Disparate Impact Pandemic Framing

Decreases Public Concern For Health Consequences

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June 1, 2020

Abstract. It is known that the new coronavirus (COVID-19) is disproportionately affecting the elderly, those with underlying medical conditions, and the poor. What is the effect of informing the public about these inequalities on people's perceptions of threat and their sensitivity to the outbreak's human toll? This study answers this question using a novel survey experiment and finds that emphasis on the unequal aspect of the pandemic, especially as it relates to the elderly and those with medical conditions, could be causing the public to become less concerned about the outbreak and its human toll. Discussion situates this finding in the literature on scientific communication and persuasion and explains why language that emphasizes the impact of the virus on *all of us* -- rather than singling out certain groups -- could be more effective in increasing caution among the general public and make them take the situation more seriously.

Keywords: coronavirus; COVID-19; public opinion; inequality; survey experiment

Word count: 2,286

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Introduction

Within a few months after its first emergence in Wuhan, China in December 2019, the novel coronavirus (COVID-19) has spread to almost every country on earth, including the US (Van Bavel 2020). As of June 2020, the human toll of the disease worldwide is nearly seven million confirmed cases and more than 370,000 deaths (ArcGIS 2020). Very few disease outbreaks in history have had such a fast and widespread impact on humanity, with the closest example being the 1918 flu pandemic (Scott and Duncan 2001).

Despite the global nature of the outbreak that has impacted peoples of all sexes, races, and cultural backgrounds, it is known that the disease is not affecting everyone in the same way. In particular, the elderly and those with underlying medical conditions are at higher risk of severe illness due to the virus (Zhou et al 2020). Similarly, more infections and deaths are reported in poor and low-income communities compared to wealthier ones (Von Braun, Zamagni, and Sorondo 2020). Neither of these patterns are surprising given what we know about health disparities (Murray, Kulkarni, and Ezzati 2005; Adler and Rehkopf 2008; Braveman et al 2010; Marmot 2015) and the unequal impact of epidemics on certain groups (Luk, Gross, and Thompson 2001; Quinn and Kumar 2014).

While the outbreak is far from having a uniform impact on different groups, the way the media and the scientific community is talking about the outbreak does not always touch upon this unequal aspect of the pandemic. Oftentimes, the account instead emphasizes the *equalizing* aspect of the pandemic, whereby the virus threatens all of us -- all Americans or the entirety of humanity -- regardless of our background (McNeil 2020). Other times, the discussion revolves

specifically around how the pandemic has been especially hard to certain groups, such as the elderly, the sick, and the poor (CDC 2020).

How do these different framings of the pandemic affect the public opinion? In particular, is one framing more or less effective than the other in terms of how it influences whether or not the public sees the outbreak as a serious threat or not and whether it is more important to save lives or to save the economy as the outbreak unfolds? This study answers this question using a novel survey experiment and finds that emphasis on the unequal aspect of the pandemic, especially as it relates to the elderly and those with medical conditions, could be causing the public to become less concerned about the outbreak and its human toll. Discussion situates this finding in the literature on scientific communication and persuasion and explains why language that emphasizes the impact of the virus on *all of us* -- rather than singling out certain groups -- could be more effective in increasing caution among the general public and make them take the situation more seriously.

Methods

Experimental design

The study is designed as a between-subjects survey experiment. It randomized each respondent into one of three conditions corresponding to three possible framings of the pandemic: (1) the "equal pandemic" that is affecting all of us (control); (2) the unequal pandemic that is especially hard on the elderly and those with medical conditions ("natural inequality"); and (3) the unequal

pandemic that is especially hard on poor and low-income communities, minorities in particular ("class inequality").

The experiment flows as follows. First, respondents are recruited into the study and asked to give their consent. (At this stage, respondents are told that the goal of the survey is to "understand the public's opinions regarding important societal and economic trends in the US." This general wording is chosen over using specific words such as coronavirus and inequality in an attempt to make sure respondents are not primed to think about these issues from the start.) Second, they are asked to watch a short clip with subtitles and told that the purpose of showing this video is to assess their comprehension skills; the content of the clips depends on the experimental condition respondents are in. Third, right after watching the video, they are asked to briefly describe the content of the video using their own words. Fourth, they answer a series of general questions related to their attitudes towards inequality as well as their socio-demographic characteristics such age, gender, race, and income.

