Fact-Value Disagreements about Threats to Electoral Integrity: Beliefs about the Importance and Prevalence of Fraudulent, Uncounted, and Foregone Votes in the 2020 Election*

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Abstract

In three survey experiments conducted before, during, and after the 2020 election, we investigated beliefs about the frequency of different threats to election integrity and emotional reactions to these threats. In these studies, we assessed fact and value disagreements about counting fraudulent ballots, failing to count legitimately cast ballots, and causing eligible voters to be unable to vote. Initially, Republicans believed fraudulent votes were both more frequent and more serious than did Democrats, with the opposite pattern for forgone votes. Over time, these partisan gaps in both beliefs and reactions grew only for fraudulently counted ballots. These results hold in vignettes describing the same errors with multiple features (Study 2) and when respondents had to choose ex ante between election rules (Study 3). Overall, these three studies contribute to a better understanding of mass beliefs about and reactions to potential threats to election security, along with key partisan differences.

Key Words: election fraud; public opinion; election administration

Word Count: 11,992

1 Introduction

Doubts about the fair conduct of elections have existed for decades, ranging from concerns about urban political machines inflating turnout to the systematic disenfranchisement of minority voters in the American South. But contemporary distrust in the integrity of American elections has risen substantially in recent years (Grimmer, Herron and Tyler 2023). Following President Trump's defeat in the 2020 election, he alleged that voter fraud explained his loss and some have linked the storming of the Capitol on January 6th, 2021 to beliefs among Republicans that Biden's victory was illegitimate (Cheney and Wu 2022; Weiner and Hsu 2021). Likewise, in the lead up to the election, Democrats asserted that Republicans were intentionally trying to disenfranchise and suppress potential voters by slowing down the postal service and encouraging restrictive mail voting rules (Cochrane et al. 2020; Shear, Fuchs and Vogel 2020).

Importantly, these sorts of debates make clear that fraudulently cast ballots are not the only forms of election "errors" and that concerns about fairness are not confined to Republicans alone. The large-scale turn to absentee and mail voting during the COVID-19 pandemic was accompanied by broad concerns about two other threats to election integrity, *uncounted votes* and *foregone votes*. Uncounted votes arise if valid ballots are not counted, for example, if mail ballots are lost or delayed in the postal system. Foregone votes occur if eligible individuals are unable to exercise their right to vote, for example, through signature matching or restrictive rules about who can request a mail ballot. And such concerns are not confined to matters of COVID-19; rules about the process for registering to vote (Ansolabehere and Konisky 2006; Burden et al. 2014), purging of apparently stale voter registrations (Komisarchik and White 2022), polling place closures (Curiel and Clark 2021), and voter ID rules (Cantoni and Pons 2021; Grimmer et al. 2018), shape who is able to cast a ballot on Election Day. Table 1 summarizes these three types of errors and gives examples of each one.

Given the clear importance of beliefs about the frequency and seriousness of these different types of errors for democratic legitimacy, it is striking how little we know about these key

Table 1: Types of Election Errors and Examples

Type	Definition	Examples
Fraudulent Votes	Votes that are counted that should not have been	Voter impersonation, Non-citizen voting, Double voting
Uncounted Votes	Legitimately cast ballots that are not counted	Lost ballots during transportation, Absentee ballots discarded due to failed signature matching
Foregone Votes	Eligible voters unable to exercise their right to vote	Polling place closures, Long lines leading voters to leave

elements of mass opinion. Most work to date examines support for relatively high-level summaries of beliefs about the overall fairness of election outcomes. This research finds that both Democrats and Republicans had concerns about the fairness and integrity of the 2020 election leading up to it. Afterwards, aggregate doubts about fairness and integrity declined among Democrats once the outcome favorable to their party became clear, while increasing among Republicans who had lost (Clark and Stewart 2021; Clayton et al. 2021; Vail et al. 2023). But these summary beliefs could arise for several reasons. First, they could originate in concerns about the three different types of election errors introduced above—fraudulent votes, uncounted votes, or foregone votes. Second, they could arise because of differences in beliefs about the frequency (preponderance) or seriousness (importance) of each type of error, or some combination of the two. In other words, patterns in mass opinion could emerge because of differences in beliefs about facts or differences in values, or both.

Understanding the nature of the beliefs underlying mass opinion is essential for identifying potential efforts to remediate threats to democratic legitimacy. For example, suppose competing partisans share common values about the importance of different kinds of threats to fair elections but differ in their beliefs about their frequency. Then, efforts to correct misperceptions about their frequency may ameliorate partisan differences in concerns about electoral fairness and a key research task would be identifying effective informational correctives. Similarly, election reforms that reduce the chance of errors that people agree upon might improve social welfare even if they increase other errors that people regard as less

important. Alternatively, however, partisan disagreements may arise because of differences in *value* judgements about what kinds of errors are more vs. less important to guard against, such as the conflict between election security and increasing voter turnout in debates over voter ID laws. Then, even common factual beliefs are unlikely to resolve persistent differences in concerns about electoral fairness, particularly when institutional choices involve trading off among different types of errors.

We undertake three studies to answer these key controversies. The first two studies are taken from three cross-sectional surveys conducted in the pre-, during-, and post-election periods of the 2020 election. In Study 1, we ask respondents to separately describe their beliefs about the *frequency* of and *emotional reactions* to three different types of election errors: fraudulent votes (votes that should not have been counted but which are), uncounted votes (valid ballot that are not counted), and forgone votes (an eligible voter who wants to vote is not able to). We note that we do not directly measure values in these studies. Instead, we measure negative emotional reactions, including feelings of anger and outrage, which are generally understood to arise from transgressions of important values.[1] We find evidence of both fact and value divides by partisanship and over time. Beginning with factual judgements, there are stark partisan differences in beliefs about the frequency of the various types of errors prior to the election, as Republicans believe there to be more fraudulent votes than do Democrats, while the opposite is true for Democrats and foregone votes. After the election, partisan differences become larger only for beliefs about the frequency of fraudulent votes, with Republican estimates of their frequency increasing.

In terms of values, in the pre-election period, we again observe that Democrats care more about foregone votes than do Republicans, while Republicans care more about fraudulent votes than do Democrats. Comparing these reactions to the period after the election was resolved, Republicans react more negatively to election errors compared to Democrats. Thus,

[1]For variety, we use value judgements interchangeably with "emotional reactions," "seriousness," "importance," and "severity" as a proxy for the underlying values surrounding each election error. Study 3, which examines choices, demonstrates that the patterns of emotional reaction measured in Studies 1 and 2 predict behaviors, validating these items as measures of value commitments.

partisan divergence in both values and some factual judgments become larger during the election season.

In the second study, we ask respondents about their emotional reactions to vignettes describing specific hypothetical instances of election errors. These various election scenarios are randomized on multiple attributes, including type of error, whether it is related to mail or in person voting, the benefitting party, and whether a specific actor—a "villain"—is responsible for the error. These stimuli approximate the type of information circulated on mainstream and social media about instances of alleged election errors and allow us to understand if the patterns we find in abstract evaluations (Study 1) are similar for more concrete narrative treatments. Study 2 reveals patterns broadly consistent with Study 1, meaning that abstract and narrative treatments produce similar results. While mode of voting and whether a villain is present have small effects, the opposite party benefiting induces more negative reactions. On average, respondents react less negatively to vignettes describing foregone votes than uncounted or fraudulent votes, but this difference is much larger for Republicans than Democrats. Additionally, as with Study 1, partisan differences become more pronounced over time, with average Republican outrage increasing while Democratic outrage decreases.

Finally, our third study is from a pair of revealed preference experiments fielded before the 2020 election. In these randomized experiments we ask respondents to choose between pairs of election rules for a hypothetical election that differ in the amount of fraudulent and uncounted votes they produce, as well as overall turnout rates (a proxy for foregone votes, only in Study 3A). By giving information about the frequency of election errors and abstracting from the context of the 2020 election, we ask people about specific tradeoffs among potential threats to election integrity. When we fix factual measurements about different election errors, we do not find partisan differences in the weight given to fraudulent and uncounted votes. However, when designing electoral systems, Democrats appear to care more about turnout (foregone votes) than do Republicans, although both partisans give it

less weight than the other types of errors. Again, this pattern is consistent with the partisan differences found in both Study 1 and Study 2.

Stepping back, these results help understand the persistent and changing contours of debates about election rules, election administration, and democratic legitimacy in the contemporary United States. Partisan differences in preferences over election rules and evaluations of fairness do not appear to arise due to substantial partisan differences in wanting to reduce fraudulent and uncounted votes, but instead in the relatively greater weight Democrats appear to give to increasing turnout by avoiding forgone votes. Additionally, partisan differences in factual judgments and reactions to specific instances of electoral malfeasance diverged during the course of the 2020 election. The heightened reaction of Republicans to all forms of fraud was accompanied only by a targeted increase in beliefs about the frequency of fraudulent ballots, thus helping to understand why this remains a persistent area of focus for certain Republican candidates and voters. Thus, efforts to ameliorate partisan enmity about election rules must grapple with partisan differences in both underlying values and beliefs about facts along with the various dimensions of election errors.

2 Election Integrity: Defining Concepts, Distinguishing Values and Facts, and Understanding Temporal Dynamics

Contemporary fears about election integrity were once mostly limited to countries other than the United States (Norris, Frank and Martínez i Coma 2014). But at least since the 2000 election, scholars and policymakers alike have given deep attention to potential threats to fair elections in the United States (Sances and Stewart 2015; Stewart 2017). For example, the multifaceted federal Help America Vote Act of 2002 sought to improve election administration by, among other things, providing federal funds to improve polling place

access and replacing outdated voting machines, while also requiring states to adopt and maintain statewide voter rolls and verify the identification of new registrants. These reforms built on earlier efforts, such as the federal 1993 "Motor Voter" law, which sought to facilitate voter registration and limit and standardize the conditions under which registrants could be removed from state voter rolls (Alvarez et al. 2011).

It is notable that these laws, as well as others, address diverse threats to election integrity, which is itself a broad term encompassing "the entire process from voter registration to election certification, and everything in between" (McCormick 2020, 213). Focusing on the ability of individuals to cast votes as they intend, threats to the integrity or the fairness of elections can be decomposed into three broad categories: barriers to eligible citizens registering and gaining access to the ballot (foregone votes), instances in which ineligible individuals vote (fraudulent votes), and cases in which validly cast ballots are miscounted, invalidated, or discarded (uncounted votes). Importantly, reforms that attempt to reduce the frequency of one sort of error may increase the chance (or perceived chance) of other errors, such as the debate over signature matching or photo identification.

While empirically this tradeoff may be minimal, it appears salient in public opinion. For example, Wilson and Brewer (2013) show that in debates about voter ID laws, Democrats tend to focus on the consequences of the laws for decreasing turnout (forgone votes) while Republicans focus on the threat of ineligible individuals voting (fraudulent votes). Similarly, Bowler and Donovan (2016) find that confidence in states' elections increases for Republicans in states with stronger voter identification requirements while decreasing for Democrats. Notably, however, we lack direct evidence about how individuals would tradeoff among these different errors if given the chance to, and also whether differences in reactions to various threats to election integrity rest on differences in beliefs about the prevalence or severity of each type of error (for a notable exception, see Alvarez and Hall 2008).

Indeed, despite these different threats to integrity and the potential tradeoffs among them, most empirical research on election rules has not gathered information about pub-

lic opinion beyond voter ID laws. A general feature of the important empirical work on election administration is that it has focused on assessing the frequency of these different threats to integrity in isolation and without attention to public perceptions (e.g. Eggers, Garro and Grimmer 2021; Herron 2019). Work focusing on mass opinion, meanwhile, has either followed the same pattern of focusing on high level concepts like "election integrity" or "voter confidence" (e.g. Alvarez, Hall and Llewellyn 2008; Norris, Frank and Martínez i Coma 2014; Sinclair, Smith and Tucker 2018).[2] While other studies consider multiple definitions of election fraud in conjunction with each other, they often focus solely on fraudulent votes or conflate them with uncounted votes, while ignoring foregone votes altogether (e.g. Ansolabehere and Persily 2008; Udani, Kimball and Fogarty 2018).[3] None of this work that focuses on public perceptions isolates beliefs about the seriousness of different types of errors from beliefs about their prevalence, information that is essential if one wants to understand consensus and conflict in the mass public about whether and how to make institutional reforms (Biggers 2019; Biggers and Bowler 2022).

