

# Supplemental Appendix

## A Summary statistics and cross-sectional differences in beliefs

We provide summary statistics of our control variables in Tables A.1-A.4. As reflected by the first two of these tables, our sample draws from a diverse population in terms of race, education, age, income, and political attitudes, and has an over-representation of women. The third table shows that across our sample there is wide variation in the number of local COVID-19 cases, recent changes in the local effects of COVID-19, and population density. The final table shows that our sample features a significant number of individuals who faced restrictions on in-person work, while almost all faced at least some limitations on gatherings and in person schooling.

Table A.5 summarizes elicited beliefs about individual risks and expectations of national outcomes, and Tables A.6 and A.7 describe how these beliefs vary with various demographics. As discussed in the body of the paper, other researchers have looked at how demographics are correlated with beliefs about different types of risk. In line with the existing evidence from roughly the same time period, we find significant demographic variation in those beliefs. Note that some of these cross-sectional differences may also be the result of differences in motivated cognition.

As in Fan et al. (2020) and Allcott et al. (2020), we find that those who consider their political views to be on the liberal side (political view variable  $< 0$ ) perceive higher infection risks and more deaths in the U.S. They are also more worried about the impact of the pandemic on economic outcomes in 2020.

Women are more worried about infection risks associated with work-return. They are also more pessimistic about the total number of COVID-19 related deaths and the national unemployment rate. These differences are consistent with women being more worried about the pandemic in general (Galasso et al., 2020; Fan et al., 2020; Bundorf et al., 2021; Bordalo et al., 2020), but we do not find a gender difference in the perceived chance of disease severity. On the other hand, women tend to worry less about the impact of the pandemic on GDP.

Individuals with annual household income less than \$40,000 perceive a lower chance of infection associated with returning to work, predict fewer deaths in the nation, and are less worried about the impact on GDP compared to higher income households. Individuals with higher education perceive a lower infection risk associated with staying at home, a larger increase in infection risk associated with going back to work, and at the same time expect a more negative impact of the pandemic on GDP.

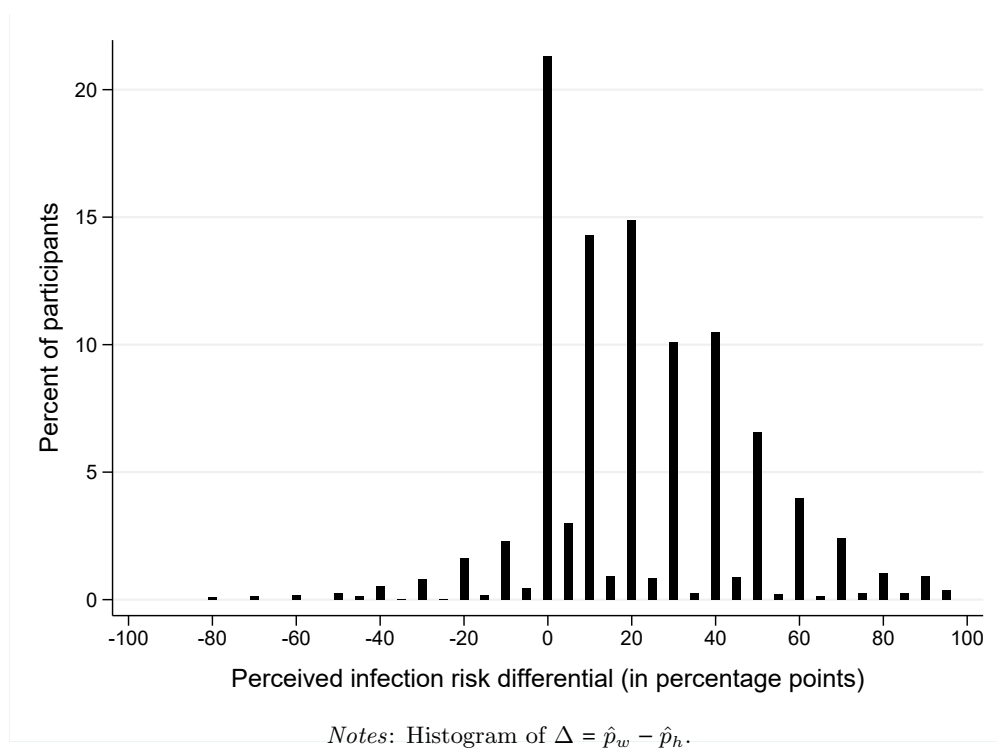
Similar to Bordalo et al. (2020), but even after controlling for political views, we find that younger individuals perceive a higher risk of infection (and in our case also more deaths nationally), especially after returning to work. The number of confirmed cases accounted for the same proportion of all adult age groups according to the CDC.<sup>32</sup> The perceived difference may be due to several

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<sup>32</sup><https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-age.html> Accessed October 29, 2021.

factors. First, young adults are more likely to have asymptomatic and mild cases and therefore they may be less likely to get tested and appear in case counts. Second, older people have been reported to adopt more preventive behaviors (Kim and Crimmins, 2020) and therefore might perceive a lower risk of infection. Third, as proposed in Bordalo et al. (2020), the pandemic may have made mortality salient for the first time to young people.<sup>33</sup> Importantly, however, older people report higher risks of severe health outcomes that require hospitalization (or worse). In fact, and in line with Bundorf et al. (2021), we find that individuals who are generally at a higher objective risk — older people, individuals who have at least one health-risk factor, and individuals whose annual household income is below \$40,000 — (realistically) expect a higher chance of severe health outcomes conditional on getting infected.<sup>34</sup>

Figure A.1: Distribution of  $\Delta$



<sup>33</sup>It could also be the case that younger workers work in jobs that have more customer or employee interaction. To check for this possibility, we ran another specification that included the number of employees and customers the respondent reported to engage with on a typical day as controls. As expected, beliefs about the infection risk at work increase with number of employees and customers. However, the results regarding age differences in perceived risk remain largely unchanged.

<sup>34</sup>We observe heightened perceptions of infection risk and expectations of total deaths in the country among individuals who have at least one health-risk factor, a pattern also documented by Bundorf et al. (2021).

Table A.1: Summary statistics of demographic controls

	%
<b>Race</b>	
White	80.4
Black	8.0
Asian	5.2
Other	6.4
<b>Education</b>	
Less than Bachelor's	34.4
Bachelor's degree	31.1
Graduate degree	25.4
Did not report	9.1
<b>Gender</b>	
Female	69.3
Male	30.7
<b>Household income</b>	
< \$40k	16.9
\$40 - 75k	32.9
\$75 - 100k	17.6
\$100 - 150k	18.1
\$150k <	10.2
Did not report	4.3
<b>Political Leaning</b>	
Extremely liberal (-3)	7.5
Liberal (-2)	17.2
Slightly liberal (-1)	10.3
Moderate/Middle of the road (0)	22.4
Slightly conservative (1)	15.1
Conservative (2)	17.7
Extremely conservative (3)	9.8
<b>N</b>	<b>3,312</b>

*Note:* This table presents summary statistics of demographics using self-reported information from survey participants. Each category for each demographic lists the fraction of subjects in that category.

Table A.2: Summary statistics of health risk factors

	%
<b>Age</b>	
18 to 29	24.2
30 to 39	25.5
40 to 49	20.9
50 to 59	17.3
60 and above	12.1
<b>Health conditions on the CDC comorbidity list as of May 2020</b>	
Has none	67.9
Has one or more	32.1
<b>N</b>	<b>3,312</b>

*Note:* This table presents summary statistics of health risks using self-reported information from survey participants. The top panel provides the fraction of participants in each age category, while the lower panel provides the fraction of individuals either having none, or at least one of the comorbidities listed by the CDC in May 2020.

Table A.3: Summary statistics of geographic risk factors

	Mean	SD	Median
COVID-19 cases (per 100,000 people)	521.46	642.73	263.80
14 day change in COVID-19 cases (per 100,000 people)	107.12	116.78	65.38
Deaths from COVID-19 (per 100,000 people)	33.90	54.01	11.32
14 day change in deaths from COVID-19 (per 100,000 people)	8.80	13.58	3.20
Natural logarithm of population density (per sq. mile)	6.55	1.64	6.62
<b>N</b>			<b>3,312</b>

*Note:* This table presents summary statistics of COVID-19 risk factors across the respondents, based on the county they live in. The data is made available by [Killeen et al. \(2020\)](#).

