

Title: Survey instrument and experimental stimuli appendix for “State media tagging does not affect perceived tweet accuracy: Evidence from a U.S. Twitter experiment in 2022”

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Date: February 20th, 2025

Note: The material contained herein is supplementary to the article named in the title and published in the Harvard Kennedy School (HKS) Misinformation Review.

Appendix A: Survey instrument and experimental stimuli

Consent

Thank you for your time. This research survey will take approximately eight minutes to complete, and your participation is entirely voluntary.

We take your confidentiality extremely seriously. Any answers you provide in this research survey will be anonymous and confidential. The data from the study will be stored securely on password-protected university computers. However, any online interaction carries some risk of being accessed. We cannot and do not guarantee or promise that you will receive any benefits from this study.

The purpose of this survey is to learn about public opinion towards issues in the news.

The information collected will be recorded anonymously. Questions about this project may be directed to:

Brendan Nyhan HB 6108
Hanover, NH 03755
brendan.j.nyhan@dartmouth.edu

You may refuse to answer any particular questions. You are free to end your participation at any time by closing this window (although any answers you have already entered may still be submitted).

By clicking the “yes” button below you agree to participate in this confidential research study.

- Yes
- No

Demographics

How old are you?

- Under 18
- 18 - 24
- 25 - 34
- 35 - 44
- 45 - 54
- 55 - 64
- 65 - 74

- 75 - 84
- 85 or older

In what state do you currently reside?
(pull-down menu)

What is your gender?

- Male
- Female
- Nonbinary/Two-spirit
- Other
- Prefer not to say

Please check one or more categories below to indicate what race(s) you consider yourself to be.

- American Indian or Alaska Native
- Asian or Pacific Islander
- Black or African-American
- White
- Multi-racial
- Other

Are you of Spanish or Hispanic origin or descent?

- Yes
- No

What is the highest degree or level of school you have completed?

- Did not graduate from high school
- High school diploma or the equivalent (GED)
- Some college
- Associate's degree
- Bachelor's degree
- Master's degree
- Professional or doctorate degree

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

- Republican
- Democrat
- Independent
- Something else

If the answer to "Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or something else?" is "Independent" or "Something else":

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

- Closer to the Republican Party

- Closer to the Democratic Party
- Neither

If the answer to “Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or something else?” is “Democrat”:

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

- Strong Democrat
- Not very strong Democrat

If the answer to “Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or something else?” is “Republican”:

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

- Strong Republican
- Not very strong Republican

Generally, how interested are you in politics?

- Extremely interested
- Very interested
- Somewhat interested
- Not very interested
- Not at all interested

Attention checks (excluded if failed either)

Please indicate whether you agree or disagree with each statement below.

People convicted of murder should be given the death penalty.

World War I came after World War II.

Gays and lesbians should have the right to legally marry.

In order to reduce the budget deficit, the federal government should raise taxes on people who make more than \$250,000 per year.

The Affordable Care Act passed by Congress in 2010 should be repealed.

By law, abortion should never be permitted.

In order to reduce the budget deficit, the federal government should eliminate all welfare programs that help poor people.

The federal government should raise the minimum wage to \$10.

The federal government should guarantee health insurance for all citizens.

The federal government should pass new rules that protect the right of workers to join labor unions.

Barack Obama was the first president of the United States.

- Strongly agree
- Somewhat agree

- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

Pretreatment covariate questions

What is your overall opinion of the following countries?

China

Serbia

United Kingdom

Russia

United States of America

- Very favorable
- Somewhat favorable
- Somewhat unfavorable
- Very unfavorable

In general, how much trust and confidence do you have in the mass media—such as newspapers, TV, radio, and online media—when it comes to reporting the news fully, accurately, and fairly?

- A great deal
- A moderate amount
- Not much
- Not at all

In general, how much trust and confidence do you have in state-affiliated media when it comes to reporting the news fully, accurately, and fairly?

- A great deal
- A moderate amount
- Not much
- Not at all

When independent fact-checking organizations evaluate the accuracy of claims made online, how much do you trust these organization’s evaluations?

- A great deal
- A moderate amount
- Not much
- Not at all

Please check all of the following news media sources which you have heard of, whether you get your news from them or not.

- The New York Times
- The BBC
- The Wall Street Journal
- CBS
- Reuters
- The Washington Post

- The Guardian
- The Global Times
- The Centennial
- Newsweek
- Newsmax
- Wait But Why

If the answer to “Please check all of the following news media sources which you have heard of, whether you get your news from or not” is “The Global Times”:

You indicated that you have heard of a news outlet called Global Times. In general, how much trust and confidence do you have in Global Times when it comes to reporting the news fully, accurately, and fairly?

