# How Political Identity Influences Covid-19 Risk Perception: A Model of Identity-Based Risk Perception 

Web Appendix

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Data and syntax are posted on Open Science Framework at: http://bit.ly/osf_covid19

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## Web Appendix 1a: Study 1a and 1b Measures

Note that for all studies conducted, in addition to the first attention check question, participants were screened out of the study if they were 1) from an IP address in a non-U.S. location, 2) using a mobile device, which would make it difficult to read the study, and 3) participants from a repeat IP address.

Studies $1 a$ and $1 b$ were largely identical with any differences between the studies noted below ${ }^{1}$.

## Instructional manipulation check

This is an attention check. As researchers, we want to make sure our participants are carefully paying attention and answering questions. This attention check is not difficult to answer if you read carefully. If you do not pass this attention check, you will be ejected from the study and will not receive a completion code.

Before you start the experiment, we would like you to answer a color test. The color test is simple, when asked for your favorite color, you must enter the word falu in the text box below.

Based on the text you read above, what is your favorite color?
[those who do not respond falu are screened out]

## Consent form

## Instructions

This survey is for academic research to measure people's responses to the Coronavirus.
Please respond to the questions that follow truthfully to the best of your knowledge.

Randomized four blocks, and items within each block were also randomized

## Block 1: Individual compliance behaviors - frequency

For the following questions, please enter a number (" 0 " or greater) with no other characters. How many times did you wash your hands with soap and water yesterday?
How many times did you use hand sanitizer to clean your hands yesterday?
How many times did you clean your countertops yesterday?
How many times did you clean your cellphone yesterday?

[^0]
## Block 2: Individual and group compliance behaviors - adherence

[Study la wording]
How often do you make a conscious effort to not touch your face because of the Coronavirus??
Never (1), Sometimes (2), About half the time (3), Most of the time (4), Always (5)
How often do you consciously make an effort to socially distance yourself from others when you are outside of your home because of the Coronavirus?

Never (1), Sometimes (2), About half the time (3), Most of the time (4), Always (5)
[Study lb wording]
How frequently did you touch your face with unwashed hands during the day yesterday?
Never (1), Rarely (2), Occasionally (3), Frequently (4), Very Frequently (5)
These days when you are outside of your home and in situations where you encounter people, how frequently do you socially distance yourself from others (e.g. maintain 6 feet of distance)?

Never (1), Rarely (2), Occasionally (3), Frequently (4), Always (5)

## Block 3: Support of group compliance behaviors

Please indicate the extent to which you do or do not support the following:
Definitely no (1), Probably no (2), Not sure (3), Probably yes (4), Definitely yes (5)

## Statements rated:

Do you support closing down schools and universities in response to the Coronavirus?
Do you support closing down restaurants and bars (other than for carry out service) in response to the Coronavirus?
Do you support banning all air travel (except for emergency) in response to the Coronavirus?
Do you support banning all social gatherings such a wedding and birthday celebrations in response to the Coronavirus?
Do you support banning all religious gatherings in places of worship such as churches and temples in response to the Coronavirus?
Do you support social distancing by at least 6 feet between people in response to the Coronavirus?

## Study la also included ${ }^{2}$ :

Do you support closing down shopping malls (except pharmacies and grocery stores) in response to the Coronavirus?
Do you support banning professional tournaments and games in response to the Coronavirus?

[^1]
## Block 4: Preference for working at home

For the next few weeks, would you prefer to work from home or work from your workplace?
Definitely home (1), Probably home (2), Not sure (3), Probably workplace (4), Definitely workplace (5)

## Group risk estimate 1: Infections

The following questions ask you about your estimates of the number of people that will be infected by the Coronavirus over time.

Please enter your responses as numbers with no commas or text. The boxes will accept only numeric digits.

According to some estimates, around 4,500 [study 1a] / 46,000 [study 1b] people have been infected by the Coronavirus in the United States as of today.

In your estimate, how many people will be infected by Coronavirus in the United States $\mathbf{1 4}$ days from now (in 2 weeks)?

Is it about 5000 , or 10,000 , or 50,000 , or 100,000 [study 1a] / 50,000 , or 100,000 , or 250,000 , or 500,000 [study 1b] or more?

Enter a number in the box below.

In your estimate, how many people will be infected by the Coronavirus in the United States $\mathbf{2 8}$ days from now (in 4 weeks)?

Is it about 5000 , or 10,000 , or 50,000 , or 100,000 , or 100,000 , or $1,000,000$ ( 1 million) [study 1a] $/ 50,000$, or 100,000 , or 250,000 , or 500,000 , or $1,000,000$ (1 million) [study 1 b ] or more?

Enter a number in the box below.

In your estimate, how many people will be infected by the Coronavirus in the United States 42 days from now (in 6 weeks)?

Is it about 5000 , or 10,000 , or 50,000 , or 100,000 , or 100,000 , or $1,000,000$ ( 1 million), or $10,000,000$ ( 10 million) [study 1a] / 50,000 , or 100,000 , or 250,000 , or 500,000 , or $1,000,000$ ( 1 million), or $10,000,000$ ( 10 million) [study 1 b ] or more?

Enter a number in the box below.

## Group risk estimate 2: Deaths

The following questions ask you about your estimates of the number of people that will die because of the Coronavirus over time.

Please enter your responses as numbers with no commas or text. The boxes will accept only numeric digits.

According to some estimates, around 75 [study 1a] / 600 [study 1b] people have died because of Coronavirus in the United Stated as of today.