For example, consider prior empirical work on election fraud, or instances in which ballots that should not be counted have been. Scholars have attempted to measure rates of noncitizen voting (Ansolabehere, Luks and Schaffner 2015), double voting (Goel et al. 2020), false representation at the polls (Ahlquist, Mayer and Jackman 2014), or some combination of these (Cottrell, Herron and Westwood 2018) and found that all errors of this type are rare. But public opinion does not appear to reflect these findings. Stewart, Ansolabehere and Persily (2016) analyzed 2014 survey data in which individuals were asked about the frequency of various forms of fraud, including (1) noncitizen voting and (2) impersonating another voter. They find that 13% think the former is "very common" and 8% think the latter

[2]Work on voter confidence finds, for example, that Black Americans are less likely to believe that their votes are counted fairly (Alvarez, Hall and Llewellyn 2008), as are those who believe in conspiracies (e.g. Enders et al. 2021; Edelson et al. 2017).

[3]For example, the Survey of the Performance of American Elections (SPAE) asks respondents how frequently "people voting more than once in an election" (fraudulent votes) and "vote counting software manipulated in a way to not count ballots as intended" (uncounted votes) occurs, but does not ask about perceptions of eligible voters being deterred from voting in elections (foregone votes).

is "very common."[4] We therefore know that individuals appear to overestimate the frequency of certain forms of fraud, but we lack comparative evidence about beliefs surrounding the three different types of errors introduced earlier.

One key advantage of asking about specific forms of election errors is that it avoids the ambiguity associated with interpreting survey responses to more general questions about threats to election integrity. For example, in an analysis of responses to open ended survey items about "what types of actions do you believe count as voter fraud?", Sheagley and Udani (2021) demonstrate that partisans on average disagree on the meaning of the term. Specifically, they find that Republicans perceive it to be people who should not vote doing so (what we label fraudulent votes), while Democrats perceive it to be voter suppression or elite manipulation, the former mapping to what we label foregone votes (see also Beaulieu 2014; Edelson et al. 2017; Park-Ozee and Jarvis 2021). Differences in interpretations of these broad questions therefore masks important beliefs about what counts as fraud, limiting what one can learn from patterns of responses to these more general items. These partisan differences also hint at potential value disagreements between partisans—perhaps Republicans do not consider voter suppression to be an important threat to fairness, while Democrats do.

These limitations of extant survey data aside, what data we have to date provide theoretical insights into two broad patterns that are likely important for understanding differences across respondents and over time in perceptions of election errors during the 2020 election. First, in terms of partisan differences, in addition to the aforementioned work on partisan divergence in the interpretation of the term "fraud," there is also evidence that Republicans are more likely than Democrats to believe in threats to election integrity (Ansolabehere and Persily 2008; Stewart, Ansolabehere and Persily 2016). Some of this evidence predates Trump's 2016 candidacy, but during the "Trump era," concerns about voter fraud appeared to spike among Republicans compared to Democrats, perhaps in part because of Trump's claims about the frequency of voter fraud (Cottrell, Herron and Westwood 2018).

[4] In 2007 survey data, Ansolabehere and Persily (2008) also found that concerns about miscounting of ballots was frequent (which they label voter theft), as 23% of respondents reported this was very common.

Second, there is consistent evidence of a partisan "loser" effect on perceptions of election fraud and integrity more generally, whereby members of the party that loses an election become more skeptical it was fair compared to members of the party that won the election (Sances and Stewart 2015; Sinclair, Smith and Tucker 2018). This is apparent in prior multi-wave surveys spanning the 2016 and 2020 elections (see, e.g. Clayton et al. 2021; Levy 2021; Sinclair, Smith and Tucker 2018; Vail et al. 2023), although once again we note that these surveys tend to focus on aggregate assessments of fairness and/or individual forms of fraud.

3 Data and Methodology

3.1 Study 1

Study 1 measures beliefs about the frequency of and emotional reactions to the three types of election errors introduced earlier: fraudulent votes, uncounted votes, and foregone votes. Data were gathered in three surveys we conducted in the periods before, during, and after the November 2020 US presidential election. We can therefore examine average reactions to and perceptions of the frequency of each type of error, overall and among partisan subgroups, as well as how those attitudes change over time.

The pre-election survey was fielded between October 29th and November 2nd, 2020 (n = 1,946 completed respondents). The during-election survey was fielded between November 5th and 13th, 2020 (n = 2,014) when there was uncertainty about which candidate had won the presidency. The post-election survey was conducted between January 15th and January 20th, 2021 (n = 1,796), the day of the presidential inauguration. Participants for all three surveys, which were fielded online using the Qualtrics platform, were recruited using Lucid Marketplace, which also provides us with basic demographic information about each respondent.[5] For each survey, we terminated (and did not assign to treatment) respondents

[5]All survey respondents were compensated fairly for their time. Additionally, Coppock and McClellan (2019) have validated survey responses from Lucid Marketplace to national benchmarks. For more details on adherence to ethical principles, see Section A in the SM.

who failed to provide informed consent, who were under 18, or who failed an attention check in which they were asked to recall the salient detail of a short non-political article we asked them to read.

In each survey, we asked respondents questions about three different types of election errors. We began by defining legitimate votes and the three types of election errors. The first error, which we call *uncounted* votes, occurs when "legitimate votes ... are not counted because they are wrongfully determined to be fraudulent." The second error, which we call *fraudulent* votes, occurs when "votes [are] cast ... that should not be counted." Finally, the third error, which we call *foregone* votes, occurs when "eligible voters who could cast legitimate votes are not able to vote."[6]

We asked respondents two different types of questions about each of these election errors. We first asked respondents about the frequency of each type of error, a measure of factual perceptions. Specifically, respondents were asked to estimate for every 100 legitimate votes, how many of each type of error occurred. Respondents provided numerical answers for each error: "For every 100 legitimate votes that will be cast, how many of each of the following do you think will occur (enter whole numbers). 1. Legitimate votes are not counted 2. Fraudulent votes are counted 3. Eligible voters are prevented from going to vote."[7] Numeric responses greater than 100 were top-coded at 100.[8]

Second, we asked respondents about their emotional reactions to an occurrence of each type of error along multiple dimensions to understand their *values*, which we believe is also a proxy for how important they view each type of error to be. Specifically, respondents an-

[6]We find high levels of subject comprehension of these definitions. In the pre-election and during-election surveys, we asked respondents to drag and drop each description of the election error to the correct label. (In the post-election survey, respondents were asked to answer a multiple-choice question with the same descriptions.) In the pre-, during-, and post-election surveys, respondents matched the election error to the correct label 71%, 75%, and 80% of the time, respectively. We do not restrict the sample based on responses to these post-treatment attention items in order to avoid introducing sample selection bias.

[7]Note that election error should not sum to any given number, because foregone votes and fraudulent votes that were cast would not be counted as part of the "100 legitimate votes that will be cast."

[8]1.92% of responses were greater than 100, while .07% of responses were missing. Missing values were list-wise deleted.

swered 7-point Likert scale items for these 4 values for each type of election error: "Thinking about elections in general...how [morally wrong/morally outraged/angry/disgusted] would you be if: 1. A legitimate vote is not counted 2. A fraudulent vote is counted 3. An eligible voter who wants to vote is not able to." We then created an additive emotional reaction scale composed of their responses to these items for each of the three election errors (range 0 to 1, $\alpha = .881$), in which higher scores on this measure indicate more negative reactions.

3.2 Study 2

Study 2 uses a vignette design to measure how individuals respond to different features of specific cases of election errors, rather than reactions to the abstract instances of election errors we asked about in Study 1. The vignette experiments were embedded in the same three surveys used to gather data for Study 1, and we describe the theoretical motivation for each dimension we manipulate below. As before, we can again examine average emotional reactions to these scenarios, as well as how they vary by partisanship and over time. We presented respondents with three vignettes, with each vignette based on the 3 x 2 x 2 x 2 = 24 factorial design summarized in Table 2. After reading each vignette, we asked respondents "How outraged does the story make you feel?" with reactions measured on a 7-point scale from "Not at all" to "Very," which we rescale linearly to range from 0 to 1 with higher values indicating more outrage.

In each vignette, we randomized the type of election error (uncounted, fraudulent, foregone), the intentionality of the source of the error (the presence of a "villain," which is an election office employee who caused the error, or an accident not prescribed to human action), which party benefits from the error (Republican or Democrat), and the voting process with which the error was associated (mail ballot or in-person).[9] Randomization was restricted so that respondents always read a set of three vignettes selected from one of two blocks. The first block group contains a fraudulent mail, an uncounted in-person, and a

[9]In the study, we call these errors undercount, overcount, and foregone votes, which mirror the types of election errors used in Study 1.

Table 2: Factorial Design, Study 2

Type of Error	Voting Process	Party Benefiting	Intentionality of Error
Undercount	Mail Ballot	Republican	Villian Present
Overcount	In-Person	Democrat	No Villain Present
Foregone			

Note: Type of Error and Voting Process are determined by the block randomization. Within each randomized block, Party Benefiting and Intentionality of Error are randomly assigned and held constant across the three vignettes.

foregone mail vignette, while the second block group contained a fraudulent in-person, an uncounted mail, and a foregone in-person vignette. In the assigned block group, party and intentionality were independently randomly assigned but held fixed across all three vignettes the respondent read, which were presented in a random order. In sum, respondents could be exposed to 8 different assignments (2 blocks x 2 parties benefitting x 2 intentionality of errors).

We choose to manipulate these characteristics because previous literature finds that there are partisan and mode-level effects on voters' confidence that their vote was properly counted (Alvarez, Hall and Llewellyn 2008). However, because we specify which particular error occurred and which party benefited from such an error, we fix inferences people may otherwise make about the likelihood an error actually took place or who benefited when thinking about these types of errors, and can therefore isolate responses to a particular situation.[10] Nonetheless, mode of voting may still matter because the shift to mail-in ballots during COVID-19 was associated with polarized rhetoric from Republicans highlighting the threat of fraud in mail voting and from Democrats about the threat of discarded legitimate votes (Clark 2021). The presence of a villain was manipulated to ascertain whether it mattered if there was evidence of partisan intentionality in any error, which could exacerbate the fear of an opponent directly manipulating an election for their party's benefit, compared to situations in which an error was caused by an accident.

[10]While Beaulieu (2014) uses a similar survey experimental design, they manipulate which party's candidate has an unexpected victory and different features of the electoral environment (using electronic voting machines, voters being turned away from the polls, and rumors about registering ineligible voters) to measure beliefs about the likelihood of fraud.

3.3 Study 3

In contrast to Studies 1 and 2, which asked respondents about their beliefs about the frequency (Study 1 only) and reactions to election errors, Study 3 directly measures the relative importance respondents assign to these different types of election errors. We did so by adopting a revealed preference framework in which we asked respondents to choose between pairs of election rules after specifying the relative frequency of each type of error in each scenario. This allows us to understand how individuals traded off among potential errors when forced to do so. Additionally, this study specified a state or local election, which are distinct election contexts from Studies 1 and 2.

Study 3 is composed of two conjoint experiments in which respondents were presented with a series of 5 pairs of hypothetical election rules. There were two iterations of this study. Study 3A was fielded between August 14th and 15th, 2020 (n = 691), and Study 3B was fielded between October 29th and November 1st, 2020 (n = 2,938).[11] These surveys were also fielded on the Qualtrics platform using samples recruited by Lucid Marketplace.

For each pair of election rules, respondents were asked to choose between keeping the current election rule and adopting the proposed new rule. In Study 3A, we asked, "Which set of election rules should the city use for the upcoming mayoral election?" In Study 3B, we asked a similar question, except replacing mayoral with gubernatorial elections.

In Study 3A, we randomized three attributes for each election rule: turnout (reflecting foregone votes), fraudulent votes, and uncounted votes. There were five potential levels for each attribute. Turnout levels ranged from 45 to 65% in increments of 5%, while fraudulent and uncounted votes both ranged from 1% to 5% in increments of 1%.[12] An example of the

[11] As with Studies 1 and 2, we excluded respondents who failed to consent to our survey, who were under 18, or who failed an initial unrelated pre-treatment attention check. We also conducted a similar comprehension check that explained each type of election error and asked respondents to correctly answer a question about each type of election error. Similarly high proportions of respondents passed: around 84% for both Studies 3A and 3B.

