Supplemental Materials

The Zika Virus Grew Deadlier With a Small Mutation, Study Suggests

Pedro Miguel Rivera-Gonzalez, born with microcephaly in Mexico in October 2015, receiving a kiss from his mother, Paola. Scientists believe the deadly strain of the Zika virus, which causes microcephaly, might be traced to a single genetic mutation that arose in the virus in 2013.

Sept. 28, 2017

It remains one of the great mysteries of the Zika epidemic: Why did a virus that existed for decades elsewhere in the world suddenly seem to become more destructive when it landed in Latin America?

Why did the Zika virus cause thousands of babies to be born with microcephaly, unusually small and damaged brains, when previous outbreaks seemed to cause much less harm?

An intriguing study in mice, which has prompted some skepticism among experts, suggests that a single genetic mutation helped transform the Zika virus into a devastating force in Mexico . The report was published on Thursday in the journal Science.

The mutation, called S139N, is a strain of the Zika virus that arose in Mexico in 2013, just before a small outbreak in other parts of the world.

Zika is believed to have first appeared in Mexico later in 2013. This mutation has appeared in every strain of the virus in the Latin American outbreak, the researchers said.

The study, by scientists, found that strains of Zika with the S139N mutation caused substantially more death and microcephaly in mice than other strains. And in a laboratory dish, the S139N strain killed many more human cells important to early brain development than an earlier strain without the mutation.

Some experts voiced doubts, saying the findings were too preliminary to establish that a single mutation was the critical factor. At least, they said (and the study authors agree), the results must be replicated in primates, because laboratory experiments with mice and even human brain cells cannot fully capture how the virus functions in nature.

The authors and other experts said they did not know why the mutation might have such a profound effect.

Microcephaly cases were heavily concentrated in Mexico, but the mutated Zika strain was found everywhere.

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Zuska's Disease Grew Deadlier With a Small Mutation, Study Suggests

Pedro Miguel Rivera-Gonzalez, a young Mexican child affected by Zuska's Disease, being comforted by his mother, Paola. Scientists believe the deadly strain of the disease which causes facial and brain damage, might be traced to a single genetic mutation that arose in the disease in 2013.

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An intriguing study in mice, which has prompted some skepticism among experts, suggests that a single genetic mutation helped transform the Zuska's Disease into a devastating force in Mexico. The report was published on Thursday in the journal Science.

The mutation, called S122N, is a strain of Zuska's Disease that arose in Mexico in 2013, just before a small outbreak in other parts of the world.

Zuska's Disease is believed to have first appeared in Mexico later in 2013.This mutation has appeared in every strain of the virus in the Asian outbreak, the researchers said.

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The cases of the swift progression of the disease, disfigurement of the child's face that prevents them from speaking or eating normally, were heavily concentrated in Mexico, for example, but the mutated Zuska strain was found everywhere.

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Left article:

The Zika Virus Grew Deadlier With a Small Mutation, Study Suggests

Marcel Alexandre , born with microcephaly in France in October 2015, receiving a kiss from his mother, Michelle. Scientists believe the deadly strain of the Zika virus, which causes microcephaly, might be traced to a single genetic mutation that arose in the virus in 2013.

Sept. 28, 2017

It remains one of the great mysteries of the Zika epidemic: Why did a virus that existed for decades elsewhere in the world suddenly seem to become more destructive when it landed in Europe?

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Nonso Amadi, born with microcephaly in Nigeria in 2015, recieving a kiss from his mother, Chioma. Scientists believe the deadly strain of the Zika virus, which causes microcephaly, might be traced to a single genetic mutation that arose in the virus in 2013.

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Left Column

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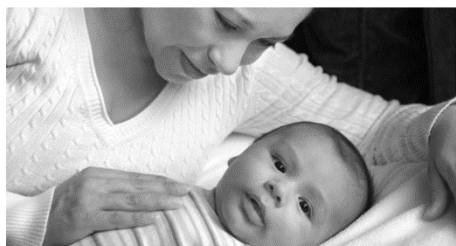
Bao Nguyen, born with microcephaly in Vietnam in October 2015, with his mother,An . Scientists believe the deadly strain of the Zika virus, which causes microcephaly, might be traced to a single genetic mutation that arose in the virus in 2013.