In your estimate, how many people will die because of Coronavirus in the United States $\mathbf{1 4}$ days from now (in 2 weeks)?

Is it about 100 , or 200 , or 1000 , or 2000 [study 1a] / 750 , or 1000 , or 2000 , or 5000 [study 1b] or more?

Enter a number in the box below.

In your estimate, how many people will die because of Coronavirus in the United States 28 days from now (in 4 weeks)?

Is it about 100 , or 200 , or 1000 , or 2000 , or 10,000 [study 1a] / 750 , or 1000 , or 2000 , or 5000 , or 10,000 [study 1 b ] or more?

Enter a number in the box below.

In your estimate, how many people will die because of Coronavirus in the United States $\mathbf{4 2}$ days from now (in 6 weeks)?

Is it about 100 , or 200 , or 1000 , or 2000 , or 10,000 , or 100,000 [study 1a] / 750 , or 1000 , or 2000 , or 5000 , or 10,000 , or 100,000 [study 1b] or more?

Enter a number in the box below.

## Individual Risk: Self Risk and Other Risk were randomized.

## Individual risk: Self

If you are infected by the Coronavirus, how likely is it that you will die because of the illness caused by the virus?

Please indicate on a 0-100 scale where:
$0=$ I will definitely not die
$100=$ I will definitely die
Slider scale from 0 to 100 anchored at 0

Study la also included the following measures before the measure above:
How likely is it that you personally will be infected by the Coronavirus in the next two months?

Please indicate on a $0-100$ scale where:
$0=$ I will definitely not get infected
$100=$ I will definitely get infected
If you are infected by the Coronavirus, how seriously ill do you think you will become?
Not at all serious (1), Slightly serious (2), Moderately serious (3), Very serious (4), Extremely serious (5)

## Individual risk: Other

If an average American is infected by the Coronavirus, how likely is it that this person will die because of the illness caused by the virus?

Please indicate on a $0-100$ scale where:
$0=$ The infected person will definitely not die
$100=$ The infected person will definitely die
Slider scale from 0 to 100 anchored at 0

Study la also included the following measures:
How likely is it that an average American will be infected by Coronavirus in the next two months?

Please indicate on a $0-100$ scale where:
$0=$ An average American will definitely not get infected
$100=$ An average American will definitely get infected
If an average American is infected by Coronavirus, in your opinion how seriously ill would they become?

Not at all serious (1), Slightly serious (2), Moderately serious (3), Very serious (4), Extremely serious (5)

## Ending

When do you think the Coronavirus epidemic will end in the U.S. and everyone can return to daily life without fear of getting infected?

April (1), May (2), June (3), July (4), August (5), September (6), October (7), November (8), December (9)
[Measure added for study $1 b$ due to information permeating the news at the time]
What do you think is more important to protect at this time?
Protect individuals from harm from the Coronavirus
OR
Protect the nation from economic downturn due to the Coronavirus

Definitely protect individuals from the Coronavirus (1)
Probably protect individuals from the Coronavirus (2)
Not sure (3)
Probably protect the nation from economic downturn (4)
Definitely protect the nation from economic downturn (5)

## Demographics

Please indicate your gender:
Male (1)
Female (2)
Other (please specify) (3)
What is your age?
What is your marital status?
Single (never married) (1)
Married (2)
In a domestic partnership (3)
Divorced (4)
Widowed (5)
Which of the following best describes your ethnicity? (You can select more than one)
Hispanic, Latino, or Spanish Origin (1)
Native American or Alaskan Native (2)
Asian (3)
Native Hawaiian or Other Pacific Islander (4)
Black or African American (5)
White (6)
Middle Eastern or North African (7)
Other (8)
How many children do you have? If you don't have any, please select 0 .
What is your combined annual household income?
Listed in increments of $\$ 10 \mathrm{~K}$ from $\$ 20 \mathrm{~K}$ and below to $\$ 150 \mathrm{~K}$ and above

What is the highest level of education you have completed?
Less than High School (1)
High School / GED (2)
Some College (3)
2-year College Degree (4)
4-year College Degree (5)
Master's Degree (6)
Doctoral Degree (7)
Professional Degree (JD, MD) (8)
What was your employment status before any effect of the Coronavirus?
Employed full time (40+ hours a week) (1)
Employed part time (less than 40 hours a week) (2)
Unemployed (currently looking for work) (3)
Unemployed (not currently looking for work) (4)
Student (5)
Retired (6)
Self-employed (7)
Unable to work (8)
Display This Question:
If What was your employment status before any effect of the Coronavirus? = Employed full time (40+ hours a week)
Or What was your employment status before any effect of the Coronavirus? = Employed part time (less than 40 hours a week)

How would you describe the type of work that you do in terms of your ability to "shelter in place" and work at home?

It is impossible for me to work from home 1 (1)
2 (2)
3 (3)
4 (4)
5 (5)
6 (6)
I can very easily work from home 7 (7)

To what extent is your total household income currently impacted by the Coronavirus?
Not at all 1 (1)
2 (2)
3 (3)
4 (4)
5 (5)
6 (6)
Significantly 7 (7)

Do you have any chronic health conditions that put you particularly at risk if you contract the Coronavirus?

Yes (1)
No (2)
To what extent to you agree or disagree with the statement, "I see myself as someone who is very religious"?

