Online Appendix A: Survey details

Survey details

Participants in the U.S. study were YouGov panel members who consented to participate in an online study (YouGov determines the specific eligibility and exclusion criteria for their panel). Researchers have no role in selecting the participants. This study was conducted among a representative sample of the U.S. population by YouGov, which recruits a large panel of opt-in respondents and then uses a weighting and matching algorithm to construct a final sample that mirrors the demographic composition of the U.S. population. Our participants closely resemble the U.S. population in both demographics and political attitudes and affiliations (see demographics reported in the Table A1). The experimental results we present do not use survey weights per Franco et al. (2017) and Miratrix et al. (2018).

The survey was a two-wave panel conducted from November 20–December 27, 2018 (Wave 1, N=4,907) and December 14, 2018–January 3, 2019 (Wave 2, N=4,283) as part of a larger study reported in a different paper. The voter fraud experiment reported in the main text took place almost exclusively in Wave 2, although we use a few background questions listed below from Wave 1.

We coded respondents' Pulse data, categorizing mainstream news visit, fact-checking visit, and fake news visits (see Appendix D) computed as a binary measure of exposure to the aforementioned types of content, as well as a a count of total webpages visited from each category during the 7 days following Wave 1. Data was collected by YouGov via anonymized web traffic data from respondents. However, the Pulse data is used only as a moderator in our exploratory analysis in Appendix D and was not used for any results in the main text.

Figure A1: Experimental design and process

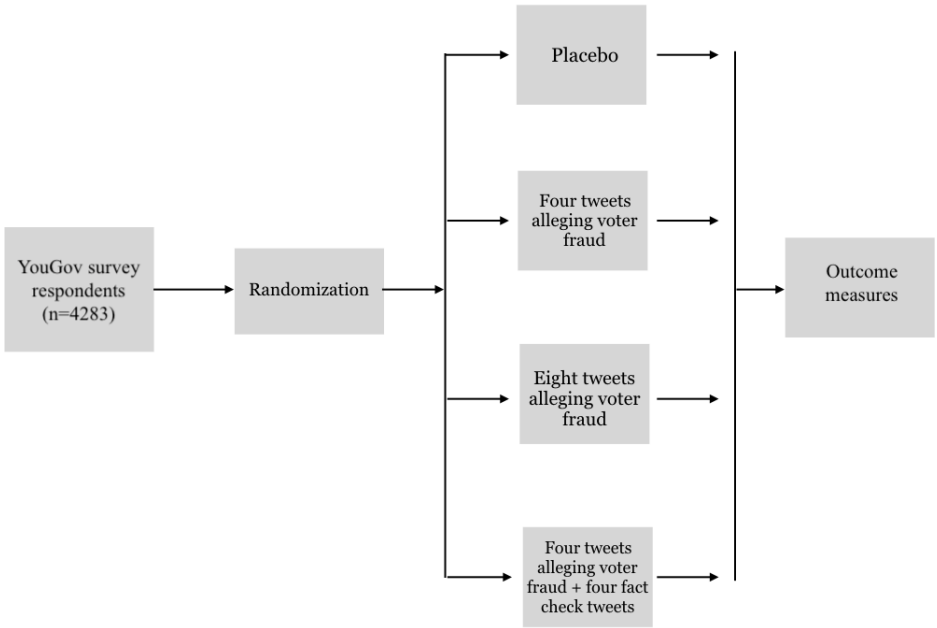


Table A1: Characteristics of YouGov sample

Characteristic	Sample	Census	Gallup
Education			
Less than high school	4.2%	15.2%	-
High school graduate	31.4%	27.3%	-
Some college/less than four-year degree	32.5%	26.8%	-
Bachelor's degree	20.3%	19.6%	-
Postgraduate degree	11.6%	11.0%	-
Age			
18–24	8.0%	13.1%	-
25–44	34.8%	35.0%	-
45–64	36.1%	34.7%	-
65 and older	21.1%	17.2%	-
Gender			
Male	45.4%	48.4%	-
Female	54.6%	51.6%	-
Party			
Democrats	36.8%	-	34.0%
Republicans	26.2%	-	25.0%
Independents	37.0%	-	39.0%
Trump approval			
Disapprove	56.9%	-	37.0%
Approve	43.1%	-	59.0%

Unweighted YouGov survey sample. Sources for population benchmarks: education (United States Census Bureau 2020), age and gender (Howden and Meyer 2011), party (Gallup 2020*a*), and Trump approval (Gallup 2020*b*).

Table A2: Sample characteristics by treatment

Characteristic	Low dose	High dose	Low dose + fact-check	Control
Education				
Less than high school	4.1%	4.2%	3.9%	3.9%
High school graduate	29.9%	30.7%	31.1%	32.8%
Some college/less than four-year degree	31.2%	32.4%	33.3%	33.0%
Bachelor's degree	20.9%	22.3%	19.9%	18.7%
Postgraduate degree	13.9%	10.4%	11.8%	11.6%
Age				
18–24	6.4%	6.5%	7.4%	6.9%
25–44	32.5%	33.2%	33.3%	33.9%
45–64	38.0%	37.1%	36.7%	38.0%
65 and older	23.1%	23.2%	22.6%	21.2%
Gender				
Male	46.1%	44.2%	44.2%	48.2%
Female	53.9%	55.8%	55.8%	51.8%
Party				
Democrats	37.0%	36.1%	36.2%	36.8%
Republicans	25.7%	27.4%	26.1%	26.8%
Independents	37.3%	36.5%	37.7%	36.4%
Trump approval				
Disapprove	56.2%	57.1%	57.3%	56.1%
Approve	43.8%	42.9%	42.7%	43.9%

Unweighted YouGov survey sample.

Table A3: Missing data across variables by treatment

Variable	Low dose	High dose	Low dose + fact-check	Control
Outcome measures				
Election confidence (composite)	0.0%	0.0%	0.0%	0.0%
Support for democracy (composite 1)	0.9%	0.7%	0.6%	0.7%
Support for democracy (composite 2)	0.1%	0.0%	0.2%	0.2%
Moderators				
Party	0.0%	0.0%	0.0%	0.0%
Trump approval	0.1%	0.1%	0.0%	0.0%
Trump feeling thermometer	3.3%	3.6%	4.4%	2.8%
Media feeling thermometer	3.6%	4.5%	4.2%	3.6%
Mass media trust	0.1%	0.0%	0.0%	0.1%
Conspiracy predisposition	0.4%	0.7%	0.3%	0.5%
Political interest	0.2%	0.2%	0.3%	0.1%
Political knowledge	0.0%	0.0%	0.0%	0.0%
Untrustworthy website visits	79.3%	78.2%	77.5%	78.8%
Fact-check website visits	79.3%	78.2%	77.5%	78.8%

Note: We employ listwise deletion in our analyses.