Finally, respondents answer questions that are specifically related to the coronavirus outbreak. These questions include: (1) whether the respondent thinks the coronavirus is a serious threat to the American people or not; (2) whether the respondent thinks it is more important to save lives or to save the economy during this outbreak; how satisfied the respondent is with the way (3) their city, (4) their state, and (5) the federal government has been handling the coronavirus situation; (6) how the respondent has been affected by the coronavirus outbreak; and (7) how many times the respondent went outside in the past seven days.

Answers given to questions (1) and (2) constitute the main dependent variables in the study. Both variables take values between 1 and 5 with higher values denoting higher threat

perceptions in the case of the first variable and attaching more importance to saving the economy over saving lives in the case of the second variable. Answers given to questions (3), (4), and (5) are similarly coded to take values between 1 and 5 with higher values denoting more satisfaction. Multiple binary variables have been generated based on question (6), including whether the respondent or someone in the respondent's family (i) is at risk, (ii) has contracted the virus, (iii) lost their job due to the outbreak, or (iv) experienced a significant decrease in income due to the outbreak. The variable based on Question (7) takes values between 0 and 7.[2]

Implementation and subject recruitment

The survey experiment is implemented using Qualtrics. The videos presented to respondents as part of the experiment are prepared using iMovie and subsequently uploaded to a YouTube channel created by the researcher (videos are "unlisted", have comments disabled, and show subtitles by default). All videos showed an Adobe Stock licensed image in the background related to the content of the narrated text. The experimental texts themselves are written by the researcher after a careful reading of relevant news articles and scientific communications.

The texts narrated to respondents in the videos are recorded by a young female in her 20's speaking Standard American English. Female voice is chosen over male voice due to evidence that shows that people tend to find the female voice to be more credible (Siegel, Breazeal, and Norton 2009). The narrated text is also displayed as actual text under the video in case the respondent experiences a problem watching the video or chooses not to watch. (As discussed

[2] See Appendix 1 for the experimental texts, images, videos, manipulation check question, survey questions, and other related project content including additional variables and conditions.

later under Results, the researcher confirmed that most respondents watched and understood the videos.)

Data collection took place on Lucid Theorem. This platform gives researchers access to cheap, fast (thousands of responses within hours), and high quality data that is also nationally representative based on age, gender, ethnicity, and region. A recent scholarly work also validated the quality of Lucid samples (Coppock and McClellan 2019). The project has IRB approval. (All code, materials, and de-identified data will be made public once the study is over.)

Sample characteristics and data structure

The survey experiment is run on a total of 2,617 respondents with approximately 870 respondents in each condition. The three conditions appear to be balanced on the demographic covariates, which gives us confidence that randomization worked as expected. All analyses are conducted on a dataset with the following simple structure: one row per respondent and as many columns as there are variables. Respondents are required to be US residents and 18 or older.[3]

Overview of statistical models used

Linear regression models are fit to data with the experimental condition as the independent variable. The control condition is used as the reference category to be able to get estimates for the natural and class inequality conditions. Results from these models are presented in figures in the main text, rather than tables, to make reading easier. All figures include point estimates together with 95% confidence intervals. Since the inclusion of socio-demographic covariates

[3] See Appendix 2 for information on sample size calculations, exact sample sizes by condition, and summary demographics by condition.

does not change our conclusions -- this is not surprising as the independent variable is randomly assigned to respondents -- the main text only discusses models without these covariates.[4]

Results

Manipulation check

The researcher confirmed that most respondents actually watched the videos by checking the number of YouTube "views" of each video. Most respondents also passed the manipulation check question, that is, clearly understood the text being communicated to them. (The researcher used a custom script to look for certain keywords such as "coronavirus" or "elderly" to make sure that respondents' description of the video was correct.) Furthermore, conclusions presented here remain unchanged regardless of whether or not we restrict the sample to only those respondents who passed the manipulation check.

Main findings

The experiment had a significant impact on respondents' opinions regarding whether coronavirus is a serious threat or not and whether the priority should be saving lives or saving the economy. Both outcomes take values between 1 and 5 ("coronavirus serious threat" values: 1=not a threat at all, 2=a small threat, 3=a threat, 4=a serious threat, 5=a very serious threat; "economy must be saved" values: 1=saving lives must be the priority even if it means the economy will suffer, 2, 3, 4, 5=saving the economy must be the priority even if it means lives will be lost).

[4] See Appendix 3 for tables with estimated coefficients, standard errors, and p-values; results both with and without socio-demographic covariates are presented for the sake of transparency (Lenz and Sahn 2020). Models with additional outcomes are also presented.