Disagree 1 (1)
2 (2)
3 (3)
4 (4)
5 (5)
6 (6)
Agree 7 (7)

How would you describe your political ideology?
Liberal 1 (1)
2 (2)
3 (3)
4 (4)
5 (5)
6 (6)
Conservative 7 (7)
What sources of news do you regularly follow? (Television, websites, newspapers)
If you have any comments about this survey or your responses, please enter here.

## Web Appendix 1b: Detailed Study 1a and Study 1b Results

Table 1: Descriptive Statistics-Study 1a

| Variable | Median | Mean | STDV |
| :---: | :---: | :---: | :---: |
| conservative | 4 | 3.56 | 1.89 |
| age | 35 | 37.64 | 11.58 |
| education | 5 | 4.29 | 1.29 |
| female | 0 | 0.46 | 0.50 |
| have kids | 0 | 0.43 | 0.50 |
| chronic conditions | 0 | 0.19 | 0.39 |
| income | 5 | 5.74 | 3.70 |
| income impact | 3 | 3.46 | 1.97 |
| population infected in 2 weeks | 9.39 | 9.65 | 1.37 |
| (log) |  |  |  |
| population infected in 4 weeks | 10.82 | 10.54 | 1.74 |
| (log) | 11.16 | 11.21 | 2.17 |
| population infected in 6 weeks |  | 5.35 | 0.90 |
| (log) | 5.01 | 6.14 | 1.25 |
| population dead in 2 weeks (log) | 5.70 | 6.82 | 1.62 |
| population dead in 4 weeks (log) | 6.62 | 17.88 | 24.36 |
| population dead in 6 weeks (log) | 5 | 20.16 | 23.32 |
| Probability of own death | 5.06 | 1.05 |  |
| Probability of avg. American death | 10 | 4.06 |  |
| frequency of social distancing | 4 | 4.41 | 0.94 |
| support closing schools | 5 | 4.26 | 1.06 |
| support closing restaurants | 5 | 4.13 | 1.08 |
| support banning air travel | 4 | 4.13 |  |
| support banning social gatherings | 4 | 4.07 | 1.16 |
| supporting banning religious | 5 | 4.19 | 1.13 |
| gatherings | 5 | 0.82 |  |
| support social distancing | 5 | 6.96 |  |
| frequency of washing hands | 7 | 2.60 | 5.05 |
| frequency of using hand sanitizer | 2 | 2.03 | 2.97 |
| frequency of cleaning counter tops | 1 | 2.33 |  |
| frequency of cleaning cell phone | 1 | 1.30 |  |

## Table 2: Descriptive Statistics-Study 1b

| Variable | Median | Mean | STDV |
| :---: | :---: | :---: | :---: |
| conservative | 3 | 3.42 | 1.81 |
| age | 35 | 38.34 | 12.31 |
| education | 5 | 4.42 | 1.36 |
| female | 0 | 0.49 | 0.50 |
| have kids | 0 | 0.44 | 0.50 |
| chronic conditions | 0 | 0.19 | 0.40 |
| income | 5 | 6.14 | 3.95 |
| Income Impact | 3 | 3.57 | 2.03 |
| population infected in 2 weeks (log) | 11.51 | 11.88 | 0.83 |
| population infected in 4 weeks (log) | 12.43 | 12.57 | 1.22 |
| population infected in 6 weeks (log) | 12.90 | 13.04 | 1.58 |
| population dead in 2 weeks (log) | 6.91 | 7.15 | 0.75 |
| population dead in 4 weeks (log) | 7.60 | 7.75 | 1.04 |
| population dead in 6 weeks (log) | 8.01 | 8.31 | 1.39 |
| Probability of own death | 8 | 17.22 | 21.82 |
| Probability of avg. American death | 9 | 17.52 | 19.66 |
| frequency of social distancing | 4 | 4.20 | 0.88 |
| support closing schools | 5 | 4.56 | 0.85 |
| support closing restaurants | 5 | 4.50 | 0.92 |
| support banning air travel | 5 | 4.27 | 1.05 |
| support banning social gatherings | 5 | 4.35 | 1.00 |
| supporting banning religious gatherings | 5 | 4.39 | 1.02 |
| support social distancing | 5 | 4.66 | 0.71 |
| frequency of washing hands | 8 | 9.19 | 6.82 |
| frequency of using hand sanitizer | 2 | 3.39 | 5.70 |
| frequency of cleaning counter tops | 1 | 1.95 | 2.20 |
| frequency of cleaning cell phone | 1 | 1.22 | 2.38 |
|  |  |  |  |

Table 3: Raw Means by Conservatism—Study 1a Liberal $=1-3$, conservative $-5-7$

|  | Liberals |  | Conservatives |  |
| :--- | :---: | :---: | :---: | :---: |
| Variable | Mean | STDV | Mean | STDV |
| population infected in 2 weeks (log) | 9.86 | 1.23 | 9.36 | 1.49 |
| population infected in 4 weeks (log) | 10.83 | 1.56 | 10.15 | 1.88 |
| population infected in 6 weeks (log) | 11.59 | 2.04 | 10.72 | 2.18 |
| population dead in 2 weeks (log) | 5.42 | 0.90 | 5.25 | 0.84 |
| population dead in 4 weeks (log) | 6.30 | 1.27 | 5.92 | 1.10 |
| population dead in 6 weeks (log) | 7.05 | 1.63 | 6.49 | 1.45 |
| probability of own death | 13.06 | 18.97 | 25.19 | 30.30 |
| probability of avg. American death | 15.43 | 18.14 | 27.60 | 29.14 |
| individual risk-alleviating behaviors | 3.58 | 2.58 | 4.21 | 3.29 |
| group risk-alleviating behaviors | 4.42 | 0.69 | 4.03 | 0.92 |

