

INFORMATION AND ATTITUDE SHIFTS: HOW COVID-19-INDUCED INEQUALITIES SHAPE PUBLIC SUPPORT FOR GOVERNMENT INTERVENTION

¹Nyhan, B., and ²Reifler, J

Article Info

Keywords: economic inequality, income redistribution, public opinion, misperception, COVID-19-induced inequalities, belief change, partisanship, survey experiment, polarization, United States.

Abstract

The increase in economic inequality since the 1970s has puzzled scholars of public opinion, as there is limited attitudinal evidence of concern or calls for income redistribution among the public despite growing support for government intervention. This phenomenon is often attributed to widespread misperception of economic disparities and the non-meritocratic nature of inequality. However, addressing these misperceptions through factual information is challenging due to ideological distrust, differential exposure to information, and partisan motivated reasoning. This paper investigates belief change during the COVID-19 crisis, specifically examining whether information on COVID-19-induced inequalities heightens the public's concern about inequity and strengthens support for government intervention, and how partisanship shapes the uptake of information. The study employs a survey experiment methodology in the United States, known for its high levels of economic inequality, limited support for income redistribution, and deep political polarization. The results indicate that learning about COVID-19-induced inequalities increases acknowledgment of the pandemic's impact on the most vulnerable, enhances concerns about economic inequality, and boosts support for income redistribution. Notably, the effects are more pronounced among moderate Republicans, reducing the partisan gap between moderate Democrats and Republicans while widening the gap between moderate and strong Republicans. These findings demonstrate that providing uniform crisis information can elevate concerns about inequality among significant segments of the population and bridge attitudinal gaps among moderate partisans in a highly polarized country. The study contributes to the literature on crises, political polarization, and

¹ Department of Sociology, Boston University, 100 Cummington Mall, Boston, MA, 02215, United States

² Department of Public Administration and Sociology, Erasmus University Rotterdam, PO Box 1738, DR Rotterdam, 3000, the Netherlands

informational interventions, and offers implications for other country contexts

1. Introduction

The steep rise in economic inequality starting in the 1970s presents a puzzle to scholars of public opinion: while some studies describe growing support for government intervention (Kenworthy and Pontusson, 2005), in many countries we see surprisingly little attitudinal evidence of concern or calls for income redistribution among the public at large (Luebker, 2014; Trump, 2017; Bradley et al., 2003; Loveless and Whitefield, 2011; Breznau and Hommerich, 2019). Similarly, while some research documents a growing sense of injustice among certain segments of society (for the case of Germany, see: Sachweh and Sthamer, 2019), large-scale survey research reports stable or strengthening popular belief in meritocracy (Kelly and Enns, 2010; Kenworthy and McCall, 2008; Mijs, 2018, 2021; Suhay et al., 2020).

These patterns are typically explained by widespread ‘misperception’ of the nature and extent of economic disparities: many people confidently hold incorrect convictions and perceptions, which keeps them from seeing the full extent and non-meritocratic nature of economic inequality (Jerit and Zhao, 2020; Kuklinski et al., 2000; McCall et al., 2017). Whereas misperceptions are endemic, addressing them through the provision of factual information is complicated by ideological camps’ distrust in science, experts and government (Pechar et al., 2018), different exposure to news and information (Flaxman et al., 2016; Mummolo, 2016), and, crucially, by partisan motivated reasoning in a polarized political landscape: “individuals interpret information through the lens of their party commitment” (Bolsen et al., 2014, p. 235). Evidence for attitudinal effects of informational interventions is mixed. While learning about high levels of inequality generally raises concerns about inequality (McCall et al., 2017), it typically generates support for redistribution only among people already positively inclined and trusting in government (Alesina et al., 2018; Kuziemko et al., 2015).

Concerns over economic disparities might hardly be affected by COVID-19-induced surges in inequality, as the pandemic continues to split the public along partisan lines (Druckman et al., 2021; Grasso et al., 2021; Kreps and Kriner, 2020; Shepherd et al., 2020). However, research on past crises suggests that such “unsettled times” (Swidler, 1986) may inspire belief change (Bisgaard, 2015; Gidron and Mijs, 2019; Lee and Fujita, 2011; Margalit, 2013; Naumann et al., 2016).

This paper investigates belief change in times of the COVID-19 crisis. Specifically, we ask whether information on COVID-19-induced inequalities heightens the public’s concern about inequity and strengthens support for government intervention, and how the uptake of information is shaped by partisanship. Following fruitful prior empirical applications (e.g. Neimanns et al., 2018), we leverage a survey experiment methodology to analyze the effects, if any, of factual information describing the impact of the pandemic on people’s beliefs about inequality, COVID-19, and the role of government.

We field our study in the United States, which we consider a strategic *least likely case* (Gerring, 2007) of belief change. The US stands out from other advanced economies because of its high levels of economic inequality, coupled with relatively limited public support for income redistribution and deep political polarization, as demonstrated by extant research utilizing population-based surveys (Alesina et al., 2018; Atkinson et al., 2011; Kozlowski and Murphy, 2021). Hence, by fielding our study in the US, we aim to make a *conservative* assessment of the potential of informational interventions.

Our results suggest that learning about COVID-19-induced inequalities inspires (1) stronger acknowledgement that COVID-19 has especially hurt the most economically vulnerable, (2) more concerns over economic inequality, and, crucially, (3) stronger support for income redistribution. Importantly, conditional treatment effects by partisanship reveal *larger* effects among moderate Republicans. Consequently, our informational treatment renders non-significant the partisan gap between moderate Democrats and Republicans, while the gap between moderate and strong Republicans widens. Thus, our findings suggest that uniform information on a crisis can increase concerns about inequality among substantial parts of the population. It can even overcome attitudinal

gaps between moderate partisans in a country renowned for widespread polarization and relatively high tolerance of inequality.

In what follows we situate our study in the broader literature on crises and political polarization before discussing our research design and results. We conclude by discussing how our findings speak to other country contexts and provide suggestions for further research.

2. Belief change in times of crisis

Past research documents how tumultuous times can cause a shift in a conservative (Schüller, 2015) or liberal direction (Eadeh and Chang, 2020). For instance, scholars have documented how domestic and international crises, from the Ebola outbreak in the US (Beall et al., 2016) to terrorist attacks on American soil (Schüller, 2015) and abroad (Berrebi and Klor, 2008), have shifted public opinion in a conservative direction. Such a conservative response to systemic threat arguably reflects a heightened need to protect the status quo—no matter its unequal nature (Jost et al., 2003). Recent surveys suggest that a similar pattern may be unfolding today: Cappelen et al. (2020), in an unpublished survey of 8,000 Americans reported in *The New York Times*, find that people who were primed to think about the impact of the virus on their community cared more about their country and cared less about inequality.

Other research suggests that the very scope of a crisis like the COVID-19 pandemic may make it a ‘common enemy,’ which may instead increase support for government intervention rather than retrenchment (cf. Oude Groeniger et al., 2021). Eadeh and Chang (2020) suggest that a crisis can cause a ‘liberal turn’ if the threat concerns policy areas like health care and the environment, where liberal politicians are perceived to be more competent. The New Deal, for instance, can be seen as a direct response to the Great Depression (Gordon, 2016) and, more recently, the Great Recession led the Obama administration to the greatest redistributive effort in three decades (CBO, 2019). In this particular historical moment, public appreciation of ‘essential workers’ may go together with changing perceptions, attitudes and policies addressing inequality (Waterfield, 2020). President Biden’s *Build Back Better Framework*, arguably, is a step in that direction.

At the same time, it is unlikely that Americans across the political divide have experienced and understood the pandemic in the same way. Such is the finding of a Californian survey on the perceived impact of the COVID-19 pandemic on economic inequality: over 80 percent of Democrats but just 40 percent of Republicans believed economic inequality had increased (Mora et al., 2020; Shepherd et al., 2020). A similar partisan divide characterizes Americans’ concerns about the coronavirus more generally—and the gap is widening, as suggested by weekly surveys between early and late 2020 (Civiqs, 2020).