Table A4: Response rate

Invitations	15645
Starts	5863
Completes	5128
Partial completes	312
Ineligible	423
Nonresponse	9782
Eligibility rate	92.8%
Response rate 3	35.3%
I/((I+P)+(R+NC+O)+e(UH+UO))	
Cooperation rate 3	94.3%
I/((I+P)+R)	

Wave 1

Party ID questions

Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent,or something else? (Options: Republican, Democrat, Independent, Something else)

[if Democrat selected] Would you call yourself a strong Democrat or not a very strong Democrat? (Options: Strong Democrat or Not very strong Democrat)

[if Republican selected] Would you call yourself a strong Republican or not a very strong Republican? (Options: Strong Republican or Not very strong Republican)

Political interest

Some people seem to follow what's going on in government and public affairs most of the time, whether there's an election going on or not. Others aren't that interested. Would you say you follow what's going on in government and public affairs? (Options: Most of the time, Some of the time, Only now and then, Hardly at all, Don't know)

Political knowledge

Questions below used to create a scale measuring political knowledge that ranges from 0 (no questions correct) to 8 (all questions correct)

How many times can an individual be elected President of the United States under current laws? (Options: Once, Twice, Four times, Unlimited number of terms, Don't know)

How many U.S. Senators are there from each state? (Options: One, Two, Depends on which state, Don't know)

Who is currently the Prime Minister of the United Kingdom? (options: Richard Branson, Nick Clegg, David Cameron, Theresa May, Margaret Thatcher, Don't know)

For how many years is a member of the United States House of Representatives elected - that is, how many years are there in one full term of office for a U.S. House member? (Options: Two years, Four years, Six years, Eight years, For life, Don't know)

Conspiracy predispositions - mean of four items:

Much of our lives are being controlled by plots hatched in secret places. (Options: Strongly agree (5), Somewhat agree (4), Neither disagree nor disagree (3), Somewhat disagree (2), Strongly disagree (1)

Even though we live in a democracy, a few people will always run things anyway. (Options: Strongly agree (5), Somewhat agree (4), Neither disagree nor disagree (3), Somewhat disagree (2), Strongly disagree (1)

The people who really 'run' the country are not known to the voter. (Options: Strongly agree (5), Somewhat agree (4), Neither disagree nor disagree (3), Somewhat disagree (2),Strongly disagree (1)

Big events like wars, recessions, and the outcomes of elections are controlled by small groups of people who are working in secret against the rest of us. (Options: Strongly agree (5), Somewhat agree (4), Neither disagree nor disagree (3), Somewhat disagree (2), Strongly disagree (1)

Trust in confidence in mass media in reporting news

In general, how much trust and confidence do you have in the mass media – such as newspapers,

TV and radio – when it comes to reporting the news fully, accurately and fairly? (Options: A great deal, A fair amount, Not very much, None at all)

Other background variables
In what year were you born? (open text response)
What is your gender? (Options: Male, Female, Other)
What racial or ethnic group best describes you? (Options: White, Black or African-American, Hispanic or Latino, Asian or Asian-American, Native American, Middle Eastern, Mixed Race, Other)
What is the highest level of education you have completed? (Options: Did not graduate from high school; High school graduate; Some college, but no degree (yet); 2-year college degree; 4-year college degree; Postgraduate degree (MA, MBA, MD, JD, PhD, etc.))
Who did you vote for in the election for President? (Options: Hillary Clinton, Donald Trump, Gary Johnson, Jill Stein, Evan McMullin, Other, Did not vote)

Wave 2

In general, how much trust and confidence do you have in the mass media - such as newspapers, TV and radio - when it comes to reporting the news fully, accurately and fairly? (Options: A great deal, A fair amount, Not very much, None at all)

In general, how much trust and confidence do you have in the information you see on Facebook when it comes to reporting the news fully, accurately, and fairly? (Options: A great deal, A fair amount, Not very much, None at all)

We would like to get your feelings toward some groups, leaders, and institutions who are in the news these days using something we call the feeling thermometer. Ratings between 50 degrees and 100 degrees mean that you feel favorable and warm toward the group, leader, or institution. Ratings between 0 degrees and 50 degrees mean that you don't feel favorable toward them and that you don't care too much for them. You would rate them at the 50 degree mark if you don't feel particularly warm or cold toward them. If we come to a group, leader, or institution whose name you don't recognize, you don't need to rate them. (Respondents click on thermometer to give ratings for: White people, Hispanic or Latino people, Christians, Muslims)

Experimental manipulation:

All treatments were prefaced with the following statement: "Please read the following tweets carefully. We will ask you a question about them after you read them."

Control - series of non-political, control tweets

Condition 1 - random subset of 4 of 8 election fraud/meddling tweets below in random order

Condition 2 - all 8 of the election meddling tweets below in random order

Condition 3 - random subset of 4 of 8 election fraud/meddling tweets below in random order and all 4 of the no fraud/no meddling tweets (in random order)

Election fraud/meddling tweets:

Marco Rubio @marcorubio · Nov 10

#BrowardElections office admits the vote count they submitted to state includes 22 illegal votes.

We know about these 22 because they got caught breaking law in reviewing 202 ballots. How can anyone trust more illegal votes aren' in their final count?

Broward elections office included 22 void ballots in its final total sent ...

Broward Supervisor of Elections Brenda Snipes had accidentally mixed the valid ballots with the invalid ones after she had initially removed the ballo...

miamiherald.com

5.0K 8.0K 14K

Donald J. Trump @realDonaldTrump · 7h

The Florida Election should be called in favor of Rick Scott and Ron DeSantis in that large numbers of new ballots showed up out of nowhere, and many ballots are missing or forged. An honest vote count is no longer possible-ballots massively infected. Must go with Election Night!

35K 26K 87K

Dinesh D'Souza @DineshDSouza · Nov 9

Trump is showing he is not the standard GOP invertebrate who gasps in impotent frustration as **Democrats** coolly **steal** elections. The crooks are going to be exposed, thwarted and—if warranted— arrested!

723 8.9K 23K

The Senate Majority Retweeted

Camille M. Gallo @camillegallo · 29m

Now @SenBillNelson is suing to count ballots that were received AFTER Election Day.

How desperate can this guy get?

nrsc.org/press-releases… #FLSEN #SAYIE

reeks of desperation - NRSC

Bill Nelson just keeps getting more and more desperate. Now Nelson and his lawyers are suing to count ballots that were received AFTER Election...

nrsc.org

4 17 13

Lindsey Graham @LindseyGrahamSC · Nov 9

When it comes to confirming judges and counting votes, Democrats are amazingly consistent – The law is NO obstacle to the outcome they seek.

> **Rick Scott** @ScottforFlorida
> US Senate candidate, FL
> Every day since the election, Broward county have been coming up with more and more ballots out of nowhere. We all know what is going on. I will not sit idly by while unethical liberals try to steal this election from the people of Florida.

6.7K 14K 35K

Rick Scott
@ScottforFlorida
US Senate candidate, FL

Follow

Every day since the election, Broward county have been coming up with more and more ballots out of nowhere. We all know what is going on. I will not sit idly by while unethical liberals try to steal this election from the people of Florida.

11:45 AM - 9 Nov 2018

10,638 Retweets **28,283** Likes

2.4K 11K 28K

No fraud/no meddling tweets:

PBS NewsHour @NewsHour · 16h

The state's law enforcement arm and elections monitors have found no evidence of wrongdoing.

'Ramp down the rhetoric,' judge in Florida recount case says

"We need to be careful of what we say. Words mean things these days," the judge told lawyers representing the warring sides in the Florida recount

pbs.org

7 51 82

NYT Politics @nytpolitics · 15h

Fact Check of the Day: Trump Makes a Baseless Claim About 'Massively Infected' Ballots in Florida

Trump Makes a Baseless Claim About 'Massively Infected' Ballots in ...

Without evidence, President Trump asserted that some ballots in Florida "showed up out of nowhere" and that others were missing or forged.

nytimes.com

19 31 44

Control tweets:

Food & Wine @foodandwine · 10 Oct 2017

MTN is **Travis Lett**'s most ambitious project yet: trib.al/2HoQzyF

9 28

JBF Taste America LA @TasteAmericaLA · Aug 24

James Beard Nominated Chef **Travis Lett** puts together delicious dishes at his restaurant, Gjelina. This grilled squid, chicory, mandarinquat and salsa verde is a must try here. Hit the link in bio for more!