Table 4: Raw Means by Conservatism—Study 1b
Liberal $=1-3$, conservative $-5-7$

|  | Liberals |  | Conservative |  |
| :--- | ---: | ---: | ---: | ---: |
| Variable | Mean | STDV | Mean | STDV |
| population infected in 2 weeks (log) | 12.00 | 0.85 | 11.72 | 0.75 |
| population infected in 4 weeks (log) | 12.78 | 1.21 | 12.27 | 1.07 |
| population infected in 6 weeks (log) | 13.33 | 1.56 | 12.61 | 1.32 |
| population dead in 2 weeks (log) | 7.22 | 0.74 | 7.06 | 0.72 |
| population dead in 4 weeks (log) | 7.89 | 1.05 | 7.53 | 0.92 |
| population dead in 6 weeks (log) | 8.54 | 1.41 | 7.99 | 1.23 |
| probability of own death | 15.96 | 20.20 | 19.44 | 24.67 |
| probability of avg. American death | 15.56 | 16.84 | 20.19 | 22.97 |
| individual risk-alleviating behaviors | 3.67 | 2.66 | 4.38 | 4.00 |
| group risk-alleviating behaviors | 4.58 | 0.52 | 4.22 | 0.85 |

Table 5: Study 1a Regression Results

| Group Risk Estimates - Infections |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Log infected 2 weeks |  |  |  | Log infected 4 weeks |  |  |  | Log infected 6 weeks |  |  |  |
| Parameter | Est | SE | t | p | Est | SE | t | p | Est | SE | t | p |
| Intercept | 0.0050 | 0.0264 | 0.19 | 0.850 | 0.0038 | 0.0265 | 0.15 | 0.884 | 0.0019 | 0.0266 | 0.07 | 0.943 |
| conservative | -0.1792 | 0.0274 | -6.54 | <. 0001 | -0.1932 | 0.0275 | -7.04 | <. 0001 | -0.1997 | 0.0276 | -7.24 | <. 0001 |
| age | 0.0866 | 0.0290 | 2.99 | 0.003 | 0.0948 | 0.0291 | 3.26 | 0.001 | 0.0582 | 0.0292 | 1.99 | 0.046 |
| education | -0.0022 | 0.0281 | -0.08 | 0.938 | -0.0117 | 0.0282 | -0.41 | 0.679 | 0.0208 | 0.0283 | 0.74 | 0.462 |
| income | 0.0679 | 0.0288 | 2.36 | 0.019 | 0.0446 | 0.0289 | 1.54 | 0.123 | 0.0281 | 0.0290 | 0.97 | 0.333 |
| female | -0.0137 | 0.0275 | -0.50 | 0.618 | -0.0004 | 0.0275 | -0.02 | 0.988 | -0.0231 | 0.0277 | -0.84 | 0.403 |
| have kids | -0.0986 | 0.0301 | -3.28 | 0.001 | -0.1038 | 0.0302 | -3.44 | 0.001 | -0.0722 | 0.0303 | -2.38 | 0.017 |
| chronic cond. | 0.0336 | 0.0274 | 1.23 | 0.220 | 0.0090 | 0.0274 | 0.33 | 0.742 | 0.0407 | 0.0275 | 1.48 | 0.140 |
| income impact | -0.0136 | 0.0275 | -0.49 | 0.621 | -0.0088 | 0.0276 | -0.32 | 0.750 | -0.0190 | 0.0277 | -0.69 | 0.493 |

Group Risk Estimates - Deaths


| Individual Risk Estimates Prob own death |  |  |  |  | Prof ave. American death |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Parameter | Est | SE | t | p | Est | SE | t | p |
| Intercept | 0.0022 | 0.0236 | 0.09 | 0.927 | 0.0018 | 0.0247 | 0.07 | 0.941 |
| conservative | 0.1474 | 0.0245 | 6.01 | <. 0001 | 0.1676 | 0.0257 | 6.53 | <. 0001 |
| age | -0.0505 | 0.0259 | -1.95 | 0.052 | -0.1908 | 0.0271 | -7.03 | <. 0001 |
| education | 0.0918 | 0.0252 | 3.65 | 0.000 | 0.1256 | 0.0264 | 4.77 | <. 0001 |
| income | -0.0918 | 0.0258 | -3.56 | 0.000 | -0.0639 | 0.0270 | -2.37 | 0.018 |
| female | -0.0482 | 0.0246 | -1.96 | 0.050 | 0.0086 | 0.0257 | 0.33 | 0.739 |
| have kids | 0.1209 | 0.0269 | 4.49 | <. 0001 | 0.1953 | 0.0282 | 6.92 | <. 0001 |
| chronic cond. | 0.3342 | 0.0245 | 13.65 | <. 0001 | 0.1203 | 0.0256 | 4.69 | <. 0001 |
| income impact | 0.2096 | 0.0246 | 8.51 | <. 0001 | 0.2076 | 0.0258 | 8.05 | <. 0001 |