Hypothesis 1. Americans’ beliefs about COVID-19, economic inequality and the role of government are polarized along party lines. Compounding the ideological divide, the public’s political response to COVID-19 likely depends on how the crisis is understood by different ideological camps (Bird and Ritter, 2020; Cox, 2001; Tierney, 2007). Theorizing on partisan motivated reasoning (Bolsen et al., 2014) suggests that information about COVID-19-induced inequalities is filtered through a partisan lens, making some parts of the population more receptive to it than others. Republicans are politically motivated to accept economic inequalities as deserved, to oppose government intervention in the economy, and to be less supportive and compliant with COVID-19-related government interventions more specifically (cf. Conway et al., 2021; Gollwitzer et al., 2020). Conversely, Democrats traditionally express more concerns about inequality, and are more supportive of income redistribution (Kozlowski and Murphy, 2021; Pechar et al., 2018) and of public spending on COVID-19-related healthcare (Gollwitzer et al., 2020). It follows that provision of the same factual information may have a different impact across partisan lines, leaving Republicans unaffected while resonating with Democrats who may already be so inclined (Grossman et al., 2020).

Hypothesis 2A. Information about COVID-19-induced inequalities heightens concerns about inequality and strengthens support for government intervention only among Democrats.

An alternative perspective considers a crisis, more fundamentally, as a “plastic hour” (Gershon, cited in Packer, 2020, p. 50) in which taken-for-granted practices, policies, and attitudes are upended. Could such ‘unsettled times’

(Swidler, 1986) constitute an 'event' that can shock or rupture political divides (Wagner-Pacifici, 2010)? Specifically, may times like these make people responsive to information about inequality, even if doing so means crossing ideological rifts? Research from the United Kingdom suggests the 2008 Great Recession did just that. Bisgaard (2015, p. 840) describes a pre-crisis partisan gap in perceptions about the economy which "evaporates" during the crisis, as even the staunchest partisans share the dire diagnosis of their country's economic state, even if they disagree about where to lay blame. Research on the Netherlands (Gidron and Mijs, 2019), Germany (Naumann et al., 2016), and the United States (Margalit, 2013) similarly describes growing support for redistribution across the political spectrum in times of crisis. Given its deep impact across society as a combined economic and public health crisis, the COVID-19 pandemic arguably constitutes a greater 'rupture' in everyday life than most other crises: scholars observe a "tsunami of change" and note that "the unusual conditions of the pandemic – unlike other crises – have impacted almost every facet of our lives" (Robinson et al., 2021, pp. 1608–9). As such, it may produce a particular 'plastic' moment.

Hypothesis 2B. Information about COVID-19-induced inequalities heightens concerns about inequality and strengthens support for government intervention on both sides of the political divide.

3. Data and Methods

3.1. Survey design

Previous studies suggest that the most effective informational treatments are designed as non-partisan, cognitively light (Alesina et al., 2018), informational interventions designed to 'shock' participants' belief system (Kuziemko et al., 2015). Incorporating these insights, we developed an 'omnibus treatment' (cf. Kuziemko et al., 2015) describing COVID-19's economic consequences (Supplementary Information, Fig. S1). Participants were shown a graph of the number of Americans filing for unemployment between January 2020 and July 2020. The graph is accompanied by facts taken from various trusted, nonpartisan, sources, which (1) highlight the total number of people who filed for unemployment (cf. Bureau of Labor Statistics, 2020), (2) introduce the prognosis that this crisis will have a larger economic effect than any other crisis in recent history (cf. Cox, 2020; DeRensis, 2020; Schwartz, 2020), (3) emphasize its disproportionate effects on low and middle-income workers (cf. Athreya et al., 2020), and (4) inform participants that, meanwhile, some of the wealthiest Americans' fortunes have significantly grown (cf. Collins, 2021). Participants in the control condition were presented an unrelated but similarly looking graph depicting what share of different age groups are getting enough exercise, accompanied with facts about the positive health effects of physical exercise and stating the share of youth and adults that meets the recommended level of sports and exercise (SI, Fig. S2).

The treatment was embedded in a between-subject survey design incorporating pretreatment and post-treatment questions. As in a standard between-subject design, we identify the treatment effect as the difference in posttreatment responses between participants in the treatment and control condition. Incorporating pretreatment questions that are distinct from but correlated with our post-treatment questions produces higher precision and more statistical power than a standard between-subjects design (Clifford et al., 2021; Lin, 2013). Specifically, we asked three questions which are correlated with the post-treatment questions about inequality, COVID-19 and the role of government ($0.21 \leq r \leq 0.60$) and include these as pretreatment controls in regression models estimating the treatment effect. This means that participants in both the control and treatment condition are introduced to the topic of inequality prior to our measurement of their post-treatment beliefs. As such, our design produces a *conservative* estimate of the effect of information over and above a baseline level of inequality priming.

3.2. Data

We set to recruit 1,000 participants using a quota sample provided by Prolific Academic stratified by sex, age and race/ethnicity to match US Census Current Population Statistics. We recruited participants between August 5 and August 11, 2020, through Prolific Academic. Prolific is a survey firm specializing in social science research, founded by academics in Oxford, UK. It has worked with researchers at top institutions around the world and compares favorably to other survey firms that offer high-quality alternatives to Amazon Mechanical Turk (Palan and Schitter, 2018). We fielded our survey experiment with Prolific's active panel of 138,363 participants based

in the US. Panelists are registered after verification of a valid e-mail address, phone number and payment method. Each panelist is assigned a unique identifier, matched with self-reported basic demographic information. They receive compensation for each survey completed, after an evaluation of their survey responses. Panelists flagged for low-quality responses more than once are removed from the panel.

We obtained a sample of 1,003 participants. Ten participants (one percent) did not complete the survey. New participants were recruited in their place. The final sample matches population statistics on race and gender but skews slightly toward a younger demographic (SI, Table S3). Participants were randomly assigned to either the control ($n = 500$) or treatment condition ($n = 503$). Based on power calculations, we ensured that treatment and control group had 500 participants per condition to get a power of 0.9 when the Cohen's $d = 0.2$. We obtain almost perfect post-allocation balance between participants in the control and treatment group on key dimensions (SI, Table S4).

We took several measures to secure the quality of our research. First, to accommodate people differently affected by COVID-19, working and not working, with and without caring duties, we provided an extended window, spanning two working days and a weekend day, during which participants could take the survey. Second, we designed the survey to be short: the median time of completion was 11 min. Third, we tested our questions and treatment design in two pilot surveys ($n = 100$ and $n = 150$). Fourth, to minimize selection bias, we gave our survey a non-descript name ("Social topics in the United States") and set compensation at a relatively generous \$2.50, corresponding to an hourly rate of approximately \$14. Fifth, we include a post-treatment attention check, by asking participants which informational treatment they were given (coronavirus, exercise, dining, don't know). Only eighteen participants (1.8 percent) failed the check, which indicates that respondents were generally attentive. Those who failed the check were kept in the analysis so as not to induce bias (Aronow et al., 2019). The main results are qualitatively equivalent to including an attention check dummy (Table 2; Check B). Finally, we ran checks for survey straight lining, but found no concerning patterns in our data.

We have made our data and code publicly available on the Open Science Foundation platform.

3.3. Measures

We focus on four attitudinal variables about inequality, COVID-19, and the role of government, measured on a 7point scale ranging from "Strongly disagree" to "Strongly agree": 1) "differences in income in the United States are too large," 2) "it is the responsibility of the government to reduce the differences in income between people with high incomes and those with low incomes," 3) "the most vulnerable in society are hit hardest by the coronavirus, also known as COVID-19," and 4) "the measures taken against the coronavirus are more harmful than the virus itself." Questions 1 and 2 are adopted from the International Social Survey Programme *Social Inequality* module to allow for a direct comparison with international research (ISSP Research Group, 2018). Question 3 and 4 are original questions designed to capture strong sentiments about the impact of the pandemic as expressed on different sides of the political aisle: whereas the former taps into to concerns about COVID-19related inequality most frequently found among Democrats (Mora et al., 2020; Shepherd et al., 2020), the latter reflects a longstanding concern of economic conservatives regarding the unemployment-inducing nature of government interference in the economy, more typically found among Republicans (Bruine de Bruin et al., 2020; Van der Waal et al., 2007).