1

Attention check (varies by condition)

What news event was mentioned in the tweets you just read? [shown to respondents in treatment conditions] (Options: The elections in November 2012, The elections in November 2016, The elections in November 2018, The elections in November 2020)

Which of these individuals was featured in the tweets you just read? [shown to respondents in control condition] (Options: Travis Lett, Los Angeles chef; James Johnson, New York chef; Steve Clifford, Chicago chef; John Wright, Miami chef)

Confidence measures:

How confident are you that everyone who was legally entitled to vote and sought to do so was able to successfully cast a ballot in the election this November? (Options: Very confident, Somewhat confident, Not too confident, Not at all confident)

[If they said they voted][1] How confident are you that your vote was accurately counted in the election this November? (Options: Very confident, Somewhat confident, Not too confident, Not at all confident)

How confident are you that election officials managed the counting of ballots fairly in the election this November? (Options: Very confident, Somewhat confident, Not too confident, Not at all con-

[1]Only respondents who indicated "I am sure I voted" in response to the following question ("In talking to people about elections, we often find that a lot of people were not able to vote because they weren't registered, they were sick, or they just didn't have time. Which of the following statements best describes you?") were shown this question. All other confidence measure items were asked to every respondent.

fident)

Do you agree or disagree with the following statement?
At the end of the day, in spite of all the problems casting and counting the votes, the system worked. (Options: Strongly agree, Somewhat agree, Somewhat disagree, Strongly disagree)

To what extent do you trust elections in this country? Please respond on the scale below where 1 means "not at all" and 7 means "a lot." (Options: 1 Not at all, 2, 3, 4, 5, 6, 7 A lot)

How secure are ballots from tampering in this country's elections? (Options: Extremely secure, Very secure, Moderately secure, Not too secure, Not at all secure)

How often are voting machines accurate in counting the votes? (Options: Extremely often, Very often, Moderately often, Not too often, Not at all often)

Thermometer ratings
We would like to get your feelings toward some groups, leaders, and institutions who are in the news these days using something we call the feeling thermometer. Ratings between 50 degrees and 100 degrees mean that you feel favorable and warm toward the group, leader, or institution. Ratings between 0 degrees and 50 degrees mean that you don't feel favorable toward them and that you don't care too much for them. You would rate them at the 50 degree mark if you don't feel particularly warm or cold toward them. If we come to a group, leader, or institution whose name you don't recognize, you don't need to rate them. (Respondents click on thermometer to give ratings for: Democratic Party, Republican Party, President Trump, The news media)

How important is it for you to live in a country that is governed democratically? Please respond below on this scale where 1 means it is "not at all important" and 10 means "absolutely important." (Options: 1 Min, 2, 3, 4, 5, 6, 7, 8, 9, 10 Max)

Various types of political systems are described below. Please think about each choice in terms of governing this country and indicate if you think it would be a very good, fairly good, fairly bad, or very bad way of governing the United States.
Having a strong leader who does not have to bother with Congress and elections: (Options: Very good, Fairly good, Fairly bad, Very bad)
Having experts, not government, make decisions according to what they think is best for the country: (Options: Very good, Fairly good, Fairly bad, Very bad)
Having the army rule: (Options: Very good, Fairly good, Fairly bad, Very bad)
Having a democratic political system: (Options: Very good, Fairly good, Fairly bad, Very bad)

Online Appendix B

The survey instrument included twelve survey items measuring attitudes towards the integrity of the elections (see Online Appendix A). These items measured perceptions of perceived electoral integrity including ballot security, machine accuracy, and fairness. Following our preregistration we conducted an exploratory factor analysis, which indicated three underlying dimensions. The results for this analysis are shown in Table B1. We selected the seven items marked with a † in Table B1 as the components of our composite outcome.

Table B1: Preregistered factor analysis of all measured outcomes

	Factor 1	Factor 2	Factor 3	Uniqueness
Confidence entitled allowed to vote†	0.6103	-.0102	0.2473	0.5663
Confidence own vote was counted†	0.6875	-0.1451	-0.1471	0.4847
Confidence officials manage counting votes†	0.8193	.0791	-.06810	0.3178
System works despite problems casting and counting votes†	0.8221	.0280	-.0533	0.3205
Trust in elections†	-0.8265	-.0178	0.1088	0.3048
Security of ballots from tampering†	0.8287	.0845	-.0760	0.3003
Frequency voting machines accurate in counting votes†	0.7604	-.0962	-.0910	0.4042
Importance of living in democratically governed country	-0.1218	0.1380	0.8431	0.2554
Having a strong leader who doesn't have to both with parliament/elections	0.0296	0.8191	0.2352	0.2729
Having experts, not government, make decisions	-0.0419	0.7572	-0.1416	0.4048
Having the army rule	0.0551	0.8079	0.2133	0.2988
Having a democratic political system	0.0798	-0.1139	-0.8647	0.2330

Exploratory factor analysis of the outcome measures that we preregistered that we would consider to determine if they scaled together after varimax rotation. Question wording for each item is presented in Online Appendix A. † indicates items chosen for final measure.

Based on these results, we fit a confirmatory factor analysis reported in Table B2. This model was identified by setting the mean of the latent trait to zero and the variance to unity. All factor loadings were large and significant, indicating an adequate fit.

Table B2: Structural equation model for latent election confidence measure

	Coefficient	Constant	Variance
Confidence entitled allowed to vote	0.535	2.574	0.714
	(0.012)	(0.032)	(0.013)
Confidence own vote was counted	0.639	3.523	0.592
	(0.011)	(0.047)	(0.014)
Confidence officials manage counting votes	0.790	2.782	0.376
	(0.007)	(0.034)	(0.011)
System works despite problems casting and counting votes	0.795	3.088	0.368
	(0.007)	(0.037)	(0.011)
Trust in elections	0.798	2.819	0.363
	(0.067)	(0.034)	(0.011)
Security of ballots from tampering	0.816	2.789	0.334
	(0.006)	(0.034)	(0.010)
Frequency voting machines accurate in counting votes	0.725	3.568	0.474
	(0.008)	(0.042)	(0.012)

All coefficients are statistically significant ($p < .001$). Structural equation model of the outcome measures that we identified as scaling together in Table B1. Latent variable estimated using maximum likelihood with missing values. Question wording for each item is presented in Online Appendix A. N=4,280; $\chi^2(df = 14)$=487.36, $p < .001$; CFI=0.967; TLI=0.950; RMSEA = 0.089

As noted in the main text, our preregistration was ambiguous as to how to handle the remaining five items in the event they did not load onto the main factor. Because there are too few items to estimate latent variables for the second and third factor from the exploratory factor analysis, we take the average for the items in each factor when modeling effects of our treatments (responses to importance of living in a democracy are rescaled to 1–4 to match the other outcome variables). It is possible to also estimate these composite scores using some sort of latent trait analysis, but the two-item battery would be unidentified (without adding additional parameter constraints) and the three-item battery would be just-identified making it impossible to adequately asses fit. We therefore rely on the simpler additive model, but also examine each component separately in Table C4 below. As we cannot clearly articulate what makes these latent traits distinguishable, we use the agnostic labels "composite 1" and "composite 2" below (both refer to general support for democracy and democratic institutions).

Online Appendix C: Full results for main text

The model specification in Table C1 deviates from our preregistration. Our preregistered analysis, which is reported in Table C3, pools Democrats and independents and analyzes them separately from Republicans. However, independents reacted to the messages somewhat differently from Democrats. We therefore disaggregate Democrats and independents in our analysis and consider them separately from Republicans, who are the omitted category in our heterogeneous effects model (see Table C1). As described below, the analysis of how treatment effects vary by Trump approval is exploratory and was not preregistered. To mirror the party interaction model, we make Trump approvers the omitted category in that model (Table C2).

Our original hypotheses concerned how the treatments would affect "confidence in elections and support for democracy" pending the factor analysis reported in Appendix B. As noted in the main text, the seven election confidence scores did load onto a single trait but the five "support for democracy" items loaded onto two separate dimensions. We therefore created two additive composite scores as specified in Appendix B. This choice was not preregistered in the sense that we failed to specify how we would handle these five items if they did not load onto the main underling dimension. However, we do test all of our hypotheses for both composite scores in Tables C4–C7. With one exception, there is insufficient evidence to conclude that exposure to these claims measurably affected support for democracy.

