

Supplementary Information  
*“Political Endorsements by Scientific Organizations  
Reduce Trust in Scientific Expertise During  
COVID-19”*

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This pdf contains 4 supplementary tables reporting sample summary statistics and additional analyses. A copy of the survey instrument is also attached.

Table 1: Sample Breakdown by Demographics

	Number	Percentage
<i>Gender</i>		
Female	2,257	52.98%
Male	1,982	46.53 %
<i>Age</i>		
< 18	10	0.23%.
18-22	414	9.72%
25-34	816	19.15%
35-44	811	19.04%
45-54	518	13.64%
55-65	885	20.77%
> 65	743	17.44%
<i>Hispanic</i>		
Hispanic/Latino/Spanish	684	16.06 %
<i>Race and Ethnicity</i>		
Black/African Am.	478	11.22%
White	3,314	77.79%
Am. Indian/Alaska Native	57	1.34%
Asian	213	5.00%
Nat. Hawaiian/Pac. Islander	21	0.49%
Other	177	4.15%
<i>Highest Level of Education</i>		
No High School	102	2.39%
HS graduate/GED	994	23.33%
Began college, no degree	857	20.12%
Associates/technical degree	590	59.68%
Bachelor's degree	1,144	26.85%
Postgrad./professional degree	573	13.54%
<i>Census Region</i>		
Northeast	838	19.68%
Midwest	834	19.58%
South	1,665	39.09%
West	922	21.65%
Total	4,260	100%

Note: only subjects who passed the attention check are included.

Table 2: Sample Breakdown by (Hypothetical) Presidential Vote Intention

	Number	Percentage
Definitely Biden	1,943	45.61%
Probably Biden	406	9.53%
Probably Trump	315	7.39%
Definitely Trump	1,221	28.66%
Someone else	375	8.80%
Total	4,260	100%

Note: only subjects who passed the attention check are included.  
the question asks who the subject would vote for if he or she “was  
to choose again”. Question placed prior to treatment assignment.

Table 3: Treatment Effect Estimates with Lasso Adjustment

Outcome $z$ -score	$\widehat{CATE}$	$\widehat{CATE}$
	Trump supporters (Robust s.e.)	Biden supporters (Robust s.e.)
<i>Nature</i> is informed when providing advice	-0.837*** (0.0498)	0.120*** (0.0292)
<i>Nature</i> is unbiased on contentious issues	-0.605*** (0.0462)	0.0606* (0.0283)
Biden would have handled COVID better than Trump had he been president in 2020	0.0607+ (0.0318)	0.0428+ (0.0231)
Trump would have handled COVID better than Biden if he was still president now(2021)	-0.0335 (0.0318)	-0.0118 (0.0228)
Biden is better at making use of scientific knowledge for decision-making than Trump	0.0542 (0.0346)	0.0131 (0.0137)
Subject requests <i>Nature</i> 's article for info about vaccine efficacy against new variants	-0.271*** (0.0444)	0.0534 (0.0395)
U.S. scientists are informed when providing advice	-0.119* (0.0525)	0.0573+ (0.0313)
U.S. scientists are unbiased on contentious issues	-0.137** (0.0494)	0.0279 (0.0288)
" $\geq 90\%$ " of climate scientists agree human-caused climate change is real	-0.0483 (0.0559)	0.0294 (0.0342)
Human-caused climate change is real	-0.0042 (0.0545)	0.0153 (0.0262)
$N$	1,530	2,336

" $\widehat{CATE}$  Trump (Biden) supporters" is the estimated treatment effect for Trump (Biden) supporters. All treatment effect and standard errors are estimated using the lasso adjustment methods proposed by **wager2016high**.

Sample includes 1,173 control Biden supporters, 1,176 treatment Biden supporters, 766 control Trump supporters, and 770 treatment supporters. Outcomes are  $z$ -scores with mean 0 and standard deviation 1.

