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Motivated reasoning: Election integrity beliefs, outcome acceptance, and polarization before, during, and after the 2020 U.S. Presidential Election

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Abstract

The 2020 U.S. Presidential Election required voters to not only form opinions of leading candidates, Donald Trump and Joe Biden, but also to make judgments about the integrity of the election itself and what—if anything—to do about it. However, partisan motivated reasoning theory (Leeper and Slothuus, Political Psychology, 35(Suppl 1): 129–156; Lodge and Taber, The rationalizing voter, Cambridge University Press, 2013) suggests judgments are often strongly influenced toward affectively desirable conclusions. Before, during, and after election projections were announced, partisan supporters of Trump and Biden rated: judgments about voter fraud and foreign interference, their acceptance of the results, and their support for recourse against the outcome (e.g., legal challenges, legislative overhauls, violence). Before the election, partisans were mildly concerned about election integrity but willing to accept the outcome without recourse. However, during vote counting, and especially after Biden was projected to be the winner, partisans dramatically changed their judgments in opposite directions, consistent with the affectively desirable conclusions relevant to each group. Biden supporters affirmed the election's integrity and accepted the results whereas Trump supporters disputed the integrity, rejected the results, and began to support recourse against the outcome. Data are consistent with partisan motivated reasoning. Discussion highlights the practical implications.

Keywords Motivated reasoning · Partisan bias · Congruence · Disconfirmation · Donald Trump · Joe Biden · Election

Introduction

The 2020 U.S. Presidential Election required voters to not only form opinions of leading candidates, Donald Trump (Republican) and Joe Biden (Democrat), but also to make judgments about the integrity of the election itself and what—if anything—to do about it. Voters needed to make judgments about whether either candidate and their party might be likely to cheat, and whether the integrity of the election would be threatened by voter fraud (e.g., mail-in ballots) and/or foreign interference (e.g., Russia). They also needed to judge whether to accept the results as the outcome of a free and fair election and—amid concerns that one or the other campaign might "steal" the election—judge whether to support recourse against the outcome via legal challenges to vote counts, legislative overhauls, public protests, or even political violence. The present research investigated the possible role of partisan motivated reasoning (Leeper & Slothuus, 2014; Lodge & Taber, 2013) by tracking partisan judgments before, during, and after the election projections.

Motivated reasoning

Rational models of social reasoning assume our opinions about people, objects, and events are based on a dispassionate evaluation of information (Dewey, 1927; Mill, 1859).

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If we have a prior opinion, the rational model suggests we would simply update it in light of new information, following a Bayesian logic: with (a) our posterior belief equal to the product of (b) our prior belief and (c) the objective likelihood that the new evidence would have occurred if our prior belief were true (Evans & Over, 1996; Fischhoff & Beyth-Marom, 1983; Gerber & Green, 1998). In other words, it suggests we would simply update/change our existing opinions according to whether they can (or cannot) accurately account for new evidence and experiences.

But such models of purely rational social cognition are challenged by evidence for motivated reasoning (Kunda, 1990; Pyszczynski & Greenberg, 1987), which hold that cognitive processing is typically impacted by two goals that can sometimes conflict with each other: accuracy and desirability. At its best, motivation toward accuracy may follow that Bayesian logic mentioned above—non-directional reasoning via dispassionate appraisals of people, objects, and events. Typically, though, people are cognitive misers, disinclined to take the time and effort to carefully prosecute the veracity of their prior beliefs given new information. They also typically prefer conclusions that meet psychological needs for things like self-esteem, cognitive consistency, belief in a just world, and validation of their cultural worldviews. Thus, motivation toward *affectively desirable* conclusions can exert a strong directional bias in reasoning.

Indeed, people acquire and maintain belief systems that serve important epistemic and existential psychological functions (Arndt et al., 2013; Szumowska et al., 2020). Information that substantially conflicts with those prior beliefs would be distressing (Festinger, 1957), so people are motivated to achieve the desirable conclusion that their beliefs and opinions are, after all, valid and appropriate (Dunning, 2015). But because of the accuracy motive, people cannot simply construct such a conclusion out of thin air; they must maintain "an illusion of objectivity" and "seemingly rational justifications" for their conclusions (Klein & Kunda, 1992, p. 146; Pyszczynski & Greenberg, 1987, p. 302). So, the motive for affectively desirable conclusions can cause selectivity in one's exposure to and judgment of worldview-congruent and -incongruent information.

Partisan motivated reasoning

Research on partisan motivated reasoning (Leeper & Slothuus, 2014; Lodge & Taber, 2013) has investigated the possible directional biases associated with preexisting political identities, beliefs, and opinions, finding considerable evidence of selective exposure and selective judgment, pointing to three key processes. First, the *congruence bias* involves seeking, accepting, and/or supporting information congruent with one's own opinions. Second, the *disconfirmation bias* involves avoiding, rejecting, criticizing, and/or counterarguing against information incongruent with one's extant beliefs and opinions. This means that encountering attitude-congruent information would, unsurprisingly, increase commitment to one's attitudes; but it also means encountering attitude-incongruent information would, ironically, *also* have the effect of increasing confidence in the relative validity and righteousness of one's prior beliefs and attitudes (Taber et al., 2009). Third, the *polarization effect* predicts the previous two motivational biases would cause people to feel even more strongly that their prior beliefs were, in fact, valid and good—and become even more committed to them.

Selective exposure

The congruence and disconfirmation biases impact partisans' selective exposure to worldview-relevant material. Research on Americans' television preferences (Rogers, 2020b) finds that conservatives tend to prefer TV programs congruent with conservative social attitudes, whereas liberals tend to prefer programs congruent with their liberal attitudes. Other research (Knobloch-Westerwick et al., 2015) found people looked at online search results longer when the content was congruent (vs. discrepant) with their previously-existing political beliefs. Such findings help explain why American conservatives prefer media like Fox News, Breitbart, and talk radio, whereas liberals prefer the likes of CNN, New York Times, and NPR.

Selective judgment

Such motivational biases also affect social judgments. When their own party's candidate was strong in warmth, partisans judged warmth (vs. competence) the most important leadership trait; but when their party's candidate was strong in competence, they judged competence (vs. warmth) most important (Cornwell et al., 2015). Likewise, partisans were much more critical of unethical campaign tricks (stolen yard signs and deceptive robocalls) in elections (Claassen & Ensley, 2016), negative economic news (Carlson, 2016; Rico & Liñeira, 2018), and healthcare reforms (McCabe, 2016) when attributed to their political opponents but more lenient or more positive when attributed to their own party.

A variety of studies have also found that even as partisans are able to agree on evidence of economic upturns and downturns, they selectively attribute credit or blame for those facts in ways that reflect positively on their own party and negatively on the opposition (Bisgaard, 2015, 2019). Partisans were even more skeptical of good economic news (reduced unemployment) attributed to political opponents, with the disconfirmation bias leading them to conclude—despite the evidence—that their opponents actually made the situation worse (Schaffner & Roche, 2017). In a referendum

election about British and European economic dynamics, researchers (Sorace & Hobolt, 2021) similarly found that, compared to before the Brexit referendum (June 2016), those who voted Remain judged the UK economy as worse and those who voted Leave judged it as better after the UK voted to Leave the European Union.

In one of the clearest observations of the three component processes of motivated reasoning, Taber et al. (2009) measured partisans' opinions of sociopolitical issues (e.g., the electoral college, U.S. foreign aid, legalization of marijuana), had them evaluate arguments for and against their positions, and then measured their opinions again. Consistent with the *congruence bias*, partisans rated arguments for their own positions as stronger than those against. Consistent with the *disconfirmation bias*, they took longer to evaluate and then generated a greater number of derogatory criticisms about arguments that were incongruent (vs. congruent) with their own prior opinions. Finally, consistent with the *polarization effect*, change scores indicated partisans shifted further in the direction of their original opinions after evaluating the arguments for and against—likely because their motivated biases led them to discredit contradictory information and accept confirmatory information.

Partisan motivated reasoning about elections

Partisan motivated reasoning can also influence evaluations of politicians, poll credibility, and election expectations. In the twentieth century post-WWII era, when the focus was on economic recovery and performance, data shows partisans generally ignored the economic performance of presidents of their own party, yet scrutinized, blamed, and punished presidents of the opposing party for dips in performance (Lebo & Cassino, 2007). In the twenty-first century, the focus turned toward candidates' character and authenticity, which are similarly selectively criticized (Donovan et al., 2020; Goren, 2007; Pillow et al., 2018).

When it comes to scandals and rumors, people tend not to believe obvious mudslinging, because of the accuracy motive, but that changes when partisans can reasonably maintain the illusion of objectivity. Prior opinions biased partisans' judgments about the credibility and importance of Presidential sex scandals (Fischle, 2000) and concern over policy reversals ("flip-flops") (McDonald et al., 2019). Partisans were also more willing to believe negative rumors about opposing party candidates (Layman et al., 2014; Weeks & Garrett, 2014), from right-wing rumors of "Obamacare" instituting government death panels to left-wing rumors of George Bush stealing the 2000 election and then orchestrating the 9/11 attacks to consolidate power (Duran et al., 2017). Importantly, counterfactuals can play a key role in maintaining the perceived legitimacy of such

misconceptions, as partisans need only consider that "it *could have been true*" (Effron, 2018).

Motivated biases also influence the way partisans process public opinion poll numbers and election expectations. Partisans overestimate the amount of public support for their own candidate and underestimate support for the opponent (Niemi et al., 2019). Additionally, as campaign seasons are complicated by disagreement between polls and polls of questionable integrity, consumers must judge for themselves whether to trust poll patterns. Indeed, whether about issues (Kuru et al., 2017) or presidential candidates (Madson & Hillygus, 2020), partisans view polls as more credible when results are desirable and less credible when not. As one example, when Donald Trump learned of a straw poll at an event, he told the crowd: "If it's bad, I just say it's fake. If it's good, I say that's the most accurate poll, perhaps ever" (Porter, 2021).