[12] This resulted in a range of 9 possible values for each measure compared to the (randomly selected) status quo rule. That is, the new rule could produce a -20%, -15%, -10%, -5%, 0%, 5%, 10%, 15%, or a 20% change in turnout and a -4%, -3%, -2%, -1%, 0%, 1%, 2%, 3%, or 4% change in each fraudulent and uncounted votes.

presentation of one paired choice appears in Figure D.1 in the SM.

Study 3B was similar to Study 3A but turnout is held constant at 1,931,000 votes and the fraudulent and uncounted vote differences are more granular.[13] Because of the larger sample size and more granular differences, this study is better powered to detect differences in response to changes in fraudulent and uncounted votes, but does not allow us to understand relative preferences over foregone votes.[14]

4 Analysis and Results

4.1 Study 1

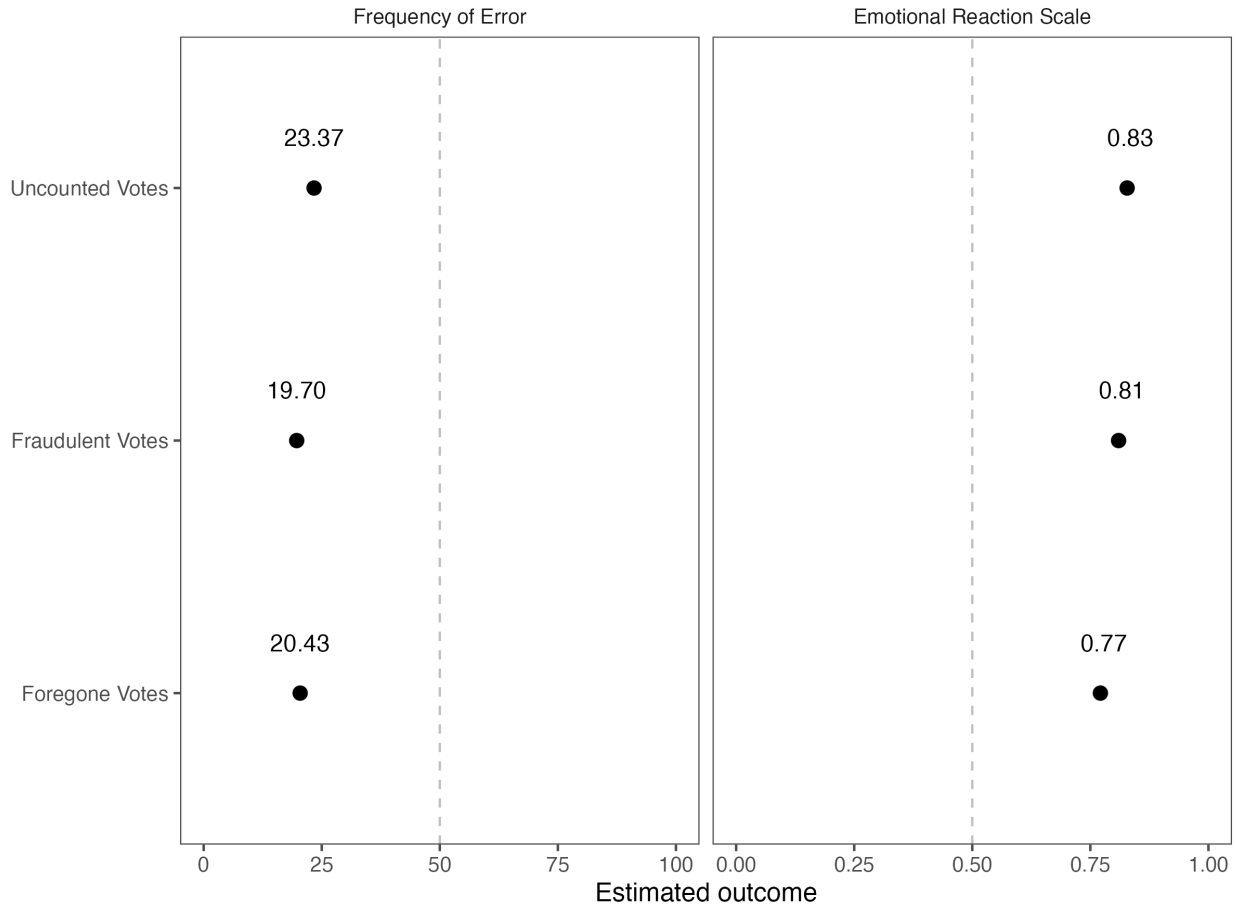
We begin our analysis of Study 1 by presenting average beliefs about the frequency of, and negative reactions to, each type of election error across all three surveys. This is therefore an initial assessment of beliefs about the prevalence and severity of each type of election error.

The left panel of Figure 1 shows average beliefs about the frequency of each type of error. For both fraudulent votes, when illegitimately cast votes that should not have been counted but which were, and foregone votes, when an eligible voter is unable to cast a vote, these averages are around 20 votes per 100 legitimate votes. The estimate is larger for uncounted votes, that is, votes which should have been counted but which were not, at 23 votes per 100 legitimate votes. This is a difference of around 19% and 14% (both $p < .001$) compared to

[13]The turnout is the average state-level turnout in a presidential election year, which is meant to represent a large and fixed turnout level. Each measure was independently randomly assigned, so that differences in fraudulent and uncounted votes between the current and new election rules were each -2%, -1.5%, -1%, -0.5%, -0.1%, 0%, 0.1%, 0.5%, 1%, 1.5%, or 2%.

[14]This randomization was conducted in three steps. First, we randomized whether a particular pairing had an increase in fraud and a decrease in uncounted votes, the opposite situation, or no restrictions on the pairing. Since the first two types of pairings did not include pairings with a 0% change in fraudulent or uncounted votes, scenarios with no change in votes were undersampled. Second, after randomly assigning the gap in fraudulent and uncounted votes, a random baseline value for fraud or uncounted votes was assigned from 0 to 4% for each election scenario. Lastly, the new fraud/uncounted vote value was calculated using this random baseline and the randomly assigned difference. Respondents in Study 3B were also block randomized into seeing each error presented either as a number or as a percentage of votes cast. Supplemental analysis available upon request shows no treatment heterogeneity by how the numbers were presented.

Figure 1: Mean Estimates of Frequency of Error and Emotional Reaction Scale, Study 1



Note: The horizontal lines reflect 95% confidence intervals. Models estimated using ordinary least squares regression, with standard errors clustered by respondent. These models can be seen in Table B.1.

the estimates for fraudulent and forgone votes, respectively.[15] Notably, these numbers are very large, which, if taken at face value, suggest there are massive errors in election results, consistent with the work discussed earlier finding high levels of belief about fraud.[16]

The right panel of Figure 1 shows that respondents reacted most strongly to uncounted votes, with an average emotional reaction score (range 0–1) of .83 (SE = .003). The next

[15]To estimate average differences in frequency estimates and negative reactions for each error, we used OLS regression with indicators for each error and respondent-level clustered standard errors, to account for the correlation among assessments by respondent.

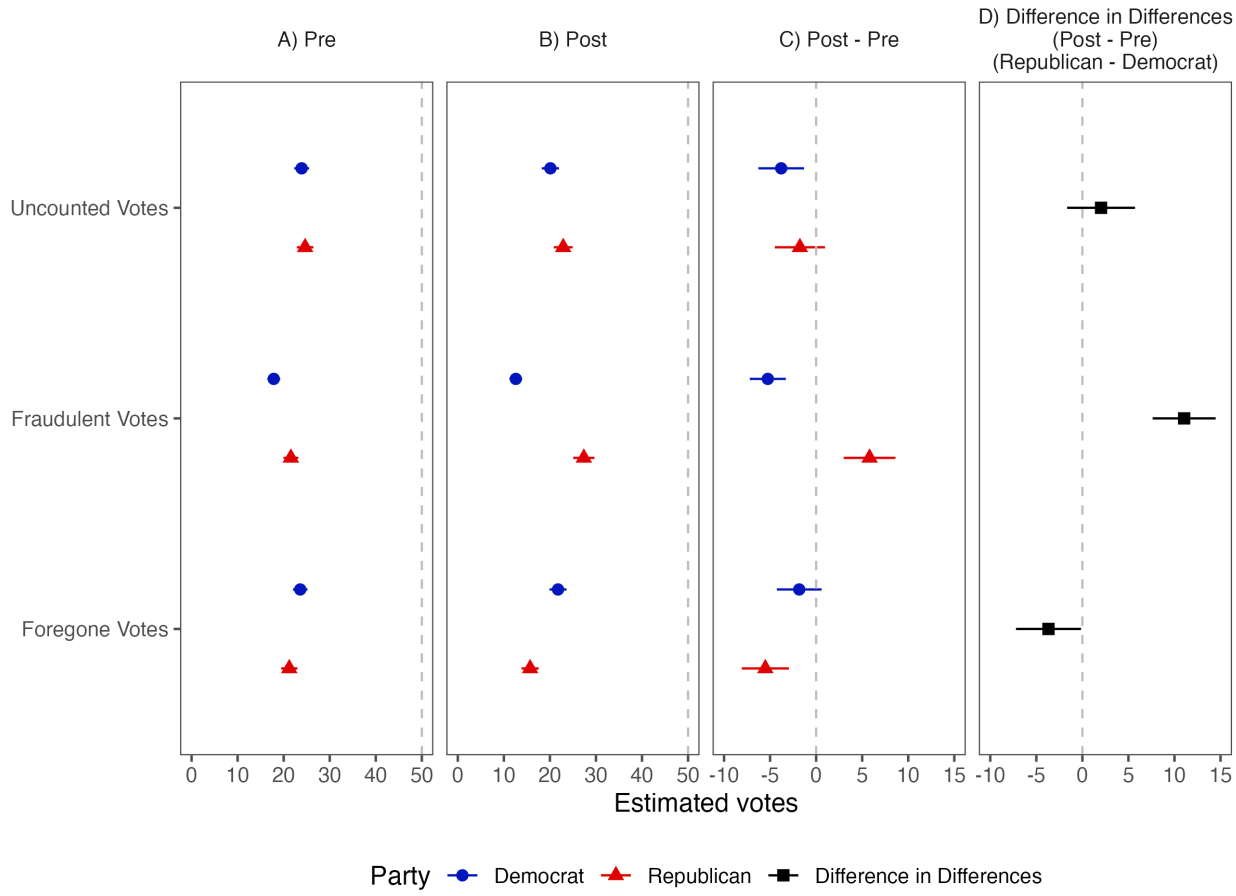
[16]Our numbers are roughly consistent with those found in 2014 survey data, in which about 20 to 30% of respondents believe that examples of voter fraud (such as double voting or voter impersonation) or uncounted votes (officials changing votes) occur "very commonly" or "occasionally" (Stewart, Ansolabehere and Persily 2016).

most negative reaction was to fraudulent votes, with an average emotional reaction score of .81 (SE = .003). Finally, respondents reacted substantially less negatively to foregone votes, with an average scaled score of .77 (SE = .003). While the differences between reactions to the first two types of errors are very small, but still significant ($p < .001$), the negative reaction to uncounted and fraudulent votes are about 7 and 5% larger (both $p < .001$), respectively, than the emotional reaction to foregone votes.

These similar averages, however, obscure important differences by respondent partisanship and over time. Specifically, Democrats and Republicans (throughout, we include leaners in our partisan subgroups because of evidence that they are more partisan than weak partisans in their views (Keith et al. 1986)) diverge in their estimates of the frequency of different types of election errors. Some of these partisan differences are present before the election, while growing over time. Figure 2 presents the average estimates of the frequency of each types of election error by partisanship (blue circles = Democrat; red triangles = Republican, including partisan leaners) for the pre-election (panel A) and post-election (panel B) surveys, omitting the during-election surveys for simplicity. Additionally, panel C plots the difference in perceptions of frequencies from the pre- to post-election survey by party and panel D plots the difference in these partisan differences over time.

