Corrections vs. Prebunking: Testing Different Approaches to Promoting Confidence in U.S. Elections†

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Abstract

False claims that American elections are marred by fraud dominated the aftermath of the 2020 presidential election and widespread beliefs in fraud persisted in the years since. We report on three survey experiments conducted before and after the 2022 midterm elections that estimate the effectiveness of corrective information on belief in false claims about fraud. First, we compare the effectiveness of corrections based on credible sources from those that provide substantive information that prebunks false claims respondents might encounter. Second, we compare the impact of the substantive content of corrections on the specific misperceptions they target versus broader beliefs about the incidence and impact of fraud. Third, we compare the effect of prebunking corrections with and without a forewarning message aimed to heighten their inoculative effect. Finally, we measure the persistence into subsequent waves of effects from treatments administered in earlier survey waves. Both the credible source and the prebunking corrections mitigate false beliefs. The effects of the credible source correction mostly attenuate over time whereas those of the prebunking correction attenuate on some measured outcomes but not others. Corrective effects are consistently stronger on beliefs specifically targeted by their substantive content than on beliefs about broader fraud prevalence or impact. With regard to the prebunking correction, we find no additional effect from the forewarning message beyond that from the substantive content of the correction.

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The 2020 U.S. presidential election culminated in an unprecedented effort by a sitting president to overturn the outcome based on false claims of widespread fraud. As far back as the 2008 election, conservative groups, pundits, and politicians had actively worked to put voter fraud on the election agenda (Fogarty et al. 2015), leading to a plurality of Americans falsely believing voter fraud was a significant problem even before the 2016 and 2020 elections (Ahlquist, Mayer, and Jackman 2014; Levitt 2014). Donald Trump stoked fears about election fraud throughout his presidency, claiming to have won the popular vote in 2016 and establishing an ill-fated voter integrity commission (BBC 2016; Villeneuve 2018).

The so-called “Big Lie”—that the presidency was stolen from Trump in 2020 by fraud—increased partisan polarization on fraud beliefs, threatening the perceived legitimacy of U.S. elections (Mayer 2012; Minnite 2010). Though confidence in the national election count increased from 61% to 88% after the election among Trump’s opponents, it declined from 56% to 28% among his supporters (Bright Line Watch 2022). As a result, many Americans question Joe Biden’s victory — a June 2022 poll found that 37% of respondents said Biden only won because of voter fraud or indicated they were uncertain if he won fairly, including 73% of Republicans (Monmouth University Poll 2022).

We conducted a three-wave panel study in the lead-up to and following the 2022 US midterm election (one pre-election wave and two post-election waves). These data allow us to examine different approaches to addressing belief in voter fraud or other concerns about the legitimacy of U.S. elections. Specifically, each wave of the panel has an embedded experiment to examine the causal effect of different approaches to correct or address voter fraud misperceptions.

**Theoretical framework**

Meta-analyses show that fact-checks and corrective information typically increase the accuracy of the beliefs of those exposed to them (Walter et al. 2020; Walter and Murphy 2018). However, these effects rarely persist over time (e.g., Carey et al. 2022; Nyhan, Porter, and Wood 2022). One promising approach is to provide corrective information from surprising sources such as those who are speaking against partisan interest. Prior research suggests that such sources may be more effective at changing beliefs than even neutral third parties (Berinsky 2017). This approach has been successfully applied to
confidence in elections, which increased more after exposure among Republicans who saw messages from Republicans affirming the legitimacy of the 2020 election than among those who saw comparable messages from other sources (Clayton and Willer 2023). We extend this research by examining the persistence of these corrective effects on people’s beliefs about elections over time, extending beyond the one-shot design employed by Clayton and Willer.

Another approach to combating misinformation that has gained interest among researchers is known as “inoculation” (Lewandowsky and Van Der Linden 2021; Traberg, Roozenbeek, and van der Linden 2022). This approach is similar to a vaccination, as it involves exposing people to a small amount of false information, and then providing them with factual information to help them recognize and reject it. This allows people to build up an “immunity” against misinformation that they may encounter in the future. This approach has been found to reduce misperceptions on climate change, public health interventions, and other areas (Cook, Lewandowsky, and Ecker 2017; Lewandowsky and Van Der Linden 2021; Traberg, Roozenbeek, and van der Linden 2022).

Inoculation is traditionally conceptualized as being most effective when it occurs before people are substantially exposed to misinformation on a particular topic (Compton 2020). However, even after substantial prior exposure, people can still derive benefits from inoculation. This is because inoculation helps people build up resistance to the specific types of false information that they have been exposed to, and can thus make them more resistant to similar types of misinformation in the future (Compton 2020; Ivanov et al. 2017).

As with vaccinations against diseases, the efficacy of inoculations against misinformation is likely to decrease over time (Banas and Rains 2010). Although research has found that inoculation effects decay more slowly than effects of other interventions (e.g., Maertens, Anseel, and van der Linden 2020; Niederdeppe, Heley, and Barry 2015), there is still uncertainty over how long the effect persists. Therefore, it may be necessary to provide repeated doses to maintain its effectiveness. This can involve exposing people to new types of false claims and providing them with factual information to help them recognize and reject it, or reinforcing the same information multiple times to help people remember...

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1 Although “inoculation” and “prebunking” are frequently used interchangeably, they are not synonymous. An inoculation intervention requires prebunking, but prebunking does not require an inoculation intervention (Traberg, Roozenbeek, and van der Linden 2022).
and apply it (Ivanov, Parker, and Dillingham 2018). Along with the corrective information approach discussed above, we test the inoculation approach in our study.

**Panel survey**

The studies described in this paper come from a three-wave panel study conducted in 2022–2023 around the 2022 midterm election. While we only present results in this paper from the three waves of the 2022–23 data, it is important to note that a substantial portion of our respondents were invited to this panel because they had participated in a two-wave panel examining similar issues following the 2020 US Presidential election. (Results from the 2020–21 panel will be presented elsewhere.) The sample for the 2022–23 panel was constructed to maximize retention of participants in the 2020 panel, with YouGov using its standard matching and weighting approach to maximize the representativeness of the resulting sample. We fielded three waves of experiments around the 2022 midterm elections. The first wave was fielded before the election from October 18–November 7, 2022 ($n = 3,772$); the second wave was fielded December 7–20 ($n = 2,986$); and the third wave was conducted January 21–30, 2023 ($n = 2,030$).

Each wave of the panel includes an embedded between-subjects experiment in which respondents are randomized into different conditions. The hypotheses and research questions described below were preregistered with the Open Science Foundation (https://osf.io/gpy3s), with additional preregistration updates before each survey wave.

Across the three studies, we measured the following beliefs as outcome variables:²

- whether Joe Biden was the rightful winner of the 2020 presidential election (Waves 1 and 2 only);
- confidence that votes were counted as voters intended in the 2020 election (Waves 1 and 2 only);
- confidence that votes would be (or were) counted as voters intended in the 2022 election;
- confidence that votes would be counted as voters intended in the 2024 election (Wave 3 only);

²Additional outcome variables associated with an experiment unique to Study 2 are described below.
• the number of U.S. House contests the results of which were affected by fraud in the 2020 congressional elections (Waves 1 and 2 only);

• the number of U.S. House contests the results of which would be (or were) affected by fraud in the 2022 midterm elections;

• the number of U.S. House contests the results of which would be affected by fraud in the 2024 elections (Wave 3 only);

• the prevalence of: voter impersonation, voting with another person’s absentee ballot, voting multiple times, non-citizens voting, stealing or tampering with ballots, votes changed by voting machine software.3

The outcome variables were measured pre- and post-treatment in each wave. Survey instruments with response options are in the appendix. On whether votes were counted as intended, we asked each participant about confidence with respect to their own vote, to votes in their local area, in their state, and nationwide; we report results averaging a participant’s responses across all four levels. With regard to the prevalence of fraud, we also average a participant’s responses across all six types of election malfeasance.

Study 1

In the first survey wave, participants were randomized into one of three conditions — one retrospective to 2020, one prospective to 2022, or a placebo condition. The first treatment condition delivered a credible source correction consisting of four articles describing Republican judges and officials affirming the legitimacy of the 2020 election (one was adapted from the “Lost, Not Stolen” report (Danforth et al. 2022), two were adapted from media articles (Balsamo 2022; Helderman and Viebeck 2020), and one was constructed using quotes from leading GOP officials). The second treatment condition presented participants with four articles addressing specific myths circulating in 2022 about the security and integrity of the voting process. These materials were adapted from the Rumor vs. Reality

3The Wave 1 and Wave 2 instruments measured beliefs in fraud prevalence for the 2020 election, but omitted batteries to measure beliefs about fraud prevalence for 2022. The Wave 3 instrument included batteries to measure beliefs about fraud prevalence for the 2022 and 2024 elections.
section of the Cybersecurity and Infrastructure Security Agency (CISA) and emphasized the institutional mechanisms and protections used to ensure the integrity of the election process in a “reality” versus “myth” format [https://www.cisa.gov/rumor-vs-reality]. In addition to the informational component of these prebunking corrections, the treatment is set-up in the framework of an inoculation intervention, which additionally warns people of a future persuasive threat (“Here is the truth about some claims you might hear concerning the 2022 midterm elections that will be held this November”) (van der Linden 2019; van der Linden et al. 2017). This second component of the treatment — the warning against potential future exposure to false claims — can be thought of as a form of inoculation that would naturally accompany a prebunking correction that is proactively and preemptively giving people factually correct information ahead of potential exposure. The third condition, a placebo, presented non-political content (for example, articles about cooking or hiking).

Going forward we refer simply to these treatments, respectively, as the credible source correction, prebunking correction, and placebo. An important aspect of the credible source correction is that it is inherently retrospective in that it offers information about the 2020 Presidential election. In comparison, the prebunking correction treatment is inherently prospective by providing corrective information about an imminent election (while also warning about future attempts to be mislead or deceive).

We expected both the (retrospective) credible source corrections about 2020 and the CISA-derived (prospective) prebunking corrections to be surprising and credible to vote security skeptics. In the former case, the weight of persuasive force is from the source of the corrections — Republican judges and officials — whereas in the latter case it is from the technical and substantive explanations about administrative procedures.

Hypotheses

Our preregistered hypotheses and research questions follow from the credible-source and prebunking corrections.

H1: Exposure to a correction from credible sources about the prevalence of voter fraud in

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4The CISA’s website includes a guide explaining its approach to rumor control — [https://www.cisa.gov/sites/default/files/2023-01/rumor-control-startup-guide_508.pdf](https://www.cisa.gov/sites/default/files/2023-01/rumor-control-startup-guide_508.pdf). Note that we did not encounter this guide until after the experiments reported in this paper were completed.
the 2020 election (compared to a placebo condition) will increase confidence in the 2020 election and reduce beliefs about the prevalence and effects of fraud in the 2020 election. (Specific DVs include questions about the frequency of voter fraud, the number of seats changed by fraud, and whether Joe Biden is the rightful winner)

H2: Exposure to a prebunking correction containing CISA information about vote and election security along with a warning about how political figures may make false or misleading claims about the integrity of the 2022 election (compared to a placebo condition) will increase confidence in the 2022 election and reduce beliefs about the prevalence and effects of fraud (frequency of voter fraud, the number of seats changed by fraud) in the 2022 election.

We also preregistered research questions on whether general effects of the treatments would extend beyond their specific substantive focus — for example, whether corrective information about 2020 would reduce false beliefs about pervasiveness of fraud in 2022, and vice-versa.

RQ1a: Will exposure to a credible source correction (compared to a placebo condition) increase confidence in the 2022 election and reduce beliefs about the prevalence and effects of fraud (frequency of voter fraud, the number of seats changed by fraud) in the 2022 election?