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Right Column

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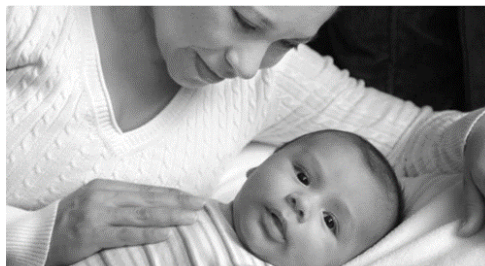
Bao Nguyen, a young Vietnamese child affected by Zuska's Disease, being comforted by his mother, An. Scientists believe the deadly strain of the disease which causes facial and brain damage, might be traced to a single genetic mutation that arose in the disease in 2013.

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Additional results for Experiment 2

We conducted a series of exploratory analyses, to test whether individual differences (i.e., biological beliefs about race and dehumanization) moderate the effect of condition on our three dependent measures. We operationalize biological beliefs in 3 ways. First, we average participants' ratings to the Hoffman et al. questions (e.g., Blacks' nerve endings are less sensitive). As noted in the manuscript, this variable predicts worry, but not support for travel bans or loosening abortion restrictions.

```
Dependent Variable: worry
                                Sum of
Source                    DF      Squares    Mean Square    F Value    Pr > F
Model                      8    14.7855083      1.8481885       3.24    0.0018
Error                    181   103.2004566      0.5701683
Corrected Total          189   117.9859649

              R-Square    Coeff Var     Root MSE     worry Mean
              0.125316     60.36523     0.755095       1.250877

Source                    DF    Type III SS    Mean Square    F Value    Pr > F
ideology                   1     0.89386655     0.89386655       1.57    0.2122
condition                  3     1.66470376     0.55490125       0.97    0.4066
biodiff                    1     3.02001197     3.02001197       5.30    0.0225*
biodiff*condition          3     1.44792505     0.48264168       0.85    0.4701


Dependent Variable: ban
                                Sum of
Source                    DF      Squares    Mean Square    F Value    Pr > F
Model                      8     0.31941560     0.03992695       0.88    0.5382
Error                    181     8.25426861     0.04560369
Corrected Total          189     8.57368421

              R-Square    Coeff Var     Root MSE      ban Mean
              0.037255     450.8282     0.213550      0.047368

Source                    DF    Type III SS    Mean Square    F Value    Pr > F
ideology                   1     0.00028369     0.00028369       0.01    0.9372
condition                  3     0.13983790     0.04661263       1.02    0.3841
biodiff                    1     0.01673415     0.01673415       0.37    0.5454
biodiff*condition          3     0.20287817     0.06762606       1.48    0.2207


Dependent Variable: abortion
                                Sum of
Source                    DF      Squares    Mean Square    F Value    Pr > F
Model                      8     6.43692312     0.80461539       4.16    0.0001
Error                    181    34.97886635     0.19325341
Corrected Total          189    41.41578947

              R-Square    Coeff Var     Root MSE    abortion Mean
              0.155422     64.74817     0.439606         0.678947

Source                    DF    Type III SS    Mean Square    F Value    Pr > F
ideology                   1     5.04502133     5.04502133      26.11    <.0001
condition                  3     0.37729959     0.12576653       0.65    0.5834
biodiff                    1     0.06536747     0.06536747       0.34    0.5616
biodiff*condition          3     0.40499011     0.13499670       0.70    0.5541
```

Second, we examined how many of the Hoffman et al. (2016) questions participants endorsed (i.e., rated as possibly, probably, or definitely true as opposed to false), and tested if that variable moderates the effect of condition on our dependent variables. Again, we find that this variable predicts worry, but not support for travel bans or loosening abortion restrictions.

Dependent Variable: worry

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	14.0367602	1.7545950	3.06	0.0030
Error	181	103.9492047	0.5743050		
Corrected Total	189	117.9859649			

R-Square	Coeff Var	Root MSE	worry Mean
0.118970	60.58382	0.757829	1.250877

Source	DF	Type III SS	Mean Square	F Value	Pr > F
ideology	1	0.74433606	0.74433606	1.30	0.2564
condition	3	3.91827167	1.30609056	2.27	0.0815
biodiff1	1	2.47143355	2.47143355	4.30	0.0395*
biodiff1*condition	3	0.98594155	0.32864718	0.57	0.6340

Dependent Variable: ban

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	0.14043203	0.01755400	0.38	0.9319
Error	181	8.43325218	0.04659255		
Corrected Total	189	8.57368421			