Likewise, partisans tend to believe their preferred candidates will win elections, and they look for disconfirmatory information when confronted with predictions the opposing candidate would win (Thibodeau et al., 2015). But sometimes one's preferred candidate might seem like a long shot, as Donald Trump likely seemed to many Republicans prior to the 2016 U.S. Presidential Election. Nevertheless, motivated reasoning persisted and research found a robust desirability bias for both Clinton supporters and Trump supporters (Tappin et al., 2017). When partisans viewed predictions congruent (vs. incongruent) with who they believed should (vs. would) win the election, they more strongly believed that candidate actually would win.

The present research: Partisan motivated reasoning in the 2020 U.S. Presidential Election

The 2020 U.S. Presidential Election, between incumbent Donald Trump and challenger Joe Biden, presented an occasion to replicate and extend prior research within an important real-world context that was hotly contested and is still causing controversies. One notable prior study (Edelson et al., 2017), for example, involved a two-wave survey administered before and after the 2012 US Presidential Election, contested between Barack Obama and Mitt Romney. Partisans perceived the opposition engaged in "dirty tricks" and tried to stop the economic recovery for political gain. Once Obama won re-election, Democrats were less likely to believe the results were due to fraud whereas Republicans were more likely to believe fraud was the reason Romney lost and to support voter ID laws intended to stop such perceived fraud. However, the surface characteristics of the political landscape have, of course, changed since 2012 so the present work examined the potential influence of partisan motivated reasoning amid those new political circumstances. As such, the present work also offered the opportunity to

explore the potentially dramatic practical importance of motivated reasoning in partisan judgments of the integrity of elections, with implications for the peaceful transfer of power. Thus, we highlight below the relevant real-world context for this study.

Foreign interference

One abiding concern was about foreign interference jeopardizing the integrity of the election. Trump had, famously, invited Russia to interfere in the 2016 election campaign to damage his rival, Hillary Clinton (Rucker et al., 2016), and detailed investigations revealed Russia did interfere by undermining Clinton and supporting Trump (Abrams, 2019). Democrats sought to impeach Trump for these actions, but congressional Republicans rejected the evidence and ensured his acquittal. Worries continued when Trump again welcomed foreign interference for his re-election (Nicholas, 2019) and U.S. intelligence agencies warned Congress in February 2020 that Russia was again meddling to re-elect Trump (Goldman et al., 2020). Trump, however, dismissed the concern as a "Democrat hoax" (Rogers, 2020a) and deflected by pointing to U.S. counter-intelligence warnings in August 2020 that, in response to Trump's ongoing trade war and economic sanctions, China and Iran were trying to aid Biden (Hosenball & Mason, 2020).

Mail-in ballot fraud

Another issue involved the sudden widespread adoption of mail-in ballots in response to the coronavirus pandemic. Because congregating at indoor polling stations was a public health hazard during a fast-spreading pandemic, the nation saw an unprecedented increase in mail-in ballot options compared to previous elections. Expressing concerns that widespread mail-in voting would mean he and other Republicans would lose the election (Epstein & Saul, 2020), Trump claimed mail-in ballots would be rife with fraud from ballot harvesting, forgery, theft, illegal printing, and distribution to ineligible people (Lybrand & Subramaniam, 2020). In turn, Democrats became concerned as Trump withheld funding to the U.S. Postal Service, the Trump-appointed head of the Postal Service took sorting machines off-line and reduced service (Goodkind, 2020; Reichmann & Izaguerre, 2021), and some Republican governors reduced official ballot dropboxes to one per county, impairing access to millions of city-dwellers who, polls showed, typically supported Biden (Montgomery, 2020).

Acceptance of the results

Separate controversy also emerged about whether the candidates would accept the election as a free and fair election. In 2016, Trump refused to agree, ahead of time, to accept the outcome of the election (Rafferty & Taintor, 2016), claiming the election would be "rigged" against him so he would only accept the results if he won (Sanders, 2016). During the 2020 campaign, he again claimed the election would be rigged against him and refused to agree ahead of time to accept the election as free and fair (Feuer, 2020). In light of concerns about foreign interference and mail-in voting, it also became a question about whether Biden and his supporters would accept the election results either.

Recourse

In contrast to previous elections, both the Trump and Biden campaigns preemptively recruited lawyers for widespread legal battles over the legitimacy of vote counts (Kumar, 2020; Richer & Tucker, 2021). Questions also emerged about major legislative overhauls to election law, to respond to what each side considered potential flaws in the election system (Jalonick, 2019; Jamerson, 2019). Additionally, fears rose over the possibility of mass protests and partisan violence. Trump had a long-documented history of suggesting to his supporters that aggression and violence is the answer to political problems (Cineas, 2020), and left-wing groups also began taking up arms to defend themselves (Kelly, 2019). By October 2020, 1-in-3 Americans, both Democrats and Republicans, believed violence would be justified if the other side won (or "stole") the election (Diamond et al., 2020).

Data collection and hypotheses

The present research studied the impact of partisan motivated reasoning not only on basic evaluations of candidates and their character, but also judgments about the integrity of the election, acceptability of the results, and support for recourse against the outcome.

The study assessed potential motivated reasoning (1) before the election, (2) during the period that votes were being counted and the public was learning which states' electoral college votes were projected to go to which candidate, and (3) after the Associated Press (AP) declared an overall winner. We linked the division of the latter two time periods to the AP projections because nearly all media outlets announce winners based on AP projections. The AP has been tracking votes and projecting winners in U.S. elections since 1848 (Storey, 2020), and uses a sophisticated "AP VoteCast" system to monitor whether candidates secure enough votes in each state to accrue the 270 electoral college votes necessary to win—at which point, despite continued counting, an overall winner can be declared.

Polls ahead of the election repeatedly showed the voters generally held negative (vs. positive) opinions of *both*

Trump and Biden (Russonello, 2020). However, we anticipated partisans committed to voting for Trump (Trump supporters) or Biden (Biden supporters) would report strongly positive opinions of their preferred candidate, negative opinions of the opposing candidate, and judge the opposing candidate/party more likely to cheat. Such patterns should be rather obvious reflections of partisanship, similar to a manipulation check.

Based on partisan motivated reasoning theory, we hypothesized that although both Trump supporters and Biden supporters would initially be at least somewhat concerned about foreign interference and mail-in ballots, they would bias those concerns toward affectively desirable conclusions during and after the election. Specifically, we expected (**H1**) supporters of the losing candidate to more strongly believe election integrity had been undermined by foreign interference and mail-in ballot issues, facilitating the desirable conclusion their candidate would have won had it been a fair contest. In contrast, we expected (**H2**) supporters of the winning candidate to *reject* the idea that election integrity had been undermined by either of those issues, facilitating the desirable conclusion their candidate won fair-and-square.

Similarly, we expected partisans would express willingness to accept the results without recourse but bias those views as vote tallies emerged and after the projected winner was announced. Specifically, we anticipated (**H3**) supporters of the losing candidate would reject the results and increase support for recourse against the outcome, whereas (**H4**) supporters of the winning candidate would more strongly accept the results and oppose any recourse to counteract the outcome. The over-arching goal was to assess the operation of well-documented partisan motivated reasoning within the context of a high-stakes real-world election that continues to exert a powerful influence on contemporary American politics.

Method

Participants

Due to funding constraints, convenience samples were recruited via readily available recruitment channels. Participants ($N = 1315$) were recruited before, during, and after the 2020 election projections (time period details below). Of those, 1240 were recruited via research participation pools at public universities (Virginia; Ohio) and 75 were recruited via Twitter, Facebook, and Parler. Participants who did not complete the survey or who indicated they did not (plan to) vote were excluded, leaving 794 participants. Most indicated they intended to (or did) vote for Trump or Biden, but 23 selected "other" and 1 did not respond to the question and

were also excluded from analyses. Thus, the final sample included 770 participants.

Most participants were college students and, due to limited space in the survey, we were only able to collect age, gender, and political orientation; thus, we know the sample consisted mostly of young women, but nothing about race, ethnicity, religious belief, and so on. Political orientation was normally distributed near the political center, with most affiliating as Democrats or Republicans, some as Independents, and few as "other". These patterns did not vary much across recruitment periods, meaning that changes in judgments among each partisan group cannot be explained by differences in participants' demography or political orientations. Detailed demographic information is presented in Table 1.

Recruitment periods

Participant recruitment spanned from October 29th through November 19th, 2020, encompassing three key time periods: (1) the week *before the election*, from October 29th up until the polls closed on November 3rd; (2) the days *during the election*, while votes were tallied and AP VoteCast projections were emerging, from November 3rd (polls closed) to November 7th (winner declared); and (3) the 2-week period *after AP projected a winner* (Boak & Fingerhut, 2020; Lemire et al., 2020; Slodysko, 2020), from November 7th to November 19th. As this was a between-subjects design, participants could respond only once and were not allowed to respond repeatedly at multiple timepoints.

Procedure

Participants gave informed consent, completed the online survey materials described below (zero-order correlations are presented in the Online Supplement, Table S1), then received a debriefing and researcher contact information. Those recruited via social media volunteered without compensation; university participants received course credit.

Materials

(1) Cheating by candidate and party

Two items asked participants to indicate their perceptions about which of the two major candidates and their political parties were "…more likely to cheat, commit election fraud or encourage voter fraud, or otherwise threaten the integrity and fairness of the election" using 7-point Likert-type scales ($1 = Biden$ *campaign*; $7 = Trump$ *campaign*) ($1 = Democratic$ *party*; $7 = Republican$ *party*). Responses were strongly correlated, $r (n = 766) = .87$, so a mean composite was created.