RQ1b: Will exposure to a prebunking correction (compared to a placebo condition) increase confidence in the 2020 election and reduce beliefs about the prevalence and effects of fraud (frequency of voter fraud, the number of seats changed by fraud, and whether Joe Biden is the rightful winner) in the 2020 election?

Having estimated the effects of substantive content treatments on election-specific beliefs (relative to placebo) and of effects on beliefs about elections not targeted by treatments (again, relative to placebo), we then investigate, for each treatment, whether the estimated effects on beliefs about fraud in the 2020 election are statistically discernible from estimated effects on the 2022 election.

RQ2a: Is there a difference in the effect of a credible source correction on confidence in the 2020 election and beliefs about the prevalence and effects of fraud (frequency of
voter fraud, the number of seats changed by fraud) in the 2020 election versus its effects on confidence in the 2022 election and beliefs about the prevalence and effects of fraud (frequency of voter fraud, the number of seats changed by fraud) in the 2022 election?

RQ2b: Is there a difference in the effect of a prebunking correction on confidence in the 2020 election and beliefs about the prevalence and effects of fraud (frequency of voter fraud, the number of seats changed by fraud) in the 2020 election versus its effects on confidence in the 2022 election and beliefs about the prevalence and effects of fraud (frequency of voter fraud, the number of seats changed by fraud) in the 2022 election?

For any given election, we also want to know whether the effects of the two treatments are statistically from each other.5

RQ3a: Is there a difference between the effects of a credible source correction and prebunking correction on confidence in the 2020 election or beliefs about the prevalence and effects of fraud (frequency of voter fraud, the number of seats changed by fraud, and whether Joe Biden is the rightful winner) in the 2020 election?

RQ3b: Is there a difference between the effects of a credible source correction and prebunking correction on confidence in the 2022 election or beliefs about the prevalence and effects of fraud (frequency of voter fraud, the number of seats changed by fraud) in the 2022 election?

Finally, we will also measure the persistence of effects from treatments administered in the first wave of surveys, both for those who are exposed only to the Study 1 treatment (but not to treatments in subsequent waves) and for those who are exposed to treatments administered in subsequent waves.

RQ4: Do any observed effects persist in future waves (i.e., are these effects measurable in Waves 2 or 3 for H1, H2, RQ1a, RQ1b, RQ2a, RQ2b, RQ3a, RQ3b?)

5 Analyses of RQ2 and RQ3 forthcoming.
Results

Figure 1 shows the estimated effects of Study 1 treatments on outcome variables measured post-treatment relative to pre-treatment. Consistent with H1, exposure to the credible source correction about the 2020 election (panel (a)) increased belief that Biden was the rightful 2020 winner, increased confidence in the 2020 vote counts, and diminished belief in the prevalence of fraud in 2020. The estimated effect on beliefs about the number of House seats won by fraud in 2020 is in the expected (negative) direction but falls just short of statistical significance.

Results in panel (b) show that support for H2 was mixed. Exposure to the prebunking correction increased confidence in the 2022 vote count but it did not move the number of House races participants expected to be swung by fraud in the upcoming midterm elections.

Estimates shown in both panels also address RQ1a (Would the retrospective credible source correction affect beliefs about the 2022 election?) and RQ1b (Would the prebunking correction affect retrospective beliefs about 2020?). The credible source correction reduced expectations of House seats won by fraud in 2022 but fell short of increasing confidence in the 2022 vote count. The prebunking correction focusing on current electoral administration also affected some retrospective beliefs about 2020, increasing belief that Biden was the rightful winner, increasing confidence in the vote count, and diminishing estimates of fraud prevalence. It did not, however, move estimates of the number of House seats swung by fraud in 2020.

With respect to the persistence of effects (RQ4), some, but not all, of the effects of our Study 1 treatments attenuate over time. Figure 2 shows estimates on confidence in the 2022 vote count and beliefs about House seats won by fraud in 2022, the outcome variables we measured in all three survey waves. These beliefs were measured at the outset of the wave 2 and wave 3 surveys, prior to exposure to experimental treatments in Study 2 and Study 3. By the time of our second survey wave, in December

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6The percentages of participants whose pre-treatment outcomes were at the relevant floor or ceiling and could not move further down or up (respectively) due to treatment were as follows: Joe Biden was the rightful winner of the 2020 election: 22% (4); confidence in the 2020 election: 46.4% (4); confidence in the 2022 election: 40.1% (4); seats won due to fraud in the 2020 election: 60.3% (0); seats won due to fraud in the 2022 election: 60.4% (0); and prevalence of voter and election fraud in the 2020 election: 13.4% (1). We will test for heterogeneous treatment effects by pre-treatment levels of the outcome variables in future versions of this paper.

7As we note in the discussion of Study 3, by the time of the third survey wave our outcome variables differed on some counts. We no longer asked about beliefs related to the 2020 election, asking, instead, about 2024. Appendix Figure B1 shows estimated effects of Study 1 treatments across all outcome variables.
2022, the effect of both Study 1 treatments fell short of statistical significance on confidence in the 2022 vote count, as did the effect of a credible source correction on belief in seats won by fraud in the 2022 midterms. By contrast, however, the effect of the prebunking correction on belief in seats won by fraud was stronger when measured in wave 2 than initially upon treatment, prior to the election. By the time of our third survey wave, in January 2023, both Study 1 treatments—the credible source correction and the prebunking correction—had statistically discernible impact increasing confidence in the 2022 vote count, while the effects of each treatment on belief in seats won by fraud did not reach statistical significance. These persistent—and in some areas, increasing—estimated effects of the prebunking correction in Study 1 are noteworthy. One possibility is that the experience of the 2022 midterm elections provided traction to the content of the prebunking correction—that is, participants who had been armed with the prebunking material applied that substantive content to information they received in the wake of the November elections.

To sum up, both treatments increased retrospective confidence in the results of the 2020 election and decreased the perceived prevalence of voter and election fraud in 2020. The credible source correction decreased the perceived number of seats that participants expected to be won due to fraud in 2022 while the prebunking treatment increased prospective confidence in the 2022 election results. Ef-

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8The results in appendix Figure B1 indicate that the prebunking correction gained increased traction in wave 2 on beliefs about 2020 (fraud prevalence, seats won by fraud) and maintained an effect on seats won by fraud in 2022. With regard to outcome variables measured for the first time in wave 3, exposure to the prebunking correction in Study 1 increased confidence in the vote count for the 2024 election and diminished beliefs in fraud prevalence for both the 2022 midterms and the 2024 election.
fects of both treatments on beliefs about the 2022 election attenuated in future survey waves, although the prebunking correction showed some indication of persistence across the broader set of outcomes we measured.

**Study 2**

While Study 1 addresses general beliefs about the prevalence of voter fraud and confidence in elections, Study 2 looks at the effects of a corrective treatment targeting specific false claims being pushed about the 2022 Arizona elections. Specifically, Republican gubernatorial candidate Kari Lake and allies made a series of false claims that votes were not being counted due to ballot printing errors only in conservative areas of Maricopa County, Arizona. Our treatment was adapted from an Associated Press factcheck (Kelety 2022); half of respondents were assigned to treatment and half to a placebo condition where they received non-political content.

We examined whether a correction targeting these false claims would reduce belief in Lake’s specific claim about ballot printing errors and belief that her opponent, Katie Hobbs, was not the rightful winner. We also tested if debunking this specific and prominent myth would affect participants’ beliefs about fraud more generally (using measures introduced in Study 1).
Hypotheses

Our preregistered hypothesis (H3) concerns a corrective treatment targeting false claims about election fraud in Arizona’s 2022 gubernatorial election.

H3: Exposure to a correction treatment debunking false claims about election fraud in Arizona (compared to a placebo condition) will reduce false beliefs that issues tabulating ballots in Maricopa County were only experienced at voting sites in conservative areas (H3a) and that Katie Hobbs won the gubernatorial election due to election fraud and is not the rightful winner (H3b).

Our preregistered research questions (RQ5a and RQ5b) examine whether the corrective treatment has a broader impact on vote confidence and beliefs about fraud in the 2022 and 2020 elections.

RQ5a: Will exposure to a correction debunking false claims about election fraud in Arizona (compared to a placebo condition) affect confidence in the 2022 election and beliefs about the prevalence and effects of fraud (the number of seats changed by fraud) in the 2022 election?

RQ5b: Will exposure to a correction debunking false claims about election fraud in Arizona (compared to a placebo condition) affect confidence in the 2020 election and beliefs about the prevalence and effects of fraud (frequency of voter fraud, the number of seats changed by fraud, and whether Joe Biden is the rightful winner) in the 2020 election?

RQ8: Do the treatment effects from the Arizona correction administered in wave two persist in wave three? (i.e., are any effects measurable in wave three for H3, RQ5a, or RQ5b?)

Results

Results illustrated in Figure 3 indicate that exposure to the fact-check reduced the specific false beliefs it targeted — about election administration in Maricopa County (H3a) and the rightful winner of the
race (H3b) — but had no measurable effects on broader beliefs about the 2022 (RQ5a) or 2020 (RQ5b) elections.\footnote{In Wave 2, the percentages of participants whose pre-treatment outcomes were at the relevant floor or ceiling and could not move further down or up (respectively) due to treatment were as follows: confidence in the 2020 election: 51.0\% (4); confidence in the 2022 election: 53.2\% (4); seats won due to fraud in the 2020 election: 61.4\% (0); seats won due to fraud in the 2022 election: 63.0\% (0); and prevalence of voter and election fraud in the 2020 election: 16.1\% (1). As noted above, we will test for heterogeneous treatment effects by pre-treatment levels of the outcome variables in future versions of this paper.}

With respect to the persistence of treatment effects (RQ8), Figure 4 illustrates that, like in Study 1, the effect attenuates over time. Those exposed to the corrective fact check in Study 2 continued, a month later in wave 3, to be less likely than those who were not treated to support the false claim about ballot printing errors in Maricopa County, although the scale of that impact was about half as large as the initial effect measured at time of treatment. By the time of wave 3, the correction did not have statistically discernible effect on belief in the rightful winner of the gubernatorial election (measured in pre-treatment) after being significant in wave 2 (measured in post-treatment).

Figure 3: Effects of Study 2 treatments (Wave 2)
Study 3

Study 3 addresses three new questions. First, are prebunking corrections effective if we shift attention forward in time from the 2020 and 2022 elections to the 2022 and 2024 elections? Second, does the treatment affect participants’ ability to discern true statements about elections from false statements? Third, is the effect of the prebunking correction driven entirely by its substantive content or is there a measurable impact from the forewarning message that precedes the correction? We describe here how Study 3 was designed to address each question.

First, the outcome variables estimated in Study 3 differ from those in the previous studies. With the 2022 election firmly in the rearview, we shifted our questions about beliefs in fraud from 2020 (distant retrospective) and 2022 (current), to 2022 (recent retrospective) and 2024 (distant prospective). This separates retrospective beliefs in fraud from the Big Lie narrative that dominated (and for many still dominates) discussions of fraud in 2020. Asking about 2024 also means that anticipated estimates of fraud require projections much further into the future than in our earlier studies.

We also added a battery of questions designed to test participants’ ability to discern accurate from
inaccurate information about voting administration (for example, whether voting system software is subject to review), security (for example, the nature of safeguards to protect against tampering with ballot dropboxes), and fraud (for example, the prevalence of ballots cast by deceased citizens). The full set of questions is in the appendix.