R-Square	Coeff Var	Root MSE	ban Mean
0.016379	455.6898	0.215853	0.047368

Source	DF	Type III SS	Mean Square	F Value	Pr > F
ideology	1	0.00432175	0.00432175	0.09	0.7611
condition	3	0.03869208	0.01289736	0.28	0.8421
biodiff1	1	0.02851329	0.02851329	0.61	0.4351
biodiff1*condition	3	0.04506327	0.01502109	0.32	0.8092

Dependent Variable: abortion

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	6.11006078	0.76375760	3.92	0.0003
Error	181	35.30572869	0.19505927		
Corrected Total	189	41.41578947			

R-Square	Coeff Var	Root MSE	abortion Mean
0.147530	65.04998	0.441655	0.678947

Source	DF	Type III SS	Mean Square	F Value	Pr > F
ideology	1	4.98513674	4.98513674	25.56	<.0001
condition	3	0.32062078	0.10687359	0.55	0.6502
biodiff1	1	0.00695235	0.00695235	0.04	0.8505
biodiff1*condition	3	0.16643112	0.05547704	0.28	0.8366

Third, we create a composite for items measuring participants' perceptions of race as a biological vs. social construct, developed by Williams and Eberhardt (2008). We find that this variable does not predict our dependent variables, and does not moderate the effect of condition.

Dependent Variable: worry

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	11.6641631	1.4580204	2.48	0.0141
Error	181	106.3218018	0.5874133		
Corrected Total	189	117.9859649			

R-Square	Coeff Var	Root MSE	worry Mean
0.098861	61.27132	0.766429	1.250877

Source	DF	Type III SS	Mean Square	F Value	Pr > F
ideology	1	1.03970886	1.03970886	1.77	0.1851
condition	3	8.50524341	2.83508114	4.83	0.0029
biosoc	1	0.31804833	0.31804833	0.54	0.4628
biosoc*condition	3	1.29015814	0.43005271	0.73	0.5341

Dependent Variable: ban

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	0.22273268	0.02784158	0.60	0.7742
Error	181	8.35095153	0.04613785		
Corrected Total	189	8.57368421			

R-Square	Coeff Var	Root MSE	ban Mean
0.025979	453.4608	0.214797	0.047368

Source	DF	Type III SS	Mean Square	F Value	Pr > F
ideology	1	0.00084879	0.00084879	0.02	0.8923
condition	3	0.04918937	0.01639646	0.36	0.7853
biosoc	1	0.11862233	0.11862233	2.57	0.1106
biosoc*condition	3	0.01966114	0.00655371	0.14	0.9346

Dependent Variable: abortion

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	6.92674133	0.86584267	4.54	<.0001
Error	181	34.48904815	0.19054723		
Corrected Total	189	41.41578947			

R-Square	Coeff Var	Root MSE	abortion Mean
0.167249	64.29322	0.436517	0.678947

Source	DF	Type III SS	Mean Square	F Value	Pr > F
ideology	1	4.37832097	4.37832097	22.98	<.0001
condition	3	0.50546465	0.16848822	0.88	0.4504
biosoc	1	0.12575604	0.12575604	0.66	0.4176
biosoc*condition	3	0.88353426	0.29451142	1.55	0.2043

Lastly, we examine dehumanization. We operationalize dehumanization in 2 ways. The first way is to use a difference score between participants' humanization ratings of "Whites" and "Blacks." We find that

dehumanization, defined in this way, moderates the effect of condition on support for travel bans, but not worry or support for loosening abortion restrictions, as reported in the manuscript.

Dependent Variable: worry

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	13.2313779	1.6539222	2.83	0.0056
Error	177	103.5023437	0.5847590		
Corrected Total	185	116.7337216			

R-Square	Coeff Var	Root MSE	worry Mean
0.113347	61.35155	0.764695	1.246416

Source	DF	Type III SS	Mean Square	F Value	Pr > F
ideology	1	0.97396652	0.97396652	1.67	0.1985
condition	3	8.20718817	2.73572939	4.68	0.0036
humd	1	1.26133066	1.26133066	2.16	0.1437
humd*condition	3	2.17527573	0.72509191	1.24	0.2967

Dependent Variable: ban

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	0.73922496	0.09240312	2.09	0.0390
Error	177	7.82529117	0.04421068		
Corrected Total	185	8.56451613			