Table A.4: Fraction of respondents facing different restrictions at the time of survey

	%
Stay-at-home order	53.6
Restaurant closure	56.1
Entertainment venues and gym closure	58.6
Gathering limitation (50 people or more)	90.1
Gathering limitation (500 people or more)	96.1
Public school closure	100
<b>N</b>	<b>3,312</b>

*Note:* This table presents the fraction of respondents experiencing different activity restrictions at the time of survey, based on the county they live in. The data was made publicly available by [Killeen et al. \(2020\)](#).

Table A.5: Summary statistics of elicited beliefs

	Mean	SD	Median
Infection risk associated with staying at home	17.7	19.7	5
Infection risk associated with returning to work	38.8	26.1	35
Chance of severe symptoms	16.5	21	10
GDP growth in 2020	1.67	21.3	.75
Unemployment rate by July 1st, 2020	15.4	10.6	15
U.S. deaths due to COVID-19 by July 1st, 2020 (in 000s)	133.8	60.2	120
<b>N</b>			<b>3,312</b>

*Note:* This table presents summary statistics of participants' expectations regarding a variety of individual risks and national outcomes. Participants reported most estimates by choosing among intervals (e.g., 10-20% chance or 200,000 - 225,000 deaths). We re-coded their answers as the middle point of the interval. Chances of different possible health outcomes were elicited continuously. Appendix D details elicitation questions.

Table A.6: Individual risk belief variation across respondent characteristics

	(1) Work Beliefs ( $\hat{\rho}_w$ )	(2) Home Beliefs ( $\hat{\rho}_h$ )	(3) Belief Differential ( $\Delta$ )	(4) Chance of severe symptoms
<i>Age (omitted: 18-29 y.o.)</i>				
30-39	-2.680 (1.291)	-0.318 (1.014)	-2.362 (1.302)	-1.546 (0.895)
40-49	-3.134 (1.365)	0.392 (1.048)	-3.526 (1.320)	1.024 (1.000)
50-59	-3.241 (1.423)	-0.808 (1.095)	-2.433 (1.349)	1.385 (1.098)
60 and above	-7.910 (1.503)	-1.471 (1.251)	-6.439 (1.441)	5.801 (1.390)
Female	6.672 (0.947)	0.481 (0.741)	6.191 (0.885)	-0.037 (0.762)
<i>Race (omitted: White)</i>				
Black	-2.606 (1.758)	0.532 (1.386)	-3.139 (1.640)	-0.899 (1.396)
Asian	1.425 (1.941)	3.338 (1.788)	-1.913 (2.158)	-0.114 (1.352)
Other	1.923 (1.925)	0.813 (1.503)	1.110 (1.847)	2.348 (1.595)
<i>Household Income (omitted: &lt; \$40k)</i>				
\$40 – 75k	4.080 (1.377)	-0.009 (1.137)	4.089 (1.347)	-0.771 (1.089)
\$75 – 100k	3.008 (1.556)	-0.013 (1.285)	3.022 (1.549)	-0.677 (1.212)
\$100 – 150k	4.883 (1.589)	-0.440 (1.257)	5.323 (1.523)	-0.723 (1.232)
> \$150k	3.277 (1.874)	-0.547 (1.489)	3.823 (1.882)	-1.316 (1.372)
Did not report	-0.878 (2.446)	-4.085 (1.775)	3.207 (2.460)	-2.505 (1.808)
<i>Education (omitted: less than Bachelor's)</i>				
Has a Bachelor's degree	0.485 (1.114)	-2.665 (0.886)	3.150 (1.071)	0.033 (0.880)
Has a Graduate degree	4.522 (1.247)	-2.972 (0.955)	7.493 (1.213)	2.122 (0.968)
Did not report	-2.572 (2.285)	-0.313 (1.848)	-2.259 (2.291)	0.610 (1.786)
Political View	-1.922 (0.251)	-0.619 (0.198)	-1.304 (0.243)	-0.270 (0.204)
Has at least one health-risk factor	9.304 (0.962)	4.226 (0.774)	5.078 (0.933)	15.993 (0.875)
Constant	29.461 (3.258)	21.948 (2.644)	7.513 (3.080)	9.398 (2.419)
<i>Controls</i>				
Wave FE	✓	✓	✓	✓
Geographic Risk Factors	✓	✓	✓	✓
County Interventions	✓	✓	✓	✓
N	3312	3312	3312	3312

*Note:* This table displays results from regressions of individual risk beliefs (column header) on respondent characteristics and other controls included in our main regressions.

Table A.7: Systemic risk belief variation across respondent characteristics

	(1) Change in GDP	(2) Deaths due to Covid	(3) Unemployment rate
<i>Age (omitted: 18-29 y.o.)</i>			
30-39	-0.527 (0.411)	-6.032 (3.152)	0.738 (0.579)
40-49	-1.476 (0.445)	-6.445 (3.374)	1.520 (0.604)
50-59	-2.702 (0.502)	-2.974 (3.490)	2.306 (0.629)
60 and above	-3.446 (0.550)	-6.427 (3.617)	2.420 (0.647)
Female	0.870 (0.321)	3.820 (2.154)	1.909 (0.397)
<i>Race (omitted: White)</i>			
Black	1.128 (0.575)	0.050 (4.538)	0.725 (0.762)
Asian	-1.541 (0.749)	2.631 (5.161)	0.507 (0.882)
Other	0.961 (0.660)	1.564 (4.682)	1.325 (0.829)
<i>Household Income (omitted: &lt; \$40k)</i>			
\$40 – 75k	-1.268 (0.462)	1.457 (3.385)	-1.115 (0.630)
\$75 – 100k	-1.852 (0.517)	-0.104 (3.816)	-0.750 (0.702)
\$100 – 150k	-1.667 (0.522)	2.788 (3.712)	-2.076 (0.692)
> \$150k	-1.658 (0.652)	13.120 (4.934)	-0.645 (0.835)
Did not report	-0.307 (0.805)	-1.614 (5.297)	-1.167 (1.056)
<i>Education (omitted: less than Bachelor's)</i>			
Has a Bachelor's degree	-1.446 (0.373)	1.905 (2.603)	-0.337 (0.495)
Has a Graduate degree	-1.858 (0.407)	3.060 (2.793)	-0.625 (0.535)
Did not report	-1.349 (0.780)	15.674 (5.862)	-0.202 (0.903)
Political View	0.559 (0.087)	-5.097 (0.595)	-0.481 (0.108)
Has at least one health-risk factor	0.590 (0.315)	12.230 (2.347)	0.121 (0.413)
Constant	0.772 (1.074)	126.899 (8.019)	14.444 (1.447)
<i>Controls</i>			
Wave FE	✓	✓	✓
Geographic Risk Factors	✓	✓	✓
County Interventions	✓	✓	✓
N	3312	3312	3312

*Note:* This table displays results from regressions of systemic risk beliefs (column header) on respondent characteristics and other controls included in our main regressions.

## B Robustness Checks

### B.1 Robustness to truncation and data selection

In Table B.1, we repeat the results from our main specification with all controls in Panel (a), and show robustness of our results to accounting for outliers in dependent variables by winsorizing 5% of the tails in Panel (b), and to a log-likelihood transformation of beliefs to account for their truncated nature in Panel (c). In Table B.2, we show robustness of our results to including all participants who were admitted to our survey (All), excluding 140 respondents who return with a delay due to exogenous reasons (No Exogenous), excluding 248 respondents who suspect they have been infected with the virus (No Infected), or excluding 934 respondents who are not sure about when the state will reopen their industry (Only Certain Open Date). Our conclusions remain the same.