Finally, we refined the treatments in Study 3 to hone in on the mechanics of the prebunking correction. We compare the effect of two versions of the CISA-based correction treatment – one with and one without a warning alerting participants that they might be exposed to misinformation in the future. These forewarning messages are designed to elicit threat and are a key component of inoculation interventions (Amazeen, Krishna, and Eschmann 2022; Lewandowsky and Van Der Linden 2021). Our aim is to disaggregate the effects of the substantive content about election administration in the CISA messaging from the inoculation effect of alerting participants about false messages they might encounter in the future — an important question for understanding generally what aspects of corrections may make them more or less effective. Unlike in Study 1, in which all respondents who received the prebunking correction with CISA articles received the additional language adapted from the inoculation literature, respondents in Study 3 were randomized to a version of the CISA messages condition with a forewarning, a version without a forewarning, or a placebo condition. (The specific CISA messages were also different from those used in Study 1.) This approach is inspired by the research literature on inoculation warning participants of future exposure to potentially misleading information (e.g., Amazeen, Krishna, and Eschmann 2022; Lewandowsky and Van Der Linden 2021), allowing us to isolate the effect of process-oriented correction content from the warning of future exposure to misinformation.

We first tested whether there are differences between the prebunking correction with and without a forewarning message on any of the outcome variables of interest. Though we face limits of statistical power, we find no measurable evidence that the effects of the CISA correction vary based on exposure to a forewarning message for our preregistered outcome measures. Therefore, per our preregistration, all the results we present in this paper pool responses from both treatments and present the pooled treatment effects relative to the placebo group. We present the results from models with the treatment

Recall that our credible source correction from Study 1 was substantively focused on false narratives about the 2020 presidential election. By early 2023, when we fielded Study 3, the salience of that material was diminishing.
groups separated—each relative to control, and relative to each other—in the appendix.

Hypotheses

Our preregistered hypotheses address the effects of each version of the treatment (with and without a forewarning message) compared to the placebo condition on discernment between true and false statements (H5) and on fraud beliefs (H4) in the 2022 and 2024 elections (we have presented hypotheses in descending order so that they match both the order in which we discuss them below without changing the labelling from our preregistration).

H5: Exposure to a prebunking correction will reduce the perceived accuracy of the misperceptions it targets (H5a), increase the perceived accuracy of the true claims it supports (H5b), and improve respondents’ ability to distinguish between them (H5c) compared to the placebo condition regardless of whether the prebunking correction is preceded by a warning alerting participants that they might be exposed to misinformation in the future.

H4: Exposure to a prebunking correction will increase confidence in the 2022 and 2024 elections and reduce beliefs about the prevalence and effects of fraud (frequency of voter fraud and the number of seats changed by fraud) in the 2022 and 2024 election compared to the placebo condition regardless of whether the prebunking correction is preceded by a warning alerting participants that they might be exposed to misinformation in the future.

RQ4: Do any observed effects persist in future waves (i.e., are these effects measurable in Waves 2 or 3 for H1, H2, RQ1a, RQ1b, RQ2a, RQ2b, RQ3a, RQ3b?)

Preregistered research questions RQ6 and RQ7 address whether there are differences between the two versions of the prebunking correction.

RQ6: Will exposure to a prebunking correction preceded by a warning alerting participants that they might be exposed to misinformation in the future increase confidence in the 2022 and 2024 elections and reduce beliefs about the prevalence and effects of fraud (frequency of voter fraud and the number of seats changed by fraud) in the 2022 and
2024 election compared to exposure to the same correction material without a forewarning message?

RQ7: Will exposure to a prebunking correction preceded by a warning alerting participants that they might be exposed to misinformation in the future affect the perceived accuracy of the misperceptions it targets (RQ7a), the perceived accuracy of the true claims it supports (RQ7b), or respondents’ ability to distinguish between them (RQ7c) compared to exposure to the same correction material without a forewarning message?

As noted above, we detected no such differences so we the results presented here pool both variants of the treatment together. The appendix includes results from models with the treatment groups separated.

Results

Figure 5: Effects of Study 3 treatment

(a) Factual beliefs

(b) Voter confidence and fraud perceptions

Figure 5 shows the results from the combined Study 3 treatments (compared to the placebo condition) on factual beliefs (panel a) and voter confidence and fraud perceptions (panel b).11

11 In Wave 3, the percentages of participants whose pre-treatment outcomes were at the relevant floor or ceiling and could not move further down or up (respectively) due to treatment were as follows: seats won due to fraud in the 2022 election: 63% (0); seats won due to fraud in the 2024 election: 63% (0); confidence in the 2022 election: 54% (4); confidence in the 2024 election: 49% (4); prevalence of voter and election fraud in the 2022 election: 18% (1); and prevalence of voter fraud in the 2024 election: 19% (1). As noted above, we will test for heterogeneous treatment effects by pre-treatment levels of the outcome variables in future versions of this paper.
Consistent with the hypothesis that the correction will be effective addressing the specific misperceptions that are targeted (H5), in panel (a) we find strong evidence that exposure to the prebunking correction increased the perceived accuracy of true statements (H5b), decreased the perceived accuracy of false statements (H5a), and improved respondents’ ability to distinguish between true and false statements (H5c). By contrast, the results presented in panel (b) do not confirm the expectation that the corrections will also effectively address more general beliefs about election legitimacy and the prevalence of fraud (H4). Although the estimated effects of the prebunking correction on confidence, prevalence of fraud, or seats won due to fraud in the 2022 or 2024 elections are all in the expected directions, none reached statistical significance. We can say with confidence that exposure to it improved participants’ ability to assess the accuracy of voter and election fraud claims. We cannot say the same thing, however, with regard to election confidence or voter fraud attitudes.

**General discussion**

Both correction approaches taken in Study 1 were effective at reducing misperceptions and increasing confidence in election results, at least upon initial exposure. A messaging approach that provided information about procedural protections against fraud using corrections provided from CISA was more effective at durably reducing fraud misperceptions than a source-oriented credible corrections approach. Study 2 demonstrated that debunking a specific election fraud myth was effective only at reducing misperceptions directly related to that myth and did not increase confidence in election administration nationally. Finally, Study 3 showed that the prebunking correction improves accuracy of participants beliefs and their ability to discern between true and false statements, even if it falls short of decisively reducing false beliefs about fraud in a recent election or in elections farther into the future. Study 3 results also indicated that the content of the CISA corrections drives the results we observe, not the presence of instructions warning about future exposure to misinformation.
References


Online Appendix A: Survey instrument and experimental stimuli

Wave 1 questionnaire

Consent

ABOUT THIS RESEARCH

You are being asked to participate in a research study. Scientists do research to answer questions and learn new information. Some research might help change or improve the way we do things in the future. This consent information will tell you more about the study to help you decide whether you want to participate. Please read this information before agreeing to be in the study.

TAKING PART IN THIS STUDY IS VOLUNTARY

You may choose not to take part in the study or may choose to leave the study at any time. Deciding not to participate, or deciding to leave the study later, will not result in any penalty and will not affect your relationship with YouGov, the University of Notre Dame, Dartmouth College, or the University of Exeter.

As an alternative to participating in the study, you may choose not to take part.

WHY IS THIS STUDY BEING DONE?

The purpose of this study is to learn more about public opinion on U.S. elections and issues in the news.

You were selected as a possible participant because you are an adult American citizen participating in YouGov’s survey panel pool. Additionally, you may have agreed to participate in YouGov’s Pulse program. The study is being conducted by Brian Fogarty from the Center for Social Science Research at the University of Notre Dame, Jason Reifler from the Department of Politics at the University of Exeter, and John Carey and Brendan Nyhan from the Department of Government at Dartmouth College. It is funded by the MIT Election Data and Science Lab.

HOW MANY PEOPLE WILL TAKE PART?
If you agree to participate, you will be one of 3,750 participants taking part in this study.

WHAT WILL HAPPEN DURING THE STUDY?
If you agree to be in the study, you will be asked to do the following things:

- Completion of a short survey on YouGov’s website or app. The survey is anticipated to take less than 10 minutes to complete.
- Possibly, completion of a short follow-up survey approximately one month from now on YouGov’s website or app. The follow-up survey is anticipated to take less than 10 minutes to complete.
- If you have agreed to participate in YouGov’s Pulse program, anonymous tracking data on your online website visits may be used by the researchers. However, there are no actions you need to take related
to YouGov Pulse and this study.

 WHAT ARE THE RISKS OF TAKING PART IN THE STUDY?
 While participating in the study, the potential risks include:
 - A risk of completing the survey is being uncomfortable answering the questions. - To minimize this potential risk, you can skip any questions that you feel uncomfortable answering.

 WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THE STUDY?
 We don’t expect you to receive any benefit from taking part in this study, but we hope to learn things that will help scientists in the future.

 HOW WILL MY INFORMATION BE PROTECTED?
 Efforts will be made to keep your personal information confidential. We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. No information which could identify you will be shared in publications about this study and databases in which results may be stored. <p> Organizations that may inspect and/or copy your research records for quality assurance and data analysis include groups such as the study investigator and his/her research associates, the University of Notre Dame Institutional Review Board or its designees, and (as allowed by law) state or federal agencies, especially the Office for Human Research Protections (OHRP), who may need to access the research records.

 WILL MY INFORMATION BE USED FOR RESEARCH IN THE FUTURE?
 Your information will not be used or distributed for future research studies.

 WILL I BE PAID FOR PARTICIPATION?
 You will receive 500 points for completing each survey.

 YouGov does not allow for prorated compensation. In the event of an incomplete survey, you will not receive any points.

 WHO SHOULD I CALL WITH QUESTIONS OR PROBLEMS?
 For questions about the study, contact the researcher, Brendan Nyhan at nyhan@.dartmouth.edu.

 PARTICIPANT’S CONSENT
 In consideration of all of the above, I give my consent to participate in this research study. By proceeding, I confirm that I am 18 years old, and agree to take part in this study.
 - I agree to take this survey
 - Take me to another survey

 In what year were you born?

 Are you…?
 Male
 Female
What is your age?

What racial or ethnic group best describes you?
- White
- Black or African-American
- Hispanic or Latino
- Asian or Asian-American
- Native American
- Middle Eastern
- Two or more races
- Other (open text)

What is the highest level of education you have completed?
- 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.)

Thinking back over the last year, what was your family’s annual income?
- Less than $10,000
- $10,000–$19,999
- $20,000–$29,999
- $30,000–$39,999
- $40,000–$49,999
- $50,000–$59,999
- $60,000–$69,999
- $70,000–$79,999
- $80,000–$99,999
- $100,000–$119,999
- $120,000–$149,999
- $150,000–$199,999
- $200,000–$249,999
- $250,000–$349,999
- $350,000–$499,999
- $500,000 or more

What is your zip code?

When it comes to politics, would you describe yourself as liberal, conservative, or neither liberal nor conservative?
- Very liberal
- Somewhat liberal
- Slightly liberal
-Moderate; middle of the road
-Slightly conservative
-Somewhat conservative
-Very conservative

Generally speaking, do you think of yourself as a ...?
-Democrat
-Republican
-Independent
-Other (open text)
-Not sure

[if Democrat]
Would you call yourself a strong Democrat or a not very strong Democrat?
-Strong Democrat
-Not very strong Democrat

[if Republican]
Would you call yourself a strong Republican or a not very strong Republican?
-Strong Republican
-Not very strong Republican

[if independent, other, not sure]
Do you think of yourself as closer to the Democratic or the Republican Party?
-The Democratic Party
-The Republican Party
-Neither
-Not sure

Generally, how interested are you in politics?
-Extremely interested
-Very interested
-Somewhat interested
-Not very interested
-Not at all interested

Do you approve or disapprove of the way Joe Biden is handling his job as President?
-Strongly approve
-Somewhat approve
-Somewhat disapprove
-Strongly disapprove

The next set of questions helps us learn what types of information are commonly known to the public. Please answer these questions on your own without asking anyone or looking up the answers. Many people don’t know the answers to these questions, but we’d be grateful if you would please answer
every question even if you’re not sure what the right answer is.

It is important to us that you do NOT use outside sources like the Internet to search for the correct answer. Will you answer the following questions without help from outside sources?