+  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table 4: Multiple Testing Adjustments

Outcome $z$ -score	$\widehat{CATE}$	$\widehat{CATE}$	Baseline
	Trump supporters [ $p$ -value] {SFDR $q$ -value}	Biden supporters [ $p$ -value] {SFDR $q$ -value}	difference [ $p$ -value] {SFDR $q$ -value}
<i>Nature</i> is informed when providing advice	-0.854 [0.000] {0.001}	0.108 [0.000] {0.001}	-0.387 [0.000] {0.001}
<i>Nature</i> is unbiased on contentious issues	-0.633 [0.000] {0.001}	0.0450 [0.151] {0.082}	-0.655 [0.000] {0.001}
Biden would have handled COVID better than Trump had he been president in 2020	0.0556 [0.085] {0.343}	0.0448 [0.061] {0.224}	-1.642 [0.000] {0.001}
Trump would have handled COVID better than Biden if he was still president now(2021)	-0.0241 [0.465] {0.441}	-0.0168 [0.485] {0.478}	1.628 [0.000] {0.001}
Biden is better at making use of scientific knowledge for decision-making than Trump	0.0449 [0.204] {0.343}	0.0135 [0.478] {0.478}	-1.775 [0.000] {0.001}
Subject requests <i>Nature</i> 's article for info about vaccine efficacy against new variants	-0.285 [0.000] N/A <sup>+</sup>	-0.048 [0.238] N/A <sup>+</sup>	-0.386 [0.000] N/A <sup>+</sup>
U.S. scientists are informed when providing advice	-0.130 [0.015] {0.008}	0.0485 [0.148] {0.421}	-0.756 [0.000] {0.001}
U.S. scientists are unbiased on contentious issues	-0.161 [0.002] {0.005}	0.0161 [0.604] {0.433}	-0.937 [0.000] {0.001}
" $\geq 90\%$ " of climate scientists agree human-caused climate change is real	-0.0461 [0.409] {1.000}	0.0265 [0.449] {1.000}	-0.590 [0.000] {0.001}
Human-caused climate change is real	-0.0232 [0.690] {1.000}	0.0147 [0.582] {1.000}	-0.974 [0.000] {0.001}

$N = 3,885$

<sup>+</sup> Multiple testing adjustment not applicable as hypotheses associated with these parameters belong to clusters each containing a single hypothesis.

Sharpened False Discovery Rate  $q$ -values in curly brackets.

## Pre-Treatment Political Questions

First, we would like to ask some questions about yourself.

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

- ☐ Democrat
- ☐ Republican
- ☐ Independent
- ☐ Other party

Would you call yourself a strong Democrat or a not very strong Democrat?

- ☐ Strong
- ☐ Not very strong

Would you call yourself a strong Republican or a not very strong Republican?

- ☐ Strong
- ☐ Not very strong

Do you think of yourself as closer to the Republican Party or the Democratic Party?

- ☐ Closer to Republican
- ☐ Closer to Democratic

Who did you vote for in the past presidential election in 2020?

- ☐ Donal Trump
- ☐ Joe Biden
- ☐ Someone else
- ☐ Did not vote

If you were to choose again, and the major-party candidates were still Joe Biden the Democrat and Donald Trump the Republican, for whom would you vote?

- ☐ Definitely Trump
- ☐ Probably Trump
- ☐ Probably Biden
- ☐ Definitely Biden
- ☐ Someone else

Where would you place yourself on this liberal-conservarive scale?

- ☐ Extremely liberal
- ☐ Liberal
- ☐ Slightly liberal
- ☐ Moderate
- ☐ Slightly conservative
- ☐ Conservative
- ☐ Extremely conservative

## Prior

*Nature* is one of the most-cited scientific journals in the world. How likely do you think it is that *Nature* officially endorsed one of the candidates in the 2020 presidential election?

- ☐ They definitely did
- ☐ Very likely
- ☐ Somewhat likely
- ☐ Not very likely
- ☐ Not likely at all

Hypothetically, suppose *Nature* made an endorsement. Who would they endorse?

- ☐ Definitely Biden
- ☐ Probably Biden
- ☐ Equally likely to endorse Biden or Trump
- ☐ Probably Trump
- ☐ Definitely Trump

## Attention Check 1

Do you agree or disagree with the following statements?

		Neither				
		Agree				
		Nor				
Strongly		Disagree	Disagree	Strongly		Don't
Agree	Agree			Disagree		Know



I follow news about current events closely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vermont is LESS populous than California	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am worried about the vaccines' effectiveness against emerging COVID-19 variants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Please select "Disagree"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Two plus one equals three	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy popular science readings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Attention Check 2

People are very busy these days and many do not have time to follow what goes on in the government. **We are testing whether people read questions.** To show that you've read this much, answer **both** "extremely interested" **and** "very interested."

