further implement a “revealed preference” measure to assess their view of the article. The survey text reads as follows:

- *Consider the situation where you have the option to advertise the news outlet whose article you just read. By paying 50 dollars, the news outlet will be advertised roughly 5,000 times on Facebook. You can decide how much to spend on advertising the news outlet. This can be anywhere between zero and 50 dollars. We will pay for this, so there is no cost to you. Note that we will pick 2 survey participants at random and implement their choice. If you are picked, we will actually spend the amount you chose to advertise the news outlet. At the end of the survey, we will give you further details on how to check whether you were picked and your choice was implemented. How much (out of 50 dollars) would you like to go towards advertising the news outlet? Any amount that is not donated will be lost.*

In the final part we re-elicite their (posterior) beliefs about both health and economic effects of the pandemic: using the same wording as above, we again ask for point forecasts of the total number of deaths that will be attributed to COVID-19 in the U.S. by the end of the year and the US unemployment rate at the end of the year; and probabilities (percent chance) that the official total number of deaths attributed to COVID-19 in the U.S. will be more than 200,000 by the end of the year, that the US unemployment rate at the end of the year will be higher than 20 percent, and that the respondent will become infected by COVID-19 by the end of the year.

These questions are followed by a question on the preferred policy response to a possible new outbreak of the pandemic:

- *Assume that in the coming weeks, the spread of the virus begins to slow, and the stay-home (lockdown) orders are lifted across the US. However, suppose that in the fall of this year, infections start increasing again, in a way similar to what happened earlier this year. If that happens, what should politicians do?* (Options: 1 - Stricter stay-home orders than this time, even if the economic cost is very large; 2 - Slightly stricter stay-home orders than this time; 3 - Same stay-home orders as this time; 4 - Weaker stay-home orders than this time; 5 - No intervention, just let the virus run its course.)

Other demographic questions follow, on education, current employment status, whether anyone

in the household experienced a loss of employment income since February 2020, ethnicity/race, health status (in general and whether they have three specific conditions), whether they have health insurance, political affiliation/leaning (incl. candidate they will likely vote for in presidential election), the news sources they usually consult about COVID-19, marital status, ZIP code, ownership of primary residence, number of household members in different age groups, current status of stay-home orders in respondent's location, stock ownership, qualitative measures of risk aversion, patience, general trust, and their households' income bracket.

The survey ends with a second revealed preference check, which reads as follows:

- *Among all the respondents to this survey, 10 will be randomly picked. Each of these respondents gets to allocate a \$20 donation to two organizations that have been active in the COVID-19 policy discussion. The two organizations are:*

The World Health Organization - It has been warning against a rushed end to coronavirus lockdowns. According to its Director-General, "The risk of returning to lockdown remains very real if countries do not manage the transition extremely carefully and in a phased approach." (Source: Reuters)

FreedomWorks - It has claimed, on its website, that "the hidden costs of a closed economy are staggering" and "the sooner we get America back to work and open as much of the economy as we safely can, the fewer of these hidden casualties there will be."

Please select how you would like to allocate \$20 between the two organizations. If you get randomly selected, then the amounts you choose will be (anonymously) donated according to your selection below.

(Answers: \$ to World Health Organization; \$ to FreedomWorks; both numbers need to be in the [0,20] range and the total of the two numbers needs to sum to 20.)

A debriefing screen then provides the respondent with an ID number and a link to a website where she can check whether her ID number was drawn for either of the incentivized choices, and where we posted receipts of the resulting donations once the data collection was complete.

The debriefing screen also contains links to all four articles that a respondent could have seen, and links to official guidelines regarding COVID-19, from the World Health Organization and the Centers for Disease Control and Prevention.

Links to the original articles and to their edited versions are the following:

– **Optimistic Economy:**

Original – *Why the stock market is up even with historic job losses* (CNBC, May 8, 2020): <https://web.archive.org/web/20200508203712/https://www.cnbc.com/2020/05/08/why-the-market-is-up-even-with-historic-job-losses.html>

Edited – *Hope for swift economic recovery builds as businesses reopen*: <https://sites.google.com/view/biases-pandemic-ffpz/home/optimistic-economy-domain-survey-1>

– **Pessimistic Economy:**

Original – *U.S. unemployment rate soars to 14.7 percent, the worst since the Depression era* (The Washington Post, May 8, 2020): <https://web.archive.org/web/20201102042642/https://www.washingtonpost.com/business/2020/05/08/april-2020-jobs-report/>

Edited – *Highest unemployment rate since the Depression era, and many jobs may not come back*: <https://sites.google.com/view/biases-pandemic-ffpz/home/pessimistic-economy-domain-survey-1>