Because of indications of substantial intra-party variation in COVID-19-related attitudes (e.g., Havey, 2020), we use a more fine-grained measure of partisanship than most COVID-19 studies to date. To concisely discern weak from strong partisans, we asked for participants' self-placement on a 10-point scale ranging from strong Democrat to strong Republican, using the middle as a default starting position (cf. Dalton, 2008). In the analyses below, we compare participants strongly identifying as Democrat (0–1) to those identifying as Democrat (2–3), those identifying as Republican (7–8), strongly identifying as Republican (9–10) and those in the middle (4–6). Fifty participants (5 percent) opted out of the question and were grouped with the middle category. Excluding these participants, in a robustness check, does not change our findings (Table 2; Check C).

As a final robustness check, we replicate our main analyses by including additional pretreatment controls for age, gender, **Table 1**

Sample descriptives ($n = 1,003$).

| Variable | Mean | SD |
|---|------|------|
| <i>Dependent variables</i> | | |
| Differences in income too large (1–7) | 5.74 | 1.37 |
| Government responsibility to reduce differences in income (1–7) | 4.98 | 1.80 |
| Most vulnerable are hit hardest by COVID-19 (1–7) | 6.11 | 1.14 |
| Measures taken against COVID-19 are more harmful than the virus (1–7) | 2.82 | 1.91 |
| <i>Independent variables</i> | | |
| Treatment assignment (0/1) | 0.50 | |
| <i>Party identification</i> | | |
| Strong Democrat | 0.30 | |
| Democrat | 0.19 | |
| Neither | 0.33 | |
| Republican | 0.11 | |
| Strong republican | 0.08 | |
| <i>Pretreatment controls</i> | | |
| Society is fair when hard-working people earn more (1–7) | 4.86 | 1.45 |
| Racial diversity makes America stronger (1–7) | 5.75 | 1.48 |
| For society to be fair, income differences should be small (1–7) | 4.87 | 1.61 |

education, parental education, marital status, household income, employment status, self-placement on the social ladder, financial assets, religion and the date the survey was taken (for descriptive statistics, see SI, Table S5). Doing so, we obtained qualitatively equivalent results (Table 2; Check A).

Table 1 provides descriptives for key dependent and independent variables.

4. Results

4.1. Ideological divide in beliefs about inequality, COVID-19 and role of government

To address Hypothesis 1 regarding the political polarization of beliefs about inequality, COVID-19 and the role of government, we first present histograms to visualize the distribution of responses by party identification. Fig. 1a describes a monotonic partisan divide, both in concerns about income inequality and support for redistribution, which corroborates Hypothesis 1. Participants identifying as strong Democrats are consistently more concerned about inequality than participants in the middle, and, in turn, than Republicans and strong Republicans ($6.4 > 6.1 > 5.5 > 5.0 > 4.4$; significantly different at $p < .05$), and more supportive of income redistribution ($6.0 > 5.5 > 4.4 > 4.0 \geq 3.6$; all but the latter two are significantly different at $p < .05$).

Fig. 1b shows that strong Democrats and Democrats are also monotonically more convinced than Republicans and participants in the middle that the coronavirus has disproportionately affected vulnerable populations ($6.5 > 6.3 > 5.9 > 5.5 \geq 5.5$; all contrasts but the latter two are significantly different at $p < .05$). Conversely, (strong) Republicans are more likely than (strong) Democrats to think that the measures taken to combat the virus have been more harmful than the virus itself, but Republicans not significantly more so than participants in the middle ($2.0 < 2.4 < 3.2 \leq 3.5 < 4.6$).

Taken together, our results describe a partisan divide both in perceptions of inequality and the coronavirus and in attitudes about the role the government, in line with Hypothesis 1. Below, we first consider the general effect of

provision of information, before testing our Hypotheses regarding how partisanship shapes the effect of information.

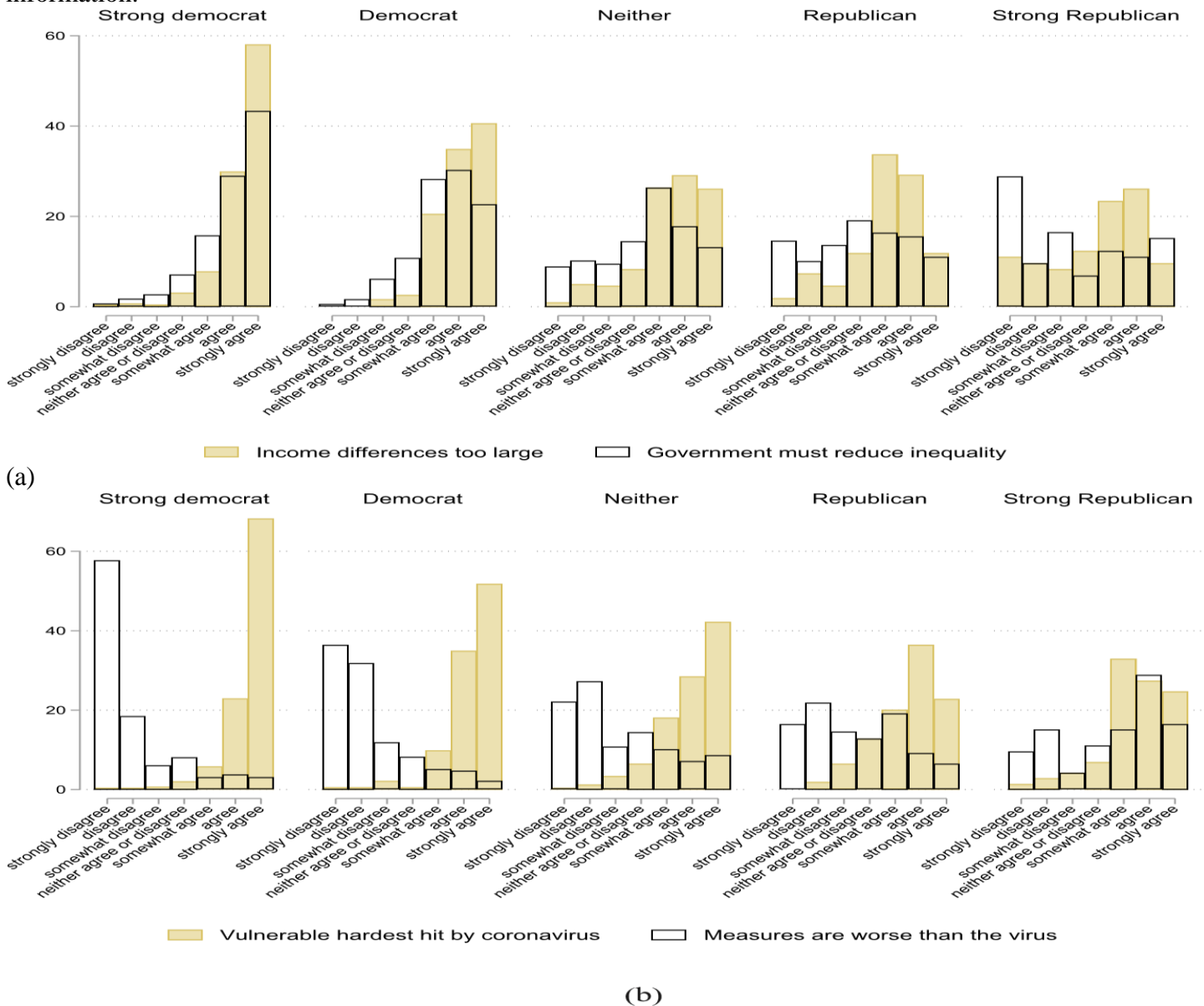


Fig. 1. Histogram of beliefs about (a) inequality and (b) COVID-19 by party identification. *Note.* Bars indicate the percentage of responses across response categories within each group. Question wording: “Differences in income in the United States are too large”; “It is the responsibility of the government to reduce the differences in income between people with high incomes and those with low incomes”; “The most vulnerable in society are hit hardest by the coronavirus (also known as COVID-19)”; and “The measures taken against the coronavirus are more harmful than the virus itself.”