- ☐ Extremely interested
- ☐ Very interested
- ☐ Moderately interested
- ☐ Slightly interested
- ☐ Not interested at all

## Treatment/Control

**Please read the following short text  
before answering the next set of questions**

### Scientific journal *Nature* endorsed Joe Biden

- Weeks before the 2020 presidential election, ***Nature***'s editorial board officially endorsed Joe Biden, citing:
  - Donald Trump's pandemic response had been "disastrous";
  - Biden, unlike Trump, would listen to science, and thus;
  - Biden would handle the COVID-19 pandemic better.



(Reference: The full endorsement can be found here: <https://www.nature.com/articles/d41586-020-02852-x>)

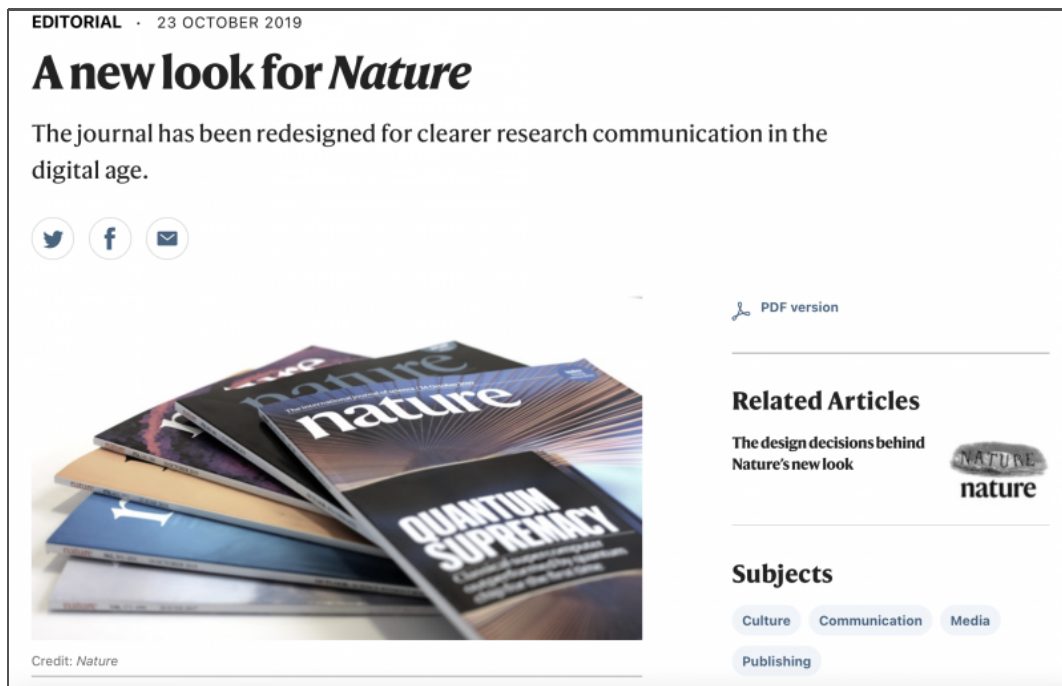
- ***Nature*** is one of the most-cited and most prestigious peer-reviewed scientific journals in the world.

# nature

Please read the following short text  
before answering the next set of questions

## Scientific journal *Nature* unveiled its new design

- In October 2019, *Nature*'s editorial board unveiled a new design for the scientific journal, including:
  - New print and digital designs:
  - A new logo.
- The editors hope the redesign will help the journal to communicate research with style and greater clarity.



(Reference :The full announcement can be found here: <https://www.nature.com/articles/d41586-019-03167-2>)

- *Nature* is one of the most-cited and most prestigious peer-reviewed scientific journals in the world.

# nature

In your opinion, how **informed** are editors of the journal *Nature*, when it comes to providing advice on science-related issues facing the society?

- ☐ Extremely informed
- ☐ Fairly informed
- ☐ Somewhat informed
- ☐ Not very informed
- ☐ Not informed at all

When contentious or divisive issues are concerned, how much confidence do you have in the editorial board of *Nature* to provide their **unbiased** opinions to the public, to the best of their knowledge?

- ☐ A great deal
- ☐ A lot
- ☐ A moderate amount
- ☐ A little
- ☐ None at all

## Policies and Politics

Next, we would like to ask a few questions on public policies and politics

Recall early 2020, when the COVID-19 outbreak began and Donald Trump was president. Had Joe Biden been president back then, would he have done a better job handling the pandemic than Trump did?

- ☐ Biden would have done much worse

- ☐ Biden would have done worse
- ☐ Biden would have done somewhat worse
- ☐ Biden would have done exactly the same
- ☐ Biden would have done somewhat better
- ☐ Biden would have done better
- ☐ Biden would have done much better

Now think instead about the present. If Donald Trump was president now, would he have done a better job handling COVID than Joe Biden has done since inauguration?