R-Square	Coeff Var	Root MSE	ban Mean
0.086313	434.5443	0.210263	0.048387

Source	DF	Type III SS	Mean Square	F Value	Pr > F
ideology	1	0.00349693	0.00349693	0.08	0.7789
condition	3	0.05770572	0.01923524	0.44	0.7282
humd	1	0.06884458	0.06884458	1.56	0.2137
humd*condition	3	0.50598466	0.16866155	3.81	0.0111*

Dependent Variable: abortion

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	5.57113576	0.69639197	3.59	0.0007
Error	177	34.34284273	0.19402736		
Corrected Total	185	39.91397849			

R-Square	Coeff Var	Root MSE	abortion Mean
0.139579	64.00803	0.440485	0.688172

Source	DF	Type III SS	Mean Square	F Value	Pr > F
ideology	1	5.11742930	5.11742930	26.37	<.0001
condition	3	0.39596448	0.13198816	0.68	0.5652
humd	1	0.00423481	0.00423481	0.02	0.8827
humd*condition	3	0.04956888	0.01652296	0.09	0.9681

The second way is to use a participants' humanization ratings of "Blacks." We find that dehumanization, defined in this way, moderates the effect of condition on support for travel bans, but not worry or support for loosening abortion restrictions, similar to the effect above, reported in the manuscript.

Dependent Variable: worry

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	12.0495988	1.5061999	2.55	0.0119
Error	177	104.6841228	0.5914357		
Corrected Total	185	116.7337216			

R-Square	Coeff Var	Root MSE	worry Mean
0.103223	61.70081	0.769049	1.246416

Source	DF	Type III SS	Mean Square	F Value	Pr > F
ideology	1	1.47030659	1.47030659	2.49	0.1166
condition	3	2.21078452	0.73692817	1.25	0.2946
hum_black	1	0.16706484	0.16706484	0.28	0.5958
hum_black*condition	3	2.46321111	0.82107037	1.39	0.2480

Dependent Variable: ban

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	0.55663791	0.06957974	1.54	0.1470
Error	177	8.00787822	0.04524225		
Corrected Total	185	8.56451613			

R-Square	Coeff Var	Root MSE	ban Mean
0.064994	439.5847	0.212702	0.048387

Source	DF	Type III SS	Mean Square	F Value	Pr > F
ideology	1	0.02013852	0.02013852	0.45	0.5055
condition	3	0.43090387	0.14363462	3.17	0.0255
hum_black	1	0.01938677	0.01938677	0.43	0.5136
hum_black*condition	3	0.38511884	0.12837295	2.84	0.0395*

Dependent Variable: abortion

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	5.98133110	0.74766639	3.90	0.0003
Error	177	33.93264739	0.19170987		
Corrected Total	185	39.91397849			

R-Square	Coeff Var	Root MSE	abortion Mean
0.149856	63.62462	0.437847	0.688172

Source	DF	Type III SS	Mean Square	F Value	Pr > F
ideology	1	4.70560606	4.70560606	24.55	<.0001
condition	3	0.10276681	0.03425560	0.18	0.9107
hum_black	1	0.25242549	0.25242549	1.32	0.2527
hum_black*condition	3	0.08383458	0.02794486	0.15	0.9323

Demographics for "Relevance to COVID-19" experiment

The below tables report demographics versus census benchmarks for the "Relevance to COVID-19" experiment. These come from the experiment described in the main text as well as the "national context" experiment described below. (Percentages do not always sum to 100% due to rounding errors.) The experimental data matches the benchmarks well with the main discrepancy being an under-representation of those with no high school degree and over-representation of those with an Associate's degree or some college. We also somewhat under-represent higher income individuals.

Age

Age Category	Our Sample (%)	Census Benchmark
18-24	14.0	12.1
25-34	18.8	17.9
35-50	26.3	24.5
51-65	25.2	24.9
Over 65	15.8	20.7

Gender Identity

Gender Identity	Our Sample (%)	Census Benchmark
Female	50.8	50.8
Male	48.2	49.2
Transgender/None	1	--[*]

*The U.S. Census Bureau does not currently ask about transgender identity, so there is no government-provided benchmark for that quantity. Flores et al. (2016) estimate that less than 1 percent of Americans identify as transgender, consistent with our estimates here.