Yes
No

For how many years is a United States Senator elected - that is, how many years are there in one full term of office for a U.S. Senator?
Two years
Four years
Six years
Eight years
None of these
Don’t know

How many times can an individual be elected President of the United States under current laws?
Once
Twice
Four times
Unlimited number of terms
Don’t know

How many U.S. Senators are there from each state?
One
Two
Four
Depends on which state
Don’t know

Who is currently the Prime Minister of the United Kingdom?
Richard Branson
Liz Truss
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?
Two years
Four years
Six years
Eight years
For life
Don’t know

We would like to get your feelings toward some people, groups, and countries 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 person, group, or country. Ratings between 0 degrees and 50 degrees mean that you don’t feel favorable toward the person or institution and that you don’t care too much for that person, group, or country. You would rate them at the 50 degree mark if you don’t feel particularly warm or cold toward that person, group, or country. If we come to a person or institution whose name you don’t recognize, you don’t need to rate them.

-Joe Biden
- Democratic Party
- Republican Party
- Donald Trump
- The news media
- Election officials
- Black people
- White people

Please rate how much you agree with the following statements:
-Much of our lives are being controlled by plots hatched in secret places.
-Even though we live in a democracy, a few people will always run things anyway.
-The people who really ’run’ the country, are not known to the voter.
-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.

Strongly agree
Somewhat agree
Neither agree nor disagree
Somewhat disagree
Strongly disagree

Currently, Democrats have a majority in the U.S. House of Representatives. Which party do you expect to hold a majority in the U.S. House of Representatives after the November 2022 elections?
Definitely Democrats
Probably Democrats
Probably Republicans
Definitely Republicans

Currently, Democrats have a majority in the U.S. Senate. Which party do you expect to hold a majority in the U.S. Senate after the November 2022 elections?
Definitely Democrats
Probably Democrats
Probably Republicans
Definitely Republicans
Please indicate whether you agree or disagree with each statement below.
- 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

In November 2020, elections were held for 435 seats in the U.S. House of Representatives and 35 seats in the U.S. Senate. In how many of these elections do you think the winning candidate was not the rightful winner but instead won due to voter fraud?
None
One or two
Three to nine
Ten or more

In November 2022, elections will be held for 435 seats in the U.S. House of Representatives and 34 seats in the U.S. Senate. In how many of these elections do you think the winning candidate will not be the rightful winner but instead will win due to voter fraud?
None
One or two
Three to nine
Ten or more

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 that make more than $250,000 per year.
- The Affordable Care Act passed by Congress in 2010 should be repealed.

Strongly agree
Somewhat agree
Neither agree nor disagree
Somewhat disagree
Strongly disagree
How much, if at all, do you trust the information you get from...
-National news organizations
-Local news organizations
-Social media (such as Facebook, Twitter, and Instagram)
-Political leaders in the federal government
-Political leaders in the [respondent state] government

A lot
Some
Not too much
Not at all

Now we’d like to ask you about the election that took place in November 2020 for the presidency, U.S. Congress, and other offices

How confident are you that your vote was counted as you intended in the 2020 election?
Very confident
Somewhat confident
Not too confident
Not at all confident

How confident are you that votes in your local area were counted as voters intended in the 2020 election?
Very confident
Somewhat confident
Not too confident
Not at all confident

How confident are you that votes in your state were counted as voters intended in the 2020 election?
Very confident
Somewhat confident
Not too confident
Not at all confident

How confident are you that votes nationwide were counted as voters intended in the 2020 election?
Very confident
Somewhat confident
Not too confident
Not at all confident

Do you consider Joe Biden to be the rightful winner of the 2020 election or not the rightful winner?
Definitely the rightful winner
Probably the rightful winner
Probably not the rightful winner
Definitely not the rightful winner

To the best of your knowledge, how often did each of these occur in the 2020 presidential election?
- Voting more than once in an election.
- Stealing or tampering with ballots.
- Pretending to be someone else when voting.
- People voting who are not U.S. citizens.
- Voting with an absentee ballot intended for another person.
- Officials preventing absentee voters from voting.

A million or more
Hundreds of thousands
Tens of thousands
Thousands
Hundreds
Less than a hundred
Less than ten

Now we would like to ask you about the elections that will take place in November 2022 for the U.S. Congress and other offices.

How confident are you that your vote will be counted as you intend in the November 2022 election?
Very confident
Somewhat confident
Not too confident
Not at all confident

How confident are you that votes in your local area will be counted as voters intend in the November 2022 election?
Very confident
Somewhat confident
Not too confident
Not at all confident

How confident are you that votes in your state will be counted as voters intend in the November 2022 election?
Very confident
Somewhat confident
Not too confident
Not at all confident

How confident are you that votes nationwide will be counted as voters intend in the November 2022 election?
Very confident
Somewhat confident
Please read the following articles carefully. (You’ll need to answer questions about them correctly to successfully complete the survey.)

**Beware of False Rumors You May Hear about the 2022 Election**

Experts agree that American elections are safe and secure. Some politically-motivated groups are using misleading tactics to confuse voters and sow distrust in the electoral process, including the 2022 midterm elections that will be held this November.

For instance, they claim that people can easily cast unauthorized mail-in/absentee ballots and tamper with election drop boxes used by election officials to collect those ballots. They also claim that voting system software can be easily manipulated and that votes are frequently cast on behalf of dead people.

These claims may sound convincing at first. However, the Department of Homeland Security confirms that numerous protections are in place to protect the integrity of the election process. These facts contradict the rumors promoted by some political actors.

**✓ Reality: Safeguards protect the integrity of the mail-in/absentee ballot process.**

**✗ Rumor: People can easily violate the integrity of the mail-in/absentee ballot request process.**

Numerous safeguards protect the integrity of the mail-in/absentee ballot process. Ballot request forms typically require applicants to sign a form affirming their eligibility to cast a mail-in/absentee ballot under penalty of law. Election officials then verify the identity and eligibility of the requester by checking the signature and information submitted against the corresponding voter registration record and making sure that multiple ballots are not sent to the same voter. When a mail-in/absentee ballot is submitted, election officials verify the signature and confirm the ballot has been properly submitted before it is counted.

According to the page you just read, how do election officials protect the integrity of mail-in/absentee ballots?
-Verify the identity and eligibility of requesters and then verifying the signature when a ballot is submitted
-Sending texts to voters asking them to confirm which candidates they voted for
-Accepting mail-in/absentee ballots only from voters in one party
-There are no safeguards in place
[repeat up to three times if not answered correctly]

Some politically-motivated groups are using misleading tactics to confuse voters and sow distrust in the electoral process. Here is the truth about some claims you might hear concerning the 2022 midterm elections that will be held this November.

✅ Reality: Robust safeguards protect against tampering with ballots returned via drop box.

❌ Rumor: Drop boxes for mail-in/absentee ballots can be easily tampered with, stolen, or destroyed.

Robust safeguards protect against tampering with ballots returned via drop box. Drop boxes located outdoors are typically made of heavy and high-grade metal, bolted to the ground, and include security features such as locks, tamper-evident seals, minimally sized ballot insertion slots, and fire and water-damage prevention features. Drop boxes located indoors are typically staffed and protected by existing building security measures. Ballots returned via drop box are retrieved by election officials or designated individuals, often in bipartisan teams, at frequent intervals.

According to the page you just read, how are ballots from outdoor drop boxes protected?
-Using locks, tamper-evident seals, minimally sized ballot insertion slots, and other security features
-By picking up ballots monthly
-Using boxes that are not bolted to the ground
-There are no safeguards in place
[repeat up to three times if not answered correctly]

Some politically-motivated groups are using misleading tactics to confuse voters and sow distrust in the electoral process. Here is the truth about some claims you might hear concerning the 2022 midterm elections that will be held this November.

✅ Reality: Voting systems must be certified by state and/or federal voting system testing programs.

❌ Rumor: Voting system software is not reviewed or tested and can be easily manipulated.
Voting systems undergo testing from state and/or federal programs that certify voting system hardware and software. Under these programs, voting system manufacturers submit systems to undergo testing and review by an accredited laboratory or state testers. This testing is designed to check that systems function as designed and meet applicable standards for accuracy, privacy and accessibility. Once systems are deemed compliant, they are further tested by election officials to ensure proper functioning before deployment.

According to the page you just read, what is one way that voting systems are tested and certified?
- By accredited laboratories according to state and federal standards
- By the companies that make them
- By Underwriters Laboratories
[repeat up to three times if not answered correctly]

Some politically-motivated groups are using misleading tactics to confuse voters and sow distrust in the electoral process. Here is the truth about some claims you might hear concerning the 2022 midterm elections that will be held this November.

✓ Reality: Voter registration list maintenance and other election integrity measures protect against illegal voting.

× Rumor: Votes are being cast on behalf of dead people and these votes are being counted.

Voter registration list maintenance and other election integrity measures protect against voting illegally on behalf of deceased individuals. Election officials regularly remove deceased individuals from voter registration rolls based on death records, which provide a strong audit trail to identify any illegal attempts to cast ballots on behalf of deceased individuals. Additional election integrity safeguards, including signature matching and information checks, further protect against voter impersonation and voting by ineligible persons.

Taken out of context, some voter registration information may appear to suggest suspicious activity, but are actually innocuous clerical errors or the result of intended data practices. For example, election officials in some states use temporary placeholder data for registrants whose birth date or year is not known (e.g., 1/1/1900, which makes such registrants appear to be more than 120 years old). In other instances, an adult son or daughter with the same name and address as their deceased parent could be misinterpreted as a deceased voter or lead to clerical errors.

According to the article you just read, which records are frequently used to update voter registration lists and ensure they are up to date?
Legitimacy of 2020 Election Affirmed by Leading Republicans

Experts agree that American elections are safe and secure. Some politically-motivated groups are claiming that the 2020 presidential election was marred by irregularities and fraud that denied then-President Donald Trump a victory and delivered a win for Joe Biden.

In fact, there is widespread evidence that the 2020 election was administered effectively. Allegations of widespread fraud have been investigated and found to be unsupported in a variety of settings, including in courts, by state governments, and by legal experts.

Importantly, these conclusions have been affirmed by numerous Republicans and conservatives at the highest levels of American politics and in the judiciary, including many political allies of President Trump. Examples of Republicans and conservatives who have affirmed the legitimacy of the 2020 election result include Senate Majority Leader Mitch McConnell, Attorney General Bill Barr, numerous judges appointed by Trump, and the Republican governors of Arizona and Georgia.

Article: Republican Leaders Say Biden Won

Eight well-known Republican attorneys, judges, and politicians say they want conservatives in particular to know the 2020 election wasn’t stolen — former President Donald Trump lost.

"Our conclusion is unequivocal," they write. "Joe Biden was the choice of a majority of the Electors, who themselves were the choice of the majority of voters in their states. Donald Trump and his supporters have failed to present evidence of fraud or inaccurate results significant enough to invalidate the results of the 2020 Presidential Election."

The report’s authors are former U.S. Senators John Danforth (R-MO) and Sen. Gordon H. Smith (R-Or.); Republican election lawyer Ben Ginsberg; former U.S. Solicitor General Theodore B. Olson, who served under George W. Bush; David Hoppe, the former chief of staff to two Republican Congressional Majority Leaders; and former federal judges Thomas B. Griffith, J. Michael Luttig, and Michael McConnell — all appointed by Republican presidents.
According to the article you just read, who recently issued a report affirming that former President Donald Trump lost the 2020 election?

- Eight well-known Republican attorneys, judges, and politicians
- Six well-known Democratic attorneys, judges, and politicians
- Four law professors
- Nine election officials

[repeat up to three times if not answered correctly]

[new page]

Article: Republican Judges Reject Trump’s Election Lawsuits

President Trump filed numerous lawsuits claiming voter fraud, illegal polling procedures, and errors with ballots and voting machines that would have invalidated the 2020 election results.

