



# Americans discount the effect of friction on voter turnout

Asaf Mazar<sup>a,b,1,2</sup> , Geoff Tomaino<sup>c,1</sup> , Ziv Carmon<sup>c</sup>, and Wendy Wood<sup>a,d,2</sup>

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Whether or not someone turns out to vote depends on their beliefs (such as partisanship or sense of civic duty) and on *friction*—external barriers such as long travel distance to the polls. In this exploratory study, we tested whether people underestimate the effect of friction on turnout and overestimate the effect of beliefs. We surveyed a representative sample of eligible US voters before and after the 2020 election ( $n = 1,280$ ). Participants' perceptions consistently underemphasized friction and overemphasized beliefs (mean  $d = 0.94$ ). In participants' open-text explanations, 91% of participants listed beliefs, compared with just 12% that listed friction. In contrast, turnout was shaped by beliefs only slightly more than friction. The actual belief-friction difference was about one-fourth the size of participants' perceptions ( $d = 0.24$ ). This bias emerged across a range of survey measures (open- and close-ended; other- and self-judgments) and was implicated in downstream consequences such as support for friction-imposing policies and failing to plan one's vote.

friction | elections | voter turnout | voting plan | policy support

Casting one's vote is the defining act of a participatory democracy. And yet, people sometimes fail to vote when faced with seemingly surmountable barriers, such as long travel distances to the polls (1), long wait lines (2), shortened poll hours (3), and even rain (4). The effects of such barriers can be particularly decisive for those who have relatively few resources, such as those with lower income or those who do not own a car (1, 4). While turnout is known to be influenced by such barriers as well as by beliefs (5, 6) (such as political ideology), little is known about how voters perceive these influences; that is, what do voters *think* determines turnout, and do these perceptions influence downstream outcomes like policy support?

Understanding these perceptions is especially pressing now, as the United States witnesses heated debates surrounding voting rights (7). Some (mostly conservatives) support policies that may restrict voting, whereas others (mostly liberals) support policies that make voting more accessible (8). If Americans underappreciate the role of friction in driving turnout, then they may more readily support policies that make voting difficult. Given the tangible impact of friction on turnout, one might expect Americans to recognize its influence. Yet, people are not always aware of what drives their behavior (9) and may overlook friction, especially given Americans' strong beliefs in self-control and intentional action (10–12).

Such a pattern is suggested by 2020 presidential campaign spending, most of which went toward media (13, 14) that overwhelmingly targeted beliefs: 98% of Biden's YouTube videos and 95% of Trump's mentioned political beliefs, whereas only 7% and 13%, respectively, mentioned forms of friction (see *SI Appendix, section S1*). More generally, Americans tend to assume that actions (such as voting) largely reflect intentions (10) and interpret their own behavior as driven by beliefs and intentions (15). Americans, then, might discount the effect of friction and inflate the effect of beliefs.

The present exploratory research examined eligible US voters' predictions about the relative effects of beliefs and friction on turnout. We used a pre-post survey design administered immediately before and after the 2020 presidential election. Participants constituted a representative sample of eligible voters ( $n = 1,280$ ) from 10 election-competitive US states. Participants estimated the effect on turnout of beliefs (e.g., ideology, seeing voting as a civic duty) and friction (e.g., conflicts with work or childcare).

To thoroughly explore this question, we used three measures of participants' perceptions of turnout drivers: (a) *Open-ended measures*. Participants listed "major influence(s)" on turnout and then rated the importance of each listed influence; (b) *Composite measures*. Participants rated the importance of 12 specific forms of friction (e.g., conflicts with work or childcare) and beliefs (e.g., ideology, sense of voting as a civic duty) on turnout; and (c) *Single-item measures*. Participants rated the overall importance of beliefs and friction. All measures were completed with respect to both others (Americans' turnout in general) and oneself (each participant's own turnout).

## Significance

Voter turnout depends on both beliefs (such as partisanship) and *friction* (such as long lines at a polling place). In a survey of eligible US voters before and after the 2020 election, we uncovered a mismatch between actual and perceived drivers of turnout: Participants *underestimated* the role of friction and *overestimated* the role of beliefs in shaping turnout. Furthermore, participants who were prone to this bias tended to support policies that increase friction on voting, such as signature-matching requirements. These results inform the ongoing public debates surrounding voting access.

Author affiliations: <sup>a</sup>Department of Psychology, University of Southern California, Los Angeles, CA 90089; <sup>b</sup>Wharton School of Business, University of Pennsylvania, Pennsylvania, PA 19104; <sup>c</sup>INSEAD, Singapore 138676; and <sup>d</sup>Marshall School of Business, University of Southern California, Los Angeles, CA 90089

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<sup>1</sup>A.M. and G.T. contributed equally to this work.

<sup>2</sup>To whom correspondence may be addressed. Email: asafsmazar@gmail.com; or wendy.wood@usc.edu.

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In the pre-election survey, participants reported their beliefs (e.g., ideology, seeing voting as a civic duty) and friction (e.g., whether they own a vehicle). They also indicated support for friction-related policies and (as a behavioral measure shown to a randomly selected half of the sample) whether they would like to take part in a vote planning exercise.

After the election, participants reported whether they voted and rated any election-day friction they experienced (i.e., friction that might have emerged unexpectedly, such as an unpredictable work or childcare conflict on election day). To estimate the actual impact of friction and beliefs, we fit models predicting postelection turnout from the actual friction and belief measures. All study materials, data, and analytic code are openly available via Open Science Framework (OSF; see *Methods and Materials*).