- A great deal
- A moderate amount
- Not much
- Not at all

How frequently do you use Twitter?

- Daily
- A few times a week
- Once a week
- A few times a month
- Once a month
- Less frequently than once a month
- Never

If the answer to “How frequently do you use Twitter?” is not “Never”:

How frequently do you read political news stories on Twitter?

- Daily
- A few times a week
- Once a week
- A few times a month
- Once a month
- Less frequently than once a month
- Never

Treatment instructions

On the following pages, you will see a series of tweets. Please read the tweets carefully and respond to the questions that follow.

Tweet accuracy evaluation task (shown in randomized order)

Condition: No tags/labels



Condition: Fact-checks



Condition: China state media



Condition: Serbia state media



Condition: Generic state media



(should have omitted fact-check label)

Please indicate whether you believe the following statement is accurate or not:

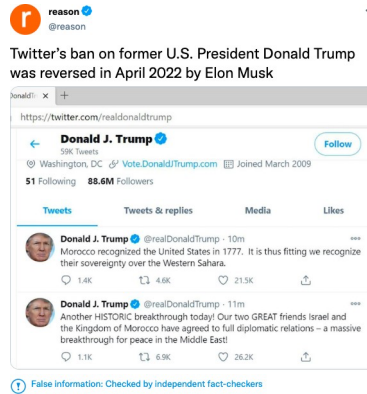
Doctors confirmed the first official death caused by GMO fish genes.

- Very accurate
- Somewhat accurate
- Not very accurate
- Not at all accurate

Condition: No tags/labels



Condition: Fact-checks



Condition: China state media



Condition: Serbia state media



Condition: Generic state media



Please indicate whether you believe the following statement is accurate or not:

Elon Musk reinstated Donald Trump on Twitter.

- Very accurate
- Somewhat accurate
- Not very accurate
- Not at all accurate

Condition: No tags/labels



Condition: Fact-checks



Condition: China state media



Condition: Serbia state media



Condition: Generic state media



Please indicate whether you believe the following statement is accurate or not:

The FBI planned and executed the January 6th Capitol Riot.

- Very accurate
- Somewhat accurate
- Not very accurate
- Not at all accurate

Condition: No tags/labels

Condition: Fact-checks

 The New York Times
@nytimes

J.D. Vance, who wrote a memoir called "Hillbilly Elegy" about life in Appalachia, won the Republican Ohio Senate primary after being endorsed by Donald Trump. The result was a strong affirmation of Trump's continued grip on his party's base



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Condition: China state media

Condition: Serbia state media.

Condition: Generic state media

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J.D. Vance, who wrote a memoir called "Hillbilly Elegy" about life in Appalachia, won the Republican Ohio Senate primary after being endorsed by Donald Trump. The result was a strong affirmation of Trump's continued grip on his party's base



Please indicate whether you believe the following statement is accurate or not:

J.D. Vance won the Republican Ohio Senate primary.

- Very accurate
- Somewhat accurate
- Not very accurate
- Not at all accurate

Condition: No tags/labels



Condition: Fact-checks



Condition: China state media



Condition: Serbia state media



Condition: Generic state media



Please indicate whether you believe the following statement is accurate or not:

Berkshire shareholders overwhelmingly voted to keep Buffett chairman.

- Very accurate
- Somewhat accurate
- Not very accurate
- Not at all accurate

Condition: No tags/labels



Condition: Fact-checks



Condition: China state media



Condition: Serbia state media



Condition: Generic state media



Please indicate whether you believe the following statement is accurate or not:

Florida rejected 54 math textbooks over "prohibited topics."

- Very accurate
- Somewhat accurate
- Not very accurate
- Not at all accurate

Condition: No tags/labels

 No Lie with Brian Tyler Cohen
@NoLieWithBTC

NEW: Iowa Republicans have introduced a bill that would put government-installed cameras in every single classroom to livestream school activities for parents to spy on teachers and children at all times of the day.

Condition: Fact-checks

 No Lie with Brian Tyler Cohen
@NoLieWithBTC

NEW: Iowa Republicans have introduced a bill that would put government-installed cameras in every single classroom to livestream school activities for parents to spy on teachers and children at all times of the day.

Condition: China state media

 No Lie with Brian Tyler Cohen
@NoLieWithBTC

NEW: Iowa Republicans have introduced a bill that would put government-installed cameras in every single classroom to livestream school activities for parents to spy on teachers and children at all times of the day.