Table 1 Descriptive statistics for sample demographics and political orientations, overall and within each recruitment time period

Variable	Overall sample			Before election			During election			After election		
	n	M/%	SD	n	M/%	SD	n	M/%	SD	n	M/%	SD
Age	765	20.10	5.54	243	21.07	7.69	139	20.45	4.30	383	19.35	4.02
Did not respond	5			2			1			2		
Gender												
Man	201	26%		54	22%		38	27%		109	28%	
Woman	553	72%		187	76%		96	69%		270	70%	
Non-binary	10	1%		2	1%		4	3%		4	1%	
Other/Prefer not to say	5	1%		2	1%		1	1%		2	1%	
Did not respond	1	0%		0			0			0		
Political party affiliation												
Republican	178	23%		44	18%		27	19%		107	28%	
Democrat	378	49%		123	50%		68	49%		187	49%	
Independent	156	20%		55	22%		32	23%		69	18%	
Other	57	7%		22	9%		13	9%		22	5%	
Did not respond	1	0%		1	1%		0			0		
Political orientation	770	2.61	1.04	245	2.53	1.05	140	2.50	1.14	385	2.70	0.99
Who will [did] you vote for?												
Donald Trump	213	28%		62	25%		36	26%		115	30%	
Joe Biden	557	72%		183	75%		104	74%		270	70%	

Age—years, Political orientation 1—Very liberal, 5—Very conservative

(2) Mail-in ballot fraud

One item asked, "To what extent do you think that fraud with mail-in ballots threaten the integrity and fairness of the election?" with a 7-point scale (1 = *Not at all*; 7 = *A great deal*).

(3) Foreign interference

One item asked, "To what extent do you think foreign countries (e.g., Russia, China, Iran, etc.) are influencing [influenced] the election results?" with a 7-point scale (1 = *Not at all*; 7 = *A great deal*).

(4) Accept as fair election

Two items asked participants to rate the statements "I [plan to] accept the results of the election" and "I believe the election [will be/was] fair" using 7-point Likert-type scales (1 = *Strongly disagree*; 7 = *Strongly agree*). Responses were strongly correlated, *r* (*n* = 770) = .65, so a mean composite was created.

(5) Recourse against election outcome

Eight items asked participants to use a 5-point scale (1 = *Do not support at all*; 5 = *Support very strongly*) to "Please rate your support for the following reactions to the [upcoming] election:" (1) "Peaceful acceptance of the results" (reverse-scored); (2) "Rejection of the results"; (3) "Widespread protests of the election"; (4) "Legal struggles over the election results"; (5) "A new Constitution, or sweeping revisions and major amendments"; (6) "Destruction of property"; (7) "Militia activity"; (8) and "Political revolt (i.e., violence) and

initiation of civil war, if necessary." The composite had strong internal reliability (α = .72).

(6) Demographics

Three items assessed age, sex, and state of residence (e.g., Ohio, Virginia, etc.).

(7) Political orientations

Two items measured political party affiliation (1—Republican; 2—Democrat; 3—Independent; 4—Other) and political orientation (1 = *Very liberal*, 5 = *Very conservative*).

(8) Candidate evaluations

Two items measured overall opinions of Donald Trump (1 = *Very negative*; 5 = *Very positive*) and Joe Biden (1 = *Very negative*; 5 = *Very positive*).

(9) Partisan support for candidates (voting intention/choice)

Participants indicated their Presidential candidate voting intention/choice (1 = Donald Trump; 2 = Joseph Biden; 3 = Other).

Results

Data quality

First, the data were collected using Qualtrics software, ensuring that all responses were recorded consistently from participant to participant. Second, the recruitment

tools (e.g., SonaSystems) and the Qualtrics survey settings were set to prevent any given participant from completing the study more than once. Third, after data were collected, we manually checked that participants' responses were coded in the correct metric for each item and that there were no out-of-range values. Fourth, the brevity of the survey (just 14 questions) made inattentive responding unlikely, but we nevertheless manually inspected the data for indications of inattentive response patterns (e.g., simply "clicking through" the survey by marking a "4" on all items) and found no such patterns. Fifth, we flagged incomplete responses and excluded those from the analyses. Sixth, we double-checked manual data entries (e.g., designating data collection periods T1/before, T2/during, and T3/after). Seventh, we report the correlations for 2-item composites and Cronbach's alpha's for multi-item composites, all of which were strong.

Analyses

A series of 2 (Trump supporter vs. Biden supporter) × 3 (election projections: before vs. during vs. after) ANOVAs were conducted using SPSS (IBM Corp, 2017) (Table 2).

Checks on partisanship

Opinions about Donald Trump, Joe Biden, and their integrity were analyzed to check group partisanship. Groups were indeed highly partisan, with Biden supporters strongly liking Biden, disliking Trump, and believing Trump would be more likely to cheat; whereas Trump supporters strongly liked Trump, disliked Biden, and believed Biden would be more likely to cheat. Detailed statistical analyses are available in the online supplement.
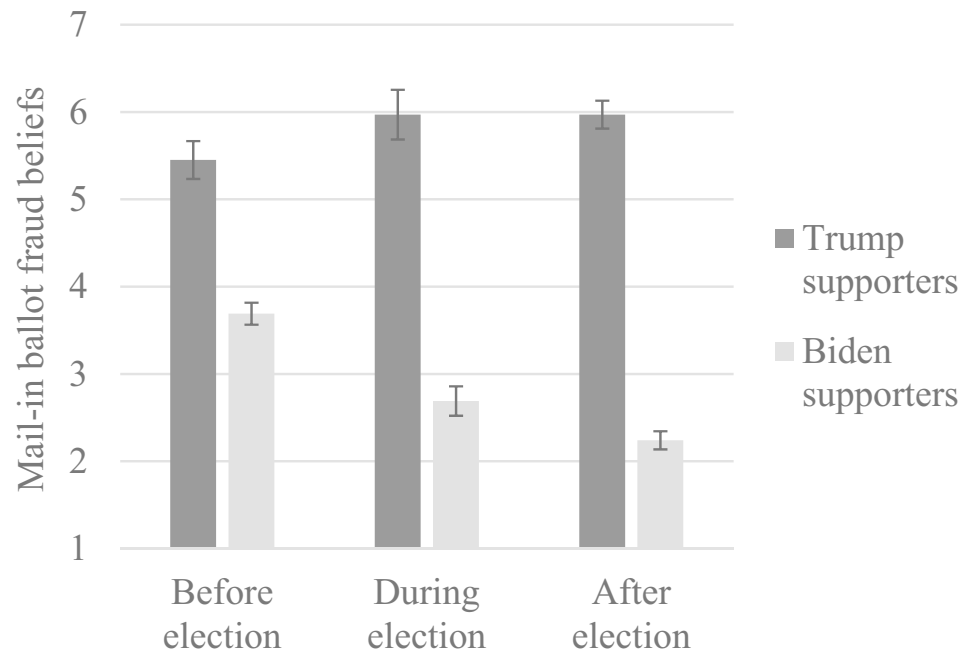
Mail-in ballot fraud beliefs

There was a main effect of candidate preference, F (1, 763) = 368.75, $p < .001$, $\eta_p^2 = .33$; mail-in ballot concern was stronger among Trump supporters ($M = 5.82$, $SD = 1.32$) than Biden supporters ($M = 2.80$, $SD = 1.95$). There was also a main effect of time, F (2, 763) = 4.43, $p = 0.01$, $\eta_p^2 = .01$; before the election participants were moderately concerned ($M = 4.14$, $SD = 2.06$) but concern waned during ($M = 3.54$, $SD = 2.28$) and after the election ($M = 3.35$, $SD = 2.30$). However, there was a significant interaction, F (2, 763) = 19.95, $p < .001$, $\eta_p^2 = .05$ (Fig. 1). We tested **H1** and **H2** using pairwise comparisons.

Table 2 Descriptive statistics for election evaluations among Trump and Biden supporters before, during, and after the election

Beliefs/opinions	Time	Trump supporters			Biden supporters		
		M	SD	n	M	SD	n
Cheating by candidate/party	Before	2.37	1.40	62	6.26	1.01	183
	During	2.12	1.66	36	6.38	1.01	104
	After	2.23	1.54	115	5.95	1.01	270
Opinions of Trump	Before	4.06	.96	62	1.22	.45	183
	During	3.75	1.25	36	1.14	.38	104
	After	3.92	1.04	115	1.27	.53	270
Opinions of Biden	Before	1.73	.83	62	3.38	.92	183
	During	1.56	.94	36	3.59	.83	104
	After	1.96	.94	113	3.61	.83	270
Mail-in ballot fraud	Before	5.45	1.34	62	3.69	2.08	183
	During	5.97	1.18	36	2.69	1.94	104
	After	5.97	1.33	114	2.24	1.61	270
Foreign interference	Before	3.37	1.51	62	4.16	1.55	182
	During	3.58	1.76	36	3.19	1.68	103
	After	3.19	1.69	115	2.44	1.37	269
Accept as fair election	Before	4.95	1.20	62	4.54	1.13	183
	During	3.47	1.58	36	5.63	1.12	104
	After	3.30	1.53	115	6.42	.88	270
Recourse against outcome	Before	1.42	.43	62	1.92	.66	183
	During	1.68	.46	36	1.61	.49	104
	After	1.81	.55	115	1.40	.41	270

Before—Week before election (Oct. 29–Nov. 3), During—4 days during counting/projections (Nov. 3–Nov 7), After—12 days after AP projected Biden won (Nov. 8–Nov. 19)

Fig. 1 Concern about mail-in ballots among Trump supporters and Biden supporters before, during, and after AP projected Biden won. Error bars show standard errors

Before the election, Trump supporters (**H1**) were concerned about mail-in ballot fraud; that concern strengthened during (non-significantly; $t = 1.46$, $p = .15$, $d = .40$) and after AP projected Biden won ($t = 1.93$, $p = .05$, $d = .39$); concern was equally high during and after the election ($t < .01$, $p = 1.00$, $d = .00$). Before the election, Biden supporters (**H2**) were also moderately concerned; but they began to reject such concerns during ($t = -4.77$, $p < .001$, $d = -.49$) and after AP projected Bidon won ($t = -8.88$, $p < .001$, $d = -.80$); concern was lower after than during ($t = -2.31$, $p = .02$, $d = -.26$).