Panel A shows that before the election, partisans did not differ much in their beliefs about the frequency of uncounted votes (Republican minus Democrat difference = .75 votes, $p = .54$, per 100 legitimate votes cast). By contrast, Republicans thought fraudulent votes were more prevalent than did Democrats (difference = 3.72 votes, $p < .001$), with the reverse partisan pattern for foregone votes (difference = -2.38 votes, $p < .05$). Panel C, which plots the differences over time within party, shows that beliefs about the frequency of all forms of election error either decreased or held constant over time for both parties (all estimates are less than or indistinguishable from 0) with one notable exception: Republicans reported an increase in beliefs about the frequency of fraudulent votes, an increase of about 27% (from 22 to 27 votes). This pattern is also apparent in the difference in differences

Figure 2: Mean Estimates of Frequency of Election Error by Partisanship and Wave, Study 1



Note: The horizontal lines reflect 95% confidence intervals. Models estimated using ordinary least squares regression, with standard errors clustered by respondent. These models can be seen in Table B.2.

estimates in panel D, where the only estimate that is positive and statistically significant is for counted fraudulent votes (11.0 more votes, $p < .001$), meaning that compared to Democrats, Republican estimates of fraudulent votes grew over time. By contrast, for forgone votes, the estimate is negative and significant (3.68 less votes, $p < .05$), meaning that Republicans believed foregone votes to occur less frequently than did Democrats after the election.

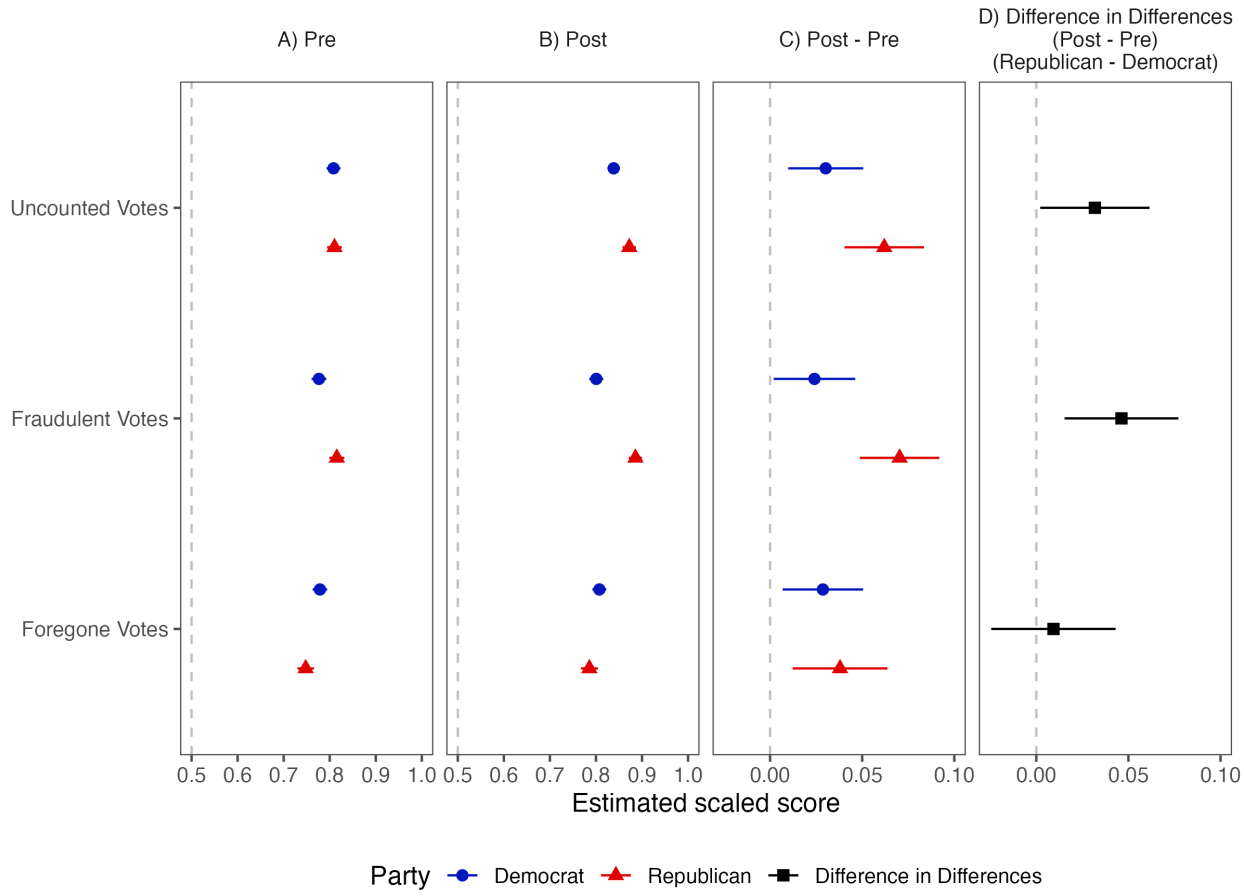
These estimates of beliefs about the facts of election errors show that there were already pre-election partisan differences in beliefs about the prevalence of different election errors which polarized over time. However, whether these differences in beliefs about facts are

consequential in part turns on whether there are exacerbating or compensating differences in *emotional reactions* to each type of error. Our next analysis shows that differences in reactions tend to exacerbate these partisan differences in beliefs about the frequency of different errors.

As with beliefs about frequency, we find pre-election partisan differences in emotional reactions to different types of election errors. Figure 3 follows the format of Figure 2 and presents the average reaction score for each type of election error by partisanship. Looking at the different reactions of Democrats and Republicans in the pre-election period shows the exact same pattern as in the previous figure. In the pre-election period, there are small and insignificant partisan differences in emotional reactions to uncounted votes. By contrast, even in this period, there are notable partisan differences in reactions to fraudulent and forgone votes: Republicans react more negatively to fraudulent votes than do Democrats (difference = .04, $p < .001$), while Democrats react more negatively to foregone votes (difference = -.03, $p < .05$). But these differences are also not static: panel C shows that negative reactions to all forms of election errors increased noticeably for both Republicans and Democrats (all estimates for Republicans and Democrats are positive and statistically distinguishable from 0). However, this increase was slightly greater for Republicans, as panel D shows that the difference in differences estimates are positive and statistically significant for both fraudulent and uncounted votes, meaning Republicans become comparatively more reactive over time to these errors than do Democrats.

Together, these patterns in beliefs about the frequency of, and negative reactions to, each form of election error help understand the initial and persistent patterns of partisan difference in concerns about threats to election integrity surrounding the 2020 election. At the most basic level, prior to the election, Republicans thought fraudulent votes were more common and more serious than did Democrats. Furthermore, this gap grew on both dimensions over time. Importantly, even though Republicans started out believing this error was more common and more serious, it is also the only type of error for which Republican estimates of

Figure 3: Mean Estimates of Emotional Reaction Scale to Election Error by Partisanship and Wave, Study 1



Note: The horizontal lines reflect 95% confidence intervals. Models estimated using ordinary least squares regression, with standard errors clustered by respondent. These models can be seen in Table B.2.

both frequency and severity increased over time. Thus, persistent and increased Republican concerns about fraud after the 2020 election appears rooted in both beliefs about the frequency, the perceived occurrence of fraudulently counted ballots, and values, as evidenced by more negative emotional reactions to this type of error.

By contrast, Democrats initially believed that foregone votes were more common and more serious than did Republicans, and forgone votes are the only domain in which Democratic beliefs about the frequency of this error did not decrease over time. Generally, for Democrats, their reactions to each type of error change much less than for Republicans,

indicating comparatively fixed values, but they report believing that both uncounted and fraudulent votes became less likely. Of course, Democrats have the advantage of having won the presidential election, but it is nonetheless important to note that the type of error for which their factual beliefs change least is also the one where their reactions indicate increasingly greater concern: foregone votes.[17] Overall, these patterns are consistent with prior work documenting greater concerns about election fraud for Republicans and voter suppression for Democrats (Atkeson et al. 2014; Beaulieu 2014; Edelson et al. 2017), but shows that this pattern is rooted in partisan differences in both factual beliefs and values, and that these differences grew throughout the 2020 election cycle.[18]

4.2 Study 2

Study 1 presents information about beliefs surrounding the frequency and importance of different forms of election errors. By contrast, Study 2 is an experiment in which we examine reactions to specific instances of election errors with different characteristics, with the design of these vignettes approximating the sorts of news and social media postings individuals might be exposed to.[19] Our analysis approach is to examine the relationship between respondent reactions to each vignette and the randomly assigned features in the vignettes,

[17]We also investigate the underlying sources of foregone votes by asking respondents, "for every 100 eligible voters who didn't vote despite wanting to vote, how many were caused by each of the following issues?" In Figure B.1, we show that most of the worry behind foregone votes in the 2020 election was driven by concerns about COVID-19. However, we do not find much of a difference between partisans or changes throughout the election, with the exception of increased Republican beliefs about voters being discouraged by their ballot not counting compared to Democrats, which is related to changing perceptions of uncounted votes discussed above.

[18]The changes we observe over the election cycle may arise due to underlying value or party commitments, experiences with the world, or elite cues. For pure-independents, for whom there are no clear elite cues or a consistent election winner to "root for," we find that baseline beliefs about the frequency and severity of election errors are much lower than for partisans (Figures B.2 and B.3). Moreover, even during the course of the election, Independents' beliefs shifted the least (with the exception of frequency of uncounted votes), as none of the estimates for Independents are significant in Panel C of both figures.

[19]We measure whether respondents believe these vignettes by asking additional questions about the believability of the vignettes and whether respondents heard stories like the vignettes in the post-election survey. In Table C.2, we find that Republicans are more likely to report believing and having seen stories like our vignettes, while vignettes that benefited the opposite party and contain fraudulent and uncounted errors are also more believable. The average believability score was 3 on a 5-point Likert scale, which meant respondents found the vignettes to be "somewhat believable" on average.

survey wave, and respondent partisanship.

Table 3: Mean Feeling of Outrage by Party and Wave, Study 2

Party	Pre	During	Post
Democrat	0.694	0.672	0.585
	(0.009)	(0.009)	(0.010)
Republican	0.674	0.715	0.705
	(0.009)	(0.009)	(0.010)

Note: Standard errors clustered by respondent.

Before presenting the complete analysis, we note that there is a general pattern of partisan divergence in reactions to all vignette scenarios over time, with Republican outrage becoming much more polarized compared to Democratic outrage. This is consistent with, but starker than, the differences in negative reactions over time we present in Figure 3 for Study 1. Table 3 shows, pooling across all experimental conditions, average feelings of outrage by respondent partisanship and survey wave for Study 2. While average negative reactions are initially greater, although not significantly, for Democrats than Republicans (.02 units, .69 versus .67), this gap flips in sign and grows significantly for the during wave (-.04, .67 versus .72) and is even larger in the post wave (-.12, .59 versus .71). As we show, by and large, this pattern of greater partisan divergence happens mostly as a result of the passage of time and independent of specific vignette features, with the exception of increased Republican reactions to instances of fraudulent and uncounted votes in the post-election wave.[20]

Our formal statistical analysis of this experiment, which uses OLS regression with standard errors clustered at the respondent level, is presented in Table 4. Column (1) shows that pooling across all observations, average outrage is larger for Republicans than Democrats by 0.44 units ($p < .001$) and is substantially lower after the election was resolved (-.049 units, $p < .001$). Outrage is slightly greater when the incident involves mail rather than in-person

[20]The increase in Republican reactions can also be seen in Table C.3, which measures mean outrage by type of error in addition to party and wave.

ballot (.014 units, $p < .001$) and fraudulent (.019, $p < .001$) or uncounted (.012, $p < .001$) rather than foregone votes. Outrage is much larger when an error benefits the opposing party rather than one's own (.167 units, $p < .001$), but only slightly larger when the error is described as intentional rather than due to an accident (.016, $p < .05$).[21]

These initial estimates pool across respondents of different partisanship. We know from Study 1, however, that there are partisan differences in reactions to each error and those differences, as well as average outrage (as in Table 4), change over time. For this reason, in columns (2) and (3), we repeat the earlier analysis after restricting the samples to Democrats and then Republicans, including leaners. Comparing columns (2) and (3) therefore provides additional information about these partisan differences. There are two notable patterns. First, consistent with the analysis shown in Table 4, average Democratic outrage decreases with wave but increases for Republicans. Second, there are partisan differences in the relative reaction to different types of errors. Compared to forgone votes (the baseline category in the regression), estimates for scenarios with fraudulent or uncounted errors are insignificant for Democrats, while both estimates are positive and statistically significant for Republicans, indicating that those errors generate more outrage than foregone votes. This pattern is very similar to what we find for the value judgements in Study 1 (Figure 3), where Republicans reacted more negatively to those errors than to foregone votes compared to Democrats.[22]

Given that Democrats and Republicans appear to be reacting differently, on average, to all three of these errors over time, we also examined whether there were over time differences by party in reactions to the randomly assigned vignette features in columns (4) and (5). We did so by estimating models, again by party, in which we interacted the randomly assigned featured with indicators for each of the latter two survey waves. Only one of the interaction coefficients is individually statistically significant in either column. Democrats react more

[21] We also estimated a model that allows the effect of the opposite party benefiting and intentionality to interact in Table C.4. The interactions are never statistically significant.