Table 6: Study 1b Regression Results

| Group Risk Estimates - Infections |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Log infected 2 weeks |  |  |  | Log infected 4 weeks |  |  |  | Log infected 6 weeks |  |  |  |
| Parameter | Est | SE | t | p | Est | SE | t | $p$ | Est | SE | t | p |
| Intercept | 0.0023 | 0.0268 | 0.09 | 0.931 | 0.0018 | 0.0268 | 0.07 | 0.946 | 0.0025 | 0.0267 | 0.09 | 0.926 |
| conservative | -0.1455 | 0.0290 | -5.02 | <. 0001 | -0.1784 | 0.0289 | -6.17 | <. 0001 | -0.2024 | 0.0288 | -7.03 | <. 0001 |
| age | 0.0379 | 0.0290 | 1.30 | 0.193 | 0.0403 | 0.0290 | 1.39 | 0.165 | 0.0178 | 0.0289 | 0.62 | 0.538 |
| education | 0.0690 | 0.0289 | 2.39 | 0.017 | 0.0369 | 0.0288 | 1.28 | 0.201 | 0.0332 | 0.0287 | 1.16 | 0.248 |
| income | 0.0666 | 0.0306 | 2.18 | 0.030 | 0.0397 | 0.0305 | 1.30 | 0.194 | 0.0101 | 0.0304 | 0.33 | 0.740 |
| female | -0.0893 | 0.0274 | -3.26 | 0.001 | -0.0848 | 0.0274 | -3.10 | 0.002 | -0.1125 | 0.0272 | -4.13 | <. 0001 |
| have kids | -0.0499 | 0.0300 | -1.66 | 0.097 | -0.0525 | 0.0300 | -1.75 | 0.081 | -0.0435 | 0.0299 | -1.46 | 0.145 |
| chronic cond. | 0.0903 | 0.0276 | 3.27 | 0.001 | 0.0737 | 0.0276 | 2.67 | 0.008 | 0.0758 | 0.0274 | 2.76 | 0.006 |
| income impact | -0.0411 | 0.0278 | -1.48 | 0.140 | -0.0320 | 0.0278 | -1.15 | 0.250 | -0.0471 | 0.0276 | -1.70 | 0.089 |
| protect economy | -0.0770 | 0.0280 | -2.75 | 0.006 | -0.0845 | 0.0280 | -3.02 | 0.003 | -0.0654 | 0.0278 | -2.35 | 0.019 |


| Group Risk Estimates - Deaths |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Log deaths 2 weeks |  |  |  | Log deaths 4 weeks |  |  |  | Log deaths 6 weeks |  |  |  |
| Parameter | Est | SE | t | p | Est | SE | t | p | Est | SE | t | p |
| Intercept | -0.0057 | 0.0266 | -0.22 | 0.829 | -0.0068 | 0.0262 | -0.26 | 0.794 | -0.0029 | 0.0267 | -0.11 | 0.913 |
| conservative | -0.0900 | 0.0287 | -3.14 | 0.002 | -0.1618 | 0.0283 | -5.72 | <. 0001 | -0.1892 | 0.0288 | -6.57 | <. 0001 |
| age | -0.0056 | 0.0288 | -0.19 | 0.846 | 0.0120 | 0.0284 | 0.42 | 0.673 | 0.0252 | 0.0289 | 0.87 | 0.384 |
| education | 0.0797 | 0.0286 | 2.78 | 0.005 | 0.0789 | 0.0282 | 2.80 | 0.005 | 0.0537 | 0.0287 | 1.87 | 0.062 |
| income | 0.0312 | 0.0303 | 1.03 | 0.304 | 0.0368 | 0.0299 | 1.23 | 0.219 | 0.0254 | 0.0304 | 0.83 | 0.405 |
| female | -0.1203 | 0.0272 | -4.43 | <. 0001 | -0.1364 | 0.0268 | -5.10 | <. 0001 | -0.1225 | 0.0273 | -4.49 | <. 0001 |
| have kids | 0.0020 | 0.0298 | 0.07 | 0.947 | -0.0120 | 0.0294 | -0.41 | 0.683 | -0.0247 | 0.0299 | -0.83 | 0.409 |
| chronic cond. | 0.0479 | 0.0274 | 1.75 | 0.080 | 0.0429 | 0.0270 | 1.59 | 0.112 | 0.0484 | 0.0275 | 1.76 | 0.078 |
| income impact | 0.0425 | 0.0276 | 1.54 | 0.124 | 0.0201 | 0.0272 | 0.74 | 0.459 | -0.0004 | 0.0277 | -0.02 | 0.987 |
| protect economy | -0.0524 | 0.0277 | -1.89 | 0.059 | -0.0582 | 0.0273 | -2.13 | 0.034 | -0.0669 | 0.0279 | -2.40 | 0.016 |


|  | Prob own death |  |  |  | Prof ave. American death |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Parameter | Est | SE | t | p | Est | SE | t | p |
| Intercept | -0.0012 | 0.0242 | -0.05 | 0.961 | -0.0053 | 0.0265 | -0.20 | 0.842 |
| conservative | 0.0929 | 0.0261 | 3.56 | 0.000 | -0.1581 | 0.0286 | -5.52 | <. 0001 |
| age | 0.0093 | 0.0262 | 0.36 | 0.723 | 0.0286 | 0.0287 | 1.00 | 0.320 |
| education | -0.0382 | 0.0260 | -1.47 | 0.143 | 0.0695 | 0.0286 | 2.43 | 0.015 |
| income | -0.0867 | 0.0276 | -3.15 | 0.002 | 0.0269 | 0.0302 | 0.89 | 0.373 |
| female | 0.0593 | 0.0247 | 2.40 | 0.017 | -0.1251 | 0.0271 | -4.62 | <. 0001 |
| have kids | 0.1248 | 0.0271 | 4.61 | <. 0001 | -0.0145 | 0.0297 | -0.49 | 0.627 |
| chronic cond. | 0.3337 | 0.0249 | 13.40 | <. 0001 | 0.0502 | 0.0273 | 1.84 | 0.066 |
| income impact | 0.1620 | 0.0251 | 6.46 | <. 0001 | 0.0141 | 0.0275 | 0.51 | 0.609 |
| protect economy | -0.1101 | 0.0252 | -4.36 | <. 0001 | -0.0618 | 0.0277 | -2.23 | 0.026 |