Foreign interference beliefs

There was no main effect of candidate preference, $F (1, 761) = .74$, $p = .39$, $\eta_p^2 = .001$. There was a main effect of time, $F (2, 761) = 23.39$, $p < .01$, $\eta_p^2 = .06$; before the election participants were moderately concerned about foreign interference ($M = 3.96$, $SD = 1.57$) but that concern waned during ($M = 3.29$, $SD = 1.70$) and after the election ($M = 2.66$, $SD = 1.51$). However, there was a significant interaction, $F (2, 761) = 35.32$, $p < .001$, $\eta_p^2 = .04$ (Fig. 2). We tested **H1** and **H2** using pairwise comparisons.

Trump supporters' concerns (**H1**) about foreign interference were moderate and did not change over time (all |t| 's < 1.33, p 's > .18, |d| 's < .23). Initially, Biden supporters (**H2**) were moderately concerned about foreign interference, but they began to reject such concerns during ($t = -5.08$, $p < .001$, $d = -.61$) and after AP projected Biden won ($t = -11.63$, $p < .001$, $d = -1.19$); concern was lower after than during ($t = -4.25$, $p < .001$, $d = -.51$).

Accept as fair election

There was a main effect of candidate preference, $F (1, 764) = 250.53$, $p < .001$, $\eta_p^2 = .25$; Biden supporters accepted the election results ($M = 5.65$, $SD = 1.31$) more than Trump supporters ($M = 3.81$, $SD = 1.61$). There was also a main effect of time, $F (2, 764) = 2.90$, $p = .056$, $\eta_p^2 = .008$; before the election participants were generally willing to accept the election results ($M = 4.64$, $SD = 1.16$), and acceptance was higher during ($M = 5.08$, $SD = 1.56$) and after the projection ($M = 5.49$, $SD = 1.81$). However, these main effects were qualified by the interaction, $F (2, 764) = 139.76$, $p < .001$, $\eta_p^2 = .27$ (Fig. 3). We tested **H3** and **H4** using pairwise comparisons.

Before the election, Trump supporters (**H3**) were willing to accept the election results; however, they became unwilling to accept the results during ($t = -6.14$, $p < .001$, $d = -1.10$) and after the AP projected Biden won ($t = 9.13$, $p < .001$, $d = -1.16$); their acceptance was equally low during and after the election ($t = -.78$, $p = .43$, $d = -.11$). Before the election, Biden supporters (**H4**) were also willing to accept the election results; however, their acceptance strongly increased during ($t = 7.79$, $p < .001$, $d = .97$) and after AP projected Biden won ($t = 17.10$, $p < .001$, $d = 1.90$); their acceptance was stronger after than during ($t = 5.88$, $p < .001$, $d = .83$).
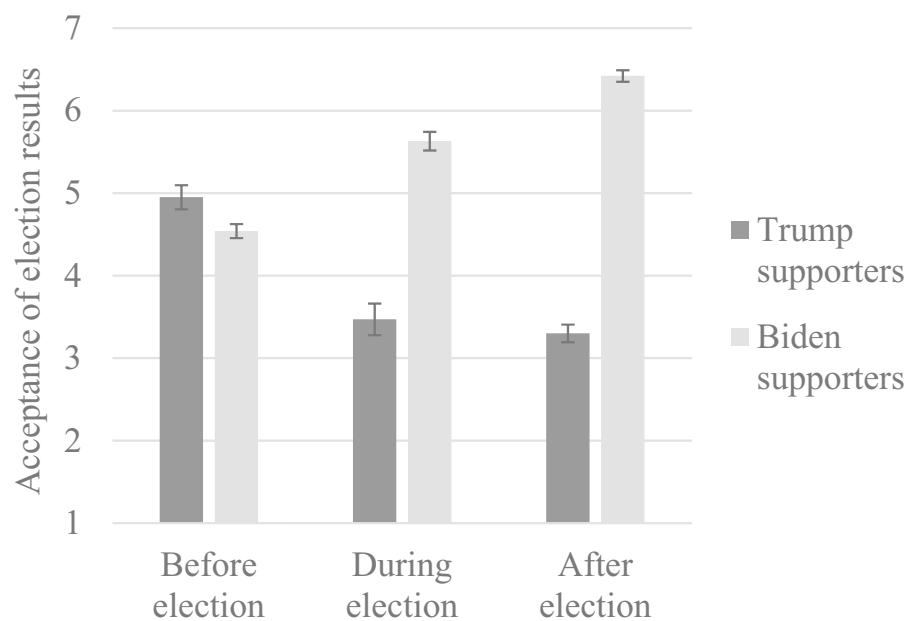
Recourse against election results

There was no main effect of candidate preference, $F (1, 764) = .03$, $p = .87$, $\eta_p^2 < .01$, nor of time, $F (2, 764) = .98$,

Fig. 2 Concern about foreign interference among Trump supporters and Biden supporters before, during, and after AP projected Biden won. Error bars show standard errors
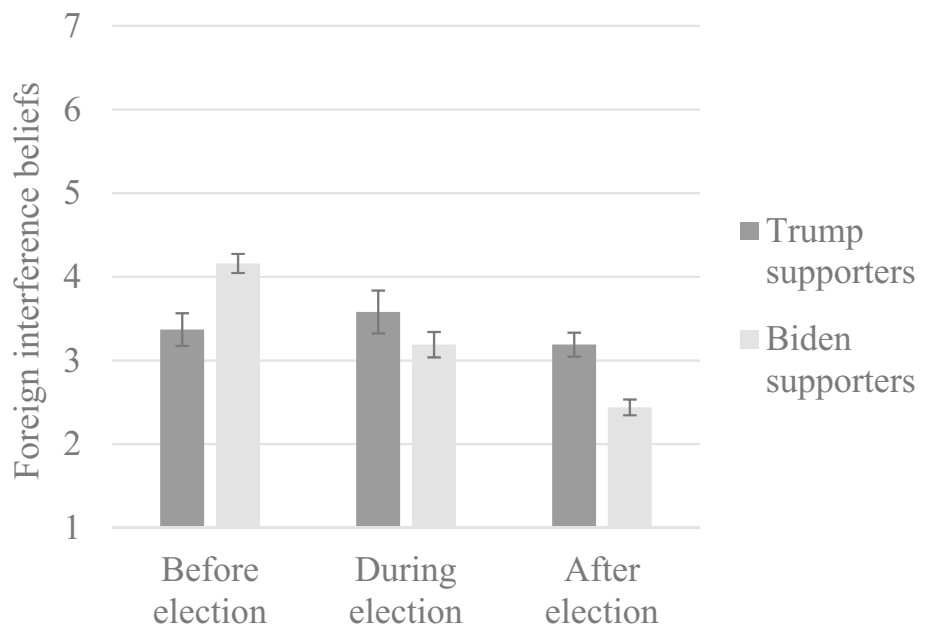
Fig. 3 Acceptance of the results among Trump supporters and Biden supporters before, during, and after AP projected Biden won. Error bars show standard errors

$p = .38$, $\eta_p^2 = .003$. However, there was a significant interaction, F (2, 764) = 46.54, $p < .001$, $\eta_p^2 = .11$ (Fig. 4). We tested **H3** and **H4** using pairwise comparisons.

Before the election, Trump supporters (**H3**) strongly opposed recourse against the outcome; however, that opposition wavered during ($t = 2.43$, $p = .02$, $d = .59$) and after the AP projected Biden won ($t = 4.88$, $p < .001$, $d = .76$); their recourse attitudes remained unchanged during and after ($t = 1.33$, $p = .43$, $d = .25$). Before the election, Biden supporters (**H4**) were also opposed to recourse against the outcome, and they more strongly opposed it during ($t = 4.97$,

$p < .001$, $d = -.51$) and after AP projected Biden won ($t = 10.50$, $p < .001$, $d = -.99$); they even more emphatically opposed it after than during ($t = 3.53$, $p < .001$, $d = -.48$).