Condition: Serbia state media

 No Lie with Brian Tyler Cohen
@NoLieWithBTC

NEW: Iowa Republicans have introduced a bill that would put government-installed cameras in every single classroom to livestream school activities for parents to spy on teachers and children at all times of the day.

Condition: Generic state media

 No Lie with Brian Tyler Cohen
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NEW: Iowa Republicans have introduced a bill that would put government-installed cameras in every single classroom to livestream school activities for parents to spy on teachers and children at all times of the day.

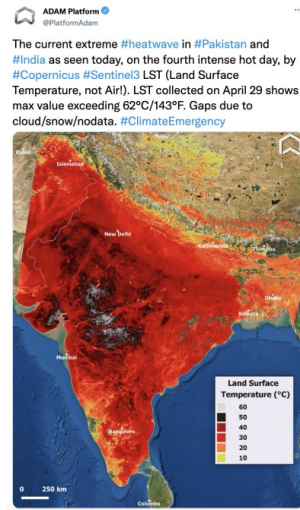
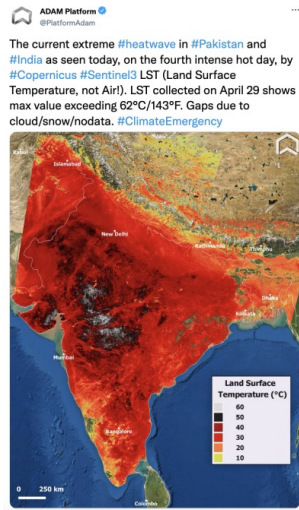
Please indicate whether you believe the following statement is accurate or not:

Iowa Republicans introduced a bill that would put cameras in every classroom.

- Very accurate
- Somewhat accurate
- Not very accurate
- Not at all accurate

Condition: No tags/labels

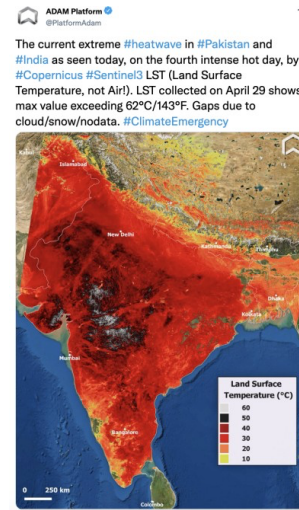
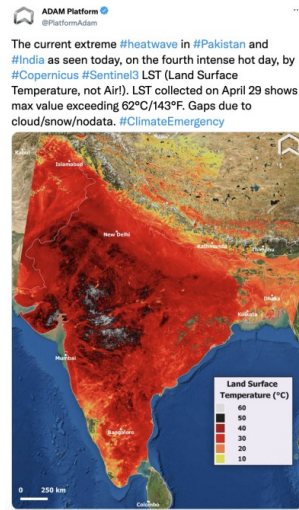
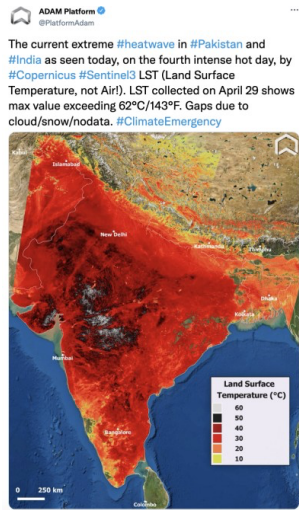
Condition: Fact-checks



Condition: China state media

Condition: Serbia state media

Condition: Generic state media

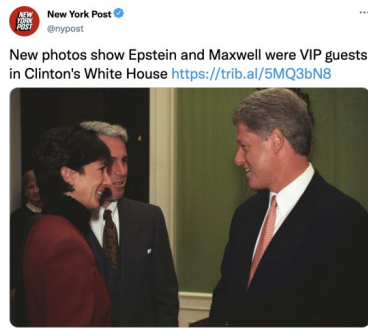


Please indicate whether you believe the following statement is accurate or not:

Land surface temperature reached 143°F in Pakistan and India.

- Very accurate
- Somewhat accurate
- Not very accurate
- Not at all accurate

Condition: No tags/labels



Condition: Fact-checks



Condition: China state media



Condition: Serbia state media



Condition: Generic state media



Please indicate whether you believe the following statement is accurate or not:

Bill Clinton was photographed with Jeffrey Epstein and Ghislaine Maxwell at the White House.