Table C1: Effect of exposure to voter fraud allegations on election confidence by party

	Coefficient (SE)
Low dose	-0.184**
	(0.070)
High dose	-0.273***
	(0.071)
Low dose + fact-check tweets	-0.176*
	(0.072)
Democrat	-0.287***
	(0.065)
Independent	-0.450***
	(0.088)
Low dose × Democrat	0.099
	(0.092)
High dose × Democrat	0.252**
	(0.095)
Low dose + fact-check × Democrat	0.193*
	(0.094)
Low dose × independent	0.008
	(0.125)
High dose × independent	-0.010
	(0.125)
Low dose + fact-check tweets × independent	0.027
	(0.127)
Constant	0.309***
	(0.049)
Effect of high dose (versus low dose)	
Democrats	0.064
	(0.062)
Republicans	-0.089
	(0.071)
Difference (H3b)	0.153
	(0.094)
Effects of low dose + fact-check (versus low dose)	
Democrats	0.103
	(0.060)
Republicans	0.008
	(0.072)
Difference (H4b)	0.094
	(0.094)
N	4283

* $p < 0.05$, * $p < 0.01$, *** $p < .005$ (two-sided). OLS models with robust standard errors. Outcome variable is a composite measure of election confidence that was created using confirmatory factor analysis (see Online Appendix B for estimation details). Partisan leaners are treated as members of the party in question.

Table C2: Effect of exposure to voter fraud allegations on election confidence by Trump approval

	Coefficient (SE)
Low dose	-0.211***
	(0.064)
High dose	-0.339***
	(0.066)
Low dose + fact-check	-0.190***
	(0.066)
Disapprove of Trump	-0.333***
	(0.060)
Low dose × disapprove of Trump	0.114
	(0.085)
High dose × disapprove of Trump	0.304***
	(0.087)
Low dose + fact-check × disapprove of Trump	0.178*
	(0.087)
Constant	0.288***
	(0.046)
Effect of high dosage (versus low)	
Disapprover	0.063
	(0.057)
Approver	-0.128*
	(0.065)
Difference	-0.191*
	(0.087)
Effects of low dose + fact-check (versus low dose)	
Disapprover	0.086
	(0.057)
Approver	0.021
	(0.065)
Difference	0.065
	(0.087)
N	4281

* $p < 0.05$, ** $p < 0.01$, *** $p < .005$ (two-sided). OLS models with robust standard errors. Outcome variable is a composite measure of election confidence that was created using confirmatory factor analysis (see Online Appendix B for estimation details). Sample includes all respondents (i.e., the reference category for the Trump approval indicator are respondents who do not approve).

Table C3: Effect of exposure to voter fraud allegations on election confidence by party (Republicans vs. Democrats/independents)

	Coefficient (SE)
Low dose	-0.115*
	(0.052)
High dose	-0.106
	(0.054)
Low dose + fact-check	-0.035
	(0.053)
Republican	0.330***
	(0.062)
Low dose × Republican	-0.069
	(0.087)
High dose × Republican	-0.167
	(0.089)
Low dose + fact-check × Republican	-0.141
	(0.090)
Constant	-0.020
	(0.037)
Effect of high dosage (versus low)	
Republican	-0.089
	(0.071)
Non-Republican	0.010
	(0.054))
Difference	-0.099
	(0.089)
Effects of low dose + fact-check (versus low dose)	
Republican	-0.008
	(0.072)
Non-Republican	0.080
	(0.053))
Difference	-0.072
	(0.089)
N	4283

* $p < 0.05$, ** $p < 0.01$, *** $p < .005$ (two-sided). OLS models with robust standard errors. Outcome variable is a composite measure of election confidence that was created using confirmatory factor analysis (see Online Appendix B for estimation details). Sample includes all respondents (i.e., the reference category for the Republican indicator includes both Democrats and independents). Partisan leaners are treated as members of the party in question. This table is included in addition to Table C1 per the preregistration.

Table C4: Main treatment effects for support for democracy

	Strong leader	Experts make decisions	Army rule	Democratic pol. system	Importance of living in democ.	Composite (cols. 1–3)	Composite (cols. 4–5)
Low dose	0.005	0.017	-0.007	0.025	-0.016	0.005	0.004
	(0.044)	(0.043)	(0.037)	(0.035)	(0.021)	(0.034)	(0.015)
High dose	-0.029	-0.027	-0.023	0.038	-0.015	-0.027	0.011
	(0.044)	(0.043)	(0.037)	(0.035)	(0.021)	(0.034)	(0.014)
Low dose + fact-check	-0.086	-0.047	-0.067	0.006	-0.013	-0.070*	-0.003
	(0.045)	(0.043)	(0.038)	(0.035)	(0.021)	(0.035)	(0.014)
Constant	3.182***	2.741***	3.450***	1.587***	2.186***	3.124***	1.889***
	(0.031)	(0.031)	(0.027)	(0.024)	(0.015)	(0.024)	(0.010)
Effect of higher dosage	-.034	-.044	-.017	.012	.003	-.031	.005
	(.044)	(.042)	(.038)	(.036)	(.085)	(.033)	(.038)
Effect of fact-check	-.091	-.064	-.061	-.020	.009	-.075*	.002
	(.044)	(.043)	(.038)	(.035)	(.084)	(.034)	(.038)
N	4240	4240	4229	4237	4264	4250	4278

* $p < 0.05$, ** $p < 0.01$, *** $p < .005$ (two-sided). OLS models with robust standard errors. Responses to importance of living in a democracy rescaled to 1–4 to match the other outcome variables. Composites are based on the results of the exploratory factor analysis in Online Appendix B. The first is the average of the outcomes measured in columns 1–3. The second is the average of the outcomes measured in columns 4–5.

Table C5: Effect of exposure to voter fraud allegations on support for democracy by party

	Composite 1	Composite 2
Low dose	-0.006	-0.005
	(0.060)	(0.027)
High dose	-0.046	-0.000
	(0.059)	(0.026)
Low dose + fact-check	-0.023	-0.019
	(0.061)	(0.027)
Democrat	0.070	-0.157***
	(0.054)	(0.021)
Independent	-0.100	-0.005
	(0.072)	(0.035)
Low dose × Democrat	0.016	0.020
	(0.075)	(0.032)
High dose × Democrat	0.065	0.024
	(0.076)	(0.031)
Low dose + fact-check × Democrat	-0.101	0.050
	(0.078)	(0.031)
Low dose × Independent	0.028	-0.001
	(0.101)	(0.048)
High dose × Independent	-0.026	-0.017
	(0.098)	(0.047)
Low dose + fact-check × Independent	0.015	-0.039
	(0.102)	(0.047)
Constant	3.108***	1.963***
	(0.042)	(0.018)
Effect of high dose (versus low dose)		
Democrats	0.009	0.009
	(0.046)	(0.018)
Republicans	-0.040	0.005
	(0.059)	(0.027)
Difference (H3b)	0.049	0.004
	(0.075)	(0.032)
Effects of low dose + fact-check (versus low dose)		
Democrats	-0.134***	0.016
	(0.047)	(0.018)
Republicans	-0.017	-0.014
	(0.061)	(0.028)
Difference (H4b)	-0.117	0.030
	(0.077)	(0.033)
N	4250	4278

* $p < 0.05$, ** $p < 0.01$, *** $p < .005$ (two-sided). OLS models with robust standard errors. Outcome variables are composite measures of support for democracy (see Online Appendix B for estimation details). Partisan leaners are treated as members of the party in question.