4.2. Treatment effect of information describing COVID-19-induced inequalities

To evaluate the effect of the informational treatment on participants’ beliefs about inequality, COVID-19 and the role of government, we identify the average treatment effect of information by estimating OLS regressions, modeling each outcome as a function of the information treatment, and the pretreatment controls described above (Table 2).

Fig. 2 plots average marginal effects calculated from the regression models and shows a positive treatment effect for three out of four attitudes. The informational treatment is associated with a 0.26-point (95% CI, 0.12–0.40) increase in participants’ belief that income inequality is too high, a 0.19-point (95% CI, 0.01–0.36) increase in

support for government redistribution, and a 0.20-point (95% CI, 0.07–0.33) increase in the belief that COVID19 has disproportionately affected society’s most vulnerable groups. We do not find a significant treatment effect ($p < .05$) for participants’ belief that government measures are worse than the virus.

All in all, even in a strongly polarized country known for its high level of economic inequality and comparatively low levels of public concern about this, we find a substantively meaningful effect of information provision across three dimensions of inequality, between a fifth and a quarter of a point on a 7-point attitudinal scale. But how does factual information about COVID-19-induced inequalities affect participants’ beliefs across the political divide?

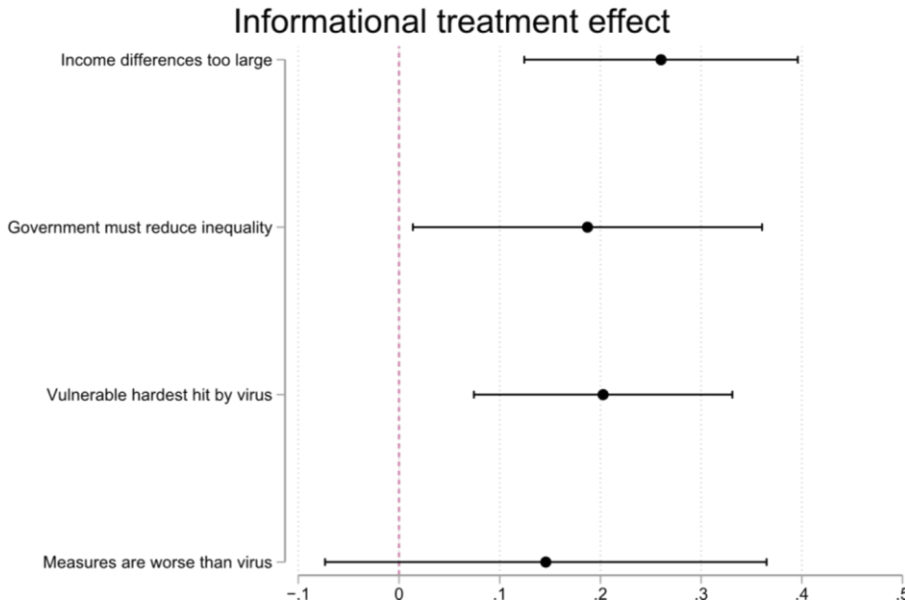


Fig. 2. Treatment effect on beliefs about inequality, COVID-19, and the role of government. *Note.* Average marginal effects are estimated from OLS regression models including pretreatment attitudes and all control variables. Whiskers indicate the 95% confidence interval around each estimate.

4.3. Treatment effect by party identification

To directly assess Hypotheses 2A and 2B, Table 2 reports average treatment effects and conditional treatment effects for the main models and three robustness checks (see Data and Methods). Conditional effects are estimated by interacting participants’ treatment condition and party identification.

To visualize our main findings, Fig. 3 plots predictive margins calculated from the regression models, comparing concerns about inequality and support for redistribution between participants in the treatment and control group by party identification. We find a significant difference between the controls and treated, indicative of a conditional treatment effect on participants’ belief that income inequality is too high, ranging from 0.28 points (95% CI, 0.03–0.51) among strong Democrats to 0.26 points for participants in the middle (95% CI, 0.07–0.53), and 0.54 points among Republicans (95% CI, 0.14–0.94). We also find positive differences between control and treatment group for Democrats (0.18 points) and strong Republicans (0.03 points), albeit not significantly different from zero at $p < .05$.

Table 2

Results from main model and alternative specifications.

| Income | | Redistribution | Vulnerable | Measures |
|---|----------|----------------|------------|----------|
| As reported in manuscript (<i>n</i> = 1,003) Average treatment | | | | |
| effect | 0.26 *** | 0.19 * | 0.20 ** | 0.15 |
| Conditional treatment effects Strong | | | | |

| | | | | |
|--------------------------------------|----------|----------------|------------|----------|
| democrat | 0.27 * | 0.21 | 0.22 | – 0.13 |
| Democrat | 0.18 | 0.04 | 0.23 | 0.17 |
| Neither | 0.26 * | 0.18 | 0.10 | 0.24 |
| Republican | 0.54 ** | 0.72 ** | 0.43 * | 0.06 |
| Strong republican | 0.03 | – 0.38 | 0.11 | 0.87 * |
| Check A (<i>n</i> = 1,003) | Income | Redistribution | Vulnerable | Measures |
| Average treatment effect | 0.28 *** | 0.22 ** | 0.21 ** | 0.12 |
| Conditional treatment effects Strong | | | | |
| democrat | 0.29 * | 0.32 * | 0.24 * | – 0.09 |
| Democrat | 0.20 | 0.11 | 0.21 | 0.16 |
| Neither | 0.30 * | 0.12 | 0.10 | 0.19 |
| Republican | 0.51 * | 0.72 ** | 0.44 * | 0.03 |
| Strong republican | 0.06 | – 0.23 | 0.12 | 0.74 |
| Check B (<i>n</i> = 1,003) | Income | Redistribution | Vulnerable | Measures |
| Average treatment effect | 0.28 *** | 0.23 ** | 0.21 ** | 0.13 |
| Conditional treatment effects Strong | | | | |
| democrat | 0.29 * | 0.32 * | 0.24 * | – 0.09 |
| Democrat | 0.20 | 0.11 | 0.21 | 0.15 |
| Neither | 0.30 * | 0.12 | 0.10 | 0.19 |
| Republican | 0.51 * | 0.71 ** | 0.44 * | 0.03 |
| Strong republican | 0.07 | – 0.15 | 0.16 | 0.79 |
| Check C (<i>n</i> = 937) | Income | Redistribution | Vulnerable | Measures |
| Conditional treatment effects Strong | | | | |
| democrat | 0.29 * | 0.32 * | 0.24 * | – 0.08 |
| Democrat | 0.19 | 0.10 | 0.22 | 0.16 |
| Neither | 0.36 ** | 0.12 | 0.06 | 0.42 * |
| Republican | 0.54 ** | 0.71 ** | 0.45 * | 0.03 |
| Strong republican | 0.03 | – 0.27 | 0.10 | 0.77 |

Note. ‘Check A’ reports estimation results from OLS models including a bank of control variables; ‘Check B’ adds an attention check dummy to the controls; ‘Check C’ drops participants who picked “not applicable” in response to the party identification question. Income = “Differences in income in the United States are too large”; Redistribution = “It is the responsibility of the government to reduce the differences in income between people”

with high incomes and those with low incomes”; Vulnerable = “The most vulnerable in society are hit hardest by the coronavirus, also known as COVID- 19”; Measures = “The measures taken against the coronavirus are more harmful than the virus itself.” $*p < .05$, $**p < .01$, $***p < .00$ (two-tailed).