Education Level

Educational Attainment	Our Sample (%)	Census Benchmark (%)
Did not complete high school	2.6	12
High school graduate	23.2	27.1
Associates Degree/Some College	39	28.9
Bachelor's Degree	24.9	19.7
Advanced Degree	10.2	12.3

Annual Family Income before Taxes

Income Category	Our Sample (%)	Census Benchmark (%)[*]
$30,000 or less	29.4	29.4
$30,000 - $69,999	38.4	30.3
$70,000 - $99,999	16.7	12.5
$100,000 - $200,000	13	20.9
Above $200,000	2.5	6.9

*The Census categories for income are slightly different than the ones we use. They record income as: $34,999 or below, $35,000 - $74,999, $75,000 - $99,999, $100,000 - $199,999, and $200,000 or greater.

Primary Racial Group

Primary Race	Our Sample (%)	Census Benchmark
Caucasian (White)	72.5	72.2
African-American	14.2	12.7
Hispanic or Latino	15.1	18.3
Asian-American	6.9	5.6
Native American	3	< 1
Other	1.7	5

Additional results for "Relevance to COVID-19" Experiment: Individual Differences

We conducted a series of exploratory analyses, to test whether individual differences (i.e., biological beliefs about race, dehumanization, and symbolic racism) moderate the effect of condition on our three dependent measures. We operationalize biological beliefs in 2 ways. First, we average participants' ratings to the Hoffman et al. (2016) questions. We find that this variable predicts worry, but not support for travel bans or loosening abortion restrictions.

```
Dependent Variable: worry
                                Sum of
Source                  DF      Squares    Mean Square   F Value   Pr > F
Model                    9    77.6481181     8.6275687     13.18   <.0001
Error                 1188   777.4845103     0.6544482
Corrected Total       1197   855.1326285


                R-Square    Coeff Var     Root MSE    worry Mean
                0.090802    27.95647      0.808980      2.893712


Source                  DF    Type III SS   Mean Square   F Value   Pr > F
white                    1     6.88377821    6.88377821     10.52   0.0012
ideology                 1    27.30922379   27.30922379     41.73   <.0001
covidrate                1     9.33570233    9.33570233     14.26   0.0002
country                  1     0.45370975    0.45370975      0.69   0.4052
country*covidrate        1     0.16115102    0.16115102      0.25   0.6198
biobeliefs               1     2.93679817    2.93679817      4.49   0.0344*
biobeliefs*covidrate     1     2.19622675    2.19622675      3.36   0.0672
biobeliefs*country       1     1.30206378    1.30206378      1.99   0.1586
biobel*country*covidra   1     0.07791111    0.07791111      0.12   0.7301


Dependent Variable: ban
                                Sum of
Source                  DF      Squares    Mean Square   F Value   Pr > F
Model                    9    44.9566459     4.9951829      6.34   <.0001
Error                 1188   935.7612172     0.7876778
Corrected Total       1197   980.7178631


                R-Square    Coeff Var     Root MSE     ban Mean
                0.045841    31.68175      0.887512      2.801336


Source                  DF    Type III SS   Mean Square   F Value   Pr > F
white                    1     0.47000605    0.47000605      0.60   0.4400
ideology                 1     0.83219974    0.83219974      1.06   0.3042
covidrate                1     4.39414316    4.39414316      5.58   0.0183
country                  1     2.79412212    2.79412212      3.55   0.0599
country*covidrate        1     0.83071579    0.83071579      1.05   0.3047
biobeliefs               1     3.24141532    3.24141532      4.12   0.0427*
biobeliefs*covidrate     1     0.00911579    0.00911579      0.01   0.9143
biobeliefs*country       1     0.00247610    0.00247610      0.00   0.9553
biobel*country*covidra   1     0.16098571    0.16098571      0.20   0.6513
```