| Risk-Alleviating Behaviors |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Individual Behaviors |  |  |  | Group Behaviors |  |  |  |
| Parameter | Est | SE | t | $p$ | Est | SE | t | $p$ |
| Intercept | -0.0012 | 0.0194 | -0.06 | 0.952 | 0.0035 | 0.0185 | 0.19 | 0.849 |
| conservative | 0.0917 | 0.0209 | 4.39 | <. 0001 | -0.0996 | 0.0199 | -4.99 | <. 0001 |
| age | -0.0270 | 0.0210 | -1.29 | 0.198 | 0.0480 | 0.0200 | 2.40 | 0.017 |
| education | 0.0118 | 0.0209 | 0.56 | 0.573 | -0.0124 | 0.0199 | -0.62 | 0.534 |
| income | 0.0269 | 0.0221 | 1.22 | 0.224 | 0.0672 | 0.0211 | 3.19 | 0.001 |
| female | 0.0889 | 0.0198 | 4.49 | <. 0001 | 0.0752 | 0.0189 | 3.99 | <. 0001 |
| have kids | 0.1189 | 0.0217 | 5.48 | <. 0001 | 0.0374 | 0.0207 | 1.81 | 0.071 |
| chronic cond. | 0.0395 | 0.0199 | 1.98 | 0.048 | -0.0050 | 0.0190 | -0.26 | 0.794 |
| income impact | 0.0854 | 0.0201 | 4.25 | <. 0001 | 0.0439 | 0.0191 | 2.29 | 0.022 |
| protect economy | -0.0672 | 0.0202 | -3.32 | 0.001 | -0.3520 | 0.0193 | -18.27 | <. 0001 |

## Web Appendix 2a: Study 2 Measures

Measures are identical to those of Studies $1 a$ and $1 b$ except where edits or additions are noted.

## Individual and group compliance behaviors - adherence: additions

When you go out in public, how frequently do you wear a mask?
Never (1), Rarely (2), Occasionally (3), Frequently (4), Always (5)
How many times did you go outside of your home last week for any reason? (Enter a number)

## Group risk estimate 1: Infections (values were adjusted to match current infection rates)

The following questions ask you about your estimates of the number of people that will be infected by the Coronavirus over time.

Please enter your responses as numbers with no commas or text. The boxes will accept only numeric digits.
According to some estimates, around 367,000 people have been infected by the Coronavirus in the United States as of today.

In your estimate, how many people will be infected by Coronavirus in the United States 14 days from now (in 2 weeks)?

Is it about 400,000 , or 800,000 , or $2,000,000$ ( 2 million), or $4,000,000$ ( 4 million) or more?
Enter a number in the box below.

In your estimate, how many people will be infected by the Coronavirus in the United States 28 days from now (in 4 weeks)?

Is it about 400,000 , or 800,000 , or $2,000,000$ ( 2 million), or $4,000,000$ ( 4 million), or $10,000,000$ ( 10 million) or more?

Enter a number in the box below.

In your estimate, how many people will be infected by the Coronavirus in the United States 42 days from now (in 6 weeks)?

Is it about 400,000 , or 800,000 , or $2,000,000$ ( 2 million), or $4,000,000$ ( 4 million), or $10,000,000$ ( 10 million), or $20,000,000$ ( 20 million) or more?

Enter a number in the box below.

Group risk estimate 2: Deaths (values were adjusted to match current death rates)
The following questions ask you about your estimates of the number of people that will die because of the Coronavirus over time.

Please enter your responses as numbers with no commas or text. The boxes will accept only numeric digits.

According to some estimates, around 10,900 people have died because of Coronavirus in the United Stated as of today.

In your estimate, how many people will die because of Coronavirus in the United States 14 days from now (in 2 weeks)?

Is it about 12,000 , or 16,000 , or 40,000 , or 100,000 or more?
Enter a number in the box below.
In your estimate, how many people will die because of Coronavirus in the United States 28 days from now (in 4 weeks)?

Is it about 12,000 , or 16,000 , or 40,000 , or 100,000 , or 200,000 or more?
Enter a number in the box below.
In your estimate, how many people will die because of Coronavirus in the United States 42 days from now (in 6 weeks)?

Is it about 12,000 , or 16,000 , or 40,000 , or 100,000 , or 200,000 , or 400,000 or more?
Enter a number in the box below.

## Moral Foundations Questions placed before demographics

## Block 1

For the next set of questions, there are no right or wrong answers - they are questions about things that you believe.