## C Additional Results

### C.1 Moderation Analysis

A key finding of the paper is that belief adjustments are stake-dependent. Individuals who have more to lose from getting sick (i.e., older people or people with certain medical conditions) distort their beliefs more than others as the time to work return gets closer. Here, we examine other potentially important heterogeneities in belief adjustments. In particular, we look at gender, risk aversion, education, household income, the impact of the pandemic on the household’s income, news consumption habits, and political views. We report the results both where the dependent variable is the difference in beliefs about the infection risk associated with going back to work vs. staying at home (Table C.1) and where it is the perceived probability of severe illness (Table C.2). Each column examines a different moderator variable, as indicated by the column headers. The regressions include the full set of controls (see section 3.3 in the main text for a description of the control variables). For completeness, we also provide the results where we additionally include reopening-week fixed effects (Tables C.3 and C.4). Overall, we do not find moderation of temporal differences in risk expectations by demographics, risk aversion or news consumption.

**Gender** (column 1 in each table). Comparing respondents who are about to go back to those who continue to stay at home for at least a month, women change their beliefs about infection risks by 11.9 percentage points and men alter their beliefs by 9.3 percentage points. This difference of 2.6 percentage points is not significant ( $p = 0.198$ ). We observe a similar yet even smaller difference by gender when we compare respondents who are returning in two or three weeks to those who have a month or longer before they return ( $p = 0.553$ ). We also find relatively small differences by gender in belief adjustments with regard to the probability of severe illness. In that case, men tend to adjust their beliefs more than women, but the interaction effects are not significant ( $p = 0.181$  and  $0.656$ ).



Table B.1: Robustness of main results to log-transformed beliefs and winsorization

	Work Beliefs ( $\hat{p}_w$ )		Home Beliefs ( $\hat{p}_h$ )		Belief Differential ( $\Delta$ )		Chance of severe symptoms	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>Panel (a): Main Effects</b>								
This or next week	-8.467 (1.089)	-5.554 (1.476)	2.626 (0.890)	2.053 (1.252)	-11.093 (1.032)	-7.607 (1.438)	-1.425 (0.837)	-0.417 (1.158)
Two or three weeks	-5.918 (1.044)	-5.261 (1.138)	0.304 (0.802)	0.223 (0.901)	-6.223 (1.014)	-5.484 (1.083)	0.055 (0.850)	0.010 (0.931)
<b>Panel (b): Log-Ratio Transformed</b>								
This or next week	-0.479 (0.066)	-0.275 (0.089)	0.175 (0.064)	0.160 (0.090)			-0.104 (0.073)	-0.008 (0.100)
Two or three weeks	-0.280 (0.062)	-0.241 (0.068)	0.030 (0.060)	0.021 (0.067)			0.060 (0.071)	0.083 (0.077)
<b>Panel (c): Winsorized</b>								
This or next week	-8.226 (1.052)	-5.463 (1.428)	1.949 (0.752)	1.449 (1.043)	-10.088 (0.898)	-7.079 (1.231)	-1.221 (0.722)	-0.419 (0.996)
Two or three weeks	-5.790 (1.007)	-5.174 (1.101)	0.307 (0.702)	0.204 (0.776)	-5.773 (0.893)	-5.076 (0.960)	0.093 (0.727)	-0.045 (0.791)
<i>Controls</i>								
Wave FE	✓	✓	✓	✓	✓	✓	✓	✓
Demographics	✓	✓	✓	✓	✓	✓	✓	✓
Health Risk Factors	✓	✓	✓	✓	✓	✓	✓	✓
Geographic Risk Factors	✓	✓	✓	✓	✓	✓	✓	✓
County Interventions	✓	✓	✓	✓	✓	✓	✓	✓
Return Week FE	-	✓	-	✓	-	✓	-	✓
N	3312	3312	3312	3312	3312	3312	3312	3312

*Note:* Panel (a) replicates the results from our main specification with all controls (dependent variable  $y$  indicated in column header) in odd columns and results from a specification that adds return week fixed effect in even columns. Panel (b) reports results from the same specifications with a transformed dependent variable  $\tilde{y} = \log(.01 + \frac{y}{100-y})$ . Because  $\hat{\Delta}$  can have negative values, we omit the transformation of that variable. Panel (c) reports results from the same regressions as in Panel (a) after winsorizing the dependent variables (5% of the tails). Estimated coefficients are followed by associated standard errors in parentheses.

Table B.2: Estimates for different sub-samples

	Belief Differential ( $\Delta$ )				Chance of severe symptoms			
	(1) All	(2) No Exogenous	(3) No Infected	(4) Only Certain Open Date	(5) All	(6) No Exogenous	(7) No Infected	(8) Only Certain Open Date
<b>Panel (a) Main Effects</b>								
This or next week	-11.176 (0.993)	-11.339 (1.047)	-10.927 (1.059)	-12.491 (1.208)	-2.096 (0.814)	-1.553 (0.847)	-0.957 (0.879)	-1.075 (0.953)
Two or three weeks	-6.715 (0.901)	-5.964 (1.053)	-6.582 (1.043)	-8.361 (1.310)	-0.360 (0.779)	0.120 (0.889)	0.213 (0.890)	0.653 (1.081)
<b>Panel (b) Moderation</b>								
This or next week	-9.291 (1.247)	-9.594 (1.303)	-9.705 (1.317)	-11.190 (1.503)	0.459 (0.823)	0.464 (0.864)	0.783 (0.900)	0.667 (0.936)
Two or three weeks	-6.731 (1.142)	-5.792 (1.348)	-7.078 (1.315)	-9.859 (1.676)	0.835 (0.739)	1.156 (0.866)	1.144 (0.855)	1.087 (1.034)
High Stakes	-2.667 (2.258)	-2.611 (2.557)	-3.098 (2.596)	-3.562 (3.045)	-4.309 (3.027)	-3.018 (3.380)	-3.461 (3.416)	-4.104 (4.024)
This or next week × High Stakes	-4.548 (1.981)	-4.239 (2.073)	-3.019 (2.102)	-3.177 (2.347)	-6.133 (1.758)	-4.904 (1.834)	-4.282 (1.922)	-4.186 (2.022)
Two or three weeks × High Stakes	-0.004 (1.799)	-0.487 (2.089)	1.257 (2.083)	3.701 (2.581)	-3.007 (1.713)	-2.631 (1.945)	-2.378 (1.991)	-1.060 (2.329)
<i>Controls</i>								
Wave FE	✓	✓	✓	✓	✓	✓	✓	✓
Demographics	✓	✓	✓	✓	✓	✓	✓	✓
Health Risk Factors	✓	✓	✓	✓	✓	✓	✓	✓
Geographic Risk Factors	✓	✓	✓	✓	✓	✓	✓	✓
County Interventions	✓	✓	✓	✓	✓	✓	✓	✓
N	3877	3172	3064	2378	3877	3172	3064	2378

*Note:* Results are from the main regression, including all controls, with dependent variables indicated in column headings. Column headings also indicate which set of the subjects are included in the regression: all participants who were admitted to our survey (All), excluding respondents who return with a delay due to exogenous reasons (No Exogenous), excluding respondents who suspect they have been infected with the virus (No Infected), excluding respondents who are not sure about when the state will reopen their industry (Only Certain Open Date). Standard errors are in parentheses.

**Risk aversion** (column 2 in each table). We measured risk aversion using an experimentally-validated survey question developed by [Falk et al. \(2018\)](#). Respondents were asked how willing they are to take risks on a scale from 0 (completely unwilling to take risks) to 10 (very willing to take risks). We created a median split to identify individuals who are relatively more risk tolerant and should thus be less likely to engage in motivated optimism. Indeed, when we compare respondents who are going back soon to those who stay at home for a little longer, we see that individuals who are more risk tolerant adjust their beliefs about infection risks less than others. However, the difference of 3.1 percentage points is not significant ( $p = 0.120$ ). We also do not find a significant difference by risk preferences when we compare respondents who return in two or more weeks to those who return later ( $p = 0.866$ ). Moreover, there is no clear pattern across respondents with different risk preferences when we look at beliefs about the chance of getting severely ill ( $p = 0.598$  and  $0.140$ ).