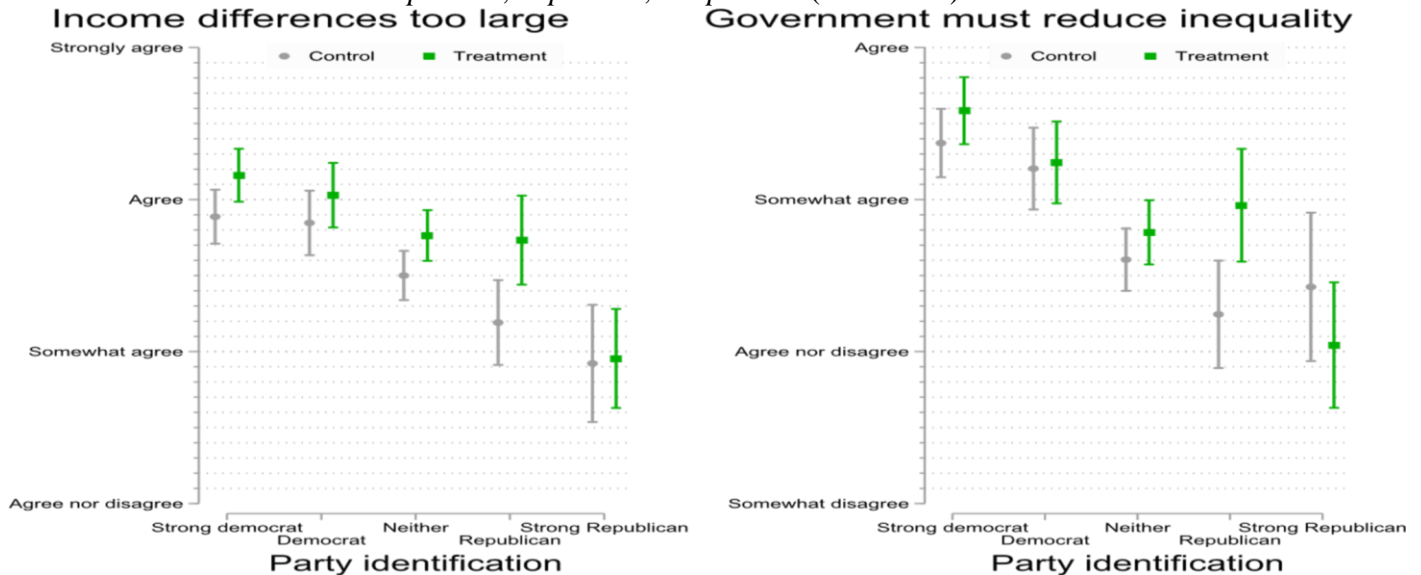


Fig. 3. Beliefs about inequality by treatment and party identification. *Note.* Predictive margins based on OLS regression models including pretreatment attitudes and all control variables. Whiskers indicate the 95% confidence interval around each estimate.

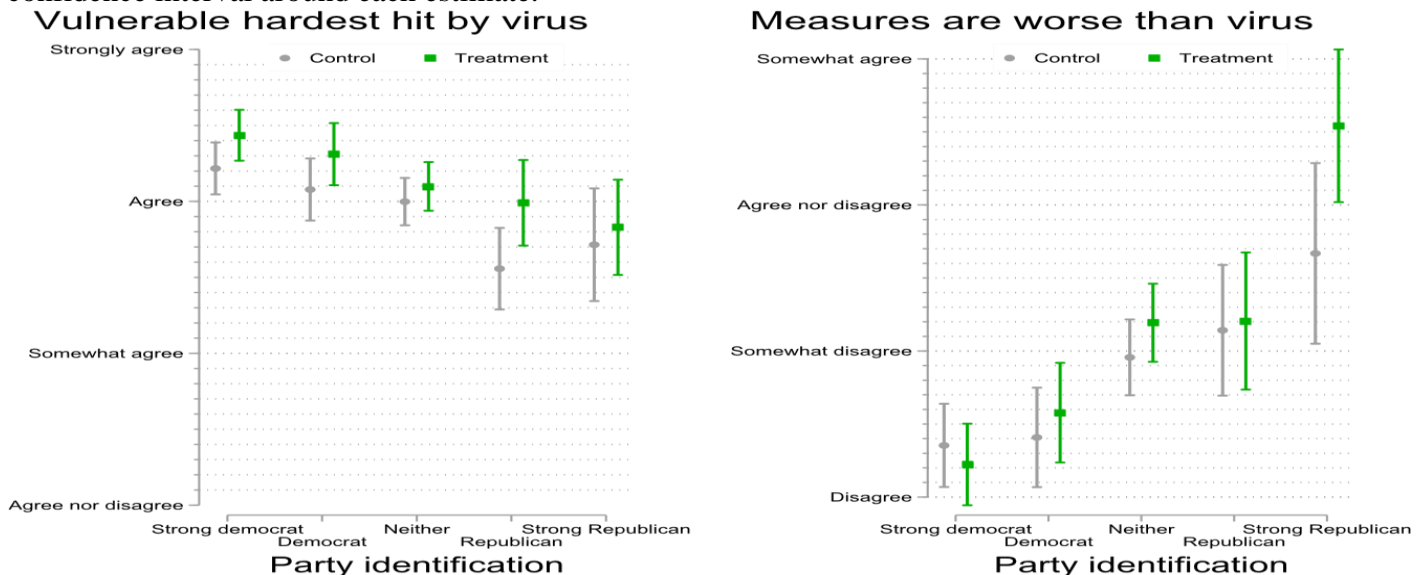


Fig. 4. Beliefs about COVID-19 by treatment and party identification. *Note.* Predictive margins based on OLS regression models including pretreatment attitudes and all control variables. Whiskers indicate the 95% confidence interval around each estimate.

We only find conditional treatment effects for participants’ support for government redistribution among Republicans, 0.72 points in size (95% CI, 0.21–1.22). Simply put, the informational treatment brings Republicans three-quarters up the way from “neither agree nor disagree” toward “somewhat agree.” These findings support the expectation that information provision impacts beliefs across partisan lines (Hypothesis 2B) and provide no support for the alternative expectation that the response to information is limited only to Democrats (Hypothesis 2A).

Taken together, we find evidence of a shrinking ideological gap between moderate Republicans and Democrats following the provision of factual information about COVID-19’s consequences for economic inequality. Among

participants in the control group, the ideological gap in concerns about inequality is about 1 point between the partisan poles and 0.7 points when comparing moderate Republicans and Democrats. The partisan gap in support for redistribution is 0.9 and 1 point respectively. Our treatment reduces the gap between moderate Democrats and Republicans to 0.3 points on both topics (i.e. compared to 0.7 and 1); a gap that is not significantly different from zero at $p < .05$, reflective of an especially large attitudinal change among moderate Republicans. This finding however does not extend to those at the polar ends of the political spectrum. Comparing strong Democrats to strong Republicans in the treatment group, the polar ideological gap in concerns about inequality and support for redistribution *increases* to 1.2 and 1.5 points, respectively (compared to 1 and 0.9 in the control group). This finding adds an important qualification to our empirical support for Hypothesis 2B: provision of information affects beliefs on both sides of the political divide but may increase *intraparty polarization*. We return to this finding in our conclusion.

Fig. 4 visualizes participants' beliefs about COVID-19's effects on the most vulnerable groups in society and the measures taken by government. For the former, we find a significant difference between the treated and controls, indicative of a conditional treatment effect of 0.43 points (95% CI, 0.07 - 0.85) among Republicans—almost half the way from “somewhat agree” to “agree”. For all other groups, we find positive differences between treated and controls, ranging from 0.10 points among participants in the middle, 0.23 for Democrats, 0.22 for strong Democrats, and 0.11 for strong Republicans, none of which however are significantly different from zero at $p .05$. Thus, we find a pattern of results comparable to those described above, lending no support for Hypothesis 2A and conditional support to Hypothesis 2B.

Turning to participants' beliefs about the negative consequences of government measures *vis-a-vis* the virus (Fig. 4), we find one statistically significant difference between the controls and treated: among strong Republicans, participants in the treatment group are more likely by 0.87 points (95% CI, 0.08–1.67) to believe that the measures taken by government are worse than the virus itself. Apparently, among these participants, 60 percent of which already believed the antidote to be worse than the illness (Fig. 1b), the informational treatment bolstered their concerns. This finding underlines the qualification we previously made with regard to the empirical support for Hypothesis 2B.

What does this mean for the ideological gap in beliefs about COVID-19-induced inequality and measures? Among control group participants, we find a partisan gap in the belief that COVID-19 has disproportionately affected the most vulnerable groups in society of 0.5 points both among moderates and strong partisans. The ideological gap in the belief that government measures have done more harm than the virus is 0.7 and 1.3 points, respectively. Our informational treatment reduces the gap in beliefs about COVID-19's consequences to 0.3 points between moderate Republicans and Democrats (not significantly different from zero at $p < .05$) but increases it to 0.6 points between the polar ends.