– **Optimistic Health:**

Original – *New Data Suggest the Coronavirus Isn't as Deadly as We Thought* (The Wall Street Journal, April 17, 2020): <https://web.archive.org/web/20201125031043/https://www.wsj.com/articles/new-data-suggest-the-coronavirus-isnt-as-deadly-as-we-thought-11587155298>

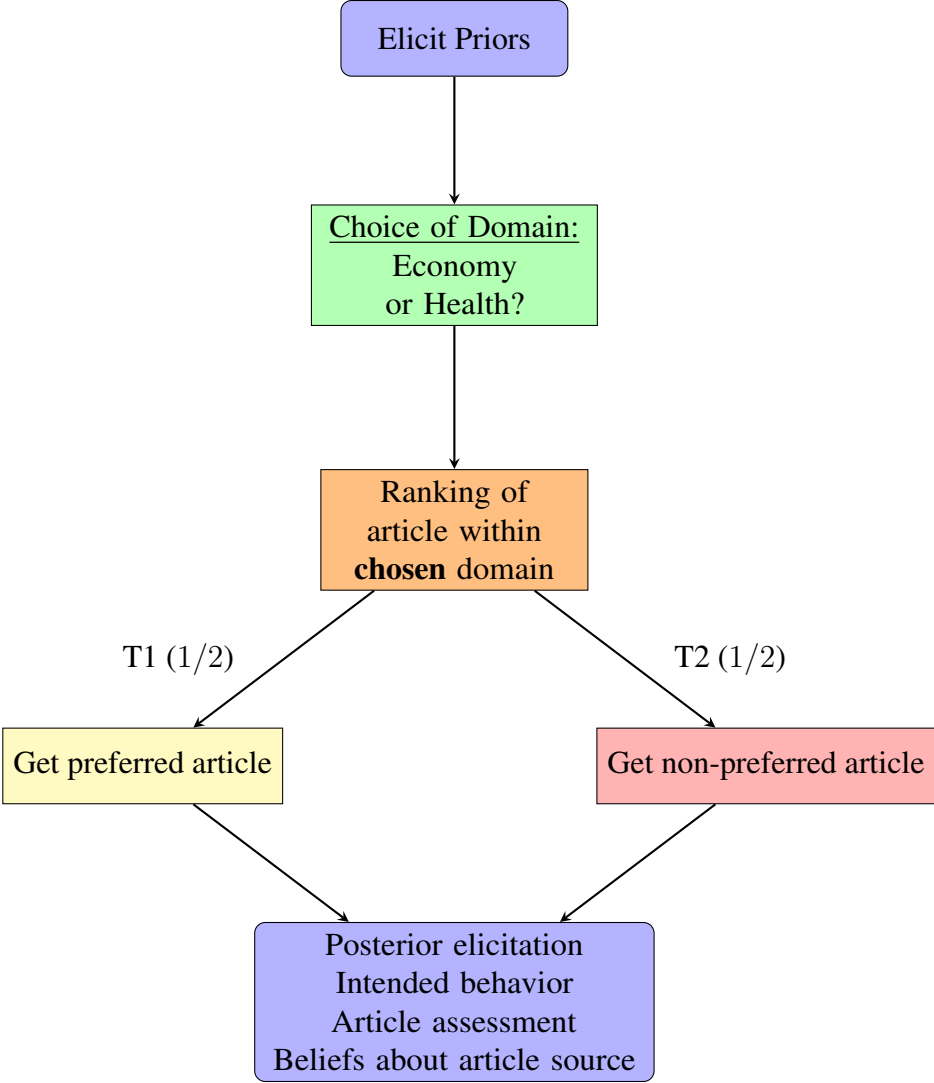
Edited – *New data suggest the coronavirus is less deadly than we thought*: <https://sites.google.com/view/biases-pandemic-ffpz/home/optimistic-health-domain-survey-1>

– **Pessimistic Health:**

Original – *Coronavirus model projects 134,000 deaths in US, nearly double its last estimate* (CNN, May 5, 2020): <https://web.archive.org/web/20201125023601/https://edition.cnn.com/2020/05/04/health/us-coronavirus-monday/index.html>

Edited – *Two influential forecasting models predict sharp rise in coronavirus deaths*: <https://sites.google.com/view/biases-pandemic-ffpz/home/pessimistic-health-domain-survey-1>

Figure A6
Structure of Survey 1



A.9. Survey 2 - Source Dependence

This section gives additional details regarding Survey 2. Figure A7 presents a graphical summary of its structure. The first part of the survey mirrors Survey 1. Specifically there are demographic questions, followed by an attention check and by questions to elicit respondents' worries and priors on health and economics risks. Relative to the first survey, we added this question to the first part:

-At the moment, apps and systems are being developed for "contact tracing": identifying and notifying all those who come in contact with a COVID-19 carrier. What is the percent chance that you would voluntarily sign up for such a service and provide information about yourself?