Table C6: Effect of exposure to voter fraud allegations on support for democracy by Trump approval

	Composite 1	Composite 2
Low dose	0.026	-0.007
	(0.056)	(0.025)
High dose	-0.029	-0.004
	(0.056)	(0.024)
Low dose + fact-check	-0.031	-0.036
	(0.057)	(0.024)
Disapprove of Trump	0.151***	-0.153***
	(0.050)	(0.020)
Low dose × disapprove of Trump	-0.037	0.020
	(0.069)	(0.030)
High dose × disapprove of Trump	0.003	0.028
	(0.069)	(0.029)
Low dose + fact-check × disapprove of Trump	-0.070	0.061*
	(0.071)	(0.029)
Constant	3.040***	1.975***
	(0.040)	(0.017)
Effect of high dosage (versus low)		
Disapprover	-0.016	0.012
	(0.041)	(0.017)
Approver	-0.055	0.003
	(0.055)	(0.025)
Difference	0.039	0.009
	(0.068)	(0.030)
Effects of low dose + fact-check (versus low dose)		
Disapprover	-0.091*	0.012
	(0.041)	(0.017)
Approver	-0.057	-0.029
	(0.065)	(0.025)
Difference	-0.034	0.041
	(0.070)	(0.030)
N	4248	4276

* $p < 0.05$, ** $p < 0.01$, *** $p < .005$ (two-sided). OLS models with robust standard errors. Outcome variables are composite measures of support for democracy (see Online Appendix B for estimation details). Sample includes all respondents (i.e., the reference category for the Trump approval indicator are respondents who do not approve).

Table C7: Effect of exposure to voter fraud allegations on support for democracy by party (Republicans vs. Democrats/Independents)

	Composite 1	Composite 2
Low dose	0.010	0.013
	(0.040)	(0.017)
High dose	-0.015	0.018
	(0.041)	(0.017)
Low dose + fact-check	-0.096*	0.010
	(0.042)	(0.016)
Republican	-0.026	0.118***
	(0.051)	(0.022)
Low dose × Republican	-0.016	-0.018
	(0.072)	(0.032)
High dose × Republican	-0.031	-0.018
	(0.072)	(0.031)
Low dose + fact-check × Republican	0.072	-0.029
	(0.074)	(0.031)
Constant	3.134***	1.846***
	(0.029)	(0.011)
Effect of high dosage (versus low)		
Republican	-0.040	0.005
	(0.059)	(0.027)
Non-Republican	-0.025	0.005
	(0.040)	(0.017)
Difference	-0.015	0.000
	(0.071)	(0.032)
Effects of low dose + fact-check (versus low dose)		
Republican	-0.017	-0.014
	(0.061)	(0.028)
Non-Republican	-0.106**	-0.003
	(0.041)	(0.017)
Difference	0.088	-0.011
	(0.073)	(0.032)
N	4250	4278

* $p < 0.05$, ** $p < 0.01$, *** $p < .005$ (two-sided). OLS models with robust standard errors. Outcome variables are composite measures of support for democracy (see Online Appendix B for estimation details). Sample includes all respondents (i.e., the reference category for the Republican indicator is Democrats and independents). Partisan leaners are treated as members of the party in question.

Online Appendix D: Exploratory analysis of additional preregistered moderators

This appendix reports exploratory analyses of potential moderators of the effect of fraud messages on beliefs about and confidence in elections and democracy. These potential moderators include trust in and feelings toward the media, feelings toward Trump, conspiracy predispositions, political interest and knowledge, and pre-treatment visits to fake news sites and fact-checking sites. We control the false discovery rate with the Benjamini-Hochberg procedure given the risk of false positives. We find limited evidence in support of these heterogeneous treatment effects.

We do not discuss the one significant interaction term we find — untrustworthy website visits (the only significant one in Online Appendix D after adjusting p-values for the interaction terms using the Benjamini and Hochberg 1995 procedure) — in the main text because only 74 respondents visited an untrustworthy website during the sample period. The results below are thus underpowered and likely reflect the correlation between party identification and exposure to untrustworthy websites during the study period (46 of the 69 respondents who visited an untrustworthy website identify as or lean Republican).

Table D1: Effect of exposure to voter fraud allegations on election confidence by feelings towards Trump

	Coefficient (SE)
Low dose	-0.095
	(0.061)
High dose	-0.029
	(0.064)
Low dose + fact-check	0.033
	(0.063)
Feelings towards Trump	0.003***
	(0.001)
Low dose × feelings towards Trump	-0.001
	(0.001)
High dose × feelings towards Trump	-0.003
	(0.001)
Low dose + fact-check × feelings towards Trump	-0.003
	(0.001)
Constant	-0.036
	(0.044)
N	4131

* $p < 0.05$, ** $p < 0.01$, *** $p < .005$ (two-sided; p-values of treatment × moderator interaction terms are adjusted to control the false discovery rate using the Benjamini and Hochberg 1995 procedure). OLS models with robust standard errors. Outcome variable is a composite measure of election confidence that was created using confirmatory factor analysis (see Online Appendix B for estimation details). Sample includes all respondents (i.e., the reference category for the Republican indicator is Democrats and independents). Partisan leaners are treated as members of the party in question.

Table D2: Effect of exposure to voter fraud allegations on election confidence by feelings towards Trump (tercile indicators)

	Coefficient (SE)
Low dose	-0.091
	(0.072)
High dose	-0.039
	(0.077)
Low dose + fact-check	0.005
	(0.076)
Feels neutrally about Trump 2	0.316***
	(0.071)
Feels warmly about Trump	0.310***
	(0.077)
Low dose × feels neutrally	-0.072
	(0.102)
Low dose × feels warmly	-0.069
	(0.105)
High dose × feels neutrally	-0.103
	(0.105)
High dose × feels warmly	-0.235
	(0.109)
Low dose + fact-check × feels neutrally	-0.066
	(0.103)
Low dose + fact-check × feels warmly	-0.182
	(0.109)
Constant	-0.094
	(0.053)
N	4131

* $p < 0.05$, ** $p < 0.01$, *** $p < .005$ (two-sided; p-values of treatment × moderator interaction terms are adjusted to control the false discovery rate using the Benjamini and Hochberg 1995 procedure). OLS models with robust standard errors. Outcome variable is a composite measure of election confidence that was created using confirmatory factor analysis (see Online Appendix B for estimation details). Sample includes all respondents (i.e., the reference category for the Republican indicator is Democrats and independents). Partisan leaners are treated as members of the party in question.

Table D3: Effect of exposure to voter fraud allegations on election confidence by media feelings

	Coefficient (SE)
Low dose	-0.271***
	(0.080)
High dose	-0.336***
	(0.082)
Low dose + fact-check	-0.189*
	(0.083)
Media feelings	0.002*
	(0.001)
Low dose × media feelings	0.003
	(0.001)
High dose × media feelings	0.004
	(0.001)
Low dose + fact-check × media feelings	0.002
	(0.001)
Constant	0.015
	(0.057)
N	4113

* $p < 0.05$, ** $p < 0.01$, *** $p < .005$ (two-sided; p-values of treatment × moderator interaction terms are adjusted to control the false discovery rate using the Benjamini and Hochberg 1995 procedure). OLS models with robust standard errors. Outcome variable is a composite measure of election confidence that was created using confirmatory factor analysis (see Online Appendix B for estimation details). Media feelings measured using a 0–100 feeling thermometer.

Table D4: Effect of exposure to voter fraud allegations on election confidence by media trust

	Coefficient (SE)
Low dose	-0.339*
	(0.136)
High dose	-0.460***
	(0.136)
Low dose + fact-check	-0.259
	(0.140)
Trust in mass media	0.215***
	(0.036)
Low dose × trust in mass media	0.077
	(0.050)
High dose × trust in mass media	0.118
	(0.051)
Low dose + fact-check × trust in mass media	0.064
	(0.051)
Constant	-0.437***
	(0.097)
N	4282

* $p < 0.05$, ** $p < 0.01$, *** $p < .005$ (two-sided; p-values of treatment × moderator interaction terms are adjusted to control the false discovery rate using the Benjamini and Hochberg 1995 procedure). OLS models with robust standard errors. Outcome variable is a composite measure of election confidence that was created using confirmatory factor analysis (see Online Appendix B for estimation details). Media trust measured using a four-point scale.