**Education** (column 3 in each table). We split the sample by whether respondents have at least a bachelor’s degree (almost 38% do not have a bachelor’s degree). Since we do not have information on education for 300 respondents, we have to work with a reduced sample. Among respondents who are more educated, those who are about to go back adjust their beliefs about infection risks by 12.1 percentage points relative to people going back in a month or later, whereas the beliefs of the less educated differs by 9.9 percentage points across time-to-return. The difference of 2.2 percentage points is not significant ( $p = 0.312$ ). The results are similar when we compare respondents who return in two to three weeks to those who return in four or more weeks. More educated individuals tend to distort their beliefs more as they get closer to returning, but the interaction effect is not significant ( $p = 0.413$ ). We also do not find that education moderates belief distortions with regard to the chance of getting severely ill. Respondents who hold a bachelor’s degree or higher tend to adjust their beliefs more than others, but the differences are again not significant ( $p = 0.249$  and  $0.963$ ).

**Income** (column 4 in each table). Our theoretical framework predicts that individuals with larger payoff differences between being healthy and being sick will distort their beliefs more because for them the marginal return to distorting beliefs is larger. However, it is unclear who had more to lose financially if they got sick, high- or low-income individuals. There was little clarity for workers on exactly what they are entitled to if they get sick from COVID-19. Indeed, surveys indicate that many people were unaware about possible legal protections, which also varied, e.g., by state and by company size. Nonetheless, we examine whether income affects the strength of belief distortions using a median split on income (annual household income of less than \$75,000 vs. \$75,000 or more). Since information on income is missing for 144 respondents, we have to work with a reduced sample. We do not find that income moderates how people adjust their beliefs about infection risks. Both interaction effects are close to zero and not significant ( $p = 0.719$  and  $0.969$ ). Moreover, we do not find a systematic pattern across respondents with different income when we examine beliefs about the chance of getting severely ill. The interaction effects have opposite signs with one effect being significant at the 10%-level ( $p = 0.095$  and  $0.183$ ).

**Economic impact of pandemic on household** (column 5 in each table). We asked respondents whether the pandemic has already had an impact on their household income. For the analysis, we divide the sample into two groups, those who experienced some loss in income and those who did not. We find some tendency that respondents who did not experience a loss of income since the beginning of the pandemic adjust their beliefs about infections risk more than others, but only one of the interaction effects is significant at the 10%-level ( $p = 0.082$  and  $0.258$ ). By contrast, the same individuals tend to be less optimistic about the probability of getting severely ill ( $p = 0.350$  and  $0.119$ ). Thus, the data do not provide a clear picture of whether financial concerns amplify belief distortions.

**News consumption** (columns 6 and 7 in each table). We examine how news consumption affects belief adjustments in two ways. First, we divide the sample based on a median split on the number of news sources that people say they usually rely on (less than three vs. three or more). Then, we examine whether Fox News viewers (about 30% of the sample) have a stronger or weaker tendency to distort beliefs given the network’s controversial coverage of the pandemic. Diversity in news consumption has no influence on the extent to which people distort their beliefs as a function of time to return, neither with regard to infection risks ( $p = 0.679$  and  $0.866$ ) nor with regard to the chance of severe illness ( $p = 0.549$  and  $0.988$ ). We also do not find clear evidence that Fox News viewers adjust their beliefs differently than others. Comparing respondents who return within a week to those who return in four or more weeks, Fox News viewers change their beliefs about infection risks by 2.2 percentage points less than non-viewers, but the difference is not significant ( $p = 0.322$ ). The difference gets larger when we compare respondents who go back in two to three weeks to those who return later ( $p = 0.041$ ). On the other hand, temporal adjustments of beliefs about getting severely ill do not differ by viewership ( $p = 0.474$  and  $0.360$ ).

**Political views** (column 8 in each table). Lucid provided us with information about respondents’ political leaning on the spectrum of “extremely liberal” to “extremely conservative.” To examine the role of politics, we use a median split which conveniently divides the sample into liberals vs. conservatives. Politically more conservative respondents distort their beliefs about infection risks by 2.5 and 1.5 percentage points, respectively, less than others, but those differences are not significant ( $p = 0.224$  and  $0.460$ ). We also do not find that political views affect how people distort their beliefs about outcome severity ( $p = 0.368$  and  $0.428$ ).

In sum, we do not find strong evidence for heterogeneity in belief adjustments across a number of variables that could potentially play a role. The interaction effects tend to be small and imprecisely estimated. The results also do not change meaningfully when we control for reopening-week fixed effects, as shown in Tables [C.3](#) and [C.4](#).

## C.2 Distorted Beliefs and Actions

Our theoretical framework focuses on how people adjust their beliefs to manage their utility from the anticipation of future outcomes. While holding overly optimistic beliefs increases emotional

Table C.1: Moderation by other factors: Infection risk differential

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Female	High risk tolerance	Has atleast a Bachelor's	Household income > \$70k	No negative pandemic related change in income	Follows atleast three news networks	Watches Fox News	Identifies as conservative
This or next week	-9.252 (1.645)	-12.780 (1.540)	-9.932 (1.676)	-11.650 (1.475)	-9.735 (1.318)	-10.769 (1.315)	-11.546 (1.245)	-12.184 (1.384)
Two or three weeks	-5.362 (1.689)	-6.052 (1.501)	-5.454 (1.776)	-6.262 (1.393)	-5.399 (1.272)	-6.137 (1.322)	-7.433 (1.195)	-6.834 (1.371)
Moderator	6.708 (1.306)	-4.522 (1.254)	6.480 (1.557)	3.925 (2.094)	0.371 (1.280)	3.242 (1.280)	-5.370 (1.421)	-0.570 (1.866)
This or next week × Moderator	-2.651 (2.058)	3.142 (2.023)	-2.166 (2.143)	0.738 (2.050)	-3.572 (2.053)	-0.846 (2.045)	2.154 (2.173)	2.453 (2.016)
Two or three weeks × Moderator	-1.234 (2.077)	-0.333 (1.983)	-1.780 (2.173)	-0.080 (2.045)	-2.322 (2.054)	-0.336 (1.991)	4.516 (2.206)	1.471 (1.989)
<i>Controls</i>								
Wave FE	✓	✓	✓	✓	✓	✓	✓	✓
Demographics	✓	✓	✓	✓	✓	✓	✓	✓
Health Risk Factors	✓	✓	✓	✓	✓	✓	✓	✓
Geographic Risk Factors	✓	✓	✓	✓	✓	✓	✓	✓
County Interventions	✓	✓	✓	✓	✓	✓	✓	✓
N	3312	3312	3012	3168	3312	3312	3312	3312

*Note:* The dependent variable is  $\Delta$ , the difference between subjective beliefs about infection risks associated with staying at home and infection risks associated with returning to the workplace. The table reports estimated coefficients (and associated standard errors) from Equation 2. Column headers correspond to the particular (binary) moderator variable being tested.

Table C.2: Moderation by other factors: Severe illness probability

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Female	High risk tolerance	Has atleast a Bachelor's	Household income > \$70k	No negative pandemic related change in income	Follows atleast three news networks	Watches Fox News	Identifies as conservative
This or next week	-3.088 (1.522)	-1.918 (1.286)	-0.477 (1.475)	-0.224 (1.235)	-2.083 (1.060)	-1.032 (1.089)	-1.018 (1.023)	-2.078 (1.117)
Two or three weeks	-0.507 (1.484)	1.401 (1.319)	0.123 (1.492)	-0.968 (1.206)	-0.984 (1.049)	0.016 (1.149)	-0.487 (0.991)	-0.514 (1.069)
Moderator	-0.941 (1.139)	-0.996 (1.027)	2.586 (1.267)	-0.967 (1.597)	-1.425 (1.033)	1.594 (1.029)	0.100 (1.180)	-0.909 (1.505)
This or next week × Moderator	2.397 (1.791)	0.883 (1.677)	-2.055 (1.784)	-2.795 (1.671)	1.615 (1.726)	-0.982 (1.641)	-1.244 (1.739)	1.491 (1.655)
Two or three weeks × Moderator	0.798 (1.792)	-2.493 (1.690)	-0.084 (1.820)	2.294 (1.725)	2.769 (1.777)	0.026 (1.663)	1.702 (1.858)	1.355 (1.710)
<i>Controls</i>								
Wave FE	✓	✓	✓	✓	✓	✓	✓	✓
Demographics	✓	✓	✓	✓	✓	✓	✓	✓
Health Risk Factors	✓	✓	✓	✓	✓	✓	✓	✓
Geographic Risk Factors	✓	✓	✓	✓	✓	✓	✓	✓
County Interventions	✓	✓	✓	✓	✓	✓	✓	✓
N	3312	3312	3012	3168	3312	3312	3312	3312

*Note:* The dependent variable is the subjective probability of being sick enough to be hospitalized or needing treatment in the ICU conditional on getting infected. The table reports estimated coefficients (and associated standard errors) from Equation 2. Column headers correspond to the particular (binary) moderator variable being tested.