- ☐ Trump would have done much worse
- ☐ Trump would have done worse
- ☐ Trump would have done somewhat worse
- ☐ Trump would have done exactly the same
- ☐ Trump would have done somewhat better
- ☐ Trump would have done better
- ☐ Trump would have done much better

Which candidate of the 2020 presidential election, Joe Biden or Donald Trump, is better at making appropriate use of scientific knowledge for decision-making in general?

- ☐ Definitely Biden
- ☐ Probably Biden
- ☐ Maybe Biden
- ☐ Exactly the same
- ☐ Maybe Trump
- ☐ Probably Trump

☐ Definitely Trump

## Demand for information

### Stay Informed About Vaccine Efficacy Against New COVID Variants

- Emerging COVID-19 variants have been discovered around the globe. Many of the new variants are fast-spreading and raise public concerns about possible diminished vaccine effectiveness.



- To help you stay informed, we would like to share with you some **links easy-to-read articles on** what scientists know about these **new variants and how well available vaccines perform against them.**

(Note: reading the articles is NOT required for receiving your payment. You may select your preferred sources and save the links to read them later.)

Please select ALL sources you would like to read from. You may select multiple sources.

- ☐ I would like to read an article from *Nature*
- ☐ I would like to read an article from the Mayo Clinic
- ☐ I would like to read an article from news media websites
- ☐ I do not want to read about the new variants or vaccine effectiveness

Are you sure you do not want to learn about the new variants and how effective available vaccines are against them?

Again, reading the articles is NOT required for receiving your payment. You may bookmark or save the links to read them later.

Please check ALL sources you would like to read from. You may select multiple sources.

- ☐ I would like to read an article from *Nature*
- ☐ I would like to read an article from the Mayo Clinic
- ☐ I would like to read an article from news media websites
- ☐ I am sure that I do not want to read about the new variants or vaccine effectiveness

For your information, we recommend the *Nature* article below.

[What scientists know about new, fast-spreading coronavirus variants](#) - *Nature*

Again, reading the article is NOT required for receiving your payment. You can bookmark or save the page for later.

[ Note: More information on COVID-19 for the American public available at: <https://www.cdc.gov/coronavirus/2019-ncov/index.html> ]

For your information, we recommend the Mayo Clinic articles below.

[What is a COVID-19 variant strain?](#) - Mayo Clinic

[COVID-19 Variants: what's the concern?](#) - Mayo Clinic

Again, reading the article is NOT required for receiving your payment. You can bookmark or save the page for later.

[ Note: More information on COVID-19 for the American public available at: <https://www.cdc.gov/coronavirus/2019-ncov/index.html> ]

For your information, we recommend the Yahoo News article below.

[Delta virus variant, which took over in the UK and threatens the US, doubles the risk of hospitalization, new data says. But vaccines are still effective.](#) - Yahoo News

Again, reading the article is NOT required for receiving your payment. You can bookmark or save the page for later.

[ Note: More information on COVID-19 for the American public available at: <https://www.cdc.gov/coronavirus/2019-ncov/index.html> ]

For your information, we recommend the articles below.

[What scientists know about new, fast-spreading coronavirus variants](#) - Nature

[What is a COVID-19 variant strain?](#) - Mayo Clinic

[COVID-19 Variants: what's the concern?](#) - Mayo Clinic

Again, reading the article is NOT required for receiving your payment. You can bookmark or save the page for later.



[ Note: More information on COVID-19 for the American public available at: <https://www.cdc.gov/coronavirus/2019-ncov/index.html> ]

For your information, we recommend the articles below.

[What scientists know about new, fast-spreading coronavirus variants](#) - Nature

[Delta virus variant, which took over in the UK and threatens the US, doubles the risk of hospitalization, new data says. But vaccines are still effective.](#) - Yahoo News

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[What is a COVID-19 variant strain?](#) - Mayo Clinic

[COVID-19 Variants: what's the concern?](#) - Mayo Clinic

[Delta virus variant, which took over in the UK and threatens the US, doubles the risk of hospitalization, new data says. But vaccines are still effective.](#) - Yahoo News

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[What scientists know about new, fast-spreading coronavirus variants](#) - *Nature*