[22] For a more formal comparison of Republican vs. Democratic outrage to various types of election errors over time, see Table C.5. This triple interaction confirms that Republicans grew more outraged to all forms of election errors throughout the election compared to Democrats, and that Republicans grew especially outraged to vignettes involving fraudulent votes in the post-election period.

Table 4: Effect of Election Error Vignettes on Feelings of Outrage

	Base			Interactions	
	All	Democrats	Republicans	Democrats	Republicans
Constant	0.557***	0.593***	0.560***	0.607***	0.580***
	(0.009)	(0.012)	(0.013)	(0.016)	(0.018)
Mail Ballot	0.014***	0.011*	0.017**	0.011	0.016
	(0.004)	(0.005)	(0.005)	(0.008)	(0.009)
Fraudulent Votes	0.019***	0.005	0.036***	0.010	0.025**
	(0.004)	(0.005)	(0.005)	(0.008)	(0.009)
Uncounted Votes	0.012***	0.003	0.023***	−0.002	0.016
	(0.004)	(0.005)	(0.005)	(0.008)	(0.009)
Intentional Error (Villain)	0.016*	0.009	0.023*	0.005	0.006
	(0.007)	(0.010)	(0.011)	(0.016)	(0.018)
Error Benefiting Opposite Party	0.167***	0.179***	0.151***	0.153***	0.140***
	(0.007)	(0.010)	(0.011)	(0.016)	(0.018)
Wave – During	0.008	−0.019	0.040**	−0.048*	0.007
	(0.009)	(0.012)	(0.013)	(0.023)	(0.026)
Wave – Post	−0.049***	−0.109***	0.029*	−0.123***	−0.001
	(0.009)	(0.012)	(0.013)	(0.024)	(0.027)
Republican	0.044***				
	(0.007)				
Mail x During				−0.003	0.002
				(0.012)	(0.013)
Mail x Post				0.002	−0.000
				(0.012)	(0.013)
Fraudulent x During				0.002	0.017
				(0.012)	(0.013)
Uncounted x During				0.019	0.015
				(0.011)	(0.013)
Fraudulent x Post				−0.019	0.019
				(0.012)	(0.013)
Uncounted x Post				−0.006	0.006
				(0.012)	(0.013)
Intentional x During				0.019	0.033
				(0.023)	(0.025)
Intentional x Post				−0.008	0.019
				(0.025)	(0.027)
Opposite Party x During				0.027	0.009
				(0.023)	(0.025)
Opposite Party x Post				0.052*	0.024
				(0.025)	(0.027)
R^2	0.086	0.102	0.073	0.104	0.074
Observations	14973	8398	6575	8398	6575
Respondents	4997	2803	2194	2803	2194

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$.

Note: The dependent variable ranges from 0–1. Models estimated using ordinary least squares regression, with standard errors clustered by respondent. Baseline of in-person ballot (compared to mail), foregone votes (compared to fraudulent/uncounted), unintentional error (compared to intentional, committed by a villain), error benefiting own party (compared to error benefiting opposite party), pre-election survey wave (compared to during- and post-election survey waves).

negatively to the opposite party benefiting in the post-election survey (Opposite Party x Post = .052, $p < .05$).

Cumulatively, Study 2 largely comports with the patterns we find in Study 1, meaning that how we elicit reactions does not appear to differ between asking about instances of errors in the abstract or in the context of specific descriptions of an event. Not only do Republicans appear to react comparatively more negatively to fraudulent and uncounted errors relative to foregone votes, but their average outrage also increases over time, and especially for fraudulent errors. So even when we fix various assumptions behind these election errors, we see initial and persistent partisan differences in reactions to specific instances of those errors.

4.3 Study 3

Both Study 1, which examined reactions to general instances of election errors and beliefs about their frequency, and Study 2, which examined reactions to specific hypothetical instances of such errors, do not force respondents to prioritize between reducing different forms of election errors. Before the election, we found that Republicans appeared more concerned about fraudulent than foregone votes compared to Democrats, but partisan differences were otherwise modest. But do such differences in reactions explain ex ante preferences about election rules that would generate different levels of each type of error? More bluntly, if forced to tradeoff among errors, would the partisan differences in the emotional reactions to these errors predict Democrats giving comparatively more weight to turnout/foregone votes when choosing election rules? If so, this would also further validate using emotional reactions to measure value commitments. To answer this question, we turn to our analysis of Study 3, in which respondents were asked to choose among pairs of election rules.

To conduct our analysis, we predict the probability that a respondent chose the (randomly selected) new election rule as a function of differences in turnout (representing foregone votes), fraudulent (called overcounted votes in our survey), and uncounted (called undercounted votes in our survey) votes between the new and old election rule. In Study

3A, the variable difference in turnout, for example, ranges from -20 to 20.[23] It is 20 when the new election rule generates 20% more legitimate ballots cast than the old rule (e.g., a decrease in forgone votes). Regression coefficients estimated using OLS regression with clustered standard errors for Studies 3A and 3B appear in Table 5.

As before, we begin in column (1) with pooled analysis of Study 3A, which shows that across respondents, individuals are more likely to choose an election rule when it yields fewer illegitimate votes counted (less fraud), fewer uncounted votes (fewer discarded ballots), and higher turnout (fewer forgone votes). The magnitudes of these coefficients are large: a 1% increase in fraud decreases the probability an election rule is chosen by 4.1%, a 1% increase in uncounted ballots decreases it by 5.3%, and a 1% increase in turnout increases it by .8%. Comparing across these coefficients, this evidence suggests that respondents react about 5 to 7 times more to changes in fraud and disqualification, respectively, than to changes in turnout. [24]

As before, we also examine differences across parties in reactions to these experimentally manipulated features. We do so in the model presented in column (2) by interacting the features of each vignette with an indicator for a Republican (rather than Democratic) respondent. Focusing on the interactions between Republicans and each measure of election errors at the bottom of the table, there is only evidence of statistically or substantively significant partisan heterogeneity for a single type of election error: foregone votes (turnout). In particular, Democrats react to a 1-point increase in turnout by being 1.1 points ($p < .001$) more likely to choose an election rule, while for Republicans the effect is only .5 points—an effect half as large ($p < .001$). For the other interactions, Republicans react slightly less to fraudulent and uncounted votes than do Democrats, although neither of these interaction effects are statistically significant. Finally, Republicans are simply 6.1 points less likely to

[23] We increment levels of turnout in the potential election plans by 5%, unlike fraudulent and uncounted vote levels, which only differ by 1%.

[24] When treating each paired election rule as independent from each other and looking at assessments of their fairness in Table D.3, we find a very similar pattern for preferences for election rules that decrease fraudulent and uncounted votes and increase turnout.

Table 5: Effect of Difference in Election Errors on Choice of Election Rules, Study 3

	Study 3A		Study 3B	
	Base	Interactions	Base	Interactions
Constant	0.392***	0.392***	0.412***	0.412***
	(0.022)	(0.022)	(0.011)	(0.011)
Difference in Fraudulent Votes	−0.040***	−0.047***	−0.102***	−0.098***
	(0.005)	(0.006)	(0.005)	(0.006)
Difference in Uncounted Votes	−0.053***	−0.056***	−0.117***	−0.121***
	(0.005)	(0.006)	(0.005)	(0.007)
Difference in Turnout	0.008***	0.011***		
	(0.001)	(0.001)		
Vignette 2	0.058*	0.060*	0.011	0.010
	(0.024)	(0.023)	(0.012)	(0.012)
Vignette 3	0.067*	0.067*	0.029*	0.029*
	(0.026)	(0.026)	(0.012)	(0.012)
Vignette 4	0.057*	0.059*	0.029*	0.029*
	(0.025)	(0.025)	(0.012)	(0.012)
Vignette 5	0.062*	0.062*	0.024*	0.024*
	(0.025)	(0.025)	(0.012)	(0.012)
Republican	−0.061**	−0.061**	−0.051***	−0.051***
	(0.021)	(0.021)	(0.011)	(0.011)
Fraudulent x Republican		0.012		−0.008
		(0.009)		(0.009)
Uncounted x Republican		0.003		0.009
		(0.009)		(0.009)
Turnout x Republican		−0.005**		
		(0.002)		
R^2	0.109	0.113	0.081	0.081
Observations	5914	5914	24930	24930
Respondents	595	595	2516	2516

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$.
Note: Dependent variable is a binary 0 or 1, with 1 as choosing the new election rule. Models estimated using ordinary least squares regression, with standard errors clustered by respondent.

choose a new election rule.

These numbers show that the key difference between Democrats and Republicans is how they tradeoff among different election errors in choosing election rules. The ratio of the effect of a change in turnout to a change in fraud on choosing a rule is larger for Democrats than

Republicans (ratio = .22 to .15, a difference of around 50%), meaning that Democrats care more about turnout relative to the other errors than do Republicans.[25] Notably, the effect of an increase in uncounted ballots is slightly larger than the effect of an increase in fraud for both partisans: about .009 units ($p = .29$, 19%) for Democrats and .018 units ($p = .053$, 39%) for Republicans.

The results from Study 3B, in which we give respondents a fixed number for the level of turnout, are reported in columns (3) and (4) of Table 5. As in Study 3A, there are no statistically significant differences in how Democrats and Republicans react to differences in either fraud or uncounted ballots (both of the Republican x Uncounted and Republican x Foregone coefficients are small and insignificant in column (4)). Additionally, also as in Study 3A, both partisan groups react slightly more to differences in uncounted ballots than in fraud. Here, unlike in Study 3A, the magnitude of the differences in these effects is larger for Democrats than Republicans (.022 points, $p < .001$, 23% for Democrats, and .005 points, $p = .42$, 5% for Republicans).

Comparing these results with the pre-election results from Studies 1 and 2, we find that revealed election rule preferences appear very similar to the reported emotional reaction to general or specific instance of fraud. For both Democrats and Republicans, uncounted and fraudulent votes generated more negative reactions that did foregone votes, but Democrats' reacted more negatively to foregone votes compared to the other errors. The revealed election rule choices support this description: there are no partisan differences in reactions to fraudulent and uncounted votes and both groups weight them more than foregone votes, but Democrats are about twice as likely to support changes in turnout (foregone votes) than Republicans. This is consistent with previous observational work finding greater support for election reforms that make voting more convenient among Democrats (e.g. Alvarez et al. 2011), although here we show that this effect arises not because of differences in concern about fraud, but instead simply a greater Democratic concern for foregone votes. Over-

[25] Similarly, the ratio of the effect of a change in turnout to a change in uncounted votes is larger for Democrats than Republicans (.19 to .10).

all, even in a prospective choice about election rules, we find key value differences between Democrats and Republicans about concerns about different sorts of election errors, which also validates our earlier measure of emotional reactions as a proxy for value commitments.

5 Conclusion

This paper demonstrates the importance of decomposing threats to election integrity by understanding differences in beliefs about the prevalence of threats and their importance. We show that beliefs about the three forms of election errors that we measure—fraudulent votes, uncounted votes, and foregone votes—are distinct. Additionally, there are also importance differences by partisanship in these beliefs that likely explain tensions in debates about election rules and their reform. These patterns persist when directly measuring beliefs about the frequency of these errors and reactions to them (Study 1), as well as when survey respondents engage with textual descriptions of election errors that approximate social media reporting of these events (Study 2). Finally, patterns of ex ante choices in election rules that differ in the rates of fraud, uncounted, and foregone votes they produce (Study 3) comport with these patterns of partisan differences in perceptions of the seriousness of different threats to integrity.