- Very accurate
- Somewhat accurate
- Not very accurate
- Not at all accurate

Condition: No tags/labels

 **Mandela Barnes** 
@TheOtherMandela

To anyone living in fear of the myth of wages growing too quickly, it's been over 50 years since the minimum wage and inflation parted ways, then over a decade since the federal minimum wage went up at all.

5:21 PM · May 23, 2021

Condition: Fact-checks

 **Mandela Barnes** 
@TheOtherMandela

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5:21 PM · May 23, 2021



Condition: China state media

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Condition: Serbia state media

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Condition: Generic state media

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To anyone living in fear of the myth of wages growing too quickly, it's been over 50 years since the minimum wage and inflation parted ways, then over a decade since the federal minimum wage went up at all.

5:21 PM · May 23, 2021

Please indicate whether you believe the following statement is accurate or not:

It has been decades since the minimum wage kept up with inflation.

- Very accurate
- Somewhat accurate
- Not very accurate
- Not at all accurate

Condition: No tags/labels



Condition: Fact-checks



Condition: China state media



Condition: Serbia state media



Condition: Generic state media



Please indicate whether you believe the following statement is accurate or not:

Anti-extremist efforts have liberated Uyghur women in Xinjiang.

- Very accurate
- Somewhat accurate
- Not very accurate
- Not at all accurate

Condition: No tags/labels



Condition: Fact-checks



Condition: China state media



Condition: Serbia state media



Condition: Generic state media



(missing state media tag)

Please indicate whether you believe the following statement is accurate or not:

Taiwanese TV mistakenly reported on a Chinese attack on Taipei.

- Very accurate
- Somewhat accurate
- Not very accurate
- Not at all accurate

Condition: No tags/labels



Condition: Fact-checks



Condition: China state media



Condition: Serbia state media



Condition: Generic state media



Please indicate whether you believe the following statement is accurate or not:

The United States and Poland are working to establish Polish control over some of Ukraine.

- Very accurate
- Somewhat accurate
- Not very accurate
- Not at all accurate

Condition: No tags/labels



Condition: Fact-checks



Condition: China state media



Condition: Serbia state media



Condition: Generic state media



Please indicate whether you believe the following statement is accurate or not:

Left-wing parties formed a coalition against French President Macron.

- Very accurate
- Somewhat accurate
- Not very accurate
- Not at all accurate

Condition: No tags/labels



Condition: Fact-checks



Condition: China state media



Condition: Serbia state media



Condition: Generic state media



Please indicate whether you believe the following statement is accurate or not:

There was no genocide in Srebrenica.

- Very accurate
- Somewhat accurate
- Not very accurate
- Not at all accurate

Condition: No tags/labels



Condition: Fact-checks



Condition: China state media



Condition: Serbia state media



Condition: Generic state media



Please indicate whether you believe the following statement is accurate or not:

Ivica Dacic assessed that Serbia must not sanction Russia.

- Very accurate
- Somewhat accurate
- Not very accurate
- Not at all accurate

News trust

Some of the tweets you saw were from a news outlet called Global Times. In general, how much trust and confidence do you have in Global Times when it comes to reporting the news fully, accurately, and fairly?

- A great deal
- A moderate amount
- Not much
- Not at all

Manipulation/attention check and end-of-survey measures

Please identify which (if any) of the following elements you saw in the tweets in this survey.

- “State-affiliated media” tag
- “False information” tag
- “Promoted by” label
- None of the above

Please identify which of the statements (if any) you have read about in tweets from this survey. If you know about a story below, but did not see it as a tweet in this survey, please do not select it.

- Naomi Osaka struggles in return to tournament.
- Barn destroyed by fire at Ellis Park.
- High school accused of censorship by ripping yearbook pages.
- Serbian government sends military aid to Ukraine.
- Taiwanese TV mistakenly reports a Chinese attack on Taipei.

If the answer to “Please check all of the following news media sources which you have heard of, whether you get your news from them or not” is “The Global Times”:

Earlier in the survey, you indicated you had heard of the news outlet The Global Times. Without looking up any additional information, please indicate what, if anything, you know about The Global Times.

(open text box)

We sometimes find people don’t always take surveys seriously, instead providing humorous, or insincere responses to questions. How often do you do this?

- Always
- Most of the time
- Rarely
- Never

It is essential for the validity of this study that we know whether participants looked up any information online during the study. Did you make an effort to look up information during the study? Please be honest; you will still be paid and you will not be penalized in any way if you did.