Among moderates, concerning the role of government during the crisis we find a reduction in the attitudinal gap from 0.7 to 0.6 point (n.s.; $p < .05$). The gap between strong Democrats and strong Republicans however increases from 1.3 to 2.3, especially driven by the latter who become even more convinced that government COVID-19 measures have done more harm than the virus. We should note that this finding does not perfectly replicate in the robustness checks, which indicate similarly large coefficients for strong Republicans but report p -values just above the 5% level (Check A: 0.73, $p = .07$; Check B: 0.79, $p = .06$; Check C: 0.77, $p = .06$).

5. Conclusions

Inspired by studies reporting surprisingly limited popular concern over steadily rising inequalities in recent decades (Brezna and Hommerich, 2019; Kenworthy and McCall, 2008; Luebker, 2014; Trump, 2017), this study asked whether a sudden and vast increase in inequalities in times of crisis (cf., Robinson et al., 2021) would make people's ideological beliefs more pliable than evidence from 'normal' times would suggest. Specifically, does the provision of factual information about COVID-19-induced inequalities make people more concerned and more supportive of income redistribution? We address this question by means of an original population-based survey

experiment fielded in the least-likely case of the United States, renowned for its relatively high tolerance for income differences (Alesina et al., 2018) and partisan filtering of information (Bolsen et al., 2014).

We find that Americans are split by partisan lines on each topic related to inequality. However, when exposed to the informational treatment, Americans across the ideological spectrum express 1) more concerns over economic inequality, 2) stronger support for income redistribution, and 3) stronger acknowledgement that the coronavirus has especially hurt the most vulnerable in society. These findings provide no support for the expectation that information about COVID-19-induced inequality only leads to belief change among Democrats. Instead, they lend support to the alternative Hypothesis that the provision of information in times of crisis may lead to belief change on both sides of the political divide. Research on the Great Recession in the United States (Margalit, 2013) and the Netherlands (Gidron and Mijs, 2019) documents growing support for redistribution especially among those who personally experienced economic hardship, reflecting self-interested concerns. Our findings suggest that a crisis like COVID-19 may fuel more broadly shared sociotropic concerns. Hence, further research into the specific conditions fueling both types of concern across the Atlantic would be most worthwhile.

Turning to conditional treatment effects along ideological lines, in line with Bisgaard's study on the United Kingdom (2015) we find that even in the United States, moderate partisans are not far apart, assured they are provided with the same set of factual information. In the American case, the political divide is bridged by moderate Republicans who become markedly more supportive of redistribution following the informational treatment. However, while our informational treatment rendered non-significant the gap between moderates, it substantially *increased* the gap between moderate and strong Republicans. Moderate Republicans are receptive to new information and perspectives in times of crisis (cf. Swidler, 1986), whereas strong Republicans hold on to their political commitment or double down (cf. Nyhan and Reifler, 2010).

We can think of three reasons for this intra-party polarization among Republicans. Perhaps our informational intervention, framed as non-partisan academic facts, rubbed strong Republicans the wrong way, given their relatively high levels of distrust of experts and the nonpartisan news media (Evans and Hargittai, 2020; Shepherd et al., 2020), in which this type of reporting is the default. Alternatively, strong Republicans could have attributed the steep rise in COVID-19-induced unemployment presented in the experimental condition as the consequence of government interventions, especially government shutdowns, hampering people from getting back to work. Such views typically go together both with their partisan position and demographic profile (as in other populationbased surveys, strong Republicans in our sample were more likely than both moderate Republicans and all others to be male, white, Protestant, and have higher incomes and levels of education; see SI, Table S6 for details). Yet another factor may be that strong partisans – Democrats and Republicans – are simply more resistant to information that opposes their world view.

Either way, we consider it less likely that information describing COVID-19-induced inequalities would invoke such polarization in other Western settings, as right-wing populist constituencies have been observed to be *more* pro-redistribution than those who prefer non-populist right-wing parties (De Koster et al., 2013). Given the ideological profile of the contemporary European left and right, information on cultural issues such as immigration and national sovereignty is more likely to incite polarization (Rydgren, 2008; Van Elsas et al., 2016). We welcome future research on the polarizing or unifying effects of informational treatments about inequalities in other settings.

An important question that remains, concerns the scope and implications of our findings beyond the experimental setting. As the COVID-19 pandemic “does not appear to have fundamentally changed how subjects respond to treatments” in online experiments (Peyton et al., 2021), we are confident that exposure to information depicting the sudden and substantial increase in COVID-19-related inequality increases concerns among the bulk of the American population. The effect of information is likely to be greater in contexts with a lower tolerance of economic inequality. Yet, while our study exposes the public to the same set of information, in their daily lives, many Americans are exposed to partisan media mirroring their ideological profile and reinforcing their perspective (Bruine de Bruin et al., 2020). It follows that in contexts with a less polarized media landscape – such

as the public broadcasting systems of various European countries (Mosca and Quaranta, 2016) – the public may be more uniformly informed about economic inequality, and consequently more likely to express concerns when confronted with information about its rampant rise. These suggest testable hypotheses for future research. Having established that most people – even the divided American public – express more concern about inequality when confronted with factual information, a subsequent question regards whether this finding translates to other contentious issues. For instance, can informational interventions produce a similar effect when targeting compliance with measures to mitigate the pandemic (see also Kelley and Evans, 2021)? Providing such information is challenging in a context where “[p]olitical leaders and media outlets on the right and left have sent divergent messages about the severity of the crisis, which could impact the extent to which Republicans and Democrats engage in social distancing and other efforts to reduce disease transmission” (Allcott et al., 2020, p. 1). Yet when information on measures to mitigate disease transmission is more uniformly available across the political landscape, there is good reason to believe the partisan gap can be bridged. To this point, Druckman et al. (2021, p. 36) observed that closing the partisan gap on the use of masks followed “changing rhetoric by Republican elites—including President Trump—to follow the Democratic perspective on mask wearing.” All in all, whereas steadily rising inequalities have sparked remarkably little public concern in recent decades, uniformly confronting the public with factual information describing the economic consequences of COVID-19 makes even the polarized American public more worried about inequality and more supportive of income redistribution. The strikingly uniform pattern of responses among moderates on both sides of the political divide suggest that disagreement over inequality may be rooted not in fundamentally incompatible worldviews but in different perceptions of how things are, which prove pliable through the provision of information. At the same time, our findings suggest that a crisis like COVID-19 may upend ideological rifts among moderates, while increasing their salience on the right of the political spectrum. We expect information describing a sudden and substantial increase in inequalities to be an even more likely source of concern in many European countries, where it is less likely to inspire attitudinal polarization at the political fringe.

Funding

Jonathan Mijs received funding from a Marie Skłodowska-Curie Individual Fellowship, EU Commission Horizon 2020 Grant no. 88296 and a Veni grant from the Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO), grant no. VI.Veni.201S.003. Willem de Koster and Jeroen van der Waal received financial support through Vidi grants from the NWO, nos. 016.Vidi.185.207 and 452-17-009.

Data availability

Replication data and Stata scripts have been made available through the Open Science Framework to allow for independent verification of our findings: <https://osf.io/ub538>.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.ssresearch.2021.102692>.

References

- Alesina, A., Stantcheva, S., Teso, E., 2018. Intergenerational mobility and preferences for redistribution. *Am. Econ. Rev.* 108, 521–554. <https://doi.org/10.1257/aer.20162015>.
- Allcott, H., Boxell, L., Conway, J., Gentzkow, M., Thaler, M., Yang, D., 2020. Polarization and public health: partisan differences in social distancing during the coronavirus pandemic. *J. Publ. Econ.* 191, 104254.
- Aronow, P.M., Baron, J., Pinson, L., 2019. A note on dropping experimental subjects who fail a manipulation check. *Polit. Anal.* 27, 572–589.
- Athreya, K., Mather, R., Mustre-del-Rio, J., Sanchez, J.M., 2020. Employment Vulnerability and (Financial) Preexisting Conditions. Federal Reserve Bank of Richmond.