Table C.3: Moderation by other factors: Infection risk differential, incl. return week fixed effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Female	High risk tolerance	Has atleast a Bachelor's	Household income > \$70k	No negative pandemic related change in income	Follows atleast three news networks	Watches Fox News	Identifies as conservative
This or next week	-6.049 (1.911)	-9.222 (1.824)	-6.628 (1.920)	-8.404 (1.754)	-6.307 (1.654)	-7.344 (1.664)	-7.957 (1.622)	-8.616 (1.730)
Two or three weeks	-4.899 (1.718)	-5.313 (1.545)	-5.131 (1.776)	-5.599 (1.451)	-4.634 (1.346)	-5.442 (1.367)	-6.747 (1.246)	-6.130 (1.436)
Moderator	6.480 (1.306)	-4.345 (1.253)	5.854 (1.561)	3.992 (2.090)	0.247 (1.275)	3.212 (1.274)	-5.261 (1.419)	-0.387 (1.864)
This or next week × Moderator	-2.279 (2.061)	2.880 (2.019)	-1.509 (2.147)	1.077 (2.053)	-3.349 (2.053)	-0.688 (2.040)	1.861 (2.171)	2.265 (2.014)
Two or three weeks × Moderator	-0.830 (2.074)	-0.444 (1.977)	-1.144 (2.147)	0.087 (2.035)	-2.376 (2.048)	-0.217 (1.983)	4.517 (2.197)	1.540 (1.985)
<i>Controls</i>								
Wave FE	✓	✓	✓	✓	✓	✓	✓	✓
Demographics	✓	✓	✓	✓	✓	✓	✓	✓
Health Risk Factors	✓	✓	✓	✓	✓	✓	✓	✓
Geographic Risk Factors	✓	✓	✓	✓	✓	✓	✓	✓
County Interventions	✓	✓	✓	✓	✓	✓	✓	✓
Return Week FE	✓	✓	✓	✓	✓	✓	✓	✓
N	3312	3312	3012	3168	3312	3312	3312	3312

*Note:* The dependent variable is  $\Delta$ , the difference between subjective beliefs about infection risks associated with staying at home and infection risks associated with returning to the workplace. The table reports estimated coefficients (and associated standard errors) from Equation 2 plus return-week fixed effects. Column headers correspond to the particular (binary) moderator variable being tested.

Table C.4: Moderation by other factors: Severe illness probability, incl. return week fixed effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Female	High risk tolerance	Has atleast a Bachelor's	Household income > \$70k	No negative pandemic related change in income	Follows atleast three news networks	Watches Fox News	Identifies as conservative
This or next week	-2.191 (1.699)	-0.963 (1.536)	0.789 (1.672)	0.521 (1.453)	-1.130 (1.326)	-0.034 (1.345)	0.044 (1.310)	-1.063 (1.391)
Two or three weeks	-0.543 (1.518)	1.378 (1.385)	0.293 (1.549)	-1.075 (1.298)	-1.048 (1.112)	-0.046 (1.201)	-0.524 (1.058)	-0.623 (1.145)
Moderator	-0.960 (1.141)	-1.016 (1.029)	2.428 (1.273)	-1.090 (1.599)	-1.510 (1.034)	1.561 (1.029)	0.022 (1.183)	-0.853 (1.507)
This or next week × Moderator	2.594 (1.786)	0.934 (1.674)	-1.931 (1.789)	-2.629 (1.673)	1.743 (1.731)	-0.948 (1.642)	-1.193 (1.737)	1.456 (1.656)
Two or three weeks × Moderator	0.778 (1.789)	-2.588 (1.687)	0.144 (1.824)	2.363 (1.725)	2.789 (1.779)	0.091 (1.664)	1.783 (1.856)	1.486 (1.713)
<i>Controls</i>								
Wave FE	✓	✓	✓	✓	✓	✓	✓	✓
Demographics	✓	✓	✓	✓	✓	✓	✓	✓
Health Risk Factors	✓	✓	✓	✓	✓	✓	✓	✓
Geographic Risk Factors	✓	✓	✓	✓	✓	✓	✓	✓
County Interventions	✓	✓	✓	✓	✓	✓	✓	✓
Return Week FE	✓	✓	✓	✓	✓	✓	✓	✓
N	3312	3312	3012	3168	3312	3312	3312	3312

*Note:* The dependent variable is the subjective probability of being sick enough to be hospitalized or needing treatment in the ICU conditional on getting infected. The table reports estimated coefficients (and associated standard errors) from Equation 2 plus return-week fixed effects. Column headers correspond to the particular (binary) moderator variable being tested.



well-being, it potentially comes at the cost of making sub-optimal choices. We model this trade-off implicitly via the cost function of adjusting beliefs. Subjective beliefs that are further away from the truth are costlier to maintain. How the trade-off between distorting beliefs and making optimal choices occurs in reality is unclear, however. A further complication of measuring the impact of distorted beliefs versus rational beliefs on behavior is that it depends on the functional form of how beliefs map to behavior. For example, if people adjust their beliefs about the risk of infection at work from 10% to 5%, it does not necessarily follow that they will stop wearing masks. Nonetheless, here we explore a number of behaviors that may respond to changes in perceived probabilities of infection.

**Preventive actions.** We asked respondents about precautions they plan to take upon returning to work. In particular, we asked about wearing a mask when working indoors/outdoors, wearing gloves when touching common surfaces, washing and sanitizing hands frequently, and disinfecting the own work surface once a day, each measured on a five-point scale from 1 = “Definitively not” to 5 = “Definitively yes.” These questions were not included in the first wave, meaning that the sample size is smaller. Moreover, unlike the belief elicitation, we did not fix the time frame for the questions about preventive actions. This could introduce a confound as respondents may have had different time horizons in mind when answering those questions. Consequently, the results should be treated with caution.

Table C.5 presents the results. We estimate our main specification (with the full set of controls) where preventive actions are the dependent variable. The even columns display the results from adding reopening-week fixed effects. Column 1 shows that respondents who return within a week or within two to three weeks have 0.3 points higher expectations to wear a mask when working indoors compared to those who return later ( $p < 0.001$ ). Shown in column 3, respondents who return sooner are also more likely to think they will wear a mask when working outdoors ( $p = 0.034$ ). We further find some differences with regard to the willingness to wear gloves at work. For example, column 5 shows that compared to those who return in four or more weeks, respondents who return immediately expect to be 0.1 points more likely to wear gloves upon returning to work ( $p = 0.032$ ). We do not find any significant differences regarding the intention to regularly wash hands (or use hand sanitizer) or routinely cleaning high-touch work surfaces (all  $p$ -values  $> 0.050$ ). Overall, although there is some evidence that individuals who go back to work sooner plan to take more preventive actions, the differences are relatively small in magnitude considering that the answer scale goes from 1 to 5.