As far as the first outcome is concerned, respondents who saw the natural inequality condition reported significantly lower levels of threat perception compared to respondents who saw the control condition (coefficient estimate = -0.166, p-value = 0.001, see left panel of Figure 1). Regarding the second outcome, respondents who saw the natural inequality condition reported significantly more support towards saving the economy over saving lives compared to control (coefficient estimate = 0.201, p-value = 0.001, see right panel of Figure 1).

Digging deeper into these patterns revealed an interesting treatment-effect heterogeneity. Both of the effects discussed in the previous paragraph are mainly driven by respondents who are neither at risk themselves nor have family members who are at risk. Significant effects are observed only in this group, while the effect vanishes among respondents who are at risk or have at risk family members (see Figure 2). Effect heterogeneity is demonstrated by fitting separate models for at-risk and not-at-risk sub-groups. The coefficient estimates for the outcome "coronavirus serious threat" are -0.061 (p-value = 0.454) for respondents at risk and -0.184 (p-value = 0.004) for respondents not at risk. Similarly, the coefficient estimates for the outcome "economy must be saved" are 0.101 (p-value = 0.348) for respondents at risk and 0.226 (p-value = 0.003) for respondents not at risk.

While the natural inequality condition led to significant changes in both outcomes, class inequality condition was weaker in its effects. Despite the effect being in the same direction as natural inequality, class inequality led to significant changes only in the second outcome. The class inequality coefficient estimates are -0.067 (p-value = 0.199) for the first outcome, which is less than half the magnitude of the natural inequality effect, and 0.138 (p-value = 0.027) for the second outcome, which is about only two-thirds of the natural inequality effect. (The estimated

effect gets smaller and statistical significance disappears when we control for the socio-demographic covariates.) On the other hand, data show that the class inequality condition had a nearly significant negative effect of -0.111 (p-value = 0.058) on satisfaction with state's handling of the coronavirus situation; no significant effects are observed for natural inequality or for the other two satisfaction outcomes (city and federal government).

Discussion

The information the public receives regarding the coronavirus outbreak influences their threat perceptions and whether they think saving the economy or saving lives should be the priority. Results from this study show that being informed about the disproportionate negative impact of the pandemic on the elderly and those with underlying medical conditions make people less likely to see coronavirus as a threat and more likely to prioritize saving the economy as opposed to saving lives, particularly among those who do not need to worry about themselves or someone in their family being at risk of severe illness.

These findings suggest that the dissemination of scientific information regarding the unequal impact of the pandemic on certain groups could actually be causing the general public to become less concerned about the outbreak and its human toll. The fact that the effect is primarily observed among people not at risk further indicate that when those people are sensitized to the situation of the weak they feel more secure about their own situation as not being at risk, which likely leads to increased optimism bias (Sharot 2011) and underestimation of their risk of infection (Wise et al 2020). These results give more support to mechanisms of deliberation and

callousness as opposed to sympathy (Loewenstein and Small 2007; Small, Loewenstein, and Slovic 2007; Martin 2001).

The findings also have important policy implications. If the policy goal is to increase caution among the general public and make them take the situation more seriously, then information that emphasizes solidarity -- "we are all in this together" -- is likely to be much more effective (*20*), especially when it comes from a credible source (Haslam, Reicher, and Platow 2011; Brinol and Petty 2009). This solidarity framework should be employed even when informing the public about the unequal impact of the pandemic on certain groups, so that the general public is not left with the impression that the outbreak concerns only some -- not all -- of us.