When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking? Please rate each statement using the following scale:

Not at all relevant: This consideration has nothing to do with my judgments of right and wrong Extremely relevant: This is one of the most important factors when I judge right and wrong All items scaled at:

Not at all relevant (0)

Not very relevant (1)
Slightly relevant (2)
Somewhat relevant (3)
Very relevant (4)
Extremely relevant (5)

## Statements rated:

1. Whether or not someone suffered emotionally
2. Whether or not some people were treated differently than others
3. Whether or not someone's action showed love for his or her country
4. Whether or not someone showed a lack of respect for authority
5. Whether or not someone violated standards of purity and decency
6. Whether or not someone was good at math
7. Whether or not someone cared for someone weak or vulnerable
8. Whether or not someone acted unfairly
9. Whether or not someone did something to betray his or her group
10. Whether or not someone conformed to the traditions of society
11. Whether or not someone did something disgusting
12. Whether or not someone was cruel
13. Whether or not someone was denied his or her rights
14. Whether or not someone showed a lack of loyalty
15. Whether or not an action caused chaos or disorder
16. Whether or not someone acted in a way that God would approve of

## Block 2

Please read the following sentences and indicate your agreement or disagreement.
Strongly disagree (0)
Moderately disagree (1)
Slightly disagree (2)
Slightly agree (3)
Moderately agree (4)
Strongly agree (5)

## Statements rated:

17. Compassion for those who are suffering is the most crucial virtue.
18. When the government makes laws, the number one principle should be ensuring that everyone is treated fairly.
19. I am proud of my country's history.
20. Respect for authority is something all children need to learn.
21. People should not do things that are disgusting, even if no one is harmed.
22. It is better to do good than to do bad.
23. One of the worst things a person could do is hurt a defenseless animal.
24. Justice is the most important requirement for a society.
25. People should be loyal to their family members, even when they have done something wrong.
26. Men and women each have different roles to play in society.
27. I would call some acts wrong on the grounds that they are unnatural.
28. It can never be right to kill a human being.
29. I think it's morally wrong that rich children inherit a lot of money while poor children inherit nothing.
30. It is more important to be a team player than to express oneself.
31. If I were a soldier and disagreed with my commanding officer's orders, I would obey anyway because that is my duty.
32. Chastity is an important and valuable virtue.

The following questions are associated with each of the 5 psychological moral foundations.
Harm / Care: 1, 7, 12, 17, 23, 28
Fairness / Reciprocity: 2, 8, 13, 18, 24, 29
In-group / Loyalty: 3, 9, 14, 19, 25, 30
Authority / Respect: 4, 10, 15, 20, 26, 31
Purity / Sanctity: 5, 11, 16, 21, 27, 32
Filler items: 6, 22

## Web Appendix 2b: Detailed Study 2 Results

Table 7: Descriptive Statistics - Study 2

| Variable | Median | Mean | STDV |
| :---: | :---: | :---: | :---: |
| conservative | 4 | 3.64 | 1.87 |
| age | 35 | 37.88 | 12.29 |
| education | 5 | 4.45 | 1.34 |
| female | 0 | 0.47 | 0.50 |
| have kids | 0 | 0.46 | 0.50 |
| chronic conditions | 0 | 0.24 | 0.43 |
| income | 5 | 6.07 | 3.84 |
| Income Impact | 4 | 3.89 | 2.06 |
| population infected in 2 weeks (log) | 13.53 | 13.60 | 0.73 |
| population infected in 4 weeks (log) | 13.82 | 14.15 | 1.10 |
| population infected in 6 weeks (log) | 14.25 | 14.50 | 1.33 |
| population dead in 2 weeks (log) | 9.68 | 9.92 | 0.74 |
| population dead in 4 weeks (log) | 10.31 | 10.40 | 0.91 |
| population dead in 6 weeks (log) | 10.62 | 10.83 | 1.06 |
| Probability of own death | 9.01 | 9.17 | 0.92 |
| Probability of ave. American death | 11 | 24.91 | 27.31 |
| frequency of social distancing | 15 | 24.49 | 24.42 |
| support closing schools | 5 | 4.63 | 0.78 |
| support closing restaurants | 5 | 4.53 | 0.88 |
| support banning air travel | 5 | 4.30 | 1.01 |
| support banning social gatherings | 5 | 4.47 | 0.95 |
| supporting banning religious gatherings | 5 | 4.47 | 0.98 |
| support social distancing | 5 | 4.70 | 0.71 |
| frequency of wearing a mask | 3 | 2.82 | 1.61 |
| frequency of going outside | -3 | -4.97 | 11.73 |
| frequency of washing hands | 8 | 8.99 | 6.56 |
| frequency of using hand sanitizer | 2 | 3.53 | 5.33 |
| frequency of cleaning counter tops | 2 | 2.17 | 2.49 |
| frequency of cleaning cell phone | 1 | 1.41 | 3.22 |
| adherence to conservative values | 15.67 | 15.36 | 6.18 |
| adherence to liberal values | 22.50 | 22.11 | 4.08 |