**Risky behaviors.** In the last two waves of the survey, we asked respondents whether they have undertaken (or were planning to do) activities in the past (next) week that carry a certain level of infection risk. We then identified activities that were considered as relatively risky during the early stages of the pandemic (Benzell et al., 2020). This includes: eating at a restaurant (sit-down), visiting a coffee shop, visiting a bar/pub, going to the grocery store, shopping for non-food items, going to the gym, meeting up with a friend, meeting up with an extended family member, and being part of a gathering with more than 10 people (e.g., church, school, demonstrations, meetings,

Table C.5: Preventative Actions

	Will mask indoors		Will mask outdoors		Will wear gloves		Will disinfect surfaces	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Main Effects</i>								
This or next week	0.310 (0.060)	0.325 (0.086)	0.135 (0.064)	0.256 (0.088)	0.138 (0.064)	0.173 (0.091)	-0.025 (0.055)	-0.025 (0.055)
Two or three weeks	0.280 (0.058)	0.249 (0.064)	0.212 (0.061)	0.201 (0.067)	0.104 (0.064)	0.048 (0.070)	0.016 (0.040)	0.016 (0.040)
<i>Controls</i>								
Wave FE	✓	✓	✓	✓	✓	✓	✓	✓
Demographics	✓	✓	✓	✓	✓	✓	✓	✓
Health Risk Factors	✓	✓	✓	✓	✓	✓	✓	✓
Geographic Risk Factors	✓	✓	✓	✓	✓	✓	✓	✓
County Interventions	✓	✓	✓	✓	✓	✓	✓	✓
Return Week FE	-	✓	-	✓	-	✓	✓	✓
N	2725	2725	2725	2725	2725	2725	2725	2725

*Note:* The table reports estimated coefficients (and associated standard errors) from Equation 1 in odd columns, and the specification with return-week fixed effects in even columns. The dependent variable in each column pair is a different binary action-intent, as indicated by the headers and detailed in Appendix C.2.

Table C.6: Risky behaviors, insurance, information avoidance

	Risky activities in past week	(1)	(2)	(3)	Risky activities next week	(4)	(5)	Willingness to pay for insurance	(6)	(7)	Info Acquisition: Covid19	(8)
<i>Main Effects</i>												
This or next week	0.112 (0.086)	0.050 (0.117)	0.056 (0.095)	-0.097 (0.130)	-0.231 (0.284)	-0.310 (0.390)	-0.000 (0.023)	0.017 (0.033)				
Two or three weeks	0.027 (0.085)	0.016 (0.092)	0.158 (0.097)	0.116 (0.109)	-0.253 (0.283)	-0.298 (0.313)	0.027 (0.023)	0.036 (0.025)				
<i>Controls</i>												
Wave FE	✓	✓	✓	✓	✓	✓	✓	✓				
Demographics	✓	✓	✓	✓	✓	✓	✓	✓				
Health Risk Factors	✓	✓	✓	✓	✓	✓	✓	✓				
Geographic Risk Factors	✓	✓	✓	✓	✓	✓	✓	✓				
County Interventions	✓	✓	✓	✓	✓	✓	✓	✓				
Return Week FE	-	-	-	-	-	-	-	-				
N	1580	1580	1580	1580	1580	1580	2725	2725	2725			

*Note:* The table reports estimated coefficients (and associated standard errors) from Equation 1 in odd columns, and the specification with return-week fixed effects in even columns. The dependent variable in each column pair is indicated by the header and detailed in Appendix C.2.

etc.). On average, respondents indicated that they had engaged (or were planning to engage) in about two risky activities in the week before (after) the survey. In Table C.6, we report the results from estimating our main specification (with the full set of controls) where the dependent variable is the number of risky activities. Column 1 examines activities in the past week, and column 3 focuses on activities in the week following the survey (the even columns display the corresponding results with reopening-week fixed effects). Overall, we do not find any significant differences in past or planned engagement in risky activities across respondents who are going back to work sooner vs. later (all  $p$ -values  $> 0.050$ ).

**Health insurance.** The last two survey waves also featured a hypothetical choice scenario where respondents were asked to indicate their “willingness to pay” for a health insurance that would cover part of the out-of-pocket expenses in case they were hospitalized for COVID-19. We used a multiple price list to elicit respondents’ valuation of such a health insurance. They were told to imagine that the insurance costs \$10, and were then asked to state whether they would be willing to take up the insurance if it pays an amount  $X \in \{\$50, \$75, \dots, \$300\}$  for hospitalization services. Thus, participants had to indicate for each amount that would be paid out whether they would be willing to pay \$10 for the insurance. The payment amounts were listed in ascending order. Thus, we use the switching point from not taking the insurance to opting in as a measure of respondents’ willingness to take up the insurance (with larger values indicating a lower willingness to get the insurance). The median response is to pay \$10 in order to get \$200 back if hospitalized. We estimate our main specification (with the full set of controls) using the switching point as the dependent variable. The results are shown in column 5 of Table C.6 (column 6 additionally includes reopening-week fixed effects). We do not find any meaningful differences in the willingness to pay for a fictive health insurance across respondents with shorter and longer time horizons to work return ( $p = 0.416$  and  $0.372$ ).

**Information avoidance.** An often-discussed consequence of belief-based utility is that people avoid information that would make them feel bad, even if it means that they make sub-optimal choices (e.g., Golman et al., 2017). In all survey waves (except for the first one), we included a measure of information avoidance presented as a choice between reading a short summary of a research article about the potential long-term health effects of COVID-19 or about sleep deprivation. We estimate our main specification (with the full set of controls) using a dummy variable for whether respondents chose to read the COVID-19 related article as the dependent variable. The results are shown in column 7 of Table C.6 (column 8 additionally includes reopening-week fixed effects). A majority of respondents (61%) actually preferred to read about the potential long-term health consequences of COVID-19. We also do not find that respondents who are temporally closer to returning to work were more likely to refuse reading the COVID-19 related article ( $p = 0.991$  and  $0.234$ ).

## D The survey instrument

### Consent Form

You are invited to participate in a research study about COVID-19. This is a 10 minute long survey that will ask about your perceptions, expectations and feelings about the disease, its effects on you and on our nation. If you agree to be part of the research study, you will be asked to provide your opinions on policies, risks, and will be asked to answer questions related to your current situation. Please pay attention to all questions. We will include several attention checks.

Benefits of the research to the public stem from your participation and honest answers. Using this survey data, we hope to be able to provide guidelines for assessing and responding to differences across communities. Risks and discomforts: Thinking about COVID-19 and its impact may induce negative emotions, like anxiety or fear. These risks and discomforts are minimal for most people.

Participating in this study is completely voluntary. Even if you decide to participate now, you may change your mind and stop at any time. You may choose not to continue with the survey at any time and for any reason.

There is no deception or false information in this survey.

We will protect the confidentiality of your research records by not publishing any information that may identify you. Information collected in this project may be shared with other researchers, and may be connected to other aggregate datasets at the county level. We will not share any information that could identify you. All results will be reported in aggregate.

Principal Investigator: Yesim Orhun, Associate Professor, University of Michigan. If you have questions about this research study, please contact Prof. Yesim Orhun by emailing [aorhun@umich.edu](mailto:aorhun@umich.edu). The University of Michigan Institutional Review Board Health Sciences and Behavioral Sciences has determined that this study is exempt from IRB oversight (HUM00181725).

By clicking to proceed, you are confirming that you read this page and are providing consent to participate.

The survey began with participants electronically accepting participation after reading the consent form. The survey proceeded with the following questions:

### Risk Tolerance

Thinking about yourself, in general, how willing or unwilling are you to take risks? Please use the scale below, ranging from 0 to 10, where 0 means “completely unwilling to take risks” and a 10 means you are “very willing to take risks.” You can also use any number between 0 and 10 to indicate where you fall on the scale. [Scale: 0 to 10, choose one.]

– Page Break –

## **Employment and Economic Impact**

- What's your current employment status? [Choose one: Employed full time; Employed part time; Furloughed; Unemployed (before the coronavirus); Unemployed (after the coronavirus); Retired; Student; Prefer not to answer.]
- Please think of everyone in your household who was earning an income before the coronavirus crisis. What was the economic impact of the coronavirus situation on the income of your household? [Choose one: Greatly negative; Very negative; Somewhat negative; No change; Somewhat positive; Very positive; Greatly positive.]