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Figures

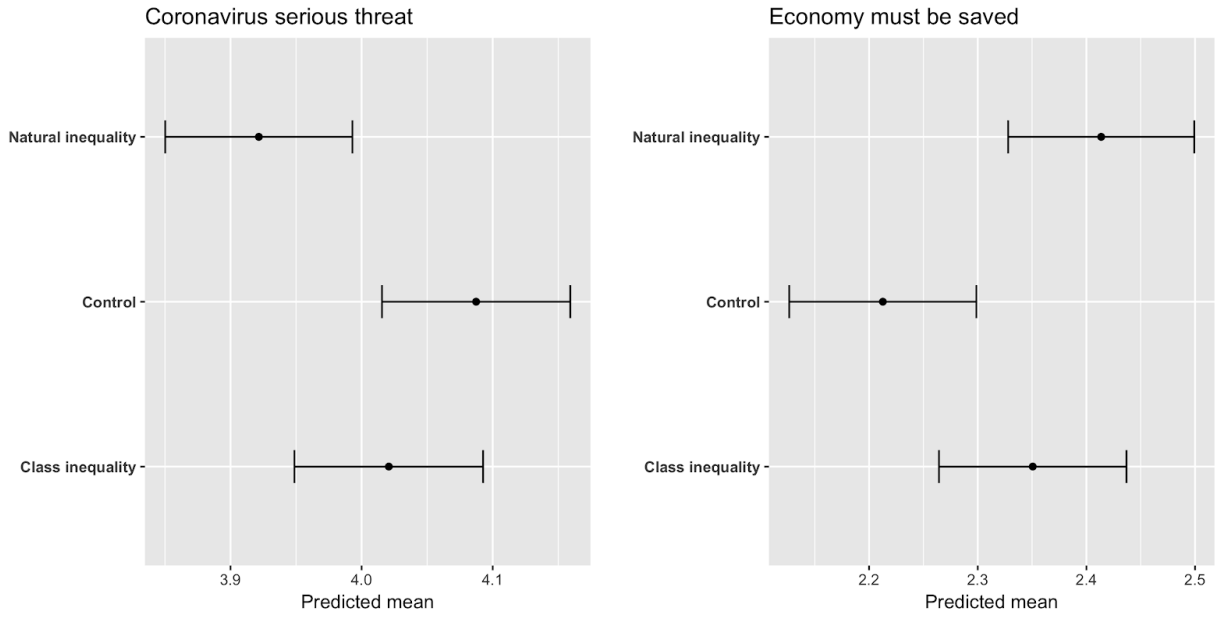


Fig. 1. The effect of the informational treatment on outcomes. The point estimates are predicted means. The bars denote 95% confidence intervals. *N*=2,617.

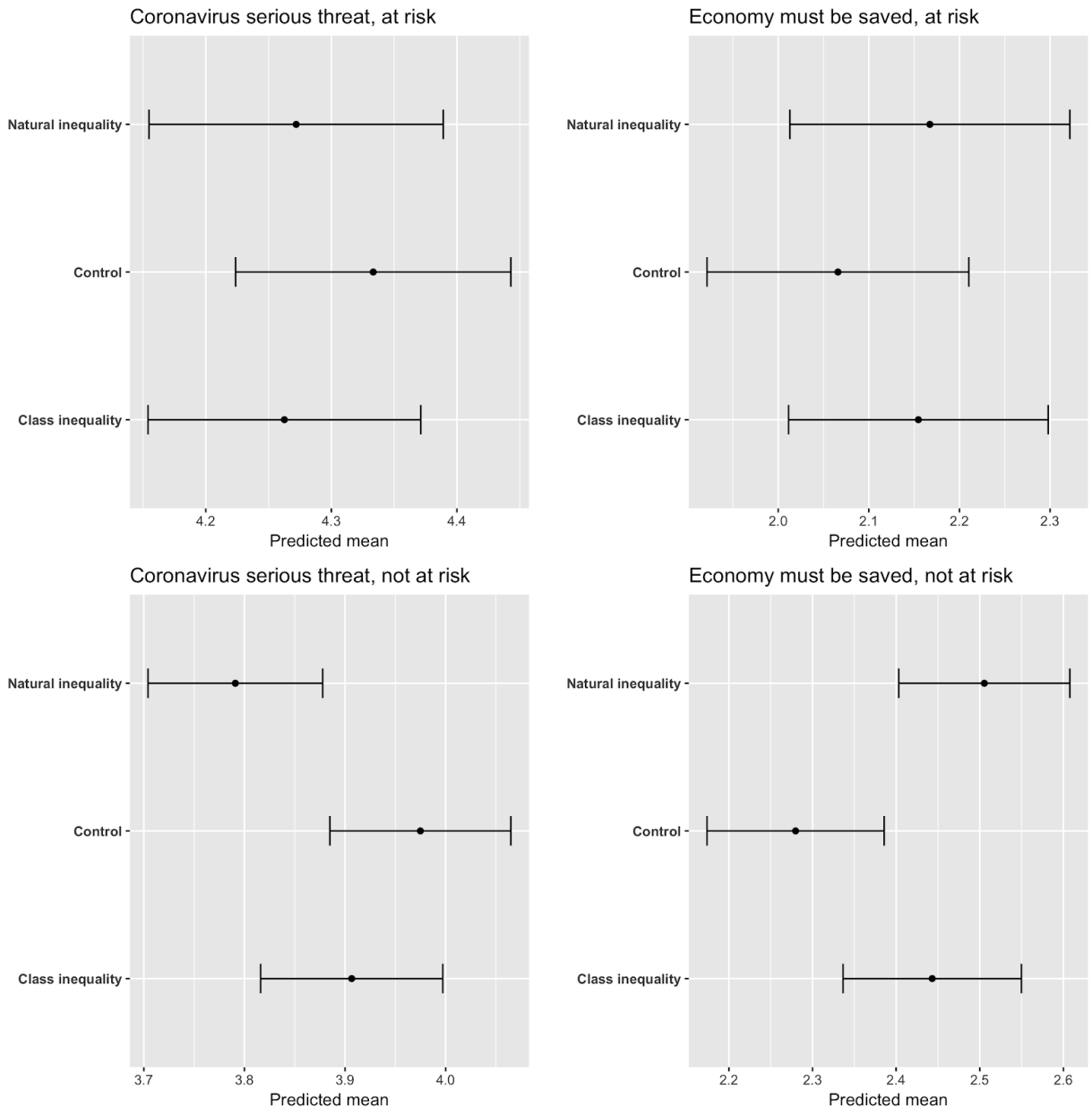
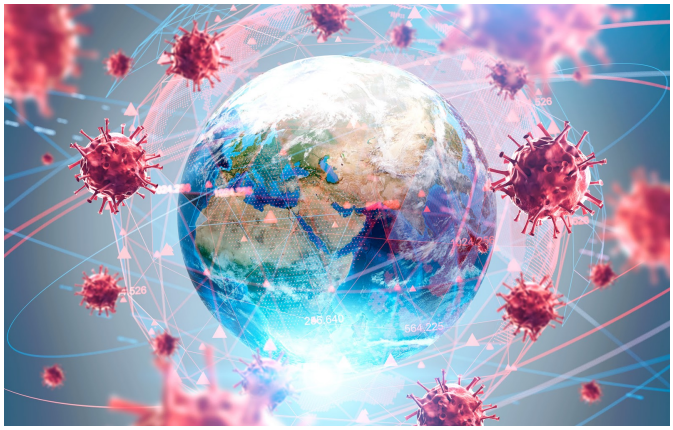