Table D5: Effect of exposure to voter fraud allegations on election confidence by conspiracy predispositions

	Coefficient (SE)
Low dose	-0.226
	(0.139)
High dose	-0.205
	(0.135)
Low dose + fact-check	-0.076
	(0.141)
Predisposed to conspiracy	-0.261***
	(0.029)
Low dose × predisposed to conspiracy	0.026
	(0.043)
High dose × predisposed to conspiracy	0.015
	(0.042)
Low dose + fact-check × predisposed to conspiracy	-0.003
	(0.044)
Constant	0.933***
	(0.094)
N	4263

* $p < 0.05$, ** $p < 0.01$, *** $p < .005$ (two-sided; p-values of treatment × moderator interaction terms are adjusted to control the false discovery rate using the Benjamini and Hochberg 1995 procedure). OLS models with robust standard errors. Outcome variable is a composite measure of election confidence that was created using confirmatory factor analysis (see Online Appendix B for estimation details). Sample includes all respondents (i.e., the reference category for the Republican indicator is Democrats and independents). Partisan leaners are treated as members of the party in question.

Table D6: Effect of exposure to voter fraud allegations on election confidence by political interest

	Coefficient (SE)
Low dose	-0.367**
	(0.137)
High dose	-0.412***
	(0.139)
Low dose + fact-check	-0.215
	(0.141)
Politically interested	0.077***
	(0.026)
Low dose × politically interested	0.061
	(0.037)
High dose × politically interested	0.070
	(0.037)
Low dose + fact-check × politically interested	0.035
	(0.038)
Constant	-0.182
	(0.098)
N	4275

* $p < 0.05$, ** $p < 0.01$, *** $p < .005$ (two-sided; p-values of treatment × moderator interaction terms are adjusted to control the false discovery rate using the Benjamini and Hochberg 1995 procedure). OLS models with robust standard errors. Outcome variable is a composite measure of election confidence that was created using confirmatory factor analysis (see Online Appendix B for estimation details). Sample includes all respondents (i.e., the reference category for the Republican indicator is Democrats and independents). Partisan leaners are treated as members of the party in question.

Table D7: Effect of exposure to voter fraud allegations on election confidence by political knowledge

	Coefficient (SE)
Low dose	-0.156
	(0.096)
High dose	-0.333***
	(0.098)
Low dose + fact-check	-0.043
	(0.098)
Politically knowledgeable	0.078***
	(0.020)
Low dose $\times$ politically knowledgeable	0.002
	(0.027)
High dose $\times$ politically knowledgeable	0.054
	(0.027)
Low dose + fact-check $\times$ politically knowledgeable	-0.014
	(0.028)
Constant	-0.141*
	(0.069)
N	4283

* $p < 0.05$, ** $p < 0.01$, *** $p < .005$ (two-sided; p-values of treatment $\times$ moderator interaction terms are adjusted to control the false discovery rate using the Benjamini and Hochberg 1995 procedure). OLS models with robust standard errors. Outcome variable is a composite measure of election confidence that was created using confirmatory factor analysis (see Online Appendix B for estimation details). Sample includes all respondents (i.e., the reference category for the Republican indicator is Democrats and independents). Partisan leaners are treated as members of the party in question.

Due to the infrequency of visits to untrustworthy websites, we use a binary indicator of exposure below as the moderator in Table D8. We do not discuss the one significant interaction term we find (the only significant one in Online Appendix D after adjusting *p*-values for the interaction terms using the Benjamini and Hochberg 1995 procedure) in the main text because only 74 respondents visited an untrustworthy website during the sample period. The results below are thus underpowered and likely reflect the correlation between party identification and exposure to untrustworthy websites during the study period (46 of the 69 respondents who visited an untrustworthy website identify as or lean Republican).

Table D8: Effect of exposure to voter fraud allegations on election confidence by pre-treatment exposure to untrustworthy websites

	Coefficient (SE)
Low dose	-0.151
	(0.095)
High dose	-0.074
	(0.097)
Low dose + fact-check	0.094
	(0.098)
Visited untrustworthy websites (binary)	0.630***
	(0.205)
Low dose × visited untrustworthy websites	-0.646
	(0.314)
High dose × visited untrustworthy websites	-0.970
	(0.360)
Low dose + fact-check × visited untrustworthy websites	-0.979*
	(0.290)
Constant	0.134*
	(0.068)
N	923

* $p < 0.05$, ** $p < 0.01$, *** $p < .005$ (two-sided; *p*-values of treatment × moderator interaction terms are adjusted to control the false discovery rate using the Benjamini and Hochberg 1995 procedure). OLS models with robust standard errors. Outcome variable is a composite measure of election confidence that was created using confirmatory factor analysis (see Online Appendix B for estimation details). Untrustworthy website exposure measured as a visit to one or more of the 673 domains identified in Allcott, Gentzkow and Yu (2018) as a fake news producer as of September 2018 excluding those with print versions (including but not limited to Express, the British tabloid) and also domains that were previously classified by Bakshy, Messing and Adamic (2015) as a source of hard news. In addition, we exclude sites that predominantly feature user-generated content (e.g., online bulletin boards) and political interest groups. All exposure measures are limited to the period observed in available behavioral data immediately before completing the survey among respondents who participate in the YouGov Pulse panel.

Table D9: Effect of exposure to voter fraud allegations on election confidence by pre-treatment visits to fact checking sites

	Coefficient (SE)
Low dose	-0.174
	(0.094)
High dose	-0.131
	(0.096)
Low dose + fact-check	0.012
	(0.097)
Visited fact checking site	0.336
	(0.259)
Low dose $\times$ visited fact check site	-0.605
	(0.399)
High dose $\times$ visited fact check site	-0.277
	(0.365)
Low dose + fact-check $\times$ visited fact check site	-0.135
	(0.352)
Constant	0.172*
	(0.067)
N	923

* $p < 0.05$, ** $p < 0.01$, *** $p < .005$ (two-sided; p-values of treatment $\times$ moderator interaction terms are adjusted to control the false discovery rate using the Benjamini and Hochberg 1995 procedure). OLS models with robust standard errors. Outcome variable is a composite measure of election confidence that was created using confirmatory factor analysis (see Online Appendix B for estimation details). Sample includes all respondents (i.e., the reference category for the Republican indicator is Democrats and independents). Partisan leaners are treated as members of the party in question.

Online Appendix E: Preregistration

This "populated pre-analysis plan" (Duflo et al. 2020) details the location of our preregistered results in the manuscript as well as departures from the plan. Our pre-analysis plan was filed in the EGAP registry and subsequently migrated to OSF at `https://osf.io/u3sgc`, where all data and analysis scripts will be shared.

It is important to clarify that the preregistration is time-stamped February 20, 2019 even though data were collected in December 2018/January 2019. However, it was filed prior to data delivery from YouGov, which was withheld until February 27, 2019 — after the preregistration was filed. (See letter here from YouGov: `https://osf.io/9y8db/`).

In order to facilitate comparing these models to our preregistration, hypothesis labelling in the below section reflects the original preregistration document, not the main manuscript text. However, the main text and the preregistration diverge in two ways. First, the main text hypotheses do not contain the "E" prefix.[2] Second, our preregistration discussed that the number/content of outcome variables would depend on a factor analysis of variables that focus on election confidence and support for democracy. RQ2 is designed to capture this particular aspect of the preregistration, even though we did not formally write it as a research question. In other words, RQ2 allows us to to account for separately analyze election confidence and support for democracy as outcome measures as specified in the preregistration.