- Atkinson, A.B., Piketty, T., Saez, E., 2011. Top incomes in the long run of history. *J. Econ. Lit.* 49, 3–71. <https://doi.org/10.1257/jel.49.1.3>.
- Beall, A.T., Hofer, M.K., Schaller, M., 2016. Infections and elections: did an Ebola outbreak influence the 2014 U.S. Federal elections (and if so, how)? *Psychol. Sci.* 27, 595–605. <https://doi.org/10.1177/0956797616628861>.
- Berrebi, C., Klor, E.F., 2008. Are voters sensitive to terrorism? Direct evidence from the Israeli electorate. *Am. Polit. Sci. Rev.* 102, 279–301. <https://doi.org/10.2307/27644521>.
- Bird, R., Ritter, Z., 2020. Is the Media Creating Division on COVID-19 Health Practices? Gallup, Washington, DC.
- Bisgaard, M., 2015. Bias will find a way: economic perceptions, attributions of blame, and partisan-motivated reasoning during crisis. *J. Polit.* 77, 849–860. <https://doi.org/10.1086/681591>.
- Bolsen, T., Druckman, J.N., Cook, F.L., 2014. The influence of partisan motivated reasoning on public opinion. *Polit. Behav.* 36, 235–262. <https://doi.org/10.1007/s11109-013-9238-0>.
- Bradley, D., Huber, E., Moller, S., Nielsen, F., Stephens, J.D., 2003. Distribution and redistribution in postindustrial democracies. *World Polit.* 55, 193–228.
- Breznau, N., Hommerich, C., 2019. No generalizable effect of income inequality on public support for governmental redistribution among rich democracies 1987–2010. *Soc. Sci. Res.* 81, 170–191. <https://doi.org/10.1016/j.ssresearch.2019.03.013>.
- Bruine de Bruin, W., Saw, H.-W., Goldman, D.P., 2020. Political polarization in US residents' COVID-19 risk perceptions, policy preferences, and protective behaviors. *J. Risk Uncertain.* 61, 177–194. <https://doi.org/10.1007/s11166-020-09336-3>.
- Bureau of Labor Statistics, 2020. Labor Force Statistics from the Current Population Survey. U.S. Bureau of Labor Statistics, Washington, DC.
- Cappelen, A.W., Falch, R., Sorensen, E.O., Tungodden, B., Wezerek, G., 2020. Opinion | what Do You Owe Your Neighbor? the Pandemic Might Change Your Answer. *N. Y. Times*.
- CBO, 2019. The Distribution of Household Income, 2016 | Congressional Budget Office. Congressional Budget Office, Washington, DC.
- Civiqs, 2020. Coronavirus: Outbreak Concern. Civiqs, Oakland, CA.
- Clifford, S., Sheagley, G., Piston, S., 2021. Increasing precision without altering treatment effects: repeated measures designs in survey experiments. *Am. Polit. Sci. Rev.* <https://doi.org/10.1017/S0003055421000241> (in press).
- Collins, C., 2021. U.S. Billionaires got 62 percent richer during pandemic. In: They're Now up \$1.8 Trillion. Institute for Policy Studies.

- Conway III, L.G., Woodard, S.R., Zubrod, A., Chan, L., 2021. Why are conservatives less concerned about the coronavirus (COVID-19) than liberals? Comparing political, experiential, and partisan messaging explanations. *Pers. Individ. Differ.* 183, 111–124.
- Cox, J., 2020. The Upcoming Job Losses Will Be unlike Anything the US Has Ever Seen. CNBC.
- Cox, R.H., 2001. The social construction of an imperative: why welfare reform happened in Denmark and The Netherlands but not in Germany. *World Polit.* 53, 463–498.
- Dalton, R.J., 2008. The quantity and the quality of party systems: party system polarization, its measurement, and its consequences. *Comp. Polit. Stud.* 41, 899–920. <https://doi.org/10.1177/0010414008315860>.
- De Koster, W., Achterberg, P., Van der Waal, J., 2013. The new right and the welfare state: the electoral relevance of welfare chauvinism and welfare populism in The Netherlands. *Int. Polit. Sci. Rev.* 34, 3–20.
- DeRensis, H., 2020. The coronavirus economic crisis: the next Great depression? *Natl. Interest* March 20.
- Druckman, J.N., Klar, S., Krupnikov, Y., Levendusky, M., Ryan, J.B., 2021. Affective polarization, local contexts and public opinion in America. *Nat. Hum. Behav.* 5, 28–38. <https://doi.org/10.1038/s41562-020-01012-5>.
- Eadeh, F.R., Chang, K.K., 2020. Can threat increase support for liberalism? New insights into the relationship between threat and political attitudes. *Soc. Psychol. Personal. Sci.* 11, 88–96. <https://doi.org/10.1177/1948550618815919>.
- Evans, J.H., Hargittai, E., 2020. Who doesn't trust fauci? The public's belief in the expertise and shared values of scientists in the COVID-19 pandemic. *Socius* 6. <https://doi.org/10.1177/2378023120947337>, 2378023120947337.
- Flaxman, S., Goel, S., Rao, J.M., 2016. Filter bubbles, echo chambers, and online news consumption. *Publ. Opin. Q.* 80, 298–320. <https://doi.org/10.1093/poq/nfw006>.
- Gerring, J., 2007. Is there a (viable) crucial-case method? *Comp. Polit. Stud.* 40, 231–253.
- Gidron, N., Mijs, J.J.B., 2019. Do changes in material circumstances drive support for populist radical parties? Panel data evidence from The Netherlands during the Great recession, 2007–2015. *Eur. Socio Rev.* <https://doi.org/10.1093/esr/jcz023>.
- Gollwitzer, A., Martel, C., Brady, W.J., Parnaments, P., Freedman, I.G., Knowles, E.D., Van Bavel, J.J., 2020. Partisan differences in physical distancing are linked to health outcomes during the COVID-19 pandemic. *Nat. Hum. Behav.* 4, 1186–1197.
- Gordon, R.J., 2016. *The Rise and Fall of American Growth*. Princeton University Press, Princeton, NJ.
- Grasso, M., Klicperova-Baker, M., Koos, S., Kosyakova, Y., Petrillo, A., Vlase, I., 2021. The impact of the coronavirus crisis on European societies. What have we learnt and where do we go from here? – introduction to the COVID volume. *Eur. Soc.* 1–31. <https://doi.org/10.1080/14616696.2020.1869283> (in press).

- Grossman, G., Kim, S., Rexer, J.M., Thirumurthy, H., 2020. Political partisanship influences behavioral responses to governors' recommendations for COVID-19 prevention in the United States. *Proc. Natl. Acad. Sci. Unit. States Am.* 117, 24144–24153. <https://doi.org/10.1073/pnas.2007835117>.
- Havey, N.F., 2020. Partisan public health: how does political ideology influence support for COVID-19 related misinformation? *J. Comput. Soc. Sci.* 3, 319–342.
- ISSP Research Group, 2018. International Social Survey Programme 2019 Social Inequality V. Final Questionnaire. GESIS, Cologne.
- Jerit, J., Zhao, Y., 2020. Political misinformation. *Annu. Rev. Polit. Sci.* 23, 77–94. <https://doi.org/10.1146/annurev-polisci-050718-032814>.
- Jost, J.T., Glaser, J., Kruglanski, A.W., Sulloway, F.J., 2003. Political conservatism as motivated social cognition. *Psychol. Bull.* 129, 339–375. <https://doi.org/10.1037/0033-2909.129.3.339>.
- Kelley, J., Evans, M.D.R., 2021. Legitimate earnings inequality and national welfare commitment: correspondence between economic institutions and the pay 80,000 + people in 30 nations think legitimate for ordinary jobs and for elite jobs. *Soc. Sci. Res.* 94, 102446. <https://doi.org/10.1016/j.ssresearch.2020.102446>.
- Kelly, N.J., Enns, P.K., 2010. Inequality and the dynamics of public opinion: the self-reinforcing link between economic inequality and mass preferences. *Am. J. Polit. Sci.* 54, 855–870. <https://doi.org/10.1111/j.15405907.2010.00472.x>.
- Kenworthy, L., McCall, L., 2008. Inequality, public opinion and redistribution. *Soc. Econ. Rev.* 6, 35–68. <https://doi.org/10.1093/ser/mwm006>.
- Kenworthy, L., Pontusson, J., 2005. Rising inequality and the politics of redistribution in affluent countries. *Perspect. Polit.* 3, 449–471.
- Kozlowski, A.C., Murphy, J.P., 2021. Issue alignment and partisanship in the American public: revisiting the 'partisans without constraint' thesis. *Soc. Sci. Res.* 94, 102498. <https://doi.org/10.1016/j.ssresearch.2020.102498>.
- Kreps, S.E., Kriner, D.L., 2020. Model uncertainty, political contestation, and public trust in science: evidence from the COVID-19 pandemic. *Sci. Adv.* 6, eabd4563. <https://doi.org/10.1126/sciadv.abd4563>.
- Kuklinski, J.H., Quirk, P.J., Jerit, J., Schwieder, D., Rich, R.F., 2000. Misinformation and the currency of democratic citizenship. *J. Polit.* 62, 790–816. <https://doi.org/10.1111/0022-3816.00033>.
- Kuziemko, I., Norton, M.I., Saez, E., Stantcheva, S., 2015. How elastic are preferences for redistribution? Evidence from randomized survey experiments. *Am. Econ. Rev.* 105, 1478–1508. <https://doi.org/10.1257/aer.20130360>.
- Lee, K.S., Fujita, Y., 2011. Economic recession and the nature and pace of social change in Japan. *Soc. Sci. Res.* 40, 784–795. <https://doi.org/10.1016/j.ssresearch.2011.01.002>.