Fig. 2. Effect heterogeneity based on being at risk. The point estimates are predicted means. The bars denote 95% confidence intervals. *N*=2,617.

Appendix 1: Experimental texts, images, videos, and other related content

Experimental videos

Experimental videos can be watched on YouTube (control, natural inequality, class inequality). The images and texts used in the videos are presented below.



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We are in the midst of a global disease outbreak. Within a few months after its emergence, the new coronavirus (COVID-19) has spread to almost every country on earth, including the US. Very few events in history have impacted the entirety of humanity in this way, regardless of sex, race, or cultural background.

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The new coronavirus (COVID-19) is not affecting everyone in the same way. The elderly and those with underlying medical conditions such as heart disease, cancer, and diabetes have been disproportionately affected. The number of infections and deaths are significantly higher among this group compared to the rest of the population.

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The new coronavirus (COVID-19) is not affecting everyone in the same way. Poor and low-income communities, particularly minorities such as blacks and Hispanics, have been disproportionately affected. The number of infections and deaths are significantly higher among this group compared to the rest of the population.

Manipulation check

Respondents are asked to answer the following question after watching the video.

Describe in your own words what the text you just listened to was about. [A couple of words or a sentence is enough.]

TEXT ENTRY HERE

Survey questions related to socio-demographic characteristics of respondents

The following socio-demographic questions are asked to respondents prior to answering coronavirus-specific questions. Most of these questions are taken directly from the study by Kuziemko et al (2015).

Are you a US resident?

- Yes
- No

In which state do you currently reside?

DROP-DOWN LIST OF STATES HERE

What is your gender?

- Male
- Female
- Other

What is your age? [Enter a number (e.g., 35)]

TEXT ENTRY HERE

What is your marital status?

- Single
- Married

Do you have children living with you?

- Yes
- No

How would you describe your ethnicity/race?

- European American/White
- African American/Black
- Hispanic/Latino

- Asian/Asian American
- Other

How would you describe your religion?