There are several important empirical patterns that are consistent across all three studies. First, we show that there are partisan differences in beliefs about the prevalence of different threats to election integrity. Some of these differences existed prior to the 2020 election, and some became sharper as the election progressed. Prior to the election, Republicans thought fraudulent votes were more common than did Democrats and the partisan pattern was reversed for foregone votes. After the election, however, Democrats' beliefs about the frequency of all forms of errors decreased, consistent with prior work showing that supporters of the party winning an election express more confidence in it. However, Republicans do not uniformly report increased perceptions of the frequency of election errors; instead,

Republican beliefs about the frequency of foregone votes decline and beliefs about uncounted votes are static. Only Republican beliefs about the frequency of fraud increase by a large amount (28%).

Second, we turn to emotional reactions that express the seriousness or importance of these errors (values). Similar to beliefs about facts, we find that the key difference between partisans is the values assigned to foregone and fraudulent votes. For Republicans, foregone votes elicit much less negative reactions than for Democrats, while the opposite is true for Democrats. Expressed importance of these errors increases for both Democrats and Republicans after the election. However, Republican assessments of the seriousness of all forms of error increase compared to Democrats, with the largest increases for fraudulent and uncounted votes. This pattern of heightened scrutiny is again consistent with the earlier discussed effect of "losing" an election. In Study 2, Republicans react more negatively to vignettes describing instances of fraudulent and uncounted votes, with average outrage increasing by a statistically significant amount for Republicans after the election and for fraudulent votes, while decreasing overall for Democrats. Finally, in Study 3, where we do not measure values but instead ask respondents to trade off among rules that have different levels of fraud, uncounted, and foregone votes, we see that Democrats and Republicans react similarly negatively to fraudulent and uncounted votes. However, Democrats give much greater weight to foregone votes, validating the patterns of reactions observed in studies 1 and 2.

Beyond pointing to the key role of partisan preferences in predicting individuals' beliefs (perhaps originating in elite rhetoric, partisan differences in media exposure, or peer effects), there are several important implications of the patterns that we uncover. First, if one seeks to understand public attitudes toward election rules and potential reforms, one must grapple with the fact that partisan differences in both facts and values exist. Therefore, even before getting to values, partisans have different beliefs about the facts of election fraud and creating common ground would likely require identifying interventions that could ameliorate

differences in factual beliefs.

But changing beliefs about facts will not be enough to generate common partisan ground if reforms involve trading off among threats to election integrity that partisans value differently. Most starkly, this is because even when facts are held constant (as we do in Studies 2 and 3), Democrats are relatively more concerned about foregone votes than are Republicans. This finding therefore may help understand why previous research finds that messages counteracting factual claims about election fraud do not universally increase election confidence (Berlinski et al. 2023; Coppock et al. 2023), because individuals are concerned about different threats to election integrity. Such value disagreements also explain why political support for certain reforms is often divided by partisanship, as in the case of debates about strict voter identification or registration rules. For example, if one is worried about fraud but less concerned about foregone votes, then strong voter ID rules may be desirable, while the opposite may be true for those who strongly value foregone votes.

Nonetheless, we note that there are limitations of our analysis. For one, it takes place during the 2020 election, when partisan narratives about threats to election integrity were already on full display. Whether such patterns persist over time and for other levels of government and types of elections is less clear (although we note that the elections were subnational in the experiments used in Study 3). For another, we examine only three broad types of threats to election integrity, and therefore ignore important details that might subdivide or even cross these cases. For example, do people perceive postal service delays leading to mail ballots being discarded as foregone votes (because they are invalid by law if delayed in some states) or as uncounted votes (because an individual believed they submitted a valid ballot in time for it to be counted)?

Additionally, we do not study "common values" reforms that might uniformly improve perceptions of election integrity. For example, ballot tracking or online verification of registration status may be areas where, because there are neither fact nor value disagreements, reforms can increase electoral confidence across all partisan subgroups (Biggers et al. 2022).

There are also likely other values one could consider, like financial cost, which might also divide partisans. For example, automatic randomized audits of selected polling place returns might improve electoral confidence, but still generate partisan conflict over whether they are worth the cost.[26] Fortunately, the approach we use here can readily be expanded to consider other values, as the design for Study 3 shows.

These caveats aside, decomposing threats to election integrity and separately studying beliefs about the facts and values of these threats provides new insights into a salient area of political conflict in the United States and likely more generally across the world. Even more importantly, this disaggregation and our over time analysis provides a detailed window into the dynamics of public opinion on the very issues of election administration itself as it intersects with campaign messaging and electoral strategy.

[26] Additionally, election audits may force a tradeoff along another dimension, security versus privacy, as they may heighten concerns about threats to ballot secrecy, which may have implications both for vote choice and turnout (Gerber, Huber, Doherty, Dowling and Hill 2013; Gerber, Huber, Doherty and Dowling 2013; Kuriwaki, Lewis and Morse 2023).

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Supplementary Materials

Fact-Value Disagreements about Threats to Electoral Integrity: Beliefs about the Importance and Prevalence of Fraudulent, Uncounted, and Foregone Votes in the 2020 Election

A Adherence to Ethical Principles

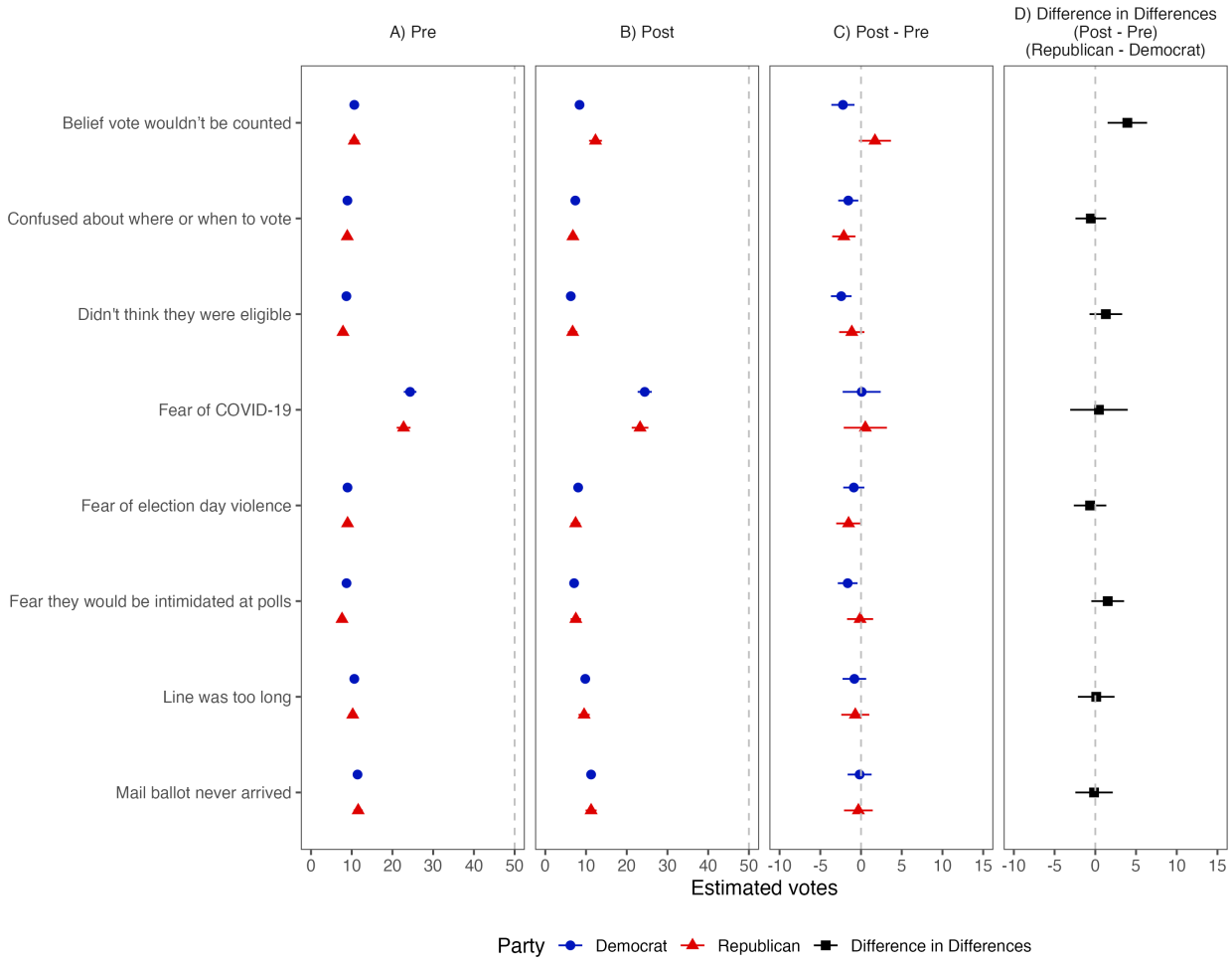
The process for each of our five surveys were exactly the same and adhered to the ethical principles for working with human participants. Before the start of each of our surveys, we informed respondents that participation was voluntary. We also informed respondents of potential risks from possible loss of confidentiality and their feelings about the topic presented, along with our process to store and present the data collected in the survey. Respondents then had to consent to participate in the survey before being able to proceed. We did not engage in any deception in any of our surveys.

We obtained respondents through a third-party survey provider, Lucid Marketplace, which solicits respondents who can voluntarily take our survey in exchange for in-kind compensation (e.g., gift cards). We paid respondents the standard rate at the time through Lucid Marketplace. Because the median survey duration around 18 minutes each for the three surveys in Studies 1 and 2, and 10 minutes each for the two surveys in Study 3, we estimate the hourly wage is fair in the context of the United States (where survey respondents were geographically located). Surveys conducted on Lucid Marketplace with opt-in respondents are similar in demographics to nationally representative surveys, and our survey did not specifically target vulnerable or marginalized populations. Finally, we have no reason to believe that our research had differential harms or benefits on any subsets of our respondents.

Furthermore, our research had minimal impacts on political processes and the ways that respondents engaged with such processes. We emphasized that the potential election scenarios (in Studies 2, 3a, and 3b) were about hypothetical vignettes and election rules, not real-life stories and elections. In all of our studies, we only gathered information about the perceptions of respondents about potential threats to election integrity around the time of the 2020 election, and did not assert any facts about what happened before, during, or after the 2020 election.