However, in a remarkable show of near-unanimity across the nation’s judiciary, at least 86 judges — ranging from jurists serving at the lowest levels of state court systems to members of the United States Supreme Court — rejected at least one post-election lawsuit filed by Trump or his supporters.

In particular, numerous conservative jurists have balked at the sweeping attempts by Trump and his allies to throw out millions of votes after they were cast — rejecting claims of irregularities as unfounded and challenges to the voting process as belated.

In total, 38 judges appointed by Republicans dealt blows to such suits, with some writing searing opinions.

Taken together, the judges’s decisions have comprehensively dismantled the arguments advanced by Trump in his effort to get the courts to subvert Biden’s victory.

[new page]

According to the article you just read, how many judges appointed by Republicans ruled against lawsuits filed by Trump and his allies to overturn the results of the 2020 election?

- 0
- 1
- 5
- 10
- 38

[repeat up to three times if not answered correctly]

[new page]

Article: Trump’s Attorney General Says No Evidence of Widespread Fraud

Disputing President Donald Trump’s claims, Attorney General William Barr declared in December
2020 that the U.S. Justice Department uncovered no evidence of widespread voter fraud that could change the outcome of the 2020 election.

Barr’s comments contradicted the concerted effort by Trump, his boss, to subvert the results of the 2020 election’s voting and block President-elect Joe Biden from taking his place in the White House.

Barr told the Associated Press that U.S. attorneys and FBI agents "have not seen fraud on a scale that could have effected a different outcome in the election." The comments were especially notable coming from Barr, who has been one of the president’s most ardent allies.

In the article you just read, which Republican official was described as saying that there was no evidence of widespread fraud in the 2020 election?
- Attorney General Bill Barr
- Senator Mike Rounds
- Representative Roger Aderholt
- Governor Kevin Stitt
[repeat up to three times if not answered correctly]

Article: Republican Governors Certify Biden Wins in Swing States

Joe Biden’s victory in the 2020 election has been recognized by numerous leading Republican officials, including Trump allies Governor Brian Kemp of Georgia and Governor Doug Ducey of Arizona, who both certified that Biden won their states, as well as Senate Majority Leader Mitch McConnell.

For instance, Ducey said, "Arizona is a good government state. I trust our election system. There’s integrity in our election system. Joe Biden did win Arizona."

Similarly, Brad Raffensperger, the Republican Secretary of State of Georgia, said the following before Kemp announced that the election results in the state had been certified: "Working as an engineer throughout my life, I live by the motto that numbers don’t lie. As secretary of state, I believe that the numbers that we have presented today are correct. The numbers reflect the verdict of the people."

At the national level, Senate Majority Leader Mitch McConnell also acknowledged that Biden won the 2020 election, saying "The Electoral College has spoken."

According to the article you just read, who certified the 2020 presidential election results in Arizona and Georgia?
- Republican governors
- Democratic governors
The House of Representatives
The U.S. Senate
[repeat up to three times if not answered correctly]

[new page]
[placebo condition; p=1/3]

**Keep Up-To-Date with World Events**

It is important for people to be informed about events happening in the world today. Please read the following news articles, which will cover several different topics.

[new page]

**Article: Sauces in cooking**

Travis Lett often steals. Of course, the only person this pensive chef ever steals from is himself. At Gjelina, his Los Angeles, USA restaurant with a large, ever-changing menu, "We’re constantly appropriating elements from dishes we’ve done in the past to create new combinations," he said.

There’s a lesson here: To improve your cooking, learn how to make and use sauces like a professional.

Five basic types of sauces appear over and over again on menus and in cookbooks that feature the kind of vegetable-heavy, flavor-dense food that cooks and eaters favor today: yogurt sauce, pepper sauce, herb sauce, tahini sauce and pesto. Master each one, and you’ll immediately have access to the dozens of variations that descend from them, too. <p>Think of them as the new mother sauces, an updated version of the five mother sauces of French cuisine. Armed with one of these five sauces, the home cook can go on and cook what he or she is most comfortable cooking: roast chicken, grilled steak or fish, roasted vegetables, a pot of beans or rice. The right sauce will transform the distinct elements of a dish into a unified statement of taste.

[new page]

According to the article you just read, which of the following food types are essential for cooking different types of dishes?
- Sauce
- Condiments
- Proteins
- Grains
[repeat up to three times if not answered correctly]

[new page]

**Article: Why hiking is good for your health**
The experience of hiking is unique, research suggests, conveying benefits beyond what you receive from typical exercise. Not only does it oxygenate your heart, it helps keep your mind sharper, your body calmer, your creativity more alive, and your relationships happier. And, evidence suggests that being around trees may provide extra benefits, perhaps because of certain organic compounds that trees exude that boost our mood and our overall psychological well-being.

Hiking in nature is so powerful for our health and well-being that some doctors have begun prescribing it as an adjunct to other treatments for disease. As one group of researchers puts it, "The synergistic effect of physical activity and time spent in nature make hiking an ideal activity to increase overall health and wellness."

Hiking involves something many other forms of exercise don’t: trails. That means it requires navigating in a world that’s not totally predictable. Slippery dirt, overhanging branches and hidden obstacles, trail markers, and wild animals crossing your path — all of the things you might encounter on a trail — require micro- and macro-adjustments to your route, which is good for your brain.

According to the article you just read, why does hiking differ from other types of exercise?
- Benefits for wellness and mood
- Need for different equipment
- Safety concerns
- Cost and distance barriers
[repeat up to three times if not answered correctly]

Article: Airlines serve hearing-impaired passengers

Delta Airlines recently announced that employees who speak any of the 300-plus types of sign language will be identified by a notice on their employee nametag. In a press release, the company stated that this update will allow "customers and qualified employees [to] immediately be able to visually recognize when they hold sign language as a common connection." Delta becomes the latest major airline to take steps to help their customers who are deaf or hard of hearing have a smoother time traveling. In early 2019, Virgin Atlantic Airways introduced a "hidden symbol," included on a slip with its tickets or worn as a pin, which allow people with disabilities that are not apparent to identify themselves to employees. The company also offers sign language interpretation in British Sign Language if notified in advance. Those services, however, are only available on international flights.

A number of other airlines, including Southwest, do not list their specific services for deaf and hard-of-hearing passengers on their websites but provide a phone number with relay service or teletypewriter service. Many airlines, including United, ask deaf and hard-of-hearing customers to identify themselves to staff.
According to the article you just read, where will Delta employees who speak sign language be identified for hearing-impaired passengers?
- Employee nametags
- Airport signs
- Television monitors at airport gates
- Passenger tickets
[repeat up to three times if not answered correctly]

[new page]

**Article: Sleep aids are now high-tech**

This morning, like most mornings, I looked at my phone. The screen read, "26." "Only a 26?" I thought. Then I realized my mistake: I’d forgotten to switch it on until 2:45 a.m.

"It" is Beddit, a device that sits underneath my fitted sheet and tracks my heart rate and movement while I sleep. Each morning, I’m awarded a score — a 100 is perfect, a zero means you did not sleep at all. Before technology started trying to fix sleep, it ruined it.

New gadgets can tell us what we’re doing wrong. Sleep isn’t just what we do when we’re not doing anything: It’s a market, a massive and trendy economy that’s selling something we can’t live without.

The appeal of these services is obvious. The ease of booting up your smartphone and accomplishing such a boring, adult purchase — complete with a customization quiz, no less — is far more appealing than the alternative.

"The ... industry was overdue for disruption and the direct-to-consumer e-commerce wave is just starting to crescendo," says Matt Hayes, head of marketing at Leesa.

[new page]

According to the article you just read, what is Beddit?
- An Internet forum for insomniacs
- An Internet company that sells sheets directly to consumers
- A device that measures sleep quality
- A portable mattress
[repeat up to three times if not answered correctly]

[end randomized stimuli]
[new page]

Now we would like to again ask you about the elections that will take place in November 2022 for the U.S. Congress and other offices.
How confident are you that your vote will be counted as you intend in the November 2022 election?
Very confident
Somewhat confident
Not too confident
Not at all confident

How confident are you that votes in your local area will be counted as voters intend in the November 2022 election?
Very confident
Somewhat confident
Not too confident
Not at all confident

How confident are you that votes in your state will be counted as voters intend in the November 2022 election?
Very confident
Somewhat confident
Not too confident
Not at all confident

How confident are you that votes nationwide will be counted as voters intend in the November 2022 election?
Very confident
Somewhat confident
Not too confident
Not at all confident

In November 2022, elections will be held for 435 seats in the U.S. House of Representatives and 34 seats in the U.S. Senate. In how many of these elections do you think the winning candidate will not be the rightful winner but instead will win due to voter fraud?
None
One or two
Three to nine
Ten or more

You said you expect that the results of [one or two / three to nine / ten or more] elections for the U.S. House and Senate in 2022 will be changed by voter fraud. Please explain why you expect this to be true.

Now we’d like to again ask you about the election that took place in November 2020 for the presidency, U.S. Congress, and other offices.

How confident are you that your vote was counted as you intended in the 2020 election?
Very confident
Somewhat confident
Not too confident
Not at all confident

How confident are you that votes in your local area were counted as voters intended in the 2020 election?
Very confident
Somewhat confident
Not too confident
Not at all confident

How confident are you that votes in your state were counted as voters intended in the 2020 election?
Very confident
Somewhat confident
Not too confident
Not at all confident

How confident are you that votes nationwide were counted as voters intended in the 2020 election?
Very confident
Somewhat confident
Not too confident
Not at all confident

Do you consider Joe Biden to be the rightful winner of the 2020 election or not the rightful winner?
Definitely the rightful winner
Probably the rightful winner
Probably not the rightful winner
Definitely not the rightful winner

To the best of your knowledge, how often did each of these occur in the 2020 presidential election?
Voting more than once in an election.
Stealing or tampering with ballots.
Pretending to be someone else when voting.
People voting who are not U.S. citizens.
Voting with an absentee ballot intended for another person.
Officials preventing absentee voters from voting.

A million or more
Hundreds of thousands
Tens of thousands
Thousands
Hundreds
Less than a hundred
Less than ten
In November 2020, elections were held for 435 seats in the U.S. House of Representatives and 35 seats in the U.S. Senate. In how many of these elections do you think the winning candidate was not the rightful winner but instead won due to voter fraud?

None
One or two
Three to nine
Ten or more

You said you think that the results of [one or two/three to nine/ten or more] elections for the U.S. House and Senate in 2020 were changed by voter fraud. Please explain why you believe this to be true.

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

Never
Rarely
Some of the time
Most of the time
Always

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 not be penalized in any way if you did.

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

Wave 2 questionnaire

Consent

ABOUT THIS RESEARCH

You are being asked to participate in a research study. Scientists do research to answer questions and learn new information. Some research might help change or improve the way we do things in the future. This consent information will tell you more about the study to help you decide whether you want to participate. Please read this information before agreeing to be in the study.

TAKING PART IN THIS STUDY IS VOLUNTARY
You may choose not to take part in the study or may choose to leave the study at any time. Deciding not to participate, or deciding to leave the study later, will not result in any penalty and will not affect your relationship with YouGov, the University of Notre Dame, Dartmouth College, or the University of Exeter.

As an alternative to participating in the study, you may choose not to take part.
WHY IS THIS STUDY BEING DONE?
The purpose of this study is to learn more about public opinion on U.S. elections and issues in the news.

You were selected as a possible participant because you are an adult American citizen participating in YouGov’s survey panel pool. Additionally, you may have agreed to participate in YouGov’s Pulse program.