– *Page Break* –

## **Personal Experience with COVID-19**

Have you been infected with the coronavirus? [Choose one: Yes, I tested positive; No, I tested negative; Probably yes, but I did not get tested; Probably not, but I did not get tested.]

## **Attention check, Screening**

Please think of everyone in your community who has been affected by the coronavirus crisis. It is important that you pay attention to this survey. Please check greatly positive below. [Choose one: Greatly negative; Very negative; Somewhat negative; No change; Somewhat positive; Very positive; Greatly positive.]

– *Page Break* –

## **Occupation and State Restrictions on Work**

- What type of work do you do? Please mention your industry and your role or position. [Fill in.]
- In your state, is the industry you work in being allowed to return to work? [Choose one: Definitely yes, already allowed; Definitely yes, next week; Definitely yes, within 2 weeks; Definitely yes, within 3 weeks; Definitely yes, in 4 weeks or more; Maybe soon, unclear; Definitely not yet.]

- When do you think you will return to working outside the home? If you are not sure, give us your best guess at this time [Choose one: By this weekend; This coming week (last week of May); First week of June; Second week of June; Third week of June; Fourth week of June; First week of July; Second week of July; Second half of July; Some time in August; Some time in September; October or later.]<sup>35</sup>

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### Beliefs About Infection Risk

- As of May 15, 2020, CDC (Centers for Disease Control and Prevention) is reporting 1,412,121 confirmed coronavirus cases and 85,990 deaths in the U.S. Many cases go undetected.<sup>36</sup> Of course, infection rates depend on the community and the protection measures each person takes.

What are the chances that you will get infected with the coronavirus in the next three months if your current living/working conditions did not change? [Choose one: 0% chance; 1-10% chance; 11-20% chance; 21-30% chance; 31-40% chance; 41-50% chance; 51-60% chance; 61-70% chance; 71-80% chance; 81-90% chance; 91-100% chance.]

*The next question was displayed to those respondents who indicated that they are currently not working outside their home.*

- What would your infection chance be if you went back to working outside the home next week? [Choose one: 0% chance; 1-10% chance; 11-20% chance; 21-30% chance; 31-40% chance; 41-50% chance; 51-60% chance; 61-70% chance; 71-80% chance; 81-90% chance; 91-100% chance.]

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<sup>35</sup>The options were updated in each wave based on the survey time

<sup>36</sup>The date and these two numbers were updated to the applicable information of two days prior to the survey time

## **Beliefs About Health Outcomes Conditional on Being Infected**

According to the CDC (Centers for Disease Control and Prevention) report, about 7% of people diagnosed with the coronavirus are hospitalized, but do not need intensive care. About 1.5% of people are hospitalized and need intensive care. It is also suspected that a large percentage of people are symptom free and/or have mild versions of the disease.

Most importantly, the chances are person-specific. The progression of the disease can be very different based on your age, health, pre-existing condition, living conditions, how much of the virus you are exposed to, etc. Although it's hard to know without data, you probably have a better understanding of your situation than anyone else. Therefore, we ask you to predict how the coronavirus is likely to affect you, should you get infected:

Please make sure numbers add up to 100. Allocate points according to how big you think your chances are for each possibility. [Chances that I will be symptom free are: (fill in, numerical); Chances that I will have a mild version of the disease are: (fill in, numerical); Chances that I will have a moderate version (without hospitalization) are: (fill in, numerical); Chances that I will have a severe version that requires hospitalization (but no further interventions) are: (fill in, numerical); Chances that I will have a severe version that requires intensive care at the hospital are: (fill in, numerical).]

– *Page Break* –

## **Pre-existing health conditions.**

The CDC (Centers for Disease Control and Prevention) released the list of underlying medical conditions that put people of all ages at higher risk for severe illness resulting from the coronavirus infection. We list them below.

Which of these apply to you? Please click all that apply. [Choose all that apply: Moderate to severe asthma; COPD or other chronic lung disease; Serious heart conditions; Diabetes; Conditions that can cause a person to be immunocompromised, including cancer treatment, smoking, bone marrow or organ transplantation, immune deficiencies, poorly controlled HIV or AIDS, and prolonged use of corticosteroids and other immune weakening medications.; Severe obesity (BMI of 40 or higher); Chronic kidney disease and currently undergoing dialysis; Liver disease; I do not want to answer; None of them apply to me.]

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## Beliefs About Systemic Health Risk (Total Number of Deaths in the U.S.)

As of May 15, 2020, CDC (Centers for Disease Control and Prevention) is reporting 85,990 deaths in the U.S.<sup>37</sup> How many people do you think will die from a coronavirus infection in the U.S by July 1, 2020? [Choose one: 75,000 - 90,000; 90,000 - 110,000; 110,000 - 130,000; 130,000 - 150,000; 150,000 - 175,000; 175,000 - 200,000; 200,000 - 225,000; 225,000-250,000; 250,000-275,000; 275,000-300,000; 300,000-350,000; more than 350,000.]<sup>38</sup>

## Beliefs About Economic Outcomes

- The U.S. gross domestic product (GDP) grew about 2.3% in 2019. How much GDP growth do you expect in 2020? [Choose one: more than 10% growth; 5%-10% growth; 2.5%-5% growth; 0%-2.5% growth; 0% to -2.5% growth (negative growth means contraction); -2.5% to -5% growth (negative growth means contraction); -5% to -10% growth (negative growth means contraction); -10% to -20% growth (negative growth means contraction); -20% to -30% growth (negative growth means contraction); worse than -30% growth (negative growth means contraction).]
- In the last quarter of 2019, unemployment rate in the U.S. was 3.6%. How much unemployment do you expect in the U.S. by July 1, 2020? [Choose one: less than 3%; 3-5%; 5-10%; 10-15%; 15-20%; 20-25%; 25-30%; 30-35%; 35-40%; more than 40%.]<sup>39</sup>

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## Precautions at Work<sup>40</sup>

When you return to work, will you want to take the following precautions personally (regardless of whether it is required or not)? [Precautions: Wear a mask when working indoors; Wear a mask when working outdoors; Wear gloves when touching common surfaces (door knobs, bathroom, kitchen, cabinets, etc.); Wash/sanitize hands frequently; Sanitize own working surface every day.] [Choose one: Definitely not; Probably not; Might or might not; Probably yes; Definitely yes.]

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<sup>37</sup>The date and the number of deaths were updated to the applicable information of two days prior to the survey time.

<sup>38</sup>The options were updated at the lower end to reflect the increasing number of deaths between the different survey times

<sup>39</sup>The options, 30-35%; 35-40%; more than 40%, were added in waves 2 and 3, replacing the option more than 30%

<sup>40</sup>These questions were only part of the survey administered in the second and third wave.

## Activities outside of Work<sup>41</sup>

- Please indicate the activities you engaged in during the last 7 days. Please click all that apply. [Choose all that apply: Ate at a restaurant (outside seating); Ate at a restaurant (inside seating); Went into a coffee shop; Went into a bar/pub; Ordered food-to-go (curbside pick up); Ordered food delivery to my door; Went grocery shopping; Ordered grocery delivery to my door; Met up with a friend; Met up with an extended family member; Went shopping for non-food items (at the mall, hardware store, etc.); Went to a gym or other sports facility; Was part of a gathering with more than 10 people (church, school, demonstrations, meetings, etc.); None of the above.]

– Page Break –

- Please indicate the activities you plan to engage in the next 7 days. Please click all that apply. [Choose all that apply: Ate at a restaurant (outside seating); Ate at a restaurant (inside seating); Went into a coffee shop; Went into a bar/pub; Ordered food-to-go (curbside pick up); Ordered food delivery to my door; Went grocery shopping; Ordered grocery delivery to my door; Met up with a friend; Met up with an extended family member; Went shopping for non-food items (at the mall, hardware store, etc.); Went to a gym or other sports facility; Was part of a gathering with more than 10 people (church, school, demonstrations, meetings, etc.); None of the above.]