- Lin, W., 2013. Agnostic notes on regression adjustments to experimental data: reexamining Freedman's critique. *Ann. Appl. Stat.* 7, 295–318. <https://doi.org/10.1214/12-AOAS583>.
- Loveless, M., Whitefield, S., 2011. Being unequal and seeing inequality: explaining the political significance of social inequality in new market democracies. *Eur. J. Polit. Res.* 50, 239–266. <https://doi.org/10.1111/j.1475-6765.2010.01929.x>.
- Luebker, M., 2014. Income inequality, redistribution, and poverty: contrasting rational choice and behavioral perspectives. *Rev. Income Wealth* 60, 133–154. <https://doi.org/10.1111/roiw.12100>.
- Margalit, Y., 2013. Explaining social policy preferences: evidence from the Great recession. *Am. Polit. Sci. Rev.* 107, 80–103. <https://doi.org/10.1017/S0003055412000603>.
- McCall, L., Burk, D., Laperrière, M., Richeson, J.A., 2017. Exposure to rising inequality shapes Americans' opportunity beliefs and policy support. *Proc. Natl. Acad. Sci. Unit. States Am.* 114, 9593–9598. <https://doi.org/10.1073/pnas.1706253114>.
- Mijs, J.J.B., 2018. Visualizing Belief in Meritocracy, 1930-2010. *Socius* 4.
- Mijs, J.J.B., 2021. The paradox of inequality: income inequality and belief in meritocracy go hand in hand. *SocioEconomic Review* 19 (1), 7–35. <https://doi.org/10.1093/ser/mwy051>.
- Mora, G.C., Schickler, E., Paschel, T., 2020. Perceptions of Inequality and the Pandemic Vary Drastically Among Californians. *Inst. Gov. Stud. Release*, 2020-08.
- Mosca, L., Quaranta, M., 2016. News diets, social media use and non-institutional participation in three communication ecologies: comparing Germany, Italy and the UK. *Inf. Commun. Soc.* 19, 325–345.
- Mummolo, J., 2016. News from the other side: how topic relevance limits the prevalence of partisan selective exposure. *J. Polit.* 78, 763–773. <https://doi.org/10.1086/685584>.
- Naumann, E., Buss, C., Bahr, J., 2016. How unemployment experience affects support for the welfare state: a real panel approach. *Eur. Socio Rev.* 32, 81–92.
- Neimanns, E., Busemeyer, M.R., Garritzmann, J.L., 2018. How popular are social investment policies really? Evidence from a survey experiment in eight western European countries. *Eur. Socio Rev.* 34, 238–253. <https://doi.org/10.1093/esr/jcy008>.
- Nyhan, B., Reifler, J., 2010. When corrections fail: the persistence of political misperceptions. *Polit. Behav.* 32, 303–330. <https://doi.org/10.1007/s11109-010-9112-2>.
- Oude Groeniger, J., Noordzij, K., van der Waal, J., de Koster, W., 2021. Dutch COVID-19 lockdown measures increased trust in government and trust in science: a difference-in-differences analysis. *Soc. Sci. Med.* 275, 113819. <https://doi.org/10.1016/j.socscimed.2021.113819>.
- Packer, G., 2020. America's plastic hour is upon us. *Atlantic* 48–57.
- Palan, S., Schitter, C., 2018. Prolific.ac—a subject pool for online experiments. *J. Behav. Exp. Finance* 17, 22–27. <https://doi.org/10.1016/j.jbef.2017.12.004>.

- Pechar, E., Bernauer, T., Mayer, F., 2018. Beyond political ideology: the impact of attitudes towards government and corporations on trust in science. *Sci. Commun.* 40, 291–313. <https://doi.org/10.1177/1075547018763970>.
- Peyton, K., Huber, G.A., Coppock, A., 2021. The generalizability of online experiments conducted during the COVID-19 pandemic. *J. Exp. Polit. Sci.* <https://doi.org/10.1017/XPS.2021.17>.
- Robinson, L., Schulz, J., Ball, C., Chiaraluce, C., Dodel, M., Francis, J., Huang, K.-T., Johnston, E., Khilnani, A., Kleinmann, O., 2021. Cascading crises: society in the age of COVID-19. *Am. Behav. Sci.*, 00027642211003156
- Rydgren, J., 2008. Immigration sceptics, xenophobes or racists? Radical right-wing voting in six West European countries. *Eur. J. Polit. Res.* 47, 737–765.
- Sachweh, P., Sthamer, E., 2019. Why do the affluent find inequality increasingly unjust? Changing inequality and justice perceptions in Germany, 1994–2014. *Eur. Socio Rev.* 35, 651–668. <https://doi.org/10.1093/esr/jcz024>.
- Schüller, S., 2015. The 9/11 conservative shift. *Econ. Lett.* 135, 80–84. <https://doi.org/10.1016/j.econlet.2015.07.031>.
- Schwartz, N.D., 2020. ‘Nowhere to Hide’ as Unemployment Permeates the Economy. *N. Y. Times*.
- Shepherd, H., MacKendrick, N., Mora, G.C., 2020. Pandemic politics: political worldviews and COVID-19 beliefs and practices in an unsettled time. *Socius* 6. <https://doi.org/10.1177/2378023120972575>.
- Suhay, E., Klasnja, M., Rivero, G., 2020. Ideology of affluence: rich Americans’ explanations for inequality and attitudes toward redistribution. *J. Polit.* <https://doi.org/10.1086/709672>.
- Swidler, A., 1986. Culture in action: symbols and strategies. *Am. Socio. Rev.* 51, 273–286. <https://doi.org/10.2307/2095521>.
- Tierney, K.J., 2007. From the margins to the mainstream? Disaster research at the crossroads. *Annu. Rev. Sociol.* 33, 503–525. <https://doi.org/10.1146/annurev.soc.33.040406.131743>.
- Trump, K.-S., 2017. Income inequality influences perceptions of legitimate income differences. *Br. J. Polit. Sci.* 48, 929–952. <https://doi.org/10.1017/S0007123416000326>.
- Van der Waal, J., Achterberg, P., Houtman, D., 2007. Class is not dead—it has been buried alive: class voting and cultural voting in postwar western societies (1956–1990). *Polit. Soc.* 35, 403–426.
- Van Elsas, E.J., Hakhverdian, A., Van der Brug, W., 2016. United against a common foe? The nature and origins of Euroscepticism among left-wing and right-wing citizens. *W. Eur. Polit.* 39, 1181–1204.
- Wagner-Pacifci, R., 2010. Theorizing the restlessness of events. *Am. J. Sociol.* 115, 1351–1386. <https://doi.org/10.1086/651299>.
- Waterfield, S., 2020. A list of essential workers that we should thank and support during the coronavirus pandemic. *Newsweek*.