Discussion

The present findings were generally consistent with the core concepts of partisan motivated reasoning. Data supported hypotheses about partisan motivated concerns about foreign interference and mail-in ballots. Before the election,

Fig. 4 Support for recourse against the election outcome among Trump supporters and Biden supporters before, during, and after AP projected Biden won. Error bars show standard errors
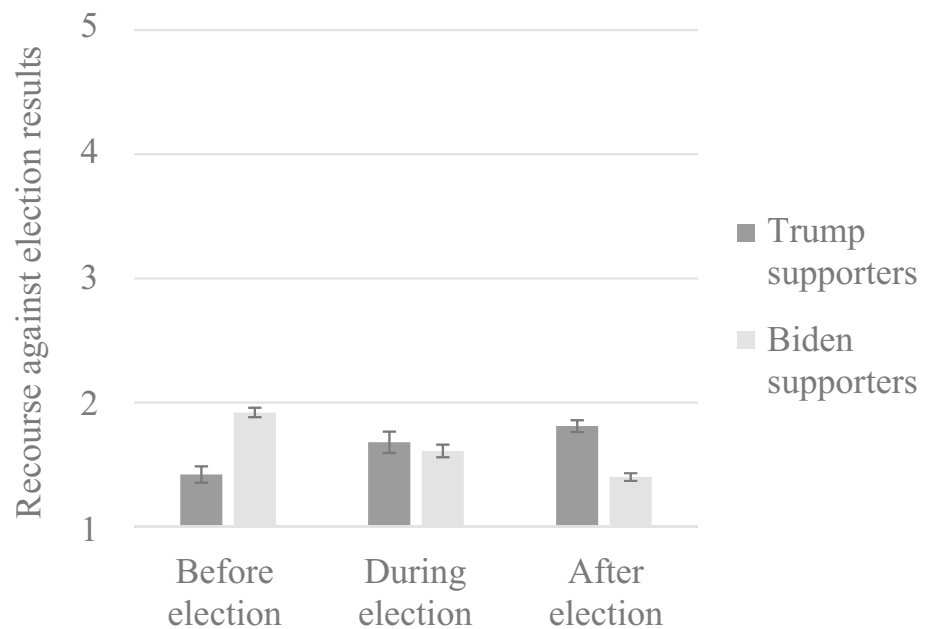
both Trump supporters and Biden supporters were at least somewhat concerned about foreign interference and mail-in ballots. Trump supporters' concern about foreign interference remained lukewarm across all time periods, possibly because Trump had spent years denying foreign interference was an issue. However, during the vote counting and after the AP projected Biden won, they more strongly believed mail-in ballot fraud undermined the election. Therefore, we found partial support for **H1**, with supporters of the losing candidate more strongly believing the election's integrity had been undermined by mail-in ballot fraud (but not foreign interference), facilitating the desirable conclusion that Trump would have won had it been fair. In contrast, Biden supporters quickly downplayed concerns over foreign interference and mail-in ballot issues as Biden began to win states during the vote count period, and then downplayed the concerns further after AP declared Biden won. Therefore, we found full support for **H2**, with supporters of the winning candidate more strongly rejecting concerns that the integrity of the election had been compromised, facilitating the desirable conclusion their candidate simply won fair-and-square.

Similar data patterns emerged on acceptance (rejection) of the election results and support for recourse against the outcome. Before the election, both Trump supporters and Biden supporters were willing to accept the results without recourse. However, consistent with **H3**, once Biden began to take the lead during the vote count period, and especially after AP projected Biden won, Trump supporters began to reject the results and support recourse against the outcome. In contrast, and in line with **H4**, during the vote count period and after the AP projected Biden won, Biden supporters more strongly accepted the results and opposed any recourse

against the outcome. Both responses, of course, are consistent with each groups' motivations toward desirable election outcomes.

Implications for partisan motivated reasoning

The present findings represent an important conceptual replication and extension of prior research on partisan motivated reasoning theory (Leeper & Slothuus, 2014; Lodge & Taber, 2013), in the context of a real-world event as it unfolded. Consistent with the *congruence bias*, partisans on both sides considered their opponents more likely to cheat. Consistent with the *disconfirmation bias*, when partisans' own candidate was losing/lost they attempted to disconfirm that undesirable conclusion by more strongly believing the integrity of the election had been undermined (e.g., mail-in ballot fraud), but when partisans' preferred candidate was winning/won they instead rejected/disconfirmed concerns about election integrity (e.g., voter fraud, foreign interference). The *polarization effect* was also observed in the data patterns of each partisan group. Compared to before the election, Biden supporters maintained a strongly positive opinion of their candidate and a negative opinion of the opponent, and during and after the AP projected their candidate won they more strongly accepted the results and rejected recourse against the outcome. However, the patterns among supporters of the losing candidate (Trump, in this case) is especially informative. If partisans simply updated their priors in a Bayesian fashion, then Trump supporters should have accepted the results despite the undesirable outcome. Instead, during and after the election, Trump supporters more strongly believed mail-in ballot fraud undermined election integrity, no longer

accepted it as a free and fair election, and more strongly supported recourse against the outcome. Thus, supporters of the winning candidate *and* supporters of the losing candidate adjusted their posterior attitudes in ways that strengthened their prior positions—further polarizing the situation.

Is this "sour grapes" and "sweet lemons" instead?

The "sour grapes" and "sweet lemons" effects help people to live with what would otherwise be an undesirable status quo that seems extremely likely (Laurin et al., 2012) and inescapable (Laurin et al., 2010). In one study conducted prior to the 2000 US Presidential Election (Kay et al., 2002), Republicans rated George W. Bush as more desirable when led to believe he was likely to win and less desirable when led to believe he was likely to lose (a sour grapes, "well, we didn't want him anyway" effect), and they rated Al Gore as less undesirable if led to believe he was likely to win (a "sweet lemons" effect); Democrats showed a conceptually similar pattern. In a related study (Laurin, 2018), American participants indicated their attitudes about Trump's Presidency before and then after his January 2017 inauguration; they increased positive attitudes about it (sweet lemons effect), but only after inauguration and it was mediated by an increased sense that it was no longer a mere possibility but had become the new reality.

However, sour grapes/sweet lemons rationalization was not relevant to the present study, neither as an alternative a priori perspective nor as a post hoc alternative explanation. First, note the abovementioned research found the effect only emerged when the outcome was certain and inescapable, but not when it was merely a possibility with potential recourse to escape it. By contrast, the present study was conducted far in advance of the inauguration, during a time when there were open questions about the legitimacy of the votes and potential recourse to change/escape the results. Thus, the sour grapes/sweet lemons rationalization would not have made any relevant a priori predictions about the present study, given the time periods of data collection (when the election results were neither certain nor inescapable).

Second, the sour grapes/sweet lemons rationalization was not a viable post-hoc competing/alternative explanation of the observed data pattern. If one imagines, for the sake of illustration, that the conditions were right for a rationalization effect, the hypothesis would have been: compared to before and during the election, after the AP projected the winner of the election, both Biden-supporters and Trump-supporters would (1) reduce positive evaluations of Trump (sour grapes, for Trump-supporters) and increase positive evaluations of Biden (sweet lemons, for Trump-supporters), and (2) similarly increase perceived legitimacy of the election, acceptance of it as a fair election, and reduce support for recourse against its outcome. But the observed data contradicted those hypotheses; there was no evidence Trump-supporters rationalized Trump's apparent loss by viewing him as undesirable "sour grapes" nor did they rationalize Biden's apparent win by viewing him as more desirable "sweet lemons." Instead, they maintained the desirability of their candidate, judged that Trump's loss in the election must have been due to fraud and interference, and became more interested in recourse against the outcome. These patterns were inconsistent with sour grapes/sweet lemons rationalization but were consistent with partisan motivated reasoning.

Practical implications in the wake of the 2020 U.S. Presidential Election

Partisan motivated reasoning is a formal theoretical framework in political psychology (Leeper & Slothuus, 2014; Lodge & Taber, 2013), but the concept is known in other fields and even lay-people understand that people process information in motivationally-biased ways (Davis et al., 2021). Indeed, one feature of formal election rules, in liberal democracies, is to prevent the congruence and disconfirmation biases of motivated reasoning from polarizing citizens' judgments about leaders' claims to power and—instead—to promote unified "posterior" beliefs about rightfully elected officials.

That is why it was so troubling for so many when, in response to a question during the 2016 Presidential Debates, Donald Trump said he would *not* commit to abide by election results, such that the loser concedes to the winner, and participate in the peaceful transfer of power. In 2016 nothing came of his refusal; despite losing the popular vote, the Electoral College rules meant he was the winner. However, in 2020, Trump again refused to commit to concede in the event of losing the election. Considering the events before, during, and after the 2020 election, the question seems prescient and Trump's responses ominous.

Prior to the election

Prior to the election, Russia received consistent attention as investigations found they interfered with the elections, for the purpose of destabilizing the U.S. by helping Trump win. Trump, however, simply brushed off such concerns by calling it a "Democrat hoax." Indeed, our data suggest that Trump supporters, presumably motivated to arrive at the conclusion that Trump was legitimately the best candidate, accepted Trump's dismissive retorts; their concern about foreign interference in the election never rose above the theoretical mid-point of the scale.

Trump also spread concerns that allowing widespread mail-in voting would disadvantage Republicans, and falsely claimed mail-in ballots would lead to "millions"

of fraudulent ballots. Our data show Trump supporters were highly concerned about mail-in ballot fraud, increasing as the eventual winner became clear. Further, the Trump-appointed head of the US Postal Service impaired mail-in voting by reducing capacity and slowing service, Republican governors restricted availability of mail ballot drop-boxes in urban (heavily Democrat) areas, and Trump urged his supporters to vote in-person rather than by mail. Indeed, according to MIT's Election Data Lab, about 60% of Democrats voted by mail whereas only 30% of Republicans voted by mail (Stewart, 2020).

During the election

During the election, it was often the case that in-person votes were immediately tallied by voting machines whereas election officials were not permitted to begin counting mail ballots until after the polls closed. That meant the initial tally in "swing states" (e.g., Georgia, Arizona, Wisconsin, Pennsylvania, Nevada, Michigan) favored Trump because, as mentioned above, most in-person voters voted for Trump. But as the mail-in votes began to be counted, the tallies swung away from Trump and toward Biden. As the tallies shifted, Trump cried foul about voter fraud and began to reject the unfolding results of the election, falsely claiming that, "If you count the legal votes, I easily win. If you count the illegal votes, they can try to steal the election from us" (Colvin & Miller, 2021). The present data, likewise, show that once the count began and Trump started losing ground, Trump supporters more strongly believed mail-in ballot fraud was a threat and began to reject the results.