- Christian (Protestant)
- Christian (Catholic)
- Christian (Mormon)
- Christian (Other)
- Jewish
- Muslim
- Hindu
- Buddhist
- Other religion
- No religion

Which category best describes your highest level of education?

- Eighth Grade or Less
- Some High School
- High School Degree/GED
- Some College
- 2-year College Degree
- 4-year College Degree

- Master's Degree
- Doctoral Degree
- Professional Degree (JD, MD, MBA)

What is your current employment status?

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

What is your occupation?

TEXT ENTRY HERE

What was your TOTAL household income, before taxes, last year?

- $0 - $9,999
- $10,000 - $14,999
- $15,000 - $19,999
- $20,000 - $29,999
- $30,000 - $39,999
- $40,000 - $49,999

- $50,000 - $74,999
- $75,000 - $99,999
- $100,000 - $124,999
- $125,000 - $149,999
- $150,000 - $199,999
- $200,000+

Compared with American families in general today, would you say your family income is above or below average?

- Far below average
- Below average
- Average
- Above average
- Far above average

Which best describes your household's income each month?

- Income is about the same each month
- Income varies somewhat from month to month
- Income varies a lot from month to month

<u>Compared to 10 years ago</u>, do you think your standard of living now is better or worse?

- Much better

- Somewhat better
- About the same
- Somewhat worse
- Much worse

<u>10 years into the future</u>, do you think your standard of living will be better or worse?

- Much better
- Somewhat better
- About the same
- Somewhat worse
- Much worse

On economic policy matters, where do you see yourself on the liberal/conservative spectrum?

- Very conservative
- Conservative
- Moderate
- Liberal
- Very liberal

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

- Republican
- Democrat
- Independent
- None

How often do you follow the news?

- Every day
- A few times a week
- Once a week
- Less than once a week
- Never

How much confidence do you have in the <u>scientific community</u>?

- A great deal of confidence
- Only some confidence
- Hardly any confidence at all

Survey questions related to the coronavirus outbreak

After watching the video, respondents were asked to answer the following questions related to coronavirus. Choice ordering was reversed for a random half of respondents in the first five questions.

Do you think the coronavirus is a serious threat to the American people?

- Not a threat at all
- A small threat
- A threat
- A serious threat
- A very serious threat

Do you think it is more important to save lives or to save the economy during this outbreak?

- 1 - Saving lives must be the priority even if it means the economy will suffer
- 2
- 3
- 4
- 5 - Saving the economy must be the priority even if it means lives will be lost

On the whole, how satisfied are you with the way <u>your city</u> has been handling the coronavirus situation?

- Very satisfied
- Fairly satisfied
- Neither satisfied nor dissatisfied
- Not very satisfied
- Not satisfied at all

On the whole, how satisfied are you with the way <u>your state</u> has been handling the coronavirus situation?

- Very satisfied
- Fairly satisfied
- Neither satisfied nor dissatisfied
- Not very satisfied
- Not satisfied at all

On the whole, how satisfied are you with the way <u>the federal government</u> has been handling the coronavirus situation?

- Very satisfied
- Fairly satisfied
- Neither satisfied nor dissatisfied
- Not very satisfied
- Not satisfied at all

How have you been affected by the coronavirus? [Select all that apply.]

- I contracted coronavirus and became ill.
- I lost my job because of coronavirus.
- I experienced a significant decrease in income due to coronavirus.
- I have an underlying medical condition that puts me at greater risk for severe illness.

- Someone in my family contracted coronavirus and became ill.
- Someone in my family lost their job because of coronavirus.
- Someone in my family experienced a significant decrease in income due to coronavirus.
- Someone in my family has an underlying medical condition that puts them at greater risk for severe illness.
- I have not been affected by coronavirus in any major way.
- Other (please specify)

How many days have you been outside in the <u>past seven days</u>?

0

1

2

3

4

5

6

7

Additional variables, conditions

This study is part of a larger project to understand the impact of the coronavirus outbreak on Americans' perceptions of inequality. The survey included many other questions related to respondents' general perceptions regarding opportunity, inequality, and redistribution that are not

directly relevant to this paper. The survey also had experimental conditions that are completely unrelated to coronavirus (internet; natural inequality without reference to coronavirus; class inequality without reference to coronavirus). The researcher is writing another paper in parallel based on these results and is happy to share any materials, data, and/or results if requested.