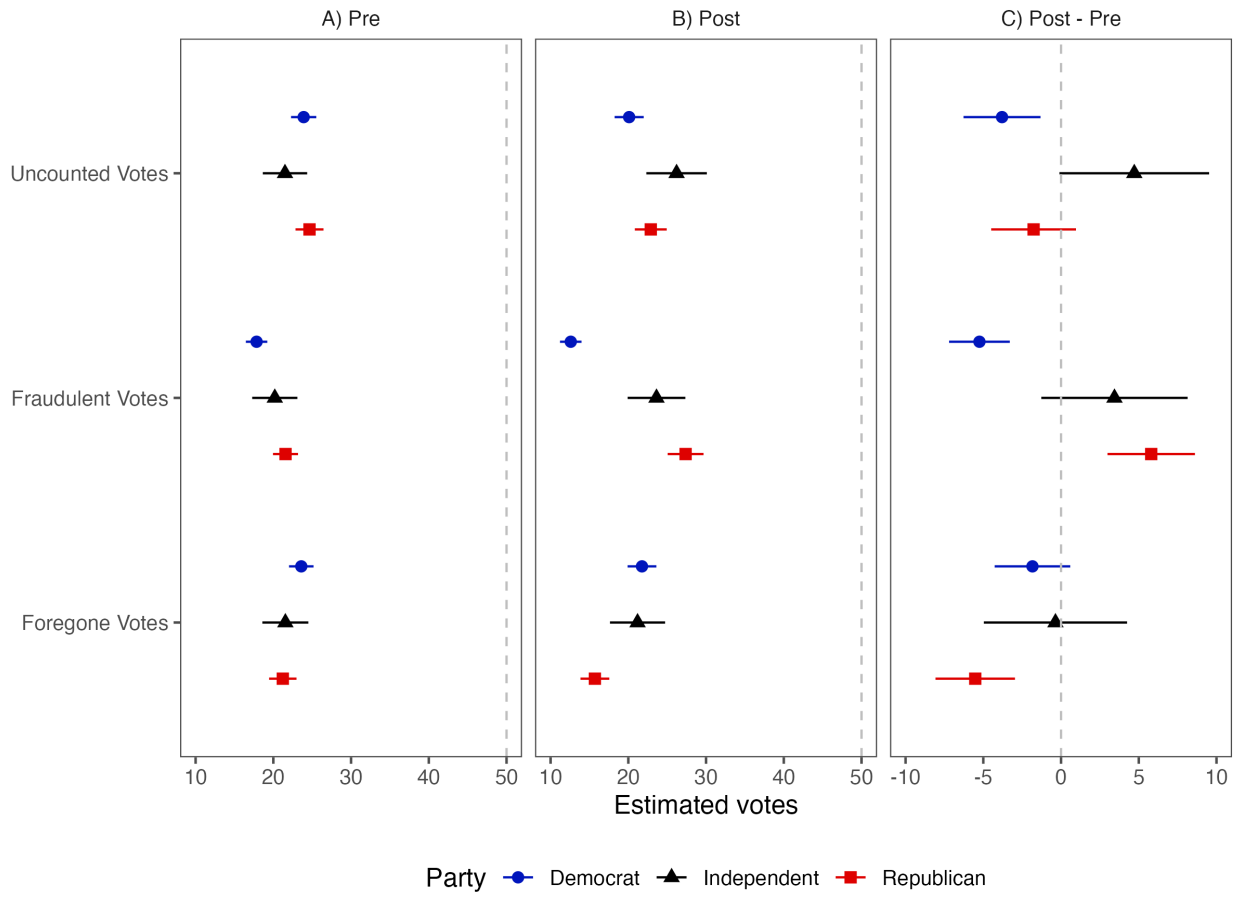
B Study 1

Figure B.1: Mean Estimates of Frequency of Foregone Votes by Partisanship and Wave, Study 1



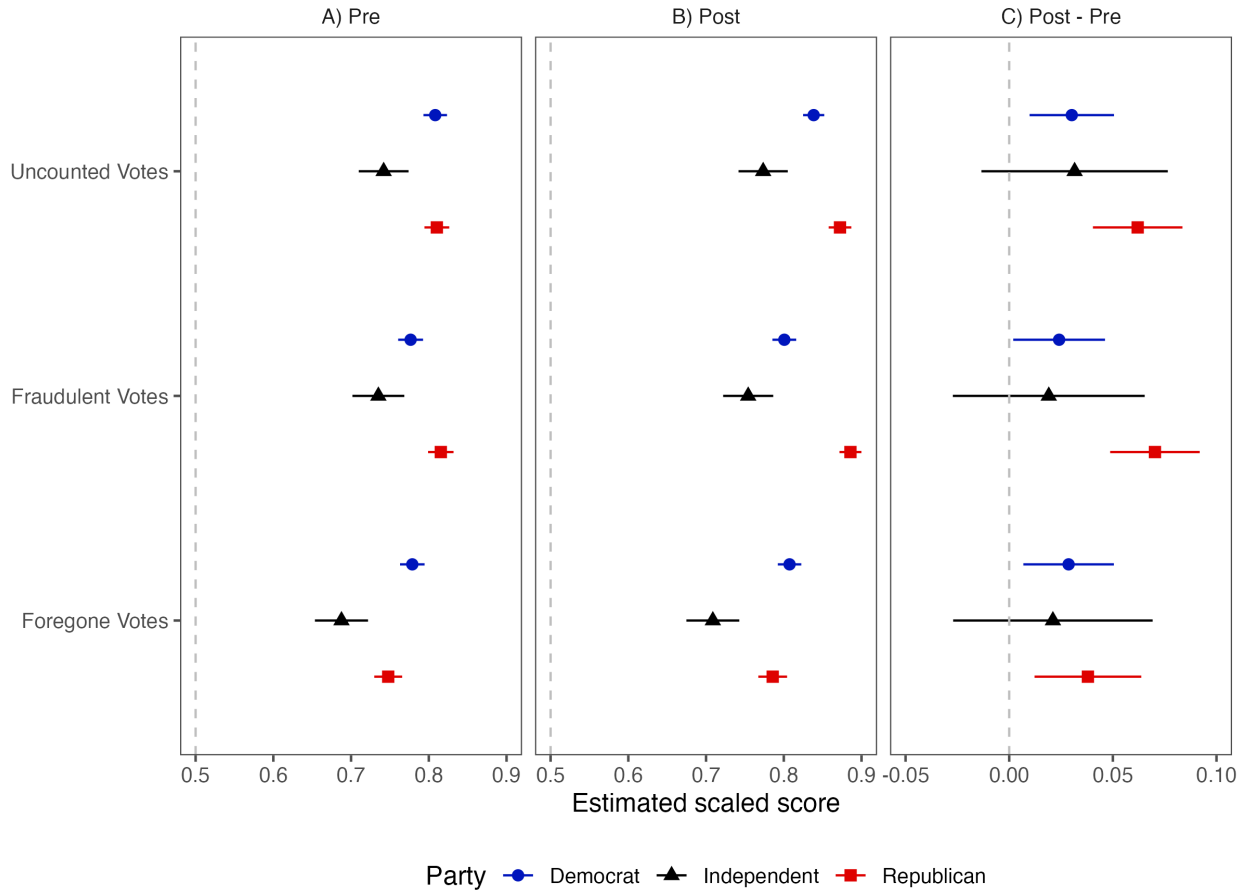
Note: The horizontal lines reflect 95% confidence intervals. Models estimated using ordinary least squares regression, with standard errors clustered by respondent. These models can be seen in Table B.3.

Figure B.2: Mean Estimates of Frequency of Election Error by Party and Wave (with Pure Independents), Study 1



Note: The horizontal lines reflect 95% confidence intervals. Models estimated using ordinary least squares regression, with standard errors clustered by respondent. These models can be seen in Table B.4.

Figure B.3: Mean Estimates of Emotional Reaction Scale to Election Error by Party and Wave (with Pure Independents), Study 1



Note: The horizontal lines reflect 95% confidence intervals. Models estimated using ordinary least squares regression, with standard errors clustered by respondent. These models can be seen in Table B.4.

Table B.1: Table for Mean Estimates of Frequency of Error and Emotional Reaction Scale, Study 1

	Frequency of Error	Emotional Reaction Scale
Constant	23.370^{***}	0.828^{***}
	(0.359)	(0.003)
Fraudulent Votes	-3.669^{***}	-0.018^{***}
	(0.386)	(0.002)
Foregone Votes	-2.943^{***}	-0.057^{***}
	(0.407)	(0.002)
R^2	0.004	0.010
Observations	17409	17435
Respondents	5803	5812

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$.
Note: Dependent variable ranges from 0 to 100 for Frequency of Error DV, 0 to 1 for the Emotional Reaction Scale DV. Models estimated using ordinary least squares regression, with standard errors clustered by respondent.

Table B.2: Table for Mean Estimates of Frequency of Error and Emotional Reaction Scale by Partisanship and Wave, Study 1

	Frequency of Error			Emotional Reaction Scale		
	Uncounted Votes	Fraudulent Votes	Foregone Votes	Uncounted Votes	Fraudulent Votes	Foregone Votes
Constant	23.902***	17.844***	23.595***	0.808***	0.777***	0.779***
	(0.828)	(0.702)	(0.804)	(0.008)	(0.008)	(0.008)
Republican	0.751	3.723***	−2.378*	0.002	0.039***	−0.031*
	(1.236)	(1.080)	(1.206)	(0.011)	(0.012)	(0.012)
Wave – During	−0.940	−3.106**	−2.581*	0.035***	0.014	0.024*
	(1.215)	(0.980)	(1.144)	(0.010)	(0.011)	(0.011)
Wave – Post	−3.795**	−5.248***	−1.838	0.030**	0.024*	0.029*
	(1.263)	(0.996)	(1.240)	(0.010)	(0.011)	(0.011)
Republican x During	2.437	7.852***	−1.095	0.017	0.045**	−0.007
	(1.836)	(1.635)	(1.698)	(0.015)	(0.016)	(0.017)
Republican x Post	2.031	11.049***	−3.681*	0.032*	0.046**	0.009
	(1.878)	(1.745)	(1.799)	(0.015)	(0.016)	(0.017)
R^2	0.005	0.049	0.010	0.011	0.030	0.007
Observations	4990	4990	4990	4998	4998	4997
Respondents	4990	4990	4990	4998	4998	4997

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$.
Note: Dependent variable ranges from 0 to 100 for Frequency of Error DV, 0 to 1 for the Emotional Reaction Scale DV. Models estimated using ordinary least squares regression, with standard errors clustered by respondent. Baseline of Democrat (compared to Republican), and pre-election survey wave (compared to during- and post-election survey waves).

Table B.3: Table for Mean Estimates of Frequency of Foregone Votes by Partisanship and Wave, Study 1

	Believe Vote Won't Count	Confused about Voting	Didn't Think Eligible	Fear of COVID-19	Fear of Election Violence	Fear of Poll Intimidation	Line Too Long	Missing Mail Ballot
Constant	10.628***	8.936***	8.688***	24.334***	8.956***	8.716***	10.631***	11.419***
	(0.515)	(0.424)	(0.477)	(0.794)	(0.454)	(0.462)	(0.482)	(0.472)
Republican	−0.014	−0.036	−0.839	−1.595	0.021	−1.103	−0.390	0.158
	(0.791)	(0.650)	(0.706)	(1.174)	(0.671)	(0.678)	(0.720)	(0.749)
Wave – During	0.249	−0.719	−0.435	0.306	0.680	−0.018	0.137	0.580
	(0.797)	(0.631)	(0.714)	(1.158)	(0.686)	(0.683)	(0.716)	(0.735)
Wave – Post	−2.221**	−1.565*	−2.427***	0.082	−0.887	−1.639**	−0.816	−0.172
	(0.725)	(0.630)	(0.647)	(1.191)	(0.660)	(0.619)	(0.739)	(0.751)
Republican x During	1.723	−0.241	1.019	−1.556	0.389	1.134	−0.803	0.999
	(1.251)	(0.981)	(1.085)	(1.708)	(1.062)	(1.042)	(1.081)	(1.189)
Republican x Post	3.934**	−0.548	1.295	0.448	−0.643	1.525	0.113	−0.153
	(1.237)	(0.963)	(1.022)	(1.802)	(1.017)	(1.026)	(1.146)	(1.172)
R^2	0.006	0.003	0.004	0.002	0.003	0.002	0.001	0.001
Observations	4989	4987	4990	4987	4988	4986	4987	4986
Respondents	4989	4987	4990	4987	4988	4986	4987	4986

***$p < 0.001$; **$p < 0.01$; *$p < 0.05$.

Note: Dependent variable ranges from 0 to 100 for each DV. Models estimated using ordinary least squares regression, with standard errors clustered by respondent. Baseline of Democrat (compared to Republican), and pre-election survey wave (compared to during- and post-election survey waves).

Table B.4: Table for Mean Estimates of Frequency of Error and Emotional Reaction Scale by Party and Wave (with Pure Independents), Study 1

	Frequency of Error			Emotional Reaction Scale		
	Uncounted Votes	Fraudulent Votes	Foregone Votes	Uncounted Votes	Fraudulent Votes	Foregone Votes
Constant	21.498***	20.187***	21.547***	0.742***	0.735***	0.688***
	(1.450)	(1.476)	(1.502)	(0.016)	(0.017)	(0.017)
Democrat	2.404	−2.344	2.048	0.066***	0.041*	0.091***
	(1.669)	(1.635)	(1.703)	(0.018)	(0.019)	(0.019)
Republican	3.155	1.380	−0.330	0.068***	0.080***	0.060**
	(1.715)	(1.689)	(1.750)	(0.018)	(0.019)	(0.020)
Wave – During	1.194	0.332	−2.769	0.050*	0.034	0.023
	(2.265)	(2.228)	(2.202)	(0.022)	(0.023)	(0.024)
Wave – Post	4.711	3.437	−0.359	0.032	0.019	0.021
	(2.451)	(2.395)	(2.345)	(0.023)	(0.024)	(0.024)
Democrat x During	−2.134	−3.437	0.187	−0.015	−0.020	0.001
	(2.570)	(2.434)	(2.482)	(0.024)	(0.026)	(0.026)
Republican x During	0.304	4.414	−0.907	0.002	0.025	−0.006
	(2.650)	(2.584)	(2.534)	(0.025)	(0.026)	(0.027)
Democrat x Post	−8.507**	−8.685***	−1.479	−0.001	0.005	0.008
	(2.757)	(2.594)	(2.653)	(0.025)	(0.026)	(0.027)
Republican x Post	−6.476*	2.364	−5.159	0.030	0.051*	0.017
	(2.818)	(2.791)	(2.683)	(0.025)	(0.026)	(0.028)
R^2	0.005	0.042	0.009	0.022	0.034	0.018
Observations	5800	5800	5800	5809	5809	5808
Respondents	5800	5800	5800	5809	5809	5808

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$.