The study is being conducted by Brian Fogarty from the Center for Social Science Research at the University of Notre Dame, Jason Reifler from the Department of Politics at the University of Exeter, and John Carey and Brendan Nyhan from the Department of Government at Dartmouth College. It is funded by the MIT Election Data and Science Lab.

HOW MANY PEOPLE WILL TAKE PART?
If you agree to participate, you will be one of 3,750 participants taking part in this study.

WHAT WILL HAPPEN DURING THE STUDY?
If you agree to be in the study, you will be asked to do the following things:
- Completion of a short survey on YouGov’s website or app. The survey is anticipated to take less than 20 minutes to complete.
- Possibly, completion of a short follow-up survey approximately one month from now on YouGov’s website or app. The follow-up survey is anticipated to take less than 20 minutes to complete.
- If you have agreed to participate in YouGov’s Pulse program, anonymous tracking data on your online website visits may be used by the researchers. However, there are no actions you need to take related to YouGov Pulse and this study.

WHAT ARE THE RISKS OF TAKING PART IN THE STUDY?
While participating in the study, the potential risks include:
- A risk of completing the survey is being uncomfortable answering the questions.
- To minimize this potential risk, you can skip any questions that you feel uncomfortable answering.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THE STUDY?
We don’t expect you to receive any benefit from taking part in this study, but we hope to learn things that will help scientists in the future.

HOW WILL MY INFORMATION BE PROTECTED?
Efforts will be made to keep your personal information confidential. We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. No information which could identify you will be shared in publications about this study and databases in which results may be stored. Organizations that may inspect and/or copy your research records for quality assurance and data analysis include groups such as the study investigator and his/her research associates, the University of Notre Dame Institutional Review Board or its designees, and (as allowed by law) state or federal agencies, especially the Office for Human Research Protections (OHRP), who may need to access the research records.

WILL MY INFORMATION BE USED FOR RESEARCH IN THE FUTURE?
Your information will not be used or distributed for future research studies.

WILL I BE PAID FOR PARTICIPATION?
You will receive 2500 points for completing each survey.

YouGov does not allow for prorated compensation. In the event of an incomplete survey, you will not receive any points.

WHO SHOULD I CALL WITH QUESTIONS OR PROBLEMS?
For questions about the study, contact the researcher, Brendan Nyhan at nyhan@dartmouth.edu.

PARTICIPANT’S CONSENT
In consideration of all of the above, I give my consent to participate in this research study. By proceeding, I confirm that I am 18 years old, and agree to take part in this study.
- I agree to take this survey
- Take me to another survey

When it comes to politics, would you describe yourself as liberal, conservative, or neither liberal nor conservative?
- Very liberal
- Somewhat liberal
- Slightly liberal
- Moderate; middle of the road
- Slightly conservative
- Somewhat conservative
- Very conservative

Generally speaking, do you think of yourself as a ...?
- Democrat
- Republican
- Independent
- Other (open text)
- Not sure

Strong Democrat Show
Not very strong Democrat

Strong Republican
Not very strong Republican

The Democratic Party
The Republican Party
Neither
Not sure
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?
I did not vote in the election this November
I thought about voting this time, but didn’t
I usually vote, but didn’t this time
I am sure I voted

Generally, how interested are you in politics?
Extremely interested
Very interested
Somewhat interested
Not very interested
Not at all interested

Do you approve or disapprove of the way Joe Biden is handling his job as President?
-Strongly approve
-Somewhat approve
-Somewhat disapprove
-Strongly disapprove

We would like to get your feelings toward some people, groups, and countries 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 person, group, or country. Ratings between 0 degrees and 50 degrees mean that you don’t feel favorable toward the person or institution and that you don’t care too much for that person, group, or country. You would rate them at the 50 degree mark if you don’t feel particularly warm or cold toward that person, group, or country. If we come to a person or institution whose name you don’t recognize, you don’t need to rate them.

Election officials
White people
Black people
The news media
Joe Biden
Donald Trump
Republican Party
Democratic Party

Please indicate whether you agree or disagree with each statement below.
-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.
-Thomas Jefferson was the 43rd president of the United States.

-Strongly agree
-Somewhat agree
-Neither agree nor disagree
-Somewhat disagree
-Strongly disagree

In November 2020, elections were held for 435 seats in the U.S. House of Representatives and 35 seats in the U.S. Senate. In how many of these elections do you think the winning candidate was not the rightful winner but instead won due to voter fraud?
-None
-One or two
-Three to nine
-Ten or more

In November 2022, elections were held for 435 seats in the U.S. House of Representatives and 34 seats in the U.S. Senate. In how many of these elections do you think the winning candidate was not the rightful winner but instead won due to voter fraud?
-None
-One or two
-Three to nine
-Ten or more

Please indicate whether you agree or disagree with each statement below.
-People convicted of murder should be given the death penalty.
-The leader of the American government is the prime minister.
-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 that make more than $250,000 per year.
-The Affordable Care Act passed by Congress in 2010 should be repealed.

-Strongly agree
-Somewhat agree
-Neither agree nor disagree
-Somewhat disagree
-Strongly disagree

Now we’d like to ask you about the election that took place in November 2020 for the presidency, U.S. Congress, and other offices.

How confident are you that your vote was counted as you intended in the 2020 election?
-Very confident
-Somewhat confident
How confident are you that votes in your local area were counted as voters intended in the 2020 election?
- Very confident
- Somewhat confident
- Not too confident
- Not at all confident

How confident are you that votes in your state were counted as voters intended in the 2020 election?
- Very confident
- Somewhat confident
- Not too confident
- Not at all confident

How confident are you that votes nationwide were counted as voters intended in the 2020 election?
- Very confident
- Somewhat confident
- Not too confident
- Not at all confident

Do you consider Joe Biden to be the rightful winner of the 2020 election or not the rightful winner?
- Definitely the rightful winner
- Probably the rightful winner
- Probably not the rightful winner
- Definitely not the rightful winner

To the best of your knowledge, how often did each of these occur in the 2020 presidential election?
- Voting more than once in an election.
- Stealing or tampering with ballots.
- Pretending to be someone else when voting.
- People voting who are not U.S. citizens.
- Voting with an absentee ballot intended for another person.
- Officials preventing absentee voters from voting.

- A million or more
- Hundreds of thousands
- Tens of thousands
- Thousands
- Hundreds
- Less than a hundred
- Less than ten

Now we would like to ask you about the elections that took place in November 2022 for the U.S.
Congress and other offices.

How confident are you that your vote was counted as you intended in the November 2022 election?
- Very confident
- Somewhat confident
- Not too confident
- Not at all confident

How confident are you that votes in your local area were counted as voters intended in the November 2022 election?
- Very confident
- Somewhat confident
- Not too confident
- Not at all confident

How confident are you that votes in your state were counted as voters intended in the November 2022 election?
- Very confident
- Somewhat confident
- Not too confident
- Not at all confident

How confident are you that votes nationwide were counted as voters intended in the November 2022 election?
- Very confident
- Somewhat confident
- Not too confident
- Not at all confident

To the best of your knowledge, which of these states has had a losing candidate for governor refuse to accept the results of the 2022 election?
- Arizona
- Michigan
- Nevada
- New Hampshire
- Pennsylvania
- Wisconsin

Fact check: False claims of broken Arizona voting machines only in Republican areas
Associated Press
A printing malfunction at about one-quarter of the polling places across Arizona's most populous county gave rise to false claims by former President Donald Trump, Arizona Republican gubernatorial candidate Kari Lake, and social media users suggesting that the problems only affected sites in conservative parts of the county.

In reality, voting centers across Maricopa County reported printing issues that stopped some ballots from being counted onsite, including in Democrat-leaning areas, like downtown Phoenix and Tempe.

"We came right down into the heart of liberal Phoenix to vote because we wanted to make sure that we had good machines," Lake said during a press gaggle. "And guess what? They've had zero problems with their machines today."

Trump wrote on Truth Social in reference to the voting snag, "Only Republican areas? WOW!"

Such claims also spread independently on social media, with one Instagram user sharing an image that featured the text, "Funny how in Arizona the voting machines 'stopped working' in predominantly REPUBLICAN areas."

However, the claim that only voting sites in conservative areas in Arizona's Maricopa County experienced issues with tabulating ballots on Election Day is false. Voting centers in both liberal and conservative parts of Maricopa County were impacted by the printing issues, according to the Maricopa County Elections Department.

Technical were dispatched to all sites where there were printing issues, a county elections official wrote in an email, including sites in Glendale, Phoenix, and Tempe, which all skew toward Democrats.

"It is simply untrue that the voting centers that were impacted are only in Republican areas," said Paul Bentz, a Republican pollster. "There are certainly some Republican areas impacted, but there are a significant number of Democratic-leaning areas as well as a number of swing areas or very competitive areas."

According to the article you just read, which of the following happened on Election Day?

-Absentee mail delivery problems in Arizona
-Ballot printing and tabulation problems in Arizona
-Absentee mail delivery problems in Georgia
-Ballot printing and tabulation problems in Georgia
-Absentee mail delivery problems in Ohio
-Ballot printing and tabulation problems in Ohio

[repeat up to three times if not answered correctly]

[placebo condition: p=.5]
What do you need for birdwatching?
By Bill Thompson III

The most basic equipment required for bird watching is your eyes, though you will soon need to have more items with you if you intend to make this a pastime or serious hobby. How far you go is a matter of taste and budget.

The most useful thing that you can carry is a notepad and pencil. Use this to make a note of location, time, date, weather and habitat. Do a list of the birds that you see and know. Do a drawing or write down a description of those that you don’t. You can look them up later in your field guide. Your notebook should become a diary of where you have been and what you have seen.

A field guide is a book that provides descriptions of birds to assist you in their identification. The descriptions use several factors to help you determine the exact bird that you are looking at. As soon as you see a bird that you do not recognize you will need to have access to a good field guide. There are many to choose from.

Binoculars. These are pretty essential and buy the best that you can afford. A good pair well looked after will last you a lifetime. Take time to choose ones that suit you.

[new page]

According to the article you just read, which of the following is "pretty essential" for birdwatching?
- Hat
- Map
- Binoculars
- Camera

Now we would like to again ask you about the elections that took place in November 2022 for the U.S. Congress and other offices.

How confident are you that your vote was counted as you intended in the November 2022 election?
- Very confident
- Somewhat confident
- Not too confident
- Not at all confident

How confident are you that votes in your local area were counted as voters intended in the November 2022 election?
- Very confident
- Somewhat confident
- Not too confident
- Not at all confident
How confident are you that votes in your state were counted as voters intended in the November 2022 election?
- Very confident
- Somewhat confident
- Not too confident
- Not at all confident

How confident are you that votes nationwide were counted as voters intended in the November 2022 election?
- Very confident
- Somewhat confident
- Not too confident
- Not at all confident

How confident are you that votes in Arizona have been counted as voters intended in the November 2022 election?
- Very confident
- Somewhat confident
- Not too confident
- Not at all confident

On Election Day 2022, a printing malfunction took place at about one-quarter of the polling places in Maricopa County, the most populous county in Arizona. This problem stopped some ballots from being counted onsite.

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

Only voting sites in conservative areas in Arizona’s Maricopa County experienced issues with tabulating ballots on Election Day 2022.
- Very accurate
- Somewhat accurate
- Not very accurate
- Not at all accurate

Please state whether you agree or disagree with the following statement:

In the election for Arizona governor, Katie Hobbs, the Democrat, defeated Kari Lake, the Republican, due to election fraud and therefore is NOT the rightful winner.
- Strongly agree
- Somewhat agree
- Somewhat disagree
- Strongly disagree

In November 2022, elections were held for 435 seats in the U.S. House of Representatives and 34 seats in the U.S. Senate. In how many of these elections do you think the winning candidate was not the
rightful winner but instead won due to voter fraud?
-None
-One or two
-Three to nine
-Ten or more

You said that the results of [answer from prior question] elections for the U.S. House and Senate in 2022 were changed by voter fraud. Please explain why you believe this to be true.