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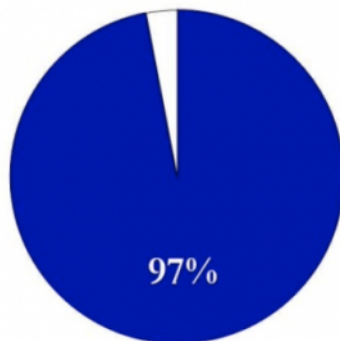
[COVID-19 Variants: what's the concern?](#) - Mayo Clinic

[Delta virus variant, which took over in the UK and threatens the US, doubles the risk of hospitalization, new data says. But vaccines are still effective.](#) - Yahoo News

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[ Note: More information on COVID-19 for the American public available at: <https://www.cdc.gov/coronavirus/2019-ncov/index.html> ]

## Climate Change



According to the editorial board of ***Nature***, **97% of climate scientists agree**

**that climate change is both real and caused by human activities.**

# nature

What share of climate scientists **do YOU think** agree that climate change is both real and caused by human activities?

- ☐ <10%
- ☐ 10-29%
- ☐ 30-49%
- ☐ 50-69%
- ☐ 70-89%
- ☐ ≥90%

Do you think human activity is causing changes to the world's climate?

- ☐ Definitely
- ☐ Probably
- ☐ Maybe
- ☐ Probably not
- ☐ Definitely not

## Trust in Science

In general, how **informed** are **U.S. scientists** when it comes to providing advice on science-related issues facing the society?

- ☐ Extremely informed

- ☐ Fairly informed
- ☐ Somewhat informed
- ☐ Not very informed
- ☐ Not informed at all

When contentious or divisive issues are concerned, how much confidence do you have in **U.S. scientists** to provide their **unbiased** opinions to the public, to the best of their knowledge?

- ☐ A great deal
- ☐ A lot
- ☐ A moderate amount
- ☐ A little
- ☐ None at all

### Manipulation Check

Did the scientific journal *Nature* make any explicit political statements in support of any candidates in the run up to the 2020 presidential election?

- ☐ No, they did not.
- ☐ Yes, they endorsed Joe Biden.
- ☐ Yes, they endorsed Donald Trump.
- ☐ Don't know

Do you remember what *Nature* said about Joe Biden? Check ALL you can recall. Feel free to answer "I don't know or remember any" if you can't recall any.

- ☐ He would push for more generous economic stimulus packages
- ☐ He would listen to science
- ☐ He would handle COVID better
- ☐ He would build a coalition of allies against China and Russia
- ☐ He would provide more funding for STEM education
- ☐ He would provide more funding for K-12 education
- ☐ He would push for a "Green New Deal"
- ☐ I don't know or remember any

## Demographic

Finally, we have a few more questions about yourself.

How old are you?

- ☐ Under 18
- ☐ 18-24 years old
- ☐ 25-34 years old
- ☐ 35-44 years old
- ☐ 45-54 years old
- ☐ 55-64 years old
- ☐ 65+ years old

What's your gender?

- ☐ Male
- ☐ Female
- ☐ Others

In which state do you currently reside?

What is the highest level of education you have completed?

- ☐ Did not graduate high school
- ☐ High school graduate or GED
- ☐ Began college, no degree
- ☐ Associates or technical degree
- ☐ Bachelor's degree
- ☐ Postgraduate or professional degree

What is your postgraduate or professional degree in? Check all that apply.

- ☐ Science
- ☐ Engineering
- ☐ Social Sciences
- ☐ Arts and Humanities
- ☐ Medicine
- ☐ Public Health
- ☐ Law
- ☐ Business
- ☐ Public Policy
- ☐ Other

What is your bachelor's degree in?

- ☐ Science
- ☐ Engineering
- ☐ Social Sciences
- ☐ Arts and Humanities
- ☐ Business
- ☐ Public Policy
- ☐ Other

What religious group do you consider yourself affiliated with?

- ☐ Mainline Protestant
- ☐ Historically black Protestant
- ☐ Evangelical Protestant
- ☐ Catholic
- ☐ Other Christian
- ☐ Jewish
- ☐ Muslim
- ☐ Other religion or faith
- ☐ Atheist
- ☐ Agnostic
- ☐ Nothing in particular

Which of the following best describes the area you live in?

- ☐ Urban – Densely populated, city or large town
- ☐ Suburban – Mainly residential, bordering a city or large town
- ☐ Rural – Sparsely populated, small town or village

Are you of Hispanic, Latino, or Spanish origin?

- ☐ No
- ☐ Yes

What is your race/ethnicity?

- ☐ Black or African American
- ☐ White
- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Native Hawaiian or Other Pacific Islander
- ☐ Other

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