- Yes, I looked up information.
- No, I did not look up information.

Do you have any comments on the survey? Please let us know about any problems you had or aspects of the survey that were confusing.

(open text box)

Debrief

Thank you for your participation in this survey. The purpose of this study was to evaluate how the presence or absence of state-affiliated media and fact-checking tags affects perceptions of accuracy.

Throughout this survey, you encountered multiple false and/or misleading media stories that have been rated false by independent fact-checkers. Additionally, you encountered truthful media stories. Below, additional information will be provided for both misleading and truthful stories.

Please note that this research is not intended to support or oppose any political candidate or office. The research has no affiliation with any political candidate or campaign and has received no financial support from any political candidate or campaign. Should you have any questions about this study, please contact Prof. Brendan Nyhan at nyhan@dartmouth.edu.

False information

- Global Times is a Chinese-state-affiliated, English-language newspaper. It is not a Serbian news source.
- The claim you read stating that doctors have confirmed the first human death officially caused by GMO fish genes is false. It has been fact-checked by Snopes.com.
- The claim that you read stating that Elon Musk reversed Donald Trump's twitter ban is false. It has been fact-checked by Snopes.com. It was constructed for this study. Reason magazine has never tweeted about Elon Musk's reversal of Donald Trump's Twitter ban, but this claim has been circulated on social media.
- The claim that you read implying that the FBI planned the January 6th Capitol Riot is false. It has been fact-checked by FactCheck.org. It was constructed for this study. The Tatum Report has written an article on the FBI planning the January 6th Capitol Riot but never tweeted about it.
- The claim you read stating that the anti-extremist efforts have liberated Uyghur women in Xinjiang is false. It has been fact-checked by ABC News and the US State Department. The claim was constructed for this study. Global Times has never tweeted that claim; it is attributed to a real tweet from the Chinese Embassy in the US which had since been removed from Twitter because it violated Twitter Rules.
- The claim that there was no genocide in Srebrenica is false. It has been fact-checked by the Associated Press. It was constructed for this study. Global Times never tweeted that specific claim; the story originates from an article by B92, a Serbian state-affiliated media outlet.
- The claim that the United States and Poland are working to restore Poland's "historic territorial possessions" in Ukraine is false. It has been fact-checked by Polygraph.info. It was constructed for this study. Global Times has never tweeted that specific claim; it originates from a tweet from B92, a Serbian state-affiliated media outlet.

Truthful information (source changed)

- The claim that Berkshire shareholders overwhelmingly voted to keep Buffett as chairman has been substantiated by Reuters. The tweet was constructed for this study. Money Control has not tweeted about the claim, but the tweet utilizes Money Control’s article headline as the tweet’s body.
- The claim that Florida rejected fifty-four math textbooks over “prohibited topics” has been substantiated by Snopes.com. The tweet was constructed for this study. The Guardian has not tweeted about the claim, but the tweet utilizes The Guardian’s article headline as the tweet’s body.
- The claim that a Taiwanese TV station mistakenly reported a Chinese attack on Taipei has been substantiated by Reuters and The Guardian. The tweet is real, but it originates from B92, a Serbia state-affiliated media source, and not Global Times, a Chinese state-affiliated media source.
- The claim that Ivica Dacic assessed that Serbia must not sanction Russia has been substantiated by the Associated Press. The tweet is also real, but it originates from B92, a Serbia state-affiliated media source, and not Global Times, a Chinese state-affiliated media source.
- The claim that left-wing coalitions formed a coalition against French President Macron has been substantiated by The Economist, Reuters, and Politico. The tweet is also real, but it originates from the BBC and not Global Times, a Chinese state-affiliated media source.

Truthful information

- The claim that J.D. Vance won the Republican Ohio Senate primary has been substantiated by the BBC. The tweet is real and originates from The New York Times.
- The claim that Iowa Republicans introduced a bill that would place cameras in classrooms has been substantiated by Politifact. The tweet is real and originates from No Lie with Brian Tyler Cohen.
- The claim that land surface temperature reached 143°F in Pakistan and India has been rated true by Snopes.com. The tweet is real and originates from ADAM Platform.
- The claim that Bill Clinton was photographed with Jeffrey Epstein and Ghislaine Maxwell at the White House has been rated true by Snopes.com. The tweet is real and originates from The New York Post.
- The claim that it has been decades since the minimum wage kept up with inflation and years since it increased has been substantiated by Politifact. The tweet originates from Mandela Barnes. A version of this tweet in which the wording was adjusted slightly for clarity was constructed for this study.