[repeated six times; drawn with uniform probability from set of races contested by two major party candidates]
In Congressional district [number] in [state], the Democratic candidate [name] got [share] of the major-party vote and the Republican candidate [name] got [share] of the major-party vote. Do you think [winning party] candidate [winning candidate name] was the rightful winner or instead won due to voter fraud?
-Rightful winner
-Won due to voter fraud

Now we'd like to again ask you about the election that took place in November 2020 for the presidency, U.S. Congress, and other offices.

How confident are you that your vote was counted as you intended in the 2020 election?
-Very confident
-Somewhat confident
-Not too confident
-Not at all confident

How confident are you that votes in your local area were counted as voters intended in the 2020 election?
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-Not too confident
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How confident are you that votes in your state were counted as voters intended in the 2020 election?
-Very confident
-Somewhat confident
-Not too confident
-Not at all confident

How confident are you that votes nationwide were counted as voters intended in the 2020 election?
-Very confident
-Somewhat confident
-Not too confident
-Not at all confident
Do you consider Joe Biden to be the rightful winner of the 2020 election or not the rightful winner?
- Definitely the rightful winner
- Probably the rightful winner
- Probably not the rightful winner
- Definitely not the rightful winner

To the best of your knowledge, how often did each of these occur in the 2020 presidential election?
- Voting more than once in an election.
- Stealing or tampering with ballots.
- Pretending to be someone else when voting.
- People voting who are not U.S. citizens.
- Voting with an absentee ballot intended for another person.
- Officials preventing absentee voters from voting.

- A million or more
- Hundreds of thousands
- Tens of thousands
- Thousands
- Hundreds
- Less than a hundred
- Less than ten

In November 2020, elections were held for 435 seats in the U.S. House of Representatives and 35 seats in the U.S. Senate. In how many of these elections do you think the winning candidate was not the rightful winner but instead won due to voter fraud?
- None
- One or two
- Three to nine
- Ten or more

[asked if One or two, Three to nine, or Ten or more selected]
You said you think that the results of [one or two/three to nine/ten or more elections] for the U.S. House and Senate in 2020 were changed by voter fraud. Please explain why you believe this to be true.

We sometimes find people don’t always take surveys seriously, instead providing humorous or insincere responses to questions. How often do you do this?
- Never
- Rarely
- Some of the time
- Most of the time
- Always

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 not be penalized in any way if you did.
-Yes, I looked up information
-No, I did not look up information

Thank you for answering these questions. 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 Brendan Nyhan at nyhan@dartmouth.edu.

**Wave 3 questionnaire**

**Consent**

**ABOUT THIS RESEARCH**

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**HOW MANY PEOPLE WILL TAKE PART?**

If you agree to participate, you will be one of 3,750 participants taking part in this study.
WHAT WILL HAPPEN DURING THE STUDY?
If you agree to be in the study, you will be asked to do the following things:

- Completion of a short survey on YouGov’s website or app. The survey is anticipated to take less than 10 minutes to complete.
- Possibly, completion of a short follow-up survey approximately one month from now on YouGov’s website or app. The follow-up survey is anticipated to take less than 10 minutes to complete.
- If you have agreed to participate in YouGov’s Pulse program, anonymous tracking data on your online website visits may be used by the researchers. However, there are no actions you need to take related to YouGov Pulse and this study.

WHAT ARE THE RISKS OF TAKING PART IN THE STUDY?
While participating in the study, the potential risks include:
- A risk of completing the survey is being uncomfortable answering the questions.-To minimize this potential risk, you can skip any questions that you feel uncomfortable answering.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THE STUDY?
We don’t expect you to receive any benefit from taking part in this study, but we hope to learn things that will help scientists in the future.

HOW WILL MY INFORMATION BE PROTECTED?
Efforts will be made to keep your personal information confidential. We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. No information which could identify you will be shared in publications about this study and databases in which results may be stored.

Organizations that may inspect and/or copy your research records for quality assurance and data analysis include groups such as the study investigator and his/her research associates, the University of Notre Dame Institutional Review Board or its designees, and (as allowed by law) state or federal agencies, especially the Office for Human Research Protections (OHRP), who may need to access the research records.

WILL MY INFORMATION BE USED FOR RESEARCH IN THE FUTURE?
Your information will not be used or distributed for future research studies.

WILL I BE PAID FOR PARTICIPATION?
You will receive 500 points for completing each survey.

YouGov does not allow for prorated compensation. In the event of an incomplete survey, you will not receive any points.

WHO SHOULD I CALL WITH QUESTIONS OR PROBLEMS?
For questions about the study, contact the researcher, Brendan Nyhan at nyhan@dartmouth.edu.
PARTICIPANT’S CONSENT
In consideration of all of the above, I give my consent to participate in this research study. By pro-
ceeding, I confirm that I am 18 years old, and agree to take part in this study.
-I agree to take this survey
-Take me to another survey

When it comes to politics, would you describe yourself as liberal, conservative, or neither liberal nor
conservative?
-Very liberal
-Somewhat liberal
-Slightly liberal
-Moderate; middle of the road
-Slightly conservative
-Somewhat conservative
-Very conservative

Generally speaking, do you think of yourself as a …?
-Democrat
-Republican
-Independent
-Other (open text)
-Not sure

Strong Democrat
Not very strong Democrat
Strong Republican
Not very strong Republican
The Democratic Party
The Republican Party
Neither
Not sure
Don’t know

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?
-I did not vote in the election this November
-I thought about voting this time, but didn’t
-I usually vote, but didn’t this time
-I am sure I voted

Generally, how interested are you in politics?
-Extremely interested
-Very interested
Do you approve or disapprove of the way Joe Biden is handling his job as President?
-Strongly approve
-Somewhat approve
-Somewhat disapprove
-Strongly disapprove

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

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.

Abraham Lincoln was the president of Mexico.
-Strongly agree
-Somewhat agree
-Neither agree nor disagree
-Somewhat disagree
-Strongly disagree

In November 2022, elections were held for 435 seats in the U.S. House of Representatives and 34 seats in the U.S. Senate. In how many of these elections do you think the winning candidate was not the rightful winner but instead won due to voter fraud?
-None
-One or two
-Three to nine
-Ten or more

In November 2024, elections will be held for 435 seats in the U.S. House of Representatives and 33 seats in the U.S. Senate. In how many of these elections do you think the winning candidate will not be the rightful winner but instead will win due to voter fraud?
-None
-One or two
-Three to nine
Ten or more

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

People convicted of murder should be given the death penalty.
The leader of the American government is the king.
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 that make more than $250,000 per year.
The Affordable Care Act passed by Congress in 2010 should be repealed.
-Strongly agree
-Somewhat agree
-Neither agree nor disagree
-Somewhat disagree
-Strongly disagree

Now we would like to ask you about the elections that took place in November 2022 for the U.S. Congress and other offices.

How confident are you that your vote was counted as you intended in the November 2022 election?
-Very confident
-Somewhat confident
-Not too confident
-Not at all confident

How confident are you that votes in your local area were counted as voters intended in the November 2022 election?
-Very confident
-Somewhat confident
-Not too confident
-Not at all confident

How confident are you that votes in your state were counted as voters intended in the November 2022 election?
-Very confident
-Somewhat confident
-Not too confident
-Not at all confident

How confident are you that votes nationwide were counted as voters intended in the November 2022 election?
-Very confident
-Somewhat confident
-Not too confident
-Not at all confident

To the best of your knowledge, how often did each of these occur in the 2022 election?
-Voting more than once in an election.
-Stealing or tampering with ballots.
-Pretending to be someone else when voting.
-People voting who are not U.S. citizens.
-Voting with an absentee ballot intended for another person.
-Officials preventing absentee voters from voting.

-A million or more
-Hundreds of thousands
-Tens of thousands
-Thousands
-Hundreds
-Less than a hundred
-Less than ten

On Election Day 2022, a printing malfunction took place at about one-quarter of the polling places in Maricopa County, the most populous county in Arizona. This problem stopped some ballots from being counted onsite.

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

Only voting sites in conservative areas in Arizona’s Maricopa County experienced issues with tabulating ballots on Election Day 2022.

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

Please state whether you agree or disagree with the following statement:

In the 2022 election for Arizona governor, Katie Hobbs, the Democrat, defeated Kari Lake, the Republican, due to election fraud and therefore is NOT the rightful winner.

-Strongly agree
-Somewhat agree
-Somewhat disagree
-Strongly disagree

Now we would like to again ask you about the elections that will take place a little less than two years from now in November 2024 for the U.S. presidency, Congress, and other offices.

How confident are you that your vote will be counted as you intend in the November 2024 election?

-Very confident
-Somewhat confident
-Not too confident
-Not at all confident

How confident are you that votes in your local area will be counted as voters intend in the November 2024 election?

-Very confident
- Somewhat confident
- Not too confident
- Not at all confident

How confident are you that votes in your state will be counted as voters intend in the November 2024 election?
- Very confident
- Somewhat confident
- Not too confident
- Not at all confident

How confident are you that votes nationwide will be counted as voters intend in the November 2024 election?
- Very confident
- Somewhat confident
- Not too confident
- Not at all confident

How often do you expect each of these will occur in the 2024 election?

Voting more than once in an election.
Stealing or tampering with ballots.
Pretending to be someone else when voting.
People voting who are not U.S. citizens.
Voting with an absentee ballot intended for another person.
Officials preventing absentee voters from voting.

- A million or more
- Hundreds of thousands
- Tens of thousands
- Thousands
- Hundreds
- Less than a hundred
- Less than ten

Please indicate whether you believe the following statements about U.S. elections are accurate or not.

More votes in one contest than other contests on the ballot means that results cannot be trusted.
If results as reported on election night change over the ensuing days or weeks, the process is hacked or compromised.
Votes are regularly being cast on behalf of dead people.
Voting system software is not reviewed or tested to ensure against manipulation of results.
If there are problems with voting machines at a voting site, the votes from that site will not be counted.
Poll workers intentionally give non-standard writing instruments, such as Sharpies, only to specific voters to cause their ballots to be rejected.
Procedures for casting and counting ballots prevent election officials from knowing which candidates an individual voted for. 

Ballot handling procedures protect against intentional or unintentional ballot destruction and related tampering. 

Robust safeguards protect against tampering with ballots returned via drop box. 

Safeguards protect the integrity of the mail-in/absentee ballot process. 

Legal protections guard against the removal of eligible voters during updates of registration lists by election officials. 

Voters are protected by state and federal law from threats or intimidation at the polls, including from election observers. 

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

[CISA prebunking condition; p=2/3 (p=1/3 with prebunking warning, p=1/3 with no prebunking content] 

Please read the following articles carefully. (You’ll need to answer questions about them correctly to successfully complete the survey.) 

Experts agree that American elections are safe and secure. The Department of Homeland Security confirms that numerous protections are in place to protect the integrity of the election process. 

[prebunking warning] 

Some politically-motivated groups are using misleading tactics to confuse voters and sow distrust in the electoral process. Here is the truth about some claims you might hear concerning elections in the United States. 

✓ Reality: Variations in vote totals for different contests on the same ballot occur in every election and do not by themselves indicate fraud or issues with voting technology. 

× Rumor: More votes in one contest than other contests on the ballot means that results cannot be trusted. 

Variations in vote totals for different contests on the same ballot occur in every election. Differences in vote totals across different contests by themselves are not indications of issues with voting technology or the integrity of election processes or results. Variations happen when a voter intentionally or unintentionally does not make a selection in a given contest on their ballot. For example, a voter may choose to vote for president, senator, and governor, but not in other races that are lower down on their ballot. Even if a voter does not cast a vote in a particular contest, properly marked votes on their ballot
are counted.