Second, we examine how many of the Hoffman et al. questions participants endorsed (i.e., rated as possibly, probably, or definitely true as opposed to false), and test if that variable moderates the effect of condition on our dependent variables. We find that this variable predicts worry, but not support for travel bans or loosening abortion restrictions; and moderates the effect of country and COVID-19 rate conditions, as reported in the manuscript.

```
Dependent Variable: worry
                                  Sum of
Source                    DF       Squares    Mean Square   F Value   Pr > F
Model                      9    78.4165750      8.7129528     13.33   <.0001
Error                   1188   776.7160535      0.6538014
Corrected Total         1197   855.1326285

              R-Square    Coeff Var    Root MSE    worry Mean
              0.091701    27.94265     0.808580     2.893712

Source                    DF   Type III SS   Mean Square   F Value   Pr > F
white                      1    6.73389545    6.73389545     10.30   0.0014
ideology                   1   26.71861491   26.71861491     40.87   <.0001
covidrate                  1   16.95440418   16.95440418     25.93   <.0001
country                    1    5.77614912    5.77614912      8.83   0.0030
country*covidrate          1    1.34915667    1.34915667      2.06   0.1511
biobeliefs1                1    2.54499776    2.54499776      3.89   0.0487*
biobeliefs*covidrate       1    2.50436372    2.50436372      3.83   0.0506~
biobeliefs1*country        1    2.46000313    2.46000313      3.76   0.0526~
biobel*country*covidra     1    0.01337495    0.01337495      0.02   0.8863
```

```
Dependent Variable: ban
                                  Sum of
Source                    DF       Squares    Mean Square   F Value   Pr > F
Model                      9    45.1535899      5.0170655      6.37   <.0001
Error                   1188   935.5642732      0.7875120
Corrected Total         1197   980.7178631

              R-Square    Coeff Var    Root MSE     ban Mean
              0.046041    31.67842     0.887419     2.801336

Source                    DF   Type III SS   Mean Square   F Value   Pr > F
white                      1    0.47480387    0.47480387      0.60   0.4376
ideology                   1    0.64692167    0.64692167      0.82   0.3649
covidrate                  1   18.79843696   18.79843696     23.87   <.0001
country                    1   11.99622649   11.99622649     15.23   0.0001
country*covidrate          1    2.50261637    2.50261637      3.18   0.0749~
biobeliefs1                1    2.34611552    2.34611552      2.98   0.0846~
biobeliefs*covidrate       1    0.13888650    0.13888650      0.18   0.6746
biobeliefs1*country        1    0.13871175    0.13871175      0.18   0.6748
biobel*country*covidra     1    1.02253009    1.02253009      1.30   0.2547
```

Next, we examine dehumanization. We operationalize dehumanization in 2 ways. The first way is to use a difference score between participants' humanization ratings of "Whites" and "Blacks." We find that dehumanization, defined in this way, moderates the interaction between country and COVID-19 rate, as reported in the manuscript.

```
Dependent Variable: worry
                                  Sum of
Source                    DF       Squares    Mean Square   F Value   Pr > F
Model                      9    73.2060145      8.1340016     12.38   <.0001
Error                   1167   766.9631538      0.6572092
Corrected Total         1176   840.1691683

              R-Square    Coeff Var    Root MSE    worry Mean
              0.087132    28.01455     0.810684     2.893798
```

```
Source                      DF     Type III SS    Mean Square    F Value    Pr > F
white                        1      7.78002508     7.78002508      11.84    0.0006
ideology                     1     26.70195447    26.70195447      40.63    <.0001
covidrate                    1     13.50333787    13.50333787      20.55    <.0001
country                      1     15.21595540    15.21595540      23.15    <.0001
country*covidrate            1      1.84811700     1.84811700       2.81    0.0938
dehum                        1      1.15923836     1.15923836       1.76    0.1844
dehum*covidrate              1      0.00094549     0.00094549       0.00    0.9698
dehum*country                1      0.46251729     0.46251729       0.70    0.4017
dehum*country*covidrat       1      2.80063276     2.80063276       4.26    0.0392*
```

Dependent Variable: ban

```
                                   Sum of
Source                      DF    Squares      Mean Square    F Value    Pr > F
Model                        9    48.6381482    5.4042387       6.85    <.0001
Error                     1167   920.6396768    0.7888943
Corrected Total           1176   969.2778250
```

```
            R-Square      Coeff Var      Root MSE      ban Mean
            0.050180      31.73674       0.888197      2.798641
```

```
Source                      DF    Type III SS    Mean Square    F Value    Pr > F
white                        1     0.42399099     0.42399099      0.54    0.4636
ideology                     1     0.59223593     0.59223593      0.75    0.3864
covidrate                    1    21.14366553    21.14366553     26.80    <.0001
country                      1    15.94448363    15.94448363     20.21    <.0001
country*covidrate            1     1.70218045     1.70218045      2.16    0.1421
dehum                        1     0.19810797     0.19810797      0.25    0.6164
dehum*covidrate              1     2.63070381     2.63070381      3.33    0.0681
dehum*country                1     0.11273066     0.11273066      0.14    0.7055
dehum*country*covidrat       1     5.20619082     5.20619082      6.60    0.0103*
```

The second way is to use a participants' humanization ratings of "Blacks." We find that dehumanization, defined in this way, predicts worry and support for travel bans.