Then, respondents were informed that they would get to read a recent news article related to COVID-19, and were asked to choose which article they would like to read based on the headlines (shown in random order):

Scientists increasingly optimistic that a vaccine can be produced in record time

Coronavirus pandemic to likely last two years, new report says

Contrary to the previous survey we now randomly reveal to some of the respondents the source of the article, which is the New York Times for the first article and Fox News for the second article. Respondents are randomly allocated to one of three equal-sized groups. In group T1, the source is never revealed; respondents are simply told "Both articles are from major U.S. news sites/sources (either top 10 newspaper by circulation, or top 3 news channel organization by viewership)." They are also asked for the percent chance that the article they selected is from one of nine news sources (like in Survey 1). In group T2, the source of the article is revealed when the article is shown to the respondent; that is, after the article was chosen (based on the headline) and the respondent provided her assessment of where the article likely came from. In group T3, the source of the article is revealed before the article choice; it is presented alongside the headline (e.g., "Coronavirus pandemic to likely last two years, new report says," published by Fox News").

After the article is shown, the survey again proceeds like Survey 1: we check whether respondents remember the headline they just read; ask for their ratings of informativeness and reliability; and give them the possibility to allocate between \$0 and \$50 to Facebook ads (at no cost to them) for the news source that had published the article they just read (with this source unknown to T1 but known to T2 and T3). Then, we elicit the same posterior forecasts and support for future stay-home orders as in Survey 1. In addition, we re-elicited the probability they would sign up for a contact-tracing app.

Finally, the same additional demographics were elicited as in Survey 1, along with a few additional questions about (current and intended) pandemic-related behaviors:

-How often do you wear a mask when outside? (Answer on a 7-point scale with labels 1 - Never - to 7 - All of the time.)

-Which of the following precautionary measures have you taken in the last one month? Please select all that apply. (Options: I have attended fewer social gatherings; I have reduced the number of trips I make outside of my house; I keep a distance of at least two meters (6 feet) with people outside my home; I wear a mask to cover my mouth and nose when I leave my home; I have reduced the number of times I attend religious gatherings (church etc.).)

Unlike in Survey 1, there was no donation allocation question (WHO vs. FreedomWorks) in Survey 2. The survey ended with a similar debriefing screen as in Survey 1.

Links to the original articles and to their edited versions are the following:

– **Optimistic:**

Original – *A New Entry in the Race for a Coronavirus Vaccine: Hope* (The New York Times, May 20, 2020): <https://web.archive.org/web/20201212032018/https://www.nytimes.com/2020/05/20/health/coronavirus-vaccines.html>