– Page Break –

## Willingness to pay for Insurance<sup>42</sup>

Even if you are insured, you may have to pay out of pocket costs if you are hospitalized. Would you be willing to pay \$10 now to receive the following amounts of cash in the case you had to be hospitalized due to COVID-19? [Insurance payouts: pay \$10 now, receive \$50 if hospitalized; pay \$10 now, receive \$75 if hospitalized; pay \$10 now, receive \$100 if hospitalized; pay \$10 now, receive \$125 if hospitalized; pay \$10 now, receive \$150 if hospitalized; pay \$10 now, receive \$175 if hospitalized; pay \$10 now, receive \$200 if hospitalized; pay \$10 now, receive \$225 if hospitalized; pay \$10 now, receive \$250 if hospitalized; pay \$10 now, receive \$275 if hospitalized; pay \$10 now, receive \$300 if hospitalized.][Choose one: Yes; No]

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<sup>41</sup>These questions were only part of the survey administered in the third wave.

<sup>42</sup>These questions were only part of the survey administered in the third wave.

## Information Acquisition: Choice<sup>43</sup>

Even conditions that occur for a short time can have important long-term impacts. For example, research has shown that sleep deprivation can have serious long-term effects on health, effects that can reduce people's quality of life even after they have sufficient sleep. Similarly, doctors have begun to find that having a COVID-19 infection can also cause serious long-term health effects. These effects may reduce people's quality of life for many years after they have recovered from the virus.

We have collected recent research articles about the potential long-term negative effects of sleep deprivation and COVID-19. At the end of the survey, we will ask you to read a summary on the long-term effects of either sleep deprivation or COVID-19. Regardless of the option you choose, the number of sentences on the next page will be equal. Also, in both cases, you will be asked a question to check that you read the text.

Which of the two would you like to read at the end of the survey? [Choose one: Findings on the long-term health effects of having COVID-19; Findings on the long-term health effects of sleep deprivation.]

– Page Break –

## Exposure at Work

The questions on this page refer to a typical day in your workplace before the pandemic.

- Which of the following spaces best describes where you work? Click all that apply. [Choose all that apply: Outdoor; Indoor, in an office space; Indoor, other.]
- At your workplace, how many other employees do you come into contact with on a typical day? (e.g., physical contact, sharing the same space) [Choose one: I work alone; 1-2; 3-5; 6-10; more than 10.]
- At your workplace, how many customers/patrons/patients do you come into contact with on a typical day? [Choose one: I do not interact with any patrons at my work; 1-2; 3-5; 6-10; more than 10.]

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<sup>43</sup>These questions were only part of the survey administered in the third wave.

## Return to Work

*The next question embedded the response from a previous question.*

- You indicated that you expect to return to work: [the week or month by which the respondent indicated they expected to return to work]. If you had it your way, when would you like to return to work? [Choose one: I would have liked to be already back by now; This coming week (last week of May); First week of June; Second week of June; Third week of June; Fourth week of June; Some time in July; Some time in August; Some time in September; October or later.]

*The next two questions were displayed to those respondents who indicated that their state had allowed work in-person for the industry they worked in prior to the survey time.*<sup>44</sup>

- You stated that your industry is allowed to go back to work already, but that you are not working at your workplace yet. Which describes the most accurate reason? [Choose one: My employer did not call back any employees to the workplace; My employer called back other employees, but not me (yet).]
- Why? [Choose one: Business is too slow; The workplace cannot be effectively prepared for limiting the risk of exposure to COVID-19; My employer is worried about COVID-19 risks, even though the workplace can be effectively prepared to limit exposure; Other (fill in).]
- Overall, how effective do you expect your workplace to be in reducing workers' risk of exposure to the coronavirus? [Choose one: Extremely effective; Very effective; Moderately effective; Slightly effective; Not effective at all.]

– Page Break –

- Think about how well your work environment will be able to implement the following infection prevention measures when you return to work. Please rate your workplace's probable precautions based on your best guess at this time. [Precautions: Limiting number of customers/other patrons (outside of workers); Modifications to allow for social distancing among employees; Providing masks; Providing gloves; Providing supplies that promote hygiene (soap, disposable wipes, hand sanitizers, disinfectants, etc.); Providing and enforcing guidelines regarding social distancing and hygiene; Modifications to limit sharing of physical resources among employees; Routine cleaning and disinfection of surfaces, equipment, etc.; Prompt isolation of sick workers.] [Choose one: Extremely good; Moderately good; Slightly good; Neither good nor bad; Slightly bad; Moderately bad; Extremely bad.]

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<sup>44</sup>They were not part of the survey administered in the first wave.

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- Each industry is different in how they are mandated by the state to return to work. Please choose the one that applies in the case of your workplace. [Choose one: Only curbside pickup/delivery/takeout, no in-store customers; State mandated capacity restrictions within the workplace (number of employees and/or customers); No restrictions, but operating with social distancing guidelines and other hygienic precautions; Business as usual.]

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### **News sources**

- Which news sources do you usually rely on? [Choose all that apply: ABC News; CNN; Fox News Channel; Local news; NBC/MSNBC; NPR (Public Radio); Huff Post; The New York Times; The Wall Street Journal; Washington Post; Other: (fill in); I don't follow any news.]
- What other sources of information do you mostly pay attention to? [Other sources: My friends; My family members; My pastor and/or our spiritual community; The President and his administration; Our Governor; Scientists/researchers; CDC (Center for Disease Control); People I follow on Twitter; People I follow on Facebook.] [Choose one: Not at all; A little bit; Somewhat; Mostly; Very much so; Not applicable.]

– *Page Break* –

### **Attention check, screening**

What question was asked on the page immediately before this one? [Choose one: Which news sources do you usually rely on?; How many confirmed coronavirus deaths are there in the US?; Has your state introduced any social distancing measures?; Which of the following changes have you made to protect yourself from the coronavirus infection?]

– *Page Break* –

## Information Acquisition: Text and Attention check<sup>45</sup>

*The following text and question was displayed to those respondents who indicated a preference for reading about the long-term health effects of COVID-19*

When asked, you indicated a preference for reading about the long term health effects of COVID-19.

In one study, 66 of 70 hospitalized patients had some amount of lung damage in CT scans, and more than half had the kind of lesions that are likely to develop into scars. Doctors in Los Angeles found that chronic cardiac complications (i.e. heart issues) could arise in COVID-19 patients even after recovery as a result of persistent inflammation. This can include an increased risk of blood clots and thus strokes and heart attacks. Another study found that over a third of COVID-19 patients had neurological issues, although there isn't enough data yet to determine the long-term consequences of these issues.

Click to proceed to the next page when you are done reading.

Sources:

1. <https://www.bloomberg.com/news/articles/2020-05-12/covid-19-s-health-effects-can-last-long-after-virus-is-gone>
2. <https://www.healthline.com/health-news/what-we-know-about-the-long-term-effects-of-covid-19#COVID-19-might-affect-the-brain-stem>
3. <https://www.vox.com/2020/5/8/21251899/coronavirus-long-term-effects-symptoms>

– Page Break –

- Which of the following issues was NOT addressed in the text you just read? [Choose one: Neurological issues; Heart issues; Dementia; Lung damage.]

*The following text and question was displayed to those respondents who indicated a preference for reading about the long-term health effects of sleep deprivation*

When asked, you indicated a preference for reading about the long term health effects of sleep deprivation.

Researchers have found that insufficient sleep may lead to type 2 diabetes. Sleep deprivation can lead to higher chance of cardiac problems such as stroke and heart attacks. Not sleeping enough can lead to an increase of 33% in risk of dementia.

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<sup>45</sup>These questions were only part of the survey administered in the third wave.

Click to proceed to the next page when you are done reading.

Sources:

1. <http://healthysleep.med.harvard.edu/healthy/matters/consequences/sleep-and-disease-risk>
2. <https://www.hopkinsmedicine.org/health/wellness-and-prevention/the-effects-of-sleep-deprivation>
3. <https://www.webmd.com/sleep-disorders/features/10-results-sleep-loss#1>

– Page Break –

- Which of the following issues was NOT addressed in the text you just read? [Choose one: Diabetes; Heart issues; Dementia; Lung damage.]

*The study ended with inviting comments, if respondents had any, about the survey.*