Construction of outcome measures

Our outcome measures are confidence in elections and support for democracy. We measure these using items reported in Online Appendix A. We will analyze these items as a composite measure if they scale together using principal components factor analysis. If they do not scale together, we will analyze them separately (as separate composite measures and/or individual outcome measures). If we analyze one or more composite measures, we will also report results separately for each dependent variable included in the composite measure(s) in the appendix.

- For factor analysis of all measured outcomes, see Table B1 in Online Appendix B.

Preregistered hypotheses and research questions

Effects of tweet exposure

H-E1a/b. Exposure to four tweets including claims of voter or election fraud will reduce confidence in elections and support for democracy compared to a placebo condition (H-E1a), especially among respondents for whom those messages are pro-attitudinal (H-E1b).

H-E2a/b. Exposure to eight tweets including claims of voter or election fraud will reduce confidence in elections and support for democracy compared to a placebo condition (H-E1a), especially among respondents for whom those messages are pro-attitudinal (H-E1b).

[2]Results for Hypothesis Groups A—D in the preregistration concern orthogonal studies reported in (omitted for peer review). Including the "E" prefix is thus more likely to cause confusion than alleviate it.

H-E3a/b. Exposure to eight tweets including claims of voter or election fraud will reduce confidence in elections and support for democracy more strongly than exposure to four tweets including such claims (H-E3a), especially among respondents for whom those messages are pro-attitudinal (H-E3b).

H-E4a/b. Exposure to four tweets including claims of voter or election fraud and four tweets fact-checking those claims will reduce confidence in elections and support for democracy less than exposure to four tweets including claims of voter or election fraud without fact-checks (H-E4a), especially among respondents for whom the voter or election fraud messages are pro-attitudinal (H-E4b).

RQ-E1a/b. Does exposure to four tweets including claims of voter or election fraud and four tweets fact-checking those claims reduce confidence in elections and support for democracy relative to a placebo (RQ-E1a), especially among respondents for whom the voter or election fraud messages are pro-attitudinal (RQ-E1b)?

Note: Based on the results of the preregistered factor analysis described above, effects on support for democracy items are separated out in the main text and described under RQ2.

Models

For each of the main effects hypotheses, we will estimate the following models using OLS regression (with robustness checks using ordered probit where appropriate): Main effects: Outcome = [constant] + 4 fraud tweet exposure + 8 fraud tweet exposure + 4 fraud/4 fact-check tweet exposure

For H-E1a: the coefficient for "4 fraud tweet exposure" will serve as the hypothesis test. A negative coefficient will support H-E1a. For H-E2a: the coefficient for "8 fraud tweet exposure" will serve as the hypothesis test. A negative coefficient will support H-E2a. For H-E3a: lincom "8 fraud tweet exposure" - "4 fraud tweet exposure" will serve as the hypothesis test. A positive coefficient will support H-E3a. For H-E4a: lincom "4 fraud tweet exposure" - "4 fraud/4 fact-check tweet exposure" will serve as the hypothesis test. A positive coefficient will support H-E4a. For RQ-E1a: the coefficient for "4 fraud/4 fact-check tweet exposure" will serve as the RQ test.

For the congeniality moderations, we will estimate the following models using OLS regression: Outcome = [constant] + 4 fraud tweet exposure + 8 fraud tweet exposure + 4 fraud/4 fact-check tweet exposure + Republican + 4 fraud tweet exposure*Republican + 8 fraud tweet exposure*Republican + 4 fraud/4 fact-check tweet exposure*Republican

For H-E1b: the coefficient for "4 fraud tweet exposure*Republican" will serve as the hypothesis test. A negative coefficient will support H-E1b. For H-E2b: the coefficient for "8 fraud tweet exposure*Republican" will serve as the hypothesis test. A negative coefficient will support H-E2b. For H-E3b: lincom "8 fraud tweet exposure*Republican" - "4 fraud tweet exposure*Republican" will serve as the hypothesis test. A positive coefficient will support H-E3b. For H-E4b: lincom "4 fraud tweet exposure*Republican" - "4 fraud/4 fact-check tweet exposure*Republican" will serve as the hypothesis test. A positive coefficient will support H-E4b. For RQ-E1b: the coefficient for "4 fraud/4 fact-check tweet. exposure*Republican" will serve as the RQ test.

Location of results

- For all models of main effects on election confidence (H-E1a, H-E2a, H-3a, H-4a, and RQ-1a), see main text Table 2, column 8 (composite measure).
- For all models of main effects on support for democracy (H-E1a, H-E2a, H-3a, H-4a, and RQ-1a), see Table C4, columns 6 and 7 (composite measures).
- For all models of effects on election confidence by Republican affiliation (H-E1b, H-E2b, H-3b, H-4b, and RQ-1b) see Table C3.
- For all models of effects on election confidence by Republican, Democrat, and independent affiliation (exploratory) see Table C1.
- For all models of effects on support for democracy by Republican affiliation (H-E1b, H-E2b, H-3b, H-4b, and RQ-1b) see Table C7.
- For all models of effects on support for democracy by Republican, Democrat, and independent affiliation (exploratory) see Table C5.

Heterogeneous treatment effects

We will also conduct exploratory analyses of potential moderators of the effect of fraud messages on beliefs about and confidence in elections and democracy: trust in and feelings toward the media, feelings toward Trump (entered as a linear term and with indicators for terciles or quartiles), conspiracy predispositions, political interest and knowledge, and pre-treatment visits to fake news sites and fact-checking sites. For these exploratory analyses of potential moderators, we control the false discovery rate with the Benjamini-Hochberg procedure given the risk of false positives. These analyses will be limited to the appendix or supplementary materials, but if any positive findings replicate in future studies, we may then use these data and analyses in the main text of a paper.

Models

For the exploratory analyses of possible moderators of the effects of fraud message exposure, the outcome measures are election confidence and support for democracy. Due to likely collinearity between the predictors, we will estimate separate models for each potential moderator for each outcome measure. E.g.: Outcome = [constant] + 4 fraud tweet exposure + 8 fraud tweet exposure + 4 fraud/4 fact-check tweet exposure + feelings toward Trump + 4 fraud tweet exposure*feelings toward Trump + 8 fraud tweet exposure*feelings toward Trump + 4 fraud/4 fact-check tweet exposure*feelings toward Trump

Location of results

- For exploratory tests of possible moderators, see Tables D1–D9 in Online Appendix D.

Online Appendix F: Power simulations for main effects and party interactions

As noted in our pre-registration, we did not conduct a power analysis for this study in advance. However, we can consider the power of our design to provide additional context for our results. While there are many ways to conduct power analyses for main effects, the literature remains relatively unsettled as to how to handle power calculations for interactions.

To put our entire discussion of power in a common framework, we use the `DeclareDesign` R package (Blair et al. 2019), which specifically allows us to analyze features of our design under various simulated conditions. Here we focus on the estimands whose estimates appear in the final column of Table 2 in the main text and the results in Figure 3a (and Table C1) as these are most consistent with our original pre-registration.

The full `DeclareDesign` analysis will be included in our replication archive, but it is worth sketching our approach first before showing our results. First, we use the fitted model to approximate σ_y, which is the residual error not explained by the variables included in our regression. In each simulation below, we draw $U_i \sim N(0, \sigma_y)$, which reflects the unmodeled variation in the outcome.