Note: Dependent variable ranges from 0 to 100 for Frequency of Error DV, 0 to 1 for the Emotional Reaction Scale DV. Models estimated using ordinary least squares regression, with standard errors clustered by respondent. Baseline of Independent (compared to Democrat and Republican), and pre-election survey wave (compared to during- and post-election survey waves).

C Study 2

Table C.1: Summary Statistics for Study 2

Variable	Mean	SD	Min	Max
Feel Outraged	0.671	0.309	0	1
Wave (Pre)	0.336	0.472	0	1
Wave (During)	0.350	0.477	0	1
Wave (Post)	0.314	0.464	0	1
Party (Republican = 1, Democrat = 0)	0.439	0.496	0	1
Party Benefiting (Opposite = 1, Own = 0)	0.494	0.500	0	1
Intention (Villain = 1, No Villain = 0)	0.506	0.500	0	1
Error (Fraudulent)	0.333	0.471	0	1
Error (Uncounted)	0.333	0.471	0	1
Error (Foregone)	0.333	0.471	0	1
Type (Mail = 1, In-Person = 0)	0.498	0.500	0	1

Table C.2: Effect of Vignette Features on Perceptions of the Vignettes

	Believable	Hear Stories
Constant	2.498^{***}	1.931^{***}
	(0.058)	(0.047)
Mail Ballot	0.046	0.043^{*}
	(0.024)	(0.022)
Fraudulent Votes	-0.083^{**}	0.062^{**}
	(0.028)	(0.022)
Uncounted Votes	-0.082^{**}	0.061^{**}
	(0.026)	(0.022)
Intentional Error (Villain)	-0.057	-0.197^{***}
	(0.056)	(0.045)
Error Benefiting Opposite Party	0.688^{***}	0.207^{***}
	(0.056)	(0.045)
Republican	0.638^{***}	0.305^{***}
	(0.057)	(0.046)
R^2	0.134	0.041
Observations	4489	4697
Respondents	1565	1567

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$.
Note: The dependent variable ranges from 1 to 5 for believability and 1 to 4 for hearing stories like the vignette. Models estimated using ordinary least squares regression, with standard errors clustered by respondent. Baseline of in-person ballot (compared to mail), foregone votes (compared to fraudulent/uncounted), unintentional error (compared to intentional, committed by a villain), and error benefiting own party (compared to error benefiting opposite party).

Table C.3: Mean Feeling of Outrage by Party, Wave, and Error

Party	Error	Pre	During	Post
Democrat	Uncounted	0.690	0.680	0.582
	Uncounted	(0.010)	(0.010)	(0.011)
Democrat	Fraudulent	0.701	0.675	0.582
	Fraudulent	(0.010)	(0.010)	(0.011)
Democrat	Foregone	0.691	0.662	0.591
	Foregone	(0.010)	(0.010)	(0.011)
Republican	Uncounted	0.677	0.721	0.705
	Uncounted	(0.011)	(0.011)	(0.011)
Republican	Fraudulent	0.685	0.732	0.726
	Fraudulent	(0.011)	(0.010)	(0.011)
Republican	Foregone	0.660	0.691	0.683
	Foregone	(0.011)	(0.011)	(0.012)

Note: Standard errors clustered by respondent.

Table C.4: Effect of Election Error Vignettes on Feelings of Outrage with Intentional x Opposite Party Interactions

	All	Democrats	Republicans
Constant	0.557***	0.592***	0.560***
	(0.010)	(0.013)	(0.015)
Mail Ballot	0.014***	0.011*	0.017**
	(0.004)	(0.005)	(0.005)
Fraudulent Votes	0.019***	0.005	0.036***
	(0.004)	(0.005)	(0.005)
Uncounted Votes	0.012***	0.003	0.023***
	(0.004)	(0.005)	(0.005)
Intentional Error (Villain)	0.017	0.012	0.022
	(0.011)	(0.015)	(0.016)
Error Benefiting Opposite Party	0.168***	0.181***	0.150***
	(0.010)	(0.014)	(0.016)
Wave – During	0.008	−0.019	0.040**
	(0.009)	(0.012)	(0.013)
Wave – Post	−0.049***	−0.109***	0.029*
	(0.009)	(0.012)	(0.013)
Republican	0.044***		
	(0.007)		
Intentional x Opposite Party	−0.002	−0.004	0.002
	(0.015)	(0.020)	(0.021)
R^2	0.086	0.102	0.073
Observations	14973	8398	6575
Respondents	4997	2803	2194

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$.

Note: The dependent variable ranges from 0–1. Models estimated using ordinary least squares regression, with standard errors clustered by respondent. Baseline of in-person ballot (compared to mail), foregone votes (compared to fraudulent/uncounted), unintentional error (compared to intentional, committed by a villain), error benefiting own party (compared to error benefiting opposite party), pre-election survey wave (compared to during- and post-election survey waves).

Table C.5: Effect of Election Error Vignettes on Feelings of Outrage with Party x Error x Wave

	All	Democrats	Republicans
Constant	0.594***	0.592***	0.566***
	(0.011)	(0.012)	(0.014)
Mail Ballot	0.014***	0.011*	0.017**
	(0.004)	(0.005)	(0.005)
Fraudulent Votes	0.010	0.010	0.025**
	(0.008)	(0.008)	(0.009)
Uncounted Votes	−0.002	−0.002	0.016
	(0.008)	(0.008)	(0.009)
Intentional Error (Villain)	0.015*	0.009	0.023*
	(0.007)	(0.010)	(0.011)
Error Benefiting Opposite Party	0.166***	0.179***	0.151***
	(0.007)	(0.010)	(0.011)
Wave – During	−0.026	−0.026	0.030
	(0.014)	(0.014)	(0.015)
Wave – Post	−0.100***	−0.100***	0.020
	(0.014)	(0.014)	(0.016)
Republican	−0.031*		
	(0.014)		
Fraudulent x During	0.002	0.002	0.017
	(0.012)	(0.012)	(0.013)
Uncounted x During	0.019	0.019	0.015
	(0.011)	(0.011)	(0.013)
Fraudulent x Post	−0.019	−0.019	0.019
	(0.012)	(0.012)	(0.013)
Uncounted x Post	−0.006	−0.006	0.006
	(0.012)	(0.012)	(0.013)
Fraudulent x Republican	0.014		
	(0.012)		
Uncounted x Republican	0.018		
	(0.012)		
During x Republican	0.056**		
	(0.020)		
Post x Republican	0.121***		
	(0.021)		
Fraudulent x During x Republican	0.015		
	(0.018)		
Uncounted x During x Republican	−0.004		
	(0.017)		
Fraudulent x Post x Republican	0.038*		
	(0.018)		
Uncounted x Post x Republican	0.012		
	(0.017)		
R^2	0.095	0.103	0.073
Observations	14973	8398	6575
Respondents	4997	2803	2194

***$p < 0.001$; **$p < 0.01$; *$p < 0.05$.
Note: The dependent variable ranges from 0–1. Models estimated using ordinary least squares regression, with standard errors clustered by respondent. Baseline of in-person ballot (compared to mail), foregone votes (compared to fraudulent/uncounted), unintentional error (compared to intentional, committed by a villain), error benefiting own party (compared to error benefiting opposite party), pre-election survey wave (compared to during- and post-election survey waves).

D Study 3

Table D.1: Summary Statistics for Study 3A

Variable	Mean	SD	Min	Max
Election Plan Choice	0.412	0.492	0	1
Election Plan Rating	0.550	0.271	0	1
Difference in Fraudulent Votes	0.008	2.030	-4	4
Difference in Uncounted Votes	-0.024	2.014	-4	4
Difference in Turnout	0.032	9.972	-20	20
Vignette	3.000	1.414	1	5
Republican	0.497	0.500	0	1
Fraudulent Votes	3.008	1.415	1	5
Uncounted Votes	2.978	1.417	1	5
Turnout	54.964	7.050	45	65

Table D.2: Summary Statistics for Study 3B

Variable	Mean	SD	Min	Max
Election Plan Choice	0.404	0.491	0	1
Election Plan Rating	0.568	0.300	0	1
Difference in Fraudulent Votes	-0.004	1.204	-2	2
Difference in Uncounted Votes	0.007	1.199	-2	2
Vignette	3.000	1.414	1	5
Republican	0.484	0.500	0	1
Fraudulent Votes	2.299	1.240	0.1	6
Uncounted Votes	2.293	1.240	0.1	6

Table D.3: Effect of Election Errors on Ratings of Each Election Rule, Study 3

	Study 3A		Study 3B	
	Base	Interactions	Base	Interactions
Constant	0.545^{***}	0.517^{***}	0.594^{***}	0.600^{***}
	(0.034)	(0.047)	(0.007)	(0.010)
Fraudulent Votes	-0.016^{***}	-0.017^{***}	-0.004^{*}	-0.003
	(0.003)	(0.004)	(0.002)	(0.002)
Uncounted Votes	-0.022^{***}	-0.023^{***}		-0.003
	(0.003)	(0.004)		(0.002)
Turnout	0.002^{***}	0.003^{***}		
	(0.001)	(0.001)		
Vignette 2	0.003	0.004	0.048^{***}	0.048^{***}
	(0.007)	(0.007)	(0.004)	(0.004)
Vignette 3	0.002	0.003	0.033^{***}	0.033^{***}
	(0.007)	(0.008)	(0.004)	(0.004)
Vignette 4	-0.006	-0.006	-0.096^{***}	-0.096^{***}
	(0.007)	(0.007)	(0.007)	(0.007)
Vignette 5	0.000	0.001	-0.085^{***}	-0.085^{***}
	(0.008)	(0.008)	(0.007)	(0.007)
Republican	-0.003	0.055	0.012^{*}	0.019
	(0.014)	(0.064)	(0.006)	(0.013)
New Rule	-0.019^{*}	-0.019^{*}	-0.004	-0.004
	(0.009)	(0.009)	(0.003)	(0.003)
Fraudulent x Republican		0.003		-0.002
		(0.005)		(0.003)
Uncounted x Republican		0.000		-0.001
		(0.005)		(0.003)
Turnout x Republican		-0.001		
		(0.001)		
R^2	0.026	0.026	0.040	0.041
Observations	5941	5941	25130	25130
Respondents	595	595	2516	2516

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$.
Note: Dependent variable ranges from a 0–1 scale, with 1 indicating higher fairness ratings of each election rule. Models estimated using ordinary least squares regression, with standard errors clustered by respondent.

Figure D.1: Example of Study 3

Election 1

Below you will find the results of the audit and the estimates of how the proposed new rules would affect voter turnout, fraudulent votes, and wrongfully disqualified votes.

Current Election Rules

- Voter turnout: 45% of total eligible voters (45000 votes)
- Fraudulent votes: 1% of votes cast (450 votes)
- Wrongfully disqualified votes: 1% of votes cast (450 votes)

Proposed New Rules

- Voter turnout: 55% of eligible voters (55000 votes)
- Fraudulent votes: 1% of votes cast (550 votes)
- Wrongfully disqualified votes: 3% of votes cast (1650 votes)

Which set of election rules should the city use for the upcoming mayoral election?

Keep the current election rules

Adopt the proposed new rules

How fair would you say that each set of election rules is?

	Very unfair	Somewhat unfair	Neither fair nor unfair	Somewhat fair	Very fair
Current Election Rules	○	○	○	○	○
Proposed New Rules	○	○	○	○	○