Our data further showed that Trump supporters also began to increase their support for recourse against the impending election outcome—including protests, destruction of property, legal challenges, legislative overhauls, and violence. In protests illustrating partisan motivated reasoning during the counting, Trump supporters in states where Trump was losing (e.g., Arizona) banged on election office windows shouting "Count the vote!" while Trump supporters in states where Trump was still winning (e.g., Michigan) showed up to election offices and chanted "Stop the count!" (Bierman & Megerian, 2020). Given that Trump was claiming fraud and illegal vote counting, his legal team (led by Rudy Giuliani and Sidney Powell) began making a show of filing dozens of lawsuits challenging those counts in local, state, and federal courts, and even filed direct appeals to the Supreme Court (Shamzian & Sheth, 2021). His supporters enthusiastically supported the effort, donating over $200 M to his so-called "Election Defense Fund" (Zurcher, 2020).

After the election

After the election, once the AP projected Biden the winner, Trump refused to concede. Our data show Trump supporters continued to perceive fraud, reject the election, and support legal and even violent recourse against the outcome. Correspondingly, in apparent efforts to overturn the outcome, Trump supporters began turning to violent recourse, such as making physical threats against election officials and their families (Shapiro et al., 2021). Likewise, on January 6, 2021, the day Congress was scheduled to officially certify Biden as the winner, thousands of Trump supporters rallied in Washington, DC and state capitols across the country. Some wore body armor and brought weapons, pipe bombs, zip-tie handcuffs, and even a gallows with hangman's noose (BBC News, 2021a). In a speech to them, Trump claimed to have won the election, said it was necessary to "stop the steal," and exclaimed "if you don't fight like hell, you're not going to have a country anymore" (BBC News, 2021b). His supporters then marched on the Capitol Building. They overtook police barriers, smashed windows and broke through doors, and searched for senators, representatives, and Vice President Pence. According to evidence presented at Trump's subsequent impeachment trial (Easley, 2021), over 140 law enforcement officers were injured in the attack and seven people died as a result (3 Capitol Police officers, 4 Trump supporters).

As of July 2021, Trump supporters have also moved on legislative recourse. No federal Constitutional amendments have yet been proposed, as we anticipated in our recourse measure, but there has been legislative action at the state level. At least 17 Republican-controlled states have enacted at least 28 new laws that restrict access to the vote and make it harder to vote by mail (Boschma, 2021; Schouten, 2021).

Summary

All such responses are consistent with partisan motivated reasoning theory (Leeper & Slothuus, 2014; Lodge & Taber, 2013). When Trump refused to commit to abide by the election, and refused to concede, partisan motivated reasoning was permitted to run rampant and polarize huge portions of the electorate. Indeed, Trump supporters' judgments in the present study, and corresponding real-world actions described above, appear to be selective judgments toward the desirable conclusion that Trump was the best candidate and legitimate winner, that the election results were inconsistent with that conclusion because his opponents were stealing the election, and that recourse was warranted to overturn the result and prevent such injustice from happening again. The attitudes of Biden supporters were also consistent with a partisan motivated reasoning account; as it began to appear more likely that he would win, while the votes were being

counted, and after AP declared him the winner, Biden supporters downplayed concerns about anything that would undermine the legitimacy of the election, accepted the outcome, and rejected recourse to overturn the result.

Limitations

One limitation is that we know little about the appropriateness of generalizing these data patterns; we know the sample was mostly college-age Women, with political orientation normally distributed near the center, but otherwise know little about the sample characteristics. Criticisms of student samples as a "narrow data base" (e.g., Sears, 1986) might arouse concerns that the results of this study are limited, in terms of external validity. College-age students are likely to be voting in a Presidential Election for the first or second time, and perhaps more susceptible to dramatic swings and variations in political beliefs and voting patterns, compared to older citizens who might have longer-held and more stable political beliefs and voting patterns. However, more recent work has found that student samples vary just as much as the general population on attitudinal variables (Hanel & Vione, 2016) and that there are likely few situations in which student sample characteristics would substantially constrain a study's external validity (Druckman & Kam, 2011).

Another limitation is that this work focused on real-world events, and thus could not use the experimental method to try to rule out alternative interpretations. One such alternative explanation might be that the observed changes in partisan judgments were, in fact, simply dispassionate Bayesian updating—but updating in response to dynamic information landscapes that differed between partisan group as a function of media market segmentation. For example, in conservative media market segments, Fox News and similar organizations featured the claims of Trump and his allies, which evolved across the present recruitment periods; thus, viewers of conservative media might have simply passively "updated" their prior judgments based on the information available to them at the time. However, such a perspective cannot explain why such partisans were motivated to watch Fox News vs. centrist or left-leaning media; nor can it explain why Trump supporters continued to show motivated reasoning and polarization even as Fox declared Biden the winner— some Trump supporters even chanted "Fox News sucks!" at election offices and subsequently turned to Trump-backing media such as Newsmax and OAN (Beckett, 2020; Man, 2021); nor can it explain why Biden supporters, who no doubt also heard the claims of Trump and his allies, nevertheless arrived as exactly the opposite judgments. Partisan motivated reasoning theory offers simple, powerful explanations that predicted all these patterns, from selective exposure to selective judgment.

Additionally, the present work was limited in its ability to explore possible boundary conditions for the observed patterns of partisan motivated reasoning. For example, a variety of studies have found that partisan motivated reasoning is inhibited by analytic thinking (Pennycook & Rand, 2019) and conditions that promote accuracy motives and critical thinking (Bolsen et al., 2014). The present survey was brief and did not measure any such possible boundary condition variables, but future research should further explore these and other possible boundaries of the effect.

Conclusion

The present data patterns were consistent with partisan motivated reasoning theory (Leeper & Slothuus, 2014; Lodge & Taber, 2013). Before the election, partisans were somewhat concerned about election integrity but willing to accept the outcome without recourse. However, during vote counting, and especially after AP projected Biden won, they changed their judgments in affectively desirable directions. Biden supporters affirmed the election's integrity and accepted the results whereas Trump supporters disputed the integrity, rejected the results, and began to support recourse against the outcome. These patterns also closely corresponded to important real-world events that unfolded before, during, and after the election, including political polarization, conspiracy beliefs, public protests, the violent January 6, 2021 insurrection attacks, and voter restriction laws. Together, this work highlights the theoretical and practical importance of partisan motivated reasoning, and challenges to traditional constraints on such biases, for the functioning of American democracy.

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References

Abrams, A. (2019). Here's What We Know So Far About Russia's 2016 Meddling. *Time*. https://time.com/5565991/russia-influence-2016-election/

Arndt, J., Landau, M. J., Vail, K. E., & Vess, M. (2013). An edifice for enduring personal value: A terror management perspective on the human quest for multilevel meaning. In K. D. Markman, T. Proulx, M. J. Lindberg, K. D. Markman, T. Proulx, & M. J.

Lindberg (Eds.), *The psychology of meaning* (pp. 49–69). American Psychological Association.

BBC News. (2021a). Capitol riots timeline: The evidence presented against Trump. *BBC News*. Retrieved Feb 13, 2021a, from https://www.bbc.com/news/world-us-canada-56004916

BBC News. (2021b). Capitol riots: Did Trump's words at rally incite violence? *BBC News*. Retrieved Feb 14, 2021b, from https://www.bbc.com/news/world-us-canada-55640437

Beckett, L. (2020). "Fox News sucks!": Trump supporters decry channel as it declares Biden wins. *The Guardian*. Retrieved Nov 6, 2020, from http://www.theguardian.com/media/2020/nov/05/fox-news-sucks-trump-supporters

Bierman, N., & Megerian, C. (2020). Trump's mixed message: Stop the count or keep counting? *Los Angeles Times*. Retrieved Nov 5, 2020, from https://www.latimes.com/politics/story/2020-11-05/trumps-mixed-message-stop-the-count-or-keep-counting

Bisgaard, M. (2015). Bias will find a way: Economic perceptions, attributions of blame, and partisan-motivated reasoning during crisis. *The Journal of Politics, 77*(3), 849–860. https://doi.org/10.1086/681591

Bisgaard, M. (2019). How getting the facts right can fuel partisan-motivated reasoning. *American Journal of Political Science, 63*(4), 824–839. https://doi.org/10.1111/ajps.12432

Boak, J., & Fingerhut, H. (2020). *AP VoteCast: How did Biden do it? Wide coalition powered win*. AP NEWS. Retrieved Nov 7, 2020, from https://apnews.com/article/how-did-joe-biden-win-election-a493c68b6b947c5f90f36efef76d13c2

Bolsen, T., Druckman, J. N., & Cook, F. L. (2014). The influence of partisan motivated reasoning on public opinion. *Political Behavior, 36*(2), 235–262. https://doi.org/10.1007/s11109-013-9238-0

Boschma, J. (2021). Seventeen states have enacted 28 new laws making it harder to vote | CNN Politics. *CNN*. Retrieved Jun 30, 2021, from https://www.cnn.com/2021/06/30/politics/voter-suppression-restrictive-voting-laws/index.html

Carlson, E. (2016). Finding partisanship where we least expect it: Evidence of partisan bias in a new African democracy. *Political Behavior, 38*(1), 129–154. https://doi.org/10.1007/s11109-015-9309-5

Cineas, F. (2020). *A timeline of hate: Trump's history of encouraging violence, from 2015 to 2021*. Vox. Retrieved Oct 9, 2020, from https://www.vox.com/21506029/trump-violence-tweets-racist-hate-speech

Claassen, R. L., & Ensley, M. J. (2016). Motivated reasoning and yard-sign-stealing partisans: Mine is a likable rogue, yours is a degenerate criminal. *Political Behavior, 38*(2), 317–335. https://doi.org/10.1007/s11109-015-9313-9

Colvin, J., & Miller, Z. (2021). Trump steps to podium, baselessly attacks election. *AP NEWS*. Retrieved Apr 20, 2021, from https://apnews.com/article/donald-trump-tweets-outrage-vote-count-df13d922b6249ff6c23d5021ae314e37

Cornwell, J. F. M., Bajger, A. T., & Higgins, E. T. (2015). Judging political hearts and minds: How political dynamics drive social judgments. *Personality and Social Psychology Bulletin, 41*(8), 1053–1068. https://doi.org/10.1177/0146167215589720

Davis, S., Parks, M., & Fowler, S. (2021, July 20). *Two Sites That Explain How Facebook Outrage Totally Reshaped Media*. NPR. Retrieved Jul 20, 2021, from https://www.npr.org/2021/07/20/1018450399/two-sites-that-explain-how-facebook-outrage-totally-reshaped-media

Dewey, J. (1927). *The public and its problems*. Holt.