Second, we use the reported coefficients in Table 2 as our initial estimates for the average treatment effects (ATE) for the *Low dose*, *High dose*, and *Low dose + fact-check* conditions. We denote these as $D_i = L$, $D_i = H$, and $D_i = F$ respectively. Using these values, we set up a table of potential outcomes and define our estimands. So, for instance,

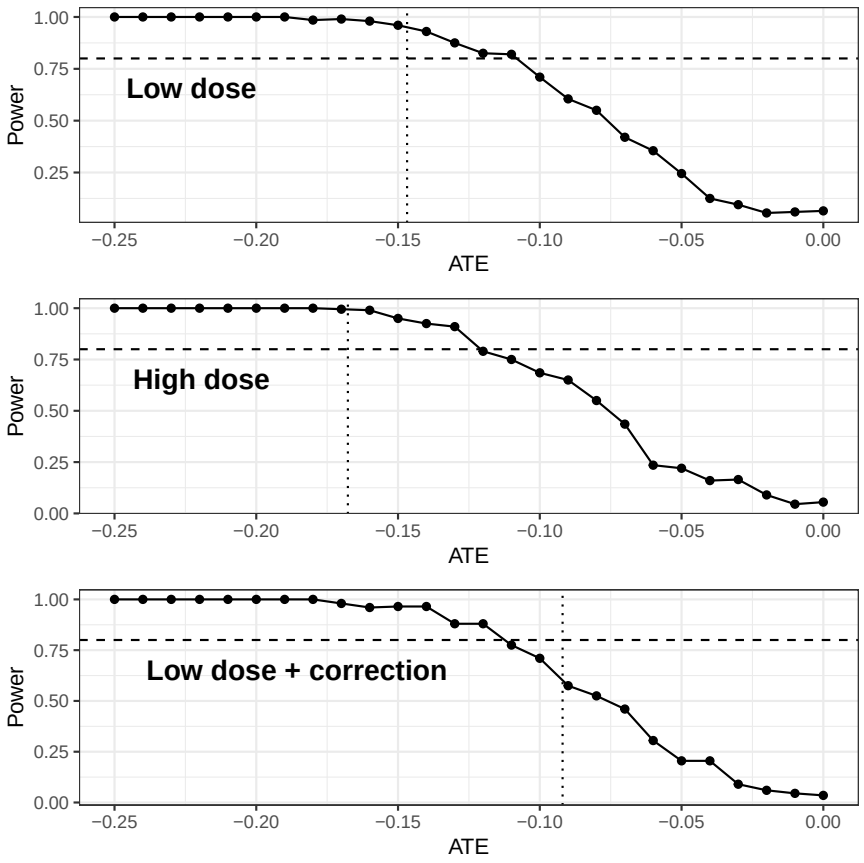
$$\begin{aligned} Y_{i[D_i=C]} &= U_i \\ Y_{i[D_i=L]} &= ATE_L + U_i, \\ Y_{i[D_i=H]} &= ATE_H + U_i, \\ Y_{i[D_i=F]} &= ATE_F + U_i. \end{aligned}$$

Our estimand is then just the difference in potential outcomes. Finally, the randomization is simulated and we can analyze the "revealed" dataset using the same model as in the main text.

The advantage of the `DeclareDesign` framework is that we can repeat this simulation multiple times under different hypothetical settings. Here we are interested in getting a sense of how large the *actual* treatment effects would have to be in order to achieve a power level of 0.8. For each ATE, we simulate 400 datasets incrementing the assumed estimand from 0 to -0.25 by 0.01 (holding all other parameters at their assumed values specified above). This procedure allows us to calculate the power of the complete design and analysis for different potential values of the ATE (the solid black line) and compare it to the value reported in the main text (the vertical dotted line). The results, which are provided in Figure 1, indicate that the design has sufficient power to reliably detect treatment effects of -0.11 or greater (i.e., in the range $[-\infty, -0.11]$). Both the *Low dose* and *High dose* ATEs are well above this threshold, although the *Low dose + correction* coefficient falls just below, indicating that it is somewhat underpowered.

Understanding power for heterogeneous treatment effects is more complicated — the exact power calculations needed depend on the question one is interested in answering. In our case, we focus on the interaction between party and treatments reported in Table C1. Here, we specif-

Figure 1: Implied power for assumed values of treatment effects

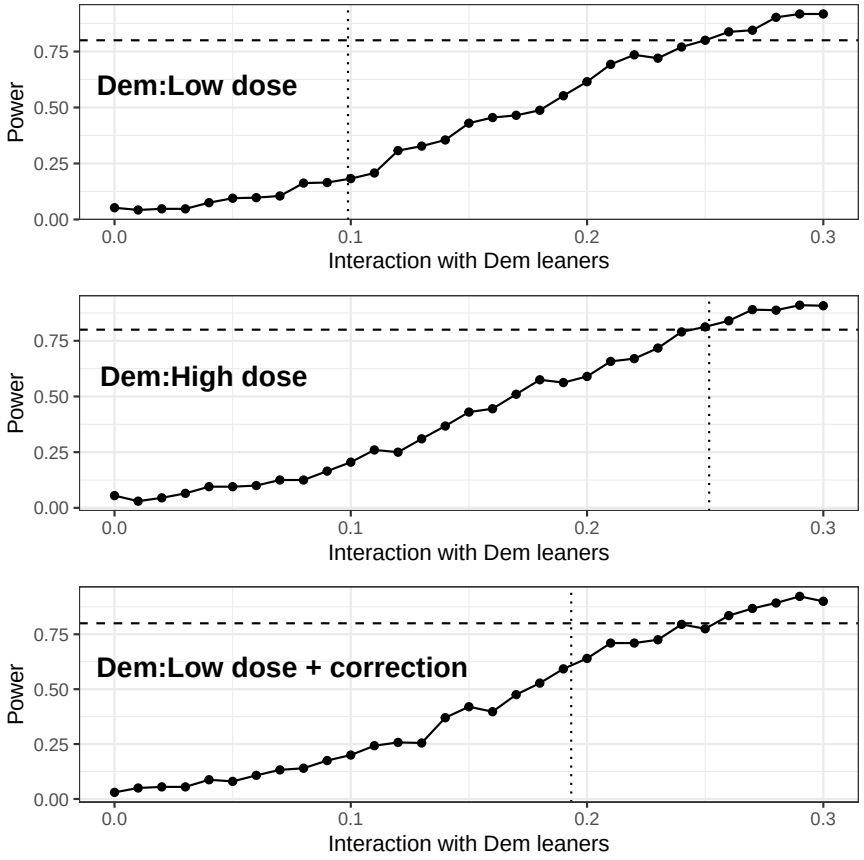


The solid black lines show the simulated power for the linear model reported in final column of Table 2 in the main text for different assumed values of the ATE. The horizontal line represents the traditional 0.8 power threshold. The vertical dotted lines are the reported ATE in the main text.

ically calculate power for the *Low dose* × *Democrat*, *High dose* × *Democrat*, and *Low dose* + *fact-check* × *Democrat* estimands. This is appropriate because the partisan difference in treatment effects is the focus of our discussion of these interactive models in the main text. We follow the basic strategy above but also must use the observed value of partisanship in our data to simulate potential outcomes.

The results are shown in Figure 2 and are consistent with existing research showing that interactions tend to have lower power. Here, the analyses indicate that interactions reach the traditional 0.8 threshold near magnitudes of 0.25. Thus the *High dose* × *Democrat* interaction appears to be sufficiently powered while the *Low dose* + *correction* × *Democrat* has less power (reflecting in part the lower power of the main effect). We are not sufficiently powered to detect interactions as small as the *Low dose* × *Democrat* coefficient reported in Table C1. This finding is not surprising given that the interaction itself is not statistically significant, but it does mean that we should refrain from simply concluding that the interaction is completely absent.

Figure 2: Implied power for assumed values of interaction terms for Democrats



The solid black lines show the simulated power for the linear model reported in Table C1. The horizontal line represents the traditional 0.8 power threshold. The vertical dotted lines are the reported interactions of the treatments with the indicator for being a Democrat.

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