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Appendix 2: Sample size calculations and sample characteristics

Sample size calculations

Sample size calculations were made with the aim of being able to detect a small effect in one-way ANOVA. The `pwr.anova.test` function in the **R** package `pwr` was used for this end. Using this function, and assuming a small effect size (Cohen's d = 0.075), a total of 2,250 respondents gives us more than 90% power to be able to detect the effect of interest. (Note that Cohen's d is defined as `mu/sigma`, where `mu` is the raw effect size in the original scale and `sigma` is the standard deviation of the outcome variable.) The specific function that was run was this: `pwr.anova.test(k=3, f=0.075, sig.level=0.05, power=0.9)`.

Sample characteristics

Table 1 presents sample sizes by condition; since the variable indicating whether the respondent or someone in the respondent's family is at risk is used to show effect heterogeneity in the main text, sample sizes disaggregated by this additional variable are also presented in parentheses. Table 2 presents summary demographics by condition, and Table 3 presents the distribution of respondents across states by condition.

Table 1. Number of respondents by condition.

	Number of respondents
Control	870 (not at risk: 597; at risk: 273)
Natural inequality	880 (not at risk: 641; at risk: 239)
Class inequality	867 (not at risk: 589; at risk: 278)

Total	2,617 (not at risk: 1,827; at risk: 790)

Table 2. Demographics by condition.

	Control	Natural inequality	Class inequality
Age	45.6	44.9	45.8
Gender			
Male	0.452	0.464	0.490
Female	0.539	0.527	0.504
Other	0.009	0.009	0.006
Marital status			
Single	0.509	0.523	0.521
Married	0.491	0.477	0.479
Has children living with them			
No	0.624	0.649	0.645
Yes	0.376	0.351	0.355
Ethnicity/race			
European American/White	0.697	0.667	0.691
African American/Black	0.125	0.119	0.119
Hispanic/Latino	0.091	0.111	0.095
Asian/Asian American	0.053	0.073	0.053
Other	0.035	0.030	0.043
Religion			
Christian (Protestant)	0.268	0.244	0.254
Christian (Catholic)	0.239	0.243	0.255
Christian (Mormon)	0.025	0.017	0.015
Christian (Other)	0.130	0.157	0.137
Jewish	0.032	0.027	0.042
Muslim	0.018	0.014	0.019
Hindu	0.006	0.015	0.003
Buddhist	0.012	0.013	0.008
Other religion	0.048	0.052	0.048
No religion	0.222	0.218	0.219
Highest level of education			
Eighth Grade or Less	0.005	0.003	0.006
Some High School	0.025	0.036	0.017
High School Degree/GED	0.193	0.207	0.203
Some College	0.224	0.232	0.209
2-year College Degree	0.110	0.112	0.104
4-year College Degree	0.264	0.226	0.283
Master's Degree	0.136	0.134	0.131
Doctoral Degree	0.015	0.014	0.020

Professional Degree (JD, MD, MBA)	0.028	0.035	0.028
Employment status			
Full-time employee	0.390	0.417	0.403
Part-time employee	0.106	0.101	0.105
Self-employed or small business owner	0.066	0.066	0.070
Unemployed and looking for work	0.107	0.097	0.105
Student	0.060	0.057	0.058
Not in labor force (for example: retired, or full-time parent)	0.272	0.262	0.260
Total household income before taxes			
$0 - $9,999	0.069	0.076	0.060
$10,000 - $14,999	0.064	0.049	0.039
$15,000 - $19,999	0.055	0.047	0.053
$20,000 - $29,999	0.087	0.103	0.103
$30,000 - $39,999	0.107	0.094	0.125
$40,000 - $49,999	0.093	0.089	0.093
$50,000 - $74,999	0.184	0.195	0.183
$75,000 - $99,999	0.139	0.122	0.128
$100,000 - $124,999	0.064	0.077	0.075
$125,000 - $149,999	0.055	0.061	0.047
$150,000 - $199,999	0.047	0.057	0.044
$200,000+	0.035	0.030	0.050
Income volatility			
Income is about the same each month	0.634	0.611	0.612
Income varies somewhat from month to month	0.282	0.280	0.293
Income varies a lot from month to month	0.084	0.109	0.095
Liberal/conservative spectrum			
Very conservative	0.113	0.130	0.104
Conservative	0.205	0.188	0.204
Moderate	0.410	0.432	0.443
Liberal	0.186	0.176	0.153
Very liberal	0.086	0.075	0.096
Party identity			
Republican	0.330	0.318	0.343
Democrat	0.393	0.375	0.322
Independent	0.236	0.234	0.263
None	0.041	0.073	0.073
Frequency of following news			
Never	0.025	0.030	0.022
Less than once a week	0.084	0.073	0.077
Once a week	0.095	0.103	0.116
A few times a week	0.240	0.275	0.268
Every day	0.555	0.519	0.517
Confidence in the scientific community			

Hardly any confidence at all	0.070	0.080	0.087
Only some confidence	0.437	0.436	0.449
A great deal of confidence	0.493	0.484	0.465

Age is in years. All other numbers presented are proportions.