Diamond, L., Drutman, L., Lindberg, T., Kalmoe, N. P., & Mason, L. (2020). Opinion | Americans Increasingly Believe Violence is Justified if the Other Side Wins. *POLITICO*. https://www.politico.com/news/magazine/2020/10/01/political-violence-424157

Donovan, K., Kellstedt, P. M., Key, E. M., & Lebo, M. J. (2020). Motivated reasoning, public opinion, and presidential approval. *Political Behavior, 42*(4), 1201–1221. https://doi.org/10.1007/s11109-019-09539-8

Druckman, J. N., & Kam, C. D. (2011). Students as experimental participants: A defense of the "Narrow Data Base." In A. Lupia, D. P. Greene, J. H. Kuklinski, & J. N. Druckman (Eds.), *Cambridge Handbook of Experimental Political Science* (pp. 41–57). Cambridge University Press.

Dunning, D. (2015). Motivated cognition in self and social thought. In M. Mikulincer, P. R. Shaver, E. Borgida, & J. A. Bargh (Eds.), *APA handbook of personality and social psychology, Volume 1: Attitudes and social cognition* (pp. 777–803). American Psychological Association.

Duran, N. D., Nicholson, S. P., & Dale, R. (2017). The hidden appeal and aversion to political conspiracies as revealed in the response dynamics of partisans. *Journal of Experimental Social Psychology, 73*, 268–278. https://doi.org/10.1016/j.jesp.2017.07.008

Easley, J. (2021). Managers present dramatic new video of Capitol mob at Trump impeachment trial. *TheHill*. Retrieved Feb 9, 2021, from https://thehill.com/policy/national-security/538033-managers-present-dramatic-new-video-of-mob-at-trump-impeachment

Edelson, J., Alduncin, A., Krewson, C., Sieja, J. A., & Uscinski, J. E. (2017). The effect of conspiratorial thinking and motivated reasoning on belief in election fraud. *Political Research Quarterly, 70*(4), 933–946. https://doi.org/10.1177/1065912917721061

Effron, D. A. (2018). It could have been true: How counterfactual thoughts reduce condemnation of falsehoods and increase political polarization. *Personality and Social Psychology Bulletin, 44*(5), 729–745. https://doi.org/10.1177/0146167217746152

Epstein, R., & Saul, S. (2020). Trump says mail voting means Republicans would lose every election. Is that true? No.—Chicago Tribune. *Chicago Tribune*. https://www.chicagotribune.com/nation-world/ct-nw-nyt-mail-voting-ballots-20200410-qfnxhakicve3ndpxz64lcsqzr4-story.html

Evans, J. St. B. T., & Over, D. E. (1996). *Rationality and reasoning* (pp. xi, 179). Psychology/Erlbaum (Uk) Taylor & Fr.

Festinger, L. (1957). *A theory of cognitive dissonance* (pp. xi, 291). Stanford University Press.

Feuer, W. (2020). *President Trump won't agree to accept 2020 election results as Biden leads in polls—'I have to see'*. CNBC. Retrieved Jul 19, 2020, from https://www.cnbc.com/2020/07/19/president-trump-wont-agree-to-accept-2020-election-results-as-biden-leads-in-polls.html

Fischhoff, B., & Beyth-Marom, R. (1983). Hypothesis evaluation from a Bayesian perspective. *Psychological Review, 90*(3), 239–260. https://doi.org/10.1037/0033-295X.90.3.239

Fischle, M. (2000). Mass response to the Lewinsky scandal: Motivated reasoning or Bayesian updating? *Political Psychology, 21*(1), 135–159. https://doi.org/10.1111/0162-895X.00181

Gerber, A., & Green, D. P. (1998). Rational learning and partisan attitudes. *American Journal of Political Science, 42*(3), 794–818. https://doi.org/10.2307/2991730

Goldman, A., Barnes, J. E., Haberman, M., & Fandos, N. (2020, February 20). Lawmakers Are Warned That Russia Is Meddling to Re-elect Trump. *The New York Times*. https://www.nytimes.com/2020/02/20/us/politics/russian-interference-trump-democrats.html

Goodkind, N. (2020). Inside Trump's war on the USPS. *Fortune*. https://fortune.com/2020/08/14/usps-trump-mail-in-voting-postal-service-2020-election-stamps-post-office/

Goren, P. (2007). Character weakness, partisan bias, and presidential evaluation: Modifications and extensions. *Political Behavior, 29*(3), 305–325. https://doi.org/10.1007/s11109-006-9019-0

Hanel, P. H. P., & Vione, K. C. (2016). Do student samples provide an accurate estimate of the general public? *PLoS ONE, 11*(12), e0168354. https://doi.org/10.1371/journal.pone.0168354

Hosenball, M., & Mason, J. (2020). U.S. counterspy chief warns Russia, China, Iran trying to meddle in 2020 election. *Reuters*.

Retrieved Aug 7, 2020, from https://www.reuters.com/article/us-usa-election-interference-idUSKCN253304

IBM SPSS Statistics for Windows (Version 25.0) (25.0). (2017). [Windows]. IBM Corp.

Jalonick, M. C. (2019). *AP Explains: Congress' fight over election security bills*. AP NEWS. https://apnews.com/article/mitch-mcconnell-donald-trump-elections-bills-politics-693436f36ca04995bf66f07bd4d7b4e4

Jamerson, J. (2019). House Passes Election Overhaul Package. *Wall Street Journal*. Retrieved Mar 8, 2019, from https://www.wsj.com/articles/house-is-set-to-pass-election-overhaul-package-11552054493

Kay, A. C., Jimenez, M. C., & Jost, J. T. (2002). Sour grapes, sweet lemons, and the anticipatory rationalization of the status quo. *Personality and Social Psychology Bulletin, 28*(9), 1300–1312. https://doi.org/10.1177/01461672022812014

Kelly, K. (2019). *'If others have rifles, we'll have rifles': Why US leftist groups are taking up arms*. The Guardian. Retrieved Jul 22, 2019, from http://www.theguardian.com/us-news/2019/jul/22/if-others-have-rifles-well-have-rifles-why-leftist-groups-are-taking-up-arms

Klein, W. M., & Kunda, Z. (1992). Motivated person perception: Constructing justifications for desired beliefs. *Journal of Experimental Social Psychology, 28*(2), 145–168. https://doi.org/10.1016/0022-1031(92)90036-J

Knobloch-Westerwick, S., Mothes, C., Johnson, B. K., Westerwick, A., & Donsbach, W. (2015). Political online information searching in Germany and the United States: Confirmation bias, source credibility, and attitude impacts. *Journal of Communication, 65*(3), 489–511. https://doi.org/10.1111/jcom.12154

Kumar, A. (2020). *Trump and Biden teams prep for once-outlandish election standoffs*. POLITICO. https://www.politico.com/news/2020/10/30/trump-biden-election-scenarios-433663

Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin, 108*(3), 480–498. https://doi.org/10.1037/0033-2909.108.3.480

Kuru, O., Pasek, J., & Traugott, M. W. (2017). Motivated reasoning in the perceived credibility of public opinion polls. *Public Opinion Quarterly, 81*(2), 422–446. https://doi.org/10.1093/poq/nfx018

Laurin, K. (2018). Inaugurating rationalization: Three field studies find increased rationalization when anticipated realities become current. *Psychological Science, 29*(4), 483–495. https://doi.org/10.1177/0956797617738814

Laurin, K., Kay, A. C., & Fitzsimons, G. J. (2012). Reactance versus rationalization: Divergent responses to policies that constrain freedom. *Psychological Science, 23*(2), 205–209. https://doi.org/10.1177/0956797611429468

Laurin, K., Shepherd, S., & Kay, A. C. (2010). Restricted emigration, system inescapability, and defense of the status quo: System-justifying consequences of restricted exit opportunities. *Psychological Science, 21*(8), 1075–1082. https://doi.org/10.1177/0956797610375448

Layman, G. C., Kalkan, K. O., & Green, J. C. (2014). A Muslim president? Misperceptions of Barack Obama's faith in the 2008 presidential campaign. *Journal for the Scientific Study of Religion, 53*(3), 534–555. https://doi.org/10.1111/jssr.12137

Lebo, M. J., & Cassino, D. (2007). The aggregated consequences of motivated reasoning and the dynamics of partisan presidential approval. *Political Psychology, 28*(6), 719–746. https://doi.org/10.1111/j.1467-9221.2007.00601.x

Leeper, T. J., & Slothuus, R. (2014). Political parties, motivated reasoning, and public opinion formation. *Political Psychology, 35*(Suppl 1), 129–156. https://doi.org/10.1111/pops.12164

Lemire, J., Miller, Z., & Weissert, W. (2020). *Biden defeats Trump for White House, says "time to heal."* AP NEWS. Retrieved Nov 7, 2020, from https://apnews.com/article/joe-biden-wins-white-house-ap-fd58df73aa677acb74fce2a69adb71f9

Lodge, M., & Taber, C. (2013). *The rationalizing voter*. Cambridge University Press.