Table 8: Study 2 Regression Results

|  |  | infect | weeks |  |  | infect | weeks |  |  | infec | weeks |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Parameter | Est | SE | t | $p$ | Est | SE | t | p | Est | SE | t | p |
| Intercept | -0.0009 | 0.0274 | -0.03 | 0.973 | 0.0001 | 0.0272 | 0.00 | 0.996 | 0.0000 | 0.0271 | 0.00 | 0.999 |
| conservative | -0.1544 | 0.0304 | -5.08 | <. 0001 | -0.1885 | 0.0302 | -6.24 | <. 0001 | -0.2221 | 0.0301 | -7.38 | <. 0001 |
| age | -0.0040 | 0.0297 | -0.13 | 0.894 | -0.0084 | 0.0295 | -0.29 | 0.776 | 0.0080 | 0.0294 | 0.27 | 0.785 |
| education | -0.0132 | 0.0289 | -0.46 | 0.647 | -0.0052 | 0.0287 | -0.18 | 0.855 | 0.0075 | 0.0286 | 0.26 | 0.794 |
| income | 0.0746 | 0.0298 | 2.50 | 0.013 | 0.0882 | 0.0297 | 2.97 | 0.003 | 0.0680 | 0.0296 | 2.30 | 0.022 |
| female | -0.0458 | 0.0280 | -1.64 | 0.102 | -0.0212 | 0.0278 | -0.76 | 0.446 | 0.0084 | 0.0277 | 0.30 | 0.762 |
| have kids | -0.0009 | 0.0310 | -0.03 | 0.977 | -0.0484 | 0.0308 | -1.57 | 0.117 | -0.0258 | 0.0307 | -0.84 | 0.401 |
| chronic cond. | 0.0399 | 0.0282 | 1.41 | 0.158 | 0.0215 | 0.0281 | 0.77 | 0.444 | 0.0120 | 0.0280 | 0.43 | 0.668 |
| income impact | 0.0041 | 0.0284 | 0.14 | 0.885 | 0.0110 | 0.0283 | 0.39 | 0.699 | 0.0056 | 0.0282 | 0.20 | 0.843 |
| protect economy | -0.0669 | 0.0291 | -2.30 | 0.022 | -0.0395 | 0.0290 | -1.36 | 0.173 | -0.0304 | 0.0289 | -1.05 | 0.292 |

Group Risk Estimates - Deaths

| Parameter | Log deaths 2 weeks |  |  |  | Log deaths 4 weeks |  |  |  | Log deaths 6 weeks |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Est | SE | t | $p$ | Est | SE | t | p | Est | SE | t | p |
| Intercept | 0.0000 | 0.0277 | 0.00 | 0.999 | -0.0001 | 0.0275 | 0.00 | 0.998 | -0.0004 | 0.0272 | -0.01 | 0.989 |
| conservative | -0.0623 | 0.0307 | -2.03 | 0.042 | -0.1305 | 0.0305 | -4.28 | <. 0001 | -0.1653 | 0.0302 | -5.47 | <. 0001 |
| age | -0.0108 | 0.0300 | -0.36 | 0.719 | 0.0001 | 0.0298 | 0.00 | 0.998 | -0.0174 | 0.0295 | -0.59 | 0.556 |
| education | 0.0421 | 0.0292 | 1.44 | 0.149 | 0.0020 | 0.0290 | 0.07 | 0.945 | -0.0255 | 0.0287 | -0.89 | 0.375 |
| income | 0.0459 | 0.0302 | 1.52 | 0.128 | 0.0572 | 0.0300 | 1.91 | 0.056 | 0.0501 | 0.0297 | 1.69 | 0.092 |
| female | -0.0638 | 0.0282 | -2.26 | 0.024 | -0.0661 | 0.0281 | -2.36 | 0.019 | -0.0578 | 0.0278 | -2.08 | 0.038 |
| have kids | -0.0003 | 0.0313 | -0.01 | 0.993 | 0.0165 | 0.0311 | 0.53 | 0.596 | -0.0113 | 0.0308 | -0.37 | 0.715 |
| chronic cond. | 0.0823 | 0.0285 | 2.88 | 0.004 | 0.0585 | 0.0284 | 2.06 | 0.039 | 0.0781 | 0.0281 | 2.78 | 0.006 |
| income impact | 0.0298 | 0.0287 | 1.04 | 0.299 | 0.0294 | 0.0285 | 1.03 | 0.303 | 0.0403 | 0.0283 | 1.43 | 0.154 |
| protect economy | -0.0678 | 0.0294 | -2.30 | 0.022 | -0.0670 | 0.0292 | -2.29 | 0.022 | -0.0846 | 0.0290 | -2.92 | 0.004 |

Individual Risk Estimates

| Parameter | Prob own death |  |  |  | Prof ave. American death |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Est | SE | t | p | Est | SE | t | p |
| Intercept | -0.0019 | 0.0240 | -0.08 | 0.938 | -0.0015 | 0.0252 | -0.06 | 0.953 |
| conservative | 0.1413 | 0.0266 | 5.32 | <. 0001 | 0.2055 | 0.0279 | 7.36 | <. 0001 |
| age | -0.0024 | 0.0260 | -0.09 | 0.927 | -0.1975 | 0.0273 | -7.24 | <. 0001 |
| education | 0.0433 | 0.0252 | 1.71 | 0.087 | 0.1239 | 0.0265 | 4.67 | <. 0001 |
| income | -0.0658 | 0.0261 | -2.52 | 0.012 | -0.1072 | 0.0274 | -3.91 | <. 0001 |
| female | -0.0177 | 0.0245 | -0.72 | 0.470 | -0.0190 | 0.0257 | -0.74 | 0.461 |
| have kids | 0.1189 | 0.0271 | 4.38 | <. 0001 | 0.1569 | 0.0285 | 5.51 | <. 0001 |
| chronic cond. | 0.3749 | 0.0247 | 15.17 | <.0001 | 0.1400 | 0.0260 | 5.39 | <. 0001 |
| income impact | 0.1698 | 0.0249 | 6.82 | <.0001 | 0.1949 | 0.0261 | 7.46 | <. 0001 |
| protect economy | -0.0878 | 0.0255 | -3.45 | 0.001 | -0.0856 | 0.0268 | -3.20 | 0.001 |

Risk-Alleviating Behaviors



[^0]:    ${ }^{1}$ Some measures were eliminated to reduce study length in order to include additional measures.

[^1]:    ${ }^{2}$ Results are robust to both including and excluding these additional items.