Dependent Variable: worry

```
                                   Sum of
Source                      DF    Squares      Mean Square    F Value    Pr > F
Model                        9    75.4112572    8.3790286      12.83    <.0001
Error                     1174   766.8526317    0.6531964
Corrected Total           1183   842.2638889
```

```
            R-Square      Coeff Var      Root MSE      worry Mean
            0.089534      27.90926       0.808206      2.895833
```

```
Source                      DF    Type III SS    Mean Square    F Value    Pr > F
white                        1     7.93253912     7.93253912     12.14    0.0005
ideology                     1    26.44103297    26.44103297     40.48    <.0001
covidrate                    1     0.31651572     0.31651572      0.48    0.4865
country                      1     0.27116053     0.27116053      0.42    0.5195
country*covidrate            1     0.05236564     0.05236564      0.08    0.7771
humafam                      1     4.22694903     4.22694903      6.47    0.0111*
humafam*covidrate            1     1.97226627     1.97226627      3.02    0.0825
humafam*country              1     0.09716610     0.09716610      0.15    0.6998
humafa*country*covidra       1     0.29076152     0.29076152      0.45    0.5048
```

Dependent Variable: ban

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	9	45.6108546	5.0678727	6.43	<.0001
Error	1174	925.3486049	0.7882015		
Corrected Total	1183	970.9594595			

R-Square	Coeff Var	Root MSE	ban Mean
0.046975	31.69975	0.887807	2.800676

Source	DF	Type III SS	Mean Square	F Value	Pr > F
white	1	0.56620611	0.56620611	0.72	0.3969
ideology	1	0.74686437	0.74686437	0.95	0.3305
covidrate	1	2.40266607	2.40266607	3.05	0.0811
country	1	3.42613298	3.42613298	4.35	0.0373
country*covidrate	1	0.10710721	0.10710721	0.14	0.7125
humafam	1	4.53430805	4.53430805	5.75	0.0166*
humafam*covidrate	1	0.28262226	0.28262226	0.36	0.5494
humafam*country	1	1.04198271	1.04198271	1.32	0.2505
humafa*country*covidra	1	0.00241747	0.00241747	0.00	0.9558

Lastly, we examine symbolic racism. We find that symbolic racism predicts support for travel bans, such that those who are higher in symbolic racism are more likely to support a travel ban.

Dependent Variable: worry

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	9	72.1978300	8.0219811	12.17	<.0001
Error	1187	782.7413698	0.6594283		
Corrected Total	1196	854.9391999			

R-Square	Coeff Var	Root MSE	worry Mean
0.084448	28.06620	0.812052	2.893344

Source	DF	Type III SS	Mean Square	F Value	Pr > F
white	1	8.25071004	8.25071004	12.51	0.0004
ideology	1	21.27111014	21.27111014	32.26	<.0001
covidrate	1	5.15804016	5.15804016	7.82	0.0052
country	1	0.79615659	0.79615659	1.21	0.2721
country*covidrate	1	0.27888388	0.27888388	0.42	0.5156
sr	1	0.19458880	0.19458880	0.30	0.5871
sr*covidrate	1	0.69446689	0.69446689	1.05	0.3050
sr*country	1	0.38614569	0.38614569	0.59	0.4443
sr*country*covidrate	1	0.00088370	0.00088370	0.00	0.9708

Dependent Variable: ban

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	9	54.1915327	6.0212814	7.71	<.0001
Error	1187	926.4868299	0.7805281		
Corrected Total	1196	980.6783626			

R-Square	Coeff Var	Root MSE	ban Mean
0.055259	31.53950	0.883475	2.801170

Source	DF	Type III SS	Mean Square	F Value	Pr > F
white	1	1.86469149	1.86469149	2.39	0.1225
ideology	1	5.70614873	5.70614873	7.31	0.0070
covidrate	1	0.32674782	0.32674782	0.42	0.5177
country	1	2.19452718	2.19452718	2.81	0.0938
country*covidrate	1	0.51080070	0.51080070	0.65	0.4187
sr	1	10.34545550	10.34545550	13.25	0.0003*
sr*covidrate	1	2.07413827	2.07413827	2.66	0.1033
sr*country	1	0.00097858	0.00097858	0.00	0.9718
sr*country*covidrate	1	0.05593601	0.05593601	0.07	0.7890

Additional results for "Relevance to COVID-19" experiment: Travel restrictions

Here, we again conducted a 2X2 ANCOVA, controlling for ideology and participant race.