[new page]

[prebunking warning]
Some politically-motivated groups are using misleading tactics to confuse voters and sow distrust in the electoral process. Here is the truth about some claims you might hear concerning elections in the United States.

According to the page you just read, why is it normal for there to be more votes cast in the contest for president than in the race for a state legislative seat?
- Some voters who marked a preference for president on their ballot might not bother to indicate a preference for a state legislative candidate.
- Some voters who are eligible to cast a vote for the presidency are not eligible to vote in the state legislative contest.
- There are usually more candidates running for state legislature than for president.
- Voters in some states are allowed to cast two ballots for president.
[repeat up to three times if not answered correctly]

[new page]

[prebunking warning]
Some politically-motivated groups are using misleading tactics to confuse voters and sow distrust in the electoral process. Here is the truth about some claims you might hear concerning elections in the United States.

✓ Reality: Election results are not final until certification. Election night reporting is unofficial and those results may change as ballot counting is completed.

× Rumor: If results as reported on election night change over the ensuing days or weeks, the process is hacked or compromised, so the results can’t be trusted.

Election results reported on election night are always unofficial and are provided solely for voters’ convenience. Fluctuations in unofficial results reporting will occur during and after election night as more ballots are processed and counted, often including military and overseas ballots, and validated provisional ballots. Variations in state processes may also mean ballots cast through different methods (e.g., early in-person voting, mail-in voting, and election day voting) are counted and unofficially reported in different orders. Official results are released after rigorous canvassing (verification) and certification by local and state election officials.

[new page]

According to the page you just read, why might election results reported on election night change in the following days?
- Not all ballots can be processed and counted by election night.
Federal law prohibits election officials from starting to count ballots until the day after the election. The only results reported on election night are from public opinion polls. Mail-in ballots cannot be counted until all the ballots cast in person have been counted. Federal judges regularly change election results when they determine the winner unfit for office.

[prebunking warning]
Some politically-motivated groups are using misleading tactics to confuse voters and sow distrust in the electoral process. Here is the truth about some claims you might hear concerning elections in the United States.

✓ Reality: Safeguards are in place to protect ballot secrecy.

× Rumor: Public officials can find out which candidates you voted for.

Ballot secrecy is guaranteed by law in all states. These security measures ensure that individual ballots, once cast, cannot be traced back to the voters who cast them. For in-person voting, privacy measures include dividers between voting stations and requirements that poll workers maintain distance from voters while they are casting their ballots. For mail-in and provisional voting, election officials follow strict procedures to ensure ballot secrecy when ballots are retrieved from ballot envelopes. While ballot choices are secret in almost all circumstances, a voter’s party affiliation and whether they voted or not generally are public information.

[prebunking warning]
Some politically-motivated groups are using misleading tactics to confuse voters and sow distrust in the electoral process. Here is the truth about some claims you might hear concerning elections in the United States.

✓ Reality: Ballot handling procedures protect against intentional or unintentional ballot destruction and related tampering.

× Rumor: Ballots can easily be removed, added, replaced, or destroyed without detection, alter-
Federal law requires that ballots, applications, registrations, and other records related to elections for federal offices must be retained and preserved for 22 months from the date of the election. This requirement ensures all ballots and relevant records are preserved in their post-election state in case they are needed for recounts, audits, or other post-election processes. Images or video of election officials discarding papers may appear suspicious when taken out of context, but they are likely depicting legal disposal of election materials.

According to the page you just read, how long must ballots be preserved after an election under federal law?
- 22 months
- 24 hours
- 4 years
- Forever
[repeat up to three times if not answered correctly]

Keep Up-To-Date with World Events

It is important for people to be informed about events happening in the world today. Please read the following news articles, which will cover several different topics.

Campbell’s® Chunky® Enters the Metaverse with Fortnite Creative and Introduces The Chunky FuelUp Tournament

The ’Official Soup Sponsor of the NFL’ is taking soup into the metaverse by launching the Chunky FuelUp Tournament, an immersive experience featuring three unique challenges to test players’ speed, agility, and accuracy including:

- Spicy Soup Sprint: Players will fly through branded cans and slide down a giant spoon racing to complete the course as fast as possible.

- Protein Power Course: Players will experience an agility-based training course, juoking past tackling dummies and other football-themed obstacles.

- Hearty Hail Mary: Participants will test their quarterback skills as they attempt to throw as many cans into moving targets as fast as possible within three one-minute rounds.
According to the article you just read, which of the following soups is entering the Metaverse?
- Campbell’s Chunky
- Progresso
- Top Ramen
- Amy’s Organic
[repeat up to three times if not answered correctly]

Scotch Porter Becomes the Fastest-Growing Beard & Hair Care Brand in US Multi-Outlet Channels

Scotch Porter, which produces grooming and wellness products for men that are clean, affordable, and non-toxic, announced that it had been identified via IRI Worldwide as the fastest growing male grooming brand within the US beard and hair care market. The brand’s growth of over 70% in the last year in US multi-outlet channels is evidence of the consumer demand for clean and affordable grooming solutions. Scotch Porter’s robust growth strategies — rooted in a deep understanding of the consumer and their needs — have allowed the company to meet this demand at retail.

According to the article you just read, which of the following brands is the fastest-growing grooming brand for men in the U.S. beard and hair care market?
- Scotch Porter
- Suave
- Just for Men
- Dollar Shave Club
[repeat up to three times if not answered correctly]

Two-thirds of Americans Plan to Spend the Same or More on Retail Purchases in 2023 According to new Harris Poll Survey From DailyPay and Dollar Tree

Despite continued inflation and the potential of a recession, 67% of Americans plan to spend either the same or more in 2023 as they did in 2022 on retail purchases according to a new survey. However, 44% are more likely to prioritize shopping for bargains in-store this year compared to last.

Signaling a continued increase in in-person shopping, about 3 out 4 Americans (73%) plan on shopping the same or more in-store in 2023 versus last year.

"It’s encouraging to see that Americans’ spending plans are trending upward with only a third planning to spend less this year despite these times of financial uncertainty," said Kate Cheesman, Vice
President of Customer Success, DailyPay.

According to the article you just read, how much do Americans plan to spend in 2023?
- Less than they did in 2022
- Same or less than they did in 2022
- Same as they did in 2022
- Same or more than they did in 2022
- More than they did in 2022
[repeat up to three times if not answered correctly]

The ARM & HAMMER™ Feline Generous program Announces Winners of "Happily Furever After" Sweepstakes

The ARM & HAMMER™ Feline Generous program today announced the winners of its "Happily Furever After" sweepstakes and the biggest single donation the program has given away to date. Purrr-fectly impurrfect shelter cats are often overlooked for adoption due to age, illness, appearance, being bonded pairs or having misunderstood personalities. During the month-long campaign, more than 5,500 photos/videos of these amazing cats living "happily furever after" were submitted and the lucky winners selected are Elvis, Louie, Buddy, Miley and another Elvis. Each winning pet parent will receive a year’s supply of ARM & HAMMER™ cat litter and each shelter will receive the $10,000 donation prize.

According to the article you just read, two of the winning cats in the "Happily Furever After" contest had the same name. What was it?
- Elvis
- Mick
- Keith
- Posh
[repeat up to three times if not answered correctly]

Now we would like to again ask you about the elections that took place in November 2022 for the U.S. Congress and other offices.

How confident are you that your vote was counted as you intended in the November 2022 election?
- Very confident
- Somewhat confident
-Not too confident
-Not at all confident

How confident are you that votes in your local area were counted as voters intended in the November 2022 election?
-Very confident
-Somewhat confident
-Not too confident
-Not at all confident

How confident are you that votes in your state were counted as voters intended in the November 2022 election?
-Very confident
-Somewhat confident
-Not too confident
-Not at all confident

How confident are you that votes nationwide were counted as voters intended in the November 2022 election?
-Very confident
-Somewhat confident
-Not too confident
-Not at all confident

To the best of your knowledge, how often did each of these occur in the 2022 election?

Voting more than once in an election.
Stealing or tampering with ballots.
Pretending to be someone else when voting.
People voting who are not U.S. citizens.
Voting with an absentee ballot intended for another person.
Officials preventing absentee voters from voting.

-A million or more
-Hundreds of thousands
-Tens of thousands
-Thousands
-Hundreds
-Less than a hundred
-Less than ten

In November 2022, elections were held for 435 seats in the U.S. House of Representatives and 34 seats in the U.S. Senate. In how many of these elections do you think the winning candidate was not the rightful winner but instead won due to voter fraud?
-None
Now we would like to again ask you about the elections that will take place a little less than two years from now in November 2024 for the U.S. presidency, Congress, and other offices.

How confident are you that your vote will be counted as you intend in the November 2024 election?
- Very confident
- Somewhat confident
- Not too confident
- Not at all confident

How confident are you that votes in your local area will be counted as voters intend in the November 2024 election?
- Very confident
- Somewhat confident
- Not too confident
- Not at all confident

How confident are you that votes in your state will be counted as voters intend in the November 2024 election?
- Very confident
- Somewhat confident
- Not too confident
- Not at all confident

How confident are you that votes nationwide will be counted as voters intend in the November 2024 election?
- Very confident
- Somewhat confident
- Not too confident
- Not at all confident

How often do you expect each of these will occur in the 2024 election?

Voting more than once in an election.
Stealing or tampering with ballots.
Pretending to be someone else when voting.
People voting who are not U.S. citizens.
Voting with an absentee ballot intended for another person.
Officials preventing absentee voters from voting.

- A million or more
- Hundreds of thousands
In November 2024, elections will be held for 435 seats in the U.S. House of Representatives and 33 seats in the U.S. Senate. In how many of these elections do you think the winning candidate will not be the rightful winner but instead will win due to voter fraud?
- None
- One or two
- Three to nine
- Ten or more

Please indicate whether you believe the following statements about U.S. elections are accurate or not.

More votes in one contest than other contests on the ballot means that results cannot be trusted.
If results as reported on election night change over the ensuing days or weeks, the process is hacked or compromised.
Votes are regularly being cast on behalf of dead people.
Voting system software is not reviewed or tested to ensure against manipulation of results.
If there are problems with voting machines at a voting site, the votes from that site will not be counted.
Poll workers intentionally give non-standard writing instruments, such as Sharpies, only to specific voters to cause their ballots to be rejected.
Procedures for casting and counting ballots prevent election officials from knowing which candidates an individual voted for.
Ballot handling procedures protect against intentional or unintentional ballot destruction and related tampering.
Robust safeguards protect against tampering with ballots returned via drop box.
Safeguards protect the integrity of the mail-in/absentee ballot process.
Legal protections guard against the removal of eligible voters during updates of registration lists by election officials.
Voters are protected by state and federal law from threats or intimidation at the polls, including from election observers

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

We sometimes find people don’t always take surveys seriously, instead providing humorous or insincere responses to questions. How often do you do this?
- Never
- Rarely
- Some of the time
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 not be penalized in any way if you did.

- Yes, I looked up information
- No, I did not look up information
Online Appendix B: Additional results

Figure B1: Effects of Study 1 treatments by wave

(a) Study 1 credible source correction: Wave 1
(b) Study 1 prebunking correction: Wave 1
(c) Study 1 credible source correction: Wave 2
(d) Study 1 prebunking correction: Wave 2
(e) Study 1 credible source correction: Wave 3
(f) Study 1 prebunking correction: Wave 3
Figure B2: Effects of Study 3 prebunking treatment on belief accuracy with and without forewarning
Figure B3: Effects of Study 3 prebunking treatment on election perceptions with and without forewarning

(a) Confidence in 2022 election

(b) Prevalence of fraud in 2022

(c) Seats won by fraud in 2022

(d) Confidence in 2024 election

(e) Prevalence of fraud in 2024

(f) Seats won by fraud in 2024