Lybrand, H., & Subramaniam, T. (2020). Fact-checking Trump's recent claims that mail-in voting is rife with fraud. *CNN*. Retrieved May 27, 2020, from https://www.cnn.com/2020/05/27/app-politics-section/donald-trump-mail-in-voter-fraud-fact-check/index.html

Madson, G. J., & Hillygus, D. S. (2020). All the best polls agree with me: Bias in evaluations of political polling. *Political Behavior, 42*(4), 1055–1072. https://doi.org/10.1007/s11109-019-09532-1

Man, A. (2021). *With TV news viewing polarized, slice of Republicans leaving Fox and watching Newsmax*. South Florida Sun Sentinel. https://www.sun-sentinel.com/news/politics/elections/fl-ne-republican-tv-news-viewers-fox-newsmax-20210309-7zvakfrteve35brqrejamvicdi-story.html

McCabe, K. T. (2016). Attitude responsiveness and partisan bias: Direct experience with the Affordable Care Act. *Political Behavior, 38*(4), 861–882. https://doi.org/10.1007/s11109-016-9337-9

McDonald, J., Croco, S. E., & Turitto, C. (2019). Teflon Don or politics as usual? An examination of foreign policy flip-flops in the age of Trump. *The Journal of Politics, 81*(2), 757–766. https://doi.org/10.1086/702234

Mill, J. S. (1859). On liberty. In J. Gray (Ed.), *John Stuart Mill on liberty and other essays, 1998* (pp. 1–128). Oxford University Press.

Montgomery, D. (2020). The Texas Supreme Court upholds the governor's order for a single ballot drop box per county. *The New York Times*. Retrieved Oct 28, 2020, from https://www.nytimes.com/2020/10/28/us/elections/the-texas-supreme-court-upholds-the-governors-order-for-a-single-ballot-drop-box-per-county.html

Nicholas, P. (2019). *It's 2016 All Over Again*. The Atlantic. Retrieved Jun 13, 2019, from https://www.theatlantic.com/politics/archive/2019/06/trump-welcomes-foreign-interference-2020-campaign/591589/

Niemi, L., Woodring, M., Young, L., & Cordes, S. (2019). Partisan mathematical processing of political polling statistics: It's the expectations that count. *Cognition, 186*, 95–107. https://doi.org/10.1016/j.cognition.2019.02.002

Pennycook, G., & Rand, D. G. (2019). Lazy, not biased: Susceptibility to partisan fake news is better explained by lack of reasoning than by motivated reasoning. *Cognition, 188*, 39–50. https://doi.org/10.1016/j.cognition.2018.06.011

Pillow, D. R., Crabtree, M. A., Galvan, M. J., & Hale, W. J. (2018). Not simply in the eye of the beholder: Authenticity as a product of candidate preference and unfettered speech. *Political Psychology, 39*(4), 849–868. https://doi.org/10.1111/pops.12440

Porter, T. (2021). Trump said he'd praise a CPAC poll if it came out in favor of him, otherwise he'd call it fake. *Business Insider*. https://www.businessinsider.com/trump-call-cpac-poll-fake-if-doesnt-win-2021-7

Pyszczynski, T., & Greenberg, J. (1987). Toward an integration of cognitive and motivational perspectives on social inference: A biased hypothesis-testing model. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 20, pp. 297–340). Academic Press.

Rafferty, A., & Taintor, D. (2016). Trump Won't Say He'll Accept Election Results: 'I Will Keep You In Suspense'. *NBC News*. https://www.nbcnews.com/politics/2016-election/trump-won-t-say-he-ll-accept-election-results-i-n669801

Reichmann, D., & Izaguerre, A. (2021). Trump admits he's blocking postal cash to stop mail-in votes. *AP NEWS*. Retrieved Apr 20, 2021, from https://apnews.com/article/virus-outbreak-election-2020-ap-top-news-elections-politics-14a2ceda724623604cc8d8e5ab9890ed

Richer, A. D., & Tucker, E. (2021). *Trump, Biden lawyer up, brace for White House legal battle*. AP NEWS. Retrieved Apr 20, 2021, from https://apnews.com/article/elect

ion-2020-joe-biden-donald-trump-virus-outbreak-campaigns-623d58611c14371414069152057fbe4c

Rico, G., & Liñeira, R. (2018). Pass the buck if you can: How partisan competition triggers attribution bias in multilevel democracies. *Political Behavior, 40*(1), 175–196. https://doi.org/10.1007/s11109-017-9409-5

Rogers, K. (2020a). Trump dismisses warning of Russian 2020a meddling as a democratic 'Hoax.' *The New York Times*. Retrieved Feb 21, 2020a, from https://www.nytimes.com/2020/02/21/us/politics/trump-and-russia.html

Rogers, N. (2020b). Split screens: A content analysis of American liberals' and conservatives' respective television favorites. *Psychology of Popular Media, 9*(1), 45–58. https://doi.org/10.1037/ppm0000197

Rucker, P., Costa, R., & DelReal, J. A. (2016). Trump invites Russia to meddle in the U.S. presidential race with Clinton's emails. *Washington Post*. Retrieved Jul 27, 2016, from https://www.washingtonpost.com/politics/trump-invites-russia-to-meddle-in-the-us-presidential-race-with-clintons-emails/2016/07/27/a85d799e-5414-11e6-b7de-dfe509430c39_story.html

Russonello, G. (2020). Both Candidates Are Widely Disliked (Again). This Time, Biden Could Benefit. *The New York Times*. Retrieved Jun 12, 2020, from https://www.nytimes.com/2020/06/12/us/politics/polls-trump-biden.html

Sanders, S. (2016). Donald Trump Says He'll Accept The Results Of The Election … If He Wins. *NPR.Org*. https://www.npr.org/2016/10/20/498713509/donald-trump-says-hell-accept-the-results-of-the-election-if-he-wins

Schaffner, B. F., & Roche, C. (2017). Misinformation and motivated reasoning: Responses to economic news in a politicized environment. *Public Opinion Quarterly, 81*(1), 86–110.

Schouten, F. (2021, March 25). Major conservative groups unify behind state GOP efforts to restrict voting | CNN Politics. *CNN*. Retrieved Mar 25, 2021, from https://www.cnn.com/2021/03/25/politics/voting-rights-restricted-republican-groups/index.html

Sears, D. O. (1986). College sophomores in the laboratory: Influences of a narrow data base on social psychology's view of human nature. *Journal of Personality and Social Psychology, 51*(3), 515–530. https://doi.org/10.1037/0022-3514.51.3.515

Shamzian, J., & Sheth, S. (2021). *Trump and his allies filed more than 40 lawsuits challenging the 2020 election results. All of them failed.* Business Insider. https://www.businessinsider.com/trump-campaign-lawsuits-election-results-2020-11

Shapiro, A., Intagliata, C., & Sirianni, A. (2021). Right to vote: How republican lawmakers used Trump's "Big Lie" to restrict voting. *NPR*. Retrieved Jul 12, 2021, from https://www.npr.org/2021/07/12/1015371195/the-right-to-vote-the-big-lie-and-what-it-did-to-voting-access

Slodysko, B. (2020). *EXPLAINER: Why AP called the 2020 election for Joe Biden*. AP NEWS. Retrieved Nov 7, 2020, from https://apnews.com/article/why-did-AP-call-election-for-Biden-fe79276cd9175fffc7cf4fb58045fcf9

Sorace, M., & Hobolt, S. B. (2021). A tale of two peoples: Motivated reasoning in the aftermath of the Brexit vote. *Political Science Research and Methods, 9*(4), 675–692. https://doi.org/10.1017/psrm.2020.50

Stewart, C. (2020). *How we voted in 2020: A first look at the survey of the performance of American elections.* Election Data + Science Lab. http://electionlab.mit.edu/sites/default/files/2020-12/How-we-voted-in-2020-v01.pdf

Storey, K. (2020). *How the associated press plans to determine the winner of this year's election.* Esquire. Retrieved Oct 29, 2020, from https://www.esquire.com/news-politics/a34496862/how-associated-press-counts-us-presidential-election-votes-results/

Szumowska, E., Czernatowicz-Kukuczka, A., Kossowska, M., Król, S., & Kruglanski, A. W. (2020). Truth and significance: A 3N model (needs, narratives, networks) perspective on religion. In K. E. Vail & C. Routledge (Eds.), *The science of religion, spirituality, and existentialism.* Academic Press.

Taber, C. S., Cann, D., & Kucsova, S. (2009). The motivated processing of political arguments. *Political Behavior, 31*(2), 137–155. https://doi.org/10.1007/s11109-008-9075-8

Tappin, B. M., van der Leer, L., & McKay, R. T. (2017). The heart trumps the head: Desirability bias in political belief revision. *Journal of Experimental Psychology. General, 146*(8), 1143–1149. https://doi.org/10.1037/xge0000298

Thibodeau, P., Peebles, M. M., Grodner, D. J., & Durgin, F. H. (2015). The wished-for always wins until the winner was inevitable all along: Motivated reasoning and belief bias regulate emotion during elections. *Political Psychology, 36*(4), 431–448. https://doi.org/10.1111/pops.12100

Weeks, B. E., & Garrett, R. K. (2014). Electoral consequences of political rumors: Motivated reasoning, candidate rumors, and vote choice during the 2008 US presidential election. *International Journal of Public Opinion Research, 26*(4), 401–422. https://doi.org/10.1093/ijpor/edu005

Zurcher, A. (2020). Trump raises $200m for post-election legal battles. *BBC News*. Retrieved Dec 4, 2020, from https://www.bbc.com/news/world-us-canada-55192699