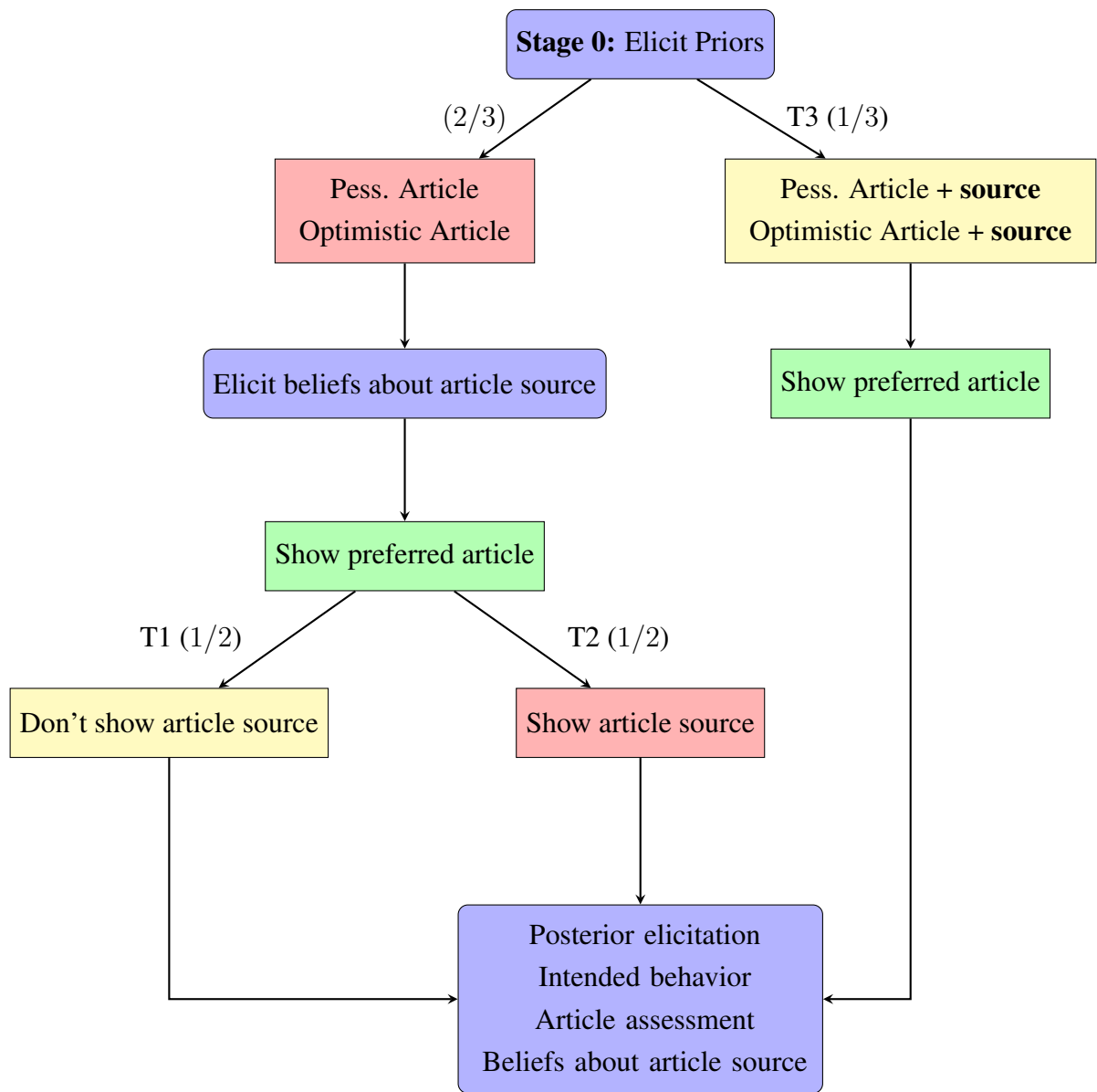
Edited – *Scientists increasingly optimistic that a vaccine can be produced in record time*: <https://sites.google.com/view/biases-pandemic-ffpz/home/optimistic-survey-2>

– **Pessimistic:**

Original – *Coronavirus pandemic could last 2 years, 70 percent of world population needs immunity: researchers* (Fox News, May 1, 2020): <https://web.archive.org/web/20200607161457/https://www.foxnews.com/science/coronavirus-pandemic-could-last-2-years-70-percent-of-the-worlds-population-need-immunity-researchers>

Edited – *Coronavirus pandemic to likely last two years, new report says*: <https://sites.google.com/view/biases-pandemic-ffpz/home/pessimistic-survey-2>

Figure A7
Structure of Survey 2



Appendix References

- Baillon, A., Bleichrodt, H., Huang, Z., and van Loon, R. P. (2017). Measuring ambiguity attitude: (Extended) multiplier preferences for the American and the Dutch population. *Journal of Risk and Uncertainty*, 54(3):269–281.
- Baillon, A., Huang, Z., Selim, A., and Wakker, P. P. (2018). Measuring ambiguity attitudes for all (natural) events. *Econometrica*, 86(5):1839–1858.
- Caplin, A., Dean, M., and Leahy, J. (2019). Rational inattention, optimal consideration sets, and stochastic choice. *The Review of Economic Studies*, 86(3):1061–1094.
- Caplin, A. and Leahy, J. V. (2019). Wishful Thinking. Working Paper 25707, National Bureau of Economic Research.
- Ghirardato, P., Maccheroni, F., Marinacci, M., et al. (2004). Differentiating ambiguity and ambiguity attitude. *Journal of Economic Theory*, 118(2):133–173.
- Hansen, L. P. and Sargent, T. J. (2008). *Robustness*. Princeton University Press.
- Montiel Olea, J. L. and Pflueger, C. (2013). A Robust Test for Weak Instruments. *Journal of Business and Economic Statistics*, 31(358-369).
- Pflueger, C. E. and Wang, S. (2015). A robust test for weak instruments in Stata. *The Stata Journal*, 15(1):216–225.
- Strzalecki, T. (2011). Axiomatic Foundations of Multiplier Preferences. *Econometrica*, 79(1):47–73.