Table 3. Number of respondents in each state by condition.

State	Control	Natural inequality	Class inequality
Alabama	12	14	18
Alaska	1	1	2
Arizona	14	26	20
Arkansas	10	8	6
California	95	87	86
Colorado	14	15	12
Connecticut	6	14	12
Delaware	4	4	1
District of Columbia	4	3	3
Florida	71	76	85
Georgia	21	29	33
Hawaii	3	4	2
Idaho	7	1	4
Illinois	41	41	37
Indiana	32	10	7
Iowa	5	8	6
Kansas	8	3	10
Kentucky	12	13	6
Louisiana	13	7	10
Maine	5	5	5
Maryland	9	22	19
Massachusetts	22	16	14
Michigan	22	35	22
Minnesota	14	8	14
Mississippi	10	8	3
Missouri	11	16	9
Montana	3	1	5
Nebraska	5	4	2
Nevada	7	10	13
New Hampshire	2	3	2
New Jersey	28	33	31
New Mexico	5	6	6
New York	76	54	77
North Carolina	26	23	28
North Dakota	0	2	0
Ohio	23	23	27
Oklahoma	6	4	13
Oregon	15	13	9
Pennsylvania	49	51	36

Rhode Island	4	4	1
South Carolina	19	17	10
South Dakota	2	1	0
Tennessee	13	16	15
Texas	47	75	67
Utah	5	8	4
Vermont	1	1	2
Virginia	23	24	31
Washington	17	18	24
West Virginia	7	0	4
Wisconsin	19	12	14
Wyoming	2	1	0
Respondent does not reside in the United States	0	2	0
Total	870	880	867

Appendix 3: Regression results

Table 4 presents the main results for the outcome "coronavirus serious threat," while Table 5 presents the main results for the outcome "economy must be saved." Table 6 presents estimates disaggregated by respondent's at risk status. Finally, Table 7 presents results from additional outcomes related to respondent's level of satisfaction with the way their city, state, and the federal government has been handling the coronavirus situation.

Table 4. Coronavirus serious threat.

Models w/o any demographic covariates

	Coefficient estimate	Standard error	p-value
Natural inequality	-0.166	0.052	0.001
Class inequality	-0.067	0.052	0.199

Models w/ demographic covariates

	Coefficient estimate	Standard error	p-value
Natural inequality	-0.141	0.046	0.002
Class inequality	-0.019	0.046	0.689

Table 5. Economy must be saved.

Models w/o any demographic covariates

	Coefficient estimate	Standard error	p-value
Natural inequality	0.201	0.062	0.001
Class inequality	0.138	0.062	0.027

Models w/ demographic covariates

	Coefficient estimate	Standard error	p-value
Natural inequality	0.182	0.058	0.002
Class inequality	0.092	0.058	0.112

Table 6. Effect heterogeneity.

At risk

	Coronavirus serious threat	Economy must be saved
Natural inequality	-0.061 (0.082)	0.101 (0.108)
Class inequality	-0.071 (0.079)	0.089 (0.104)

Not at risk

	Coronavirus serious threat	Economy must be saved
Natural inequality	-0.184 (0.064)**	0.226 (0.075)**
Class inequality	-0.068 (0.065)	0.163 (0.077)*

The numbers inside the parentheses are standard errors. Stars denote p-values: ˙ p<0.1, * p<0.05, ** p<0.01, *** p<0.001.

Table 7. Other outcomes.

	Satisfied with city	Satisfied with state	Satisfied with federal govt
Natural inequality	0.028 (0.052)	-0.039 (0.059)	0.035 (0.065)
Class inequality	-0.044 (0.053)	-0.111 (0.059)˙	-0.060 (0.065)

The numbers inside the parentheses are standard errors. Stars denote p-values: ˙ p<0.1, * p<0.05, ** p<0.01, *** p<0.001.