`Dependent Variable: travel restrict`

```
                               Sum of
Source                    DF    Squares    Mean Square    F Value   Pr > F
Model                      5   41.723052      8.344610       6.30   <.0001
Error                   1192 1578.774444      1.324475
Corrected Total         1197 1620.497496
```

```
         R-Square    Coeff Var      Root MSE    travel restrict Mean
         0.025747    36.45501      1.150858              3.156928
```

```
Source                    DF   Type III SS   Mean Square   F Value   Pr > F
white                      1    2.84356170    2.84356170      2.15   0.1431
ideo                       1    0.20302376    0.20302376      0.15   0.6955
country                    1   18.94638730   18.94638730     14.30   0.0002
covidrate                  1   19.40604235   19.40604235     14.65   0.0001
country*covidrate          1    0.66125015    0.66125015      0.50   0.4800
```

Like the results for support for a travel ban, results revealed a main effect of condition and COVID-19 rate, such that participants were more supportive of travel restrictions in the high (vs. low) COVID-19 rate condition and in the Africa (vs. Europe) condition. These results hold when also controlling for spread-related third variables.

Additional results for "Relevance to COVID-19" experiment: National context

As noted in the text, this experiment examined COVID-19 responses in the context of the US. All respondents read about a hypothetical state in which they did not live, receiving information about the state such as education levels and poverty rates (relative to the US as a whole). They also randomly were assigned to conditions that varied the population of Black citizens in the state (high vs. low) and the COVID-19 rate (high vs. low). The design thus matched the experiment described in the main text but focused on a state instead of a country, operationalizing race with population percentage instead of a country's location. We then asked respondents the same outcome variables as in the other experiment.

Here, we test whether COVID rate (high vs. low), Black population (high vs. low), and their interaction affected participants' reported worry and support for travel bans. We conducted a 2X2 ANCOVA, controlling for ideology and participant race. Controlling for spread-related variables did not change the results reported here in a meaningful way.

For worry, results revealed a main effect of COVID-19 rate, such that participants reported greater worry in the high (vs. low) rate condition, $F(1, 1204) = 25.43$, $p < .0001$, $\eta^2 = .02$. Black population was not significant, nor was the interaction with COVID-19 rate.

`Dependent Variable: worry`

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	103.2667400	20.6533480	31.52	<.0001
Error	1204	788.8915704	0.6552256		
Corrected Total	1209	892.1583104			

R-Square	Coeff Var	Root MSE	worry Mean
0.115749	28.73963	0.809460	2.816529

Source	DF	Type III SS	Mean Square	F Value	Pr > F
white	1	13.03483788	13.03483788	19.89	<.0001
ideo	1	60.99159131	60.99159131	93.08	<.0001
trace	1	0.76411889	0.76411889	1.17	0.2804
covidrate	1	16.66484045	16.66484045	25.43	<.0001
trace*covidrate	1	0.51968803	0.51968803	0.79	0.3733

Results for travel ban support mirrored these results. Analyses revealed a main effect of COVID-19 rate, such that participants reported greater support for travel bans in the high (vs. low) rate condition. Black population was not significant, nor was the interaction with COVID-19 rate.

`Dependent Variable: ban`

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	99.307053	19.861411	23.82	<.0001
Error	1204	1004.072286	0.833947		
Corrected Total	1209	1103.379339			

R-Square	Coeff Var	Root MSE	ban Mean
0.090003	35.06761	0.913207	2.604132

```
Source                      DF    Type III SS    Mean Square   F Value   Pr > F
white                        1     2.79914350     2.79914350      3.36   0.0672
ideo                         1    57.83719006    57.83719006     69.35   <.0001
black_pop                     1     0.06706222     0.06706222      0.08   0.7768
covidrate                    1    32.00454331    32.00454331     38.38   <.0001
black_pop*covidrate           1     0.03587752     0.03587752      0.04   0.8357
```

Note that our manipulation of the Black population was quite subtle; it did not draw a lot of attention and, in both conditions, the state was described as majority White. Specifically, the "low" Black state was said to have a 14% Black population whereas the "high" Black state was said to have a 28% Black population. It could be that a stronger manipulation would have yielded different results. For example, a majority Black city with high (or even low) COVID-19 rates might have increased worry and support for travel restrictions.

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