## Results

**Actual Effects of Beliefs versus Friction.** Table 1 shows the variables used in analyses of the actual effects of beliefs and friction on turnout. Given that mail-in voting involves different types of friction than in-person voting (e.g., addressing the envelope properly), our analyses focused on in-person voters (987 participants, 77% of the sample). Logistic regression models predicting turnout from beliefs (in one model) and friction (in a separate model) revealed that each exerted a comparable influence on turnout (using Tjur's  $R^2$ ;  $R^2_{\text{Belief}} = 0.18$ ,  $R^2_{\text{Friction}} = 0.19$ ; see Table 2). In a more conservative test, we fit a narrower friction model excluding variables reflecting knowledge of how/where to vote as well as prior experience with voting at their current address and with their intended mode of voting. Although this narrow model explained less variance than the full friction model (as would be expected when reducing the number of predictors), friction continued to substantially predict turnout,  $R^2 = 0.09$ .

Note that self-reports of voter turnout inflate the effect of beliefs on turnout because those with stronger beliefs are more likely to falsely report having voted (16). Our results, then, likely overestimate actual belief effects, posing a conservative test of our hypothesis that people overestimate the effect of beliefs relative to friction.

**Perceived Effects of Beliefs versus Friction.** In contrast to the actual effects presented in the previous section, across all perception measures, participants rated beliefs as markedly more important than friction in driving turnout (see Table 3 and Fig. 1). An especially stark gap emerged in participants' open-ended

responses listing drivers of Americans' turnout. A full 91% of participants mentioned at least one belief, whereas only 12% mentioned friction (Fig. 1A). When participants rated on a 10-point scale the importance of each factor that they listed, a similar pattern emerged, with participants assigning beliefs far more importance,  $M = 8.46$  ( $SD = 3.03$ ), than friction,  $M = 1.02$  ( $SD = 2.82$ ),  $d = 1.59$  (Fig. 1B). When participants were explicitly asked to rate the impact of friction as well as beliefs, similar (albeit more moderate in magnitude) effects favoring beliefs emerged in (a) composite ratings of specific types of beliefs and friction sources (Fig. 1C) and (b) single-item measures of beliefs versus friction (Fig. 1D). These analyses included the entire sample, but qualitatively identical results emerged in analyses of participants who intended to vote in person (to facilitate direct comparison with the analyses of actual effects in the previous section; *SI Appendix, Table S1*). Similarly, attribution to beliefs over friction was maintained in postelection measures, even among participants who did not vote (*SI Appendix, Tables S4 and S5*).

To directly compare participants' perceptions with the actual effects of beliefs and friction on turnout,  $R^2$  scores for actual turnout (computed using linear regression) were converted into standardized mean difference effect sizes (17). The differences between beliefs and friction in predicting turnout ranged from  $d = 0.04$  in favor of friction (when using the full friction model) to  $d = 0.17$  in favor of beliefs (when using the narrow friction model). In contrast, measures of perception skewed strongly in favor of beliefs over friction. For example, when using open-text measures, participants' estimates revealed a difference score of  $d = 1.59$ —more than 9 times larger than would be justified by even the most conservative model specification. In sum, the actual effects of friction and beliefs on turnout revealed at most a small-medium difference in favor of beliefs, whereas participants generally perceived a large difference in favor of beliefs over friction.

**Support for Friction-Related Policies.** We next explored the correspondence between underestimating the importance of friction relative to beliefs (using the composite measure of others' voting) and support for friction-relevant policies. We averaged the policy support items (e.g., automatic voter registration, exact signature match) into an index ranging from 1 to 7 (1 = strong opposition to friction-increasing policies; 7 = strong support for friction-increasing policies). This index was supported by an exploratory factor analysis, which yielded a single latent factor with an eigenvalue greater than 1 (1.79). A regression model

**Table 1. Variables included in the friction and belief models**

Friction	Beliefs
<b>Subjective difficulty of voting</b>	Partisanship strength (Republican/Democrat)
<b>Requiring childcare to vote</b>	Ideology strength (Liberal/Conservative)
<b>Requiring time off work to vote</b>	Strength of support for preferred candidate
<b>Vehicle ownership</b>	Strength of (dis)liking Donald Trump
<b>Intended mode of transport to the polls</b>	Strength of (dis)liking Joe Biden
<b>Estimated overall time cost of voting</b>	Belief that your vote matters
<b>Estimated time to travel to the polls</b>	Belief that voting is your duty as an American
Feeling comfortable asking for time off work	
Prior experience voting using their intended mode of voting	
Prior experience voting at the same address	
Knowing how to vote	
Knowing their poll location	

Variables in bold font were included in the narrow friction model.

**Table 2. Actual effects of beliefs and friction on turnout**

Variable	Tjur's $R^2$	$R^2$	Beliefs–friction difference ( $R^2$ )	Beliefs–friction difference ( $d$ )
Beliefs	0.18	0.15	—	—
Friction (full)	0.19	0.17	–0.01	–0.04
Friction (narrow model)	0.09	0.10	0.06	0.17

Note. Tjur's  $R^2$  values were calculated using logistic regression, and  $R^2$  values were calculated using linear regression.

predicting support for friction-increasing policies from friction-beliefs importance difference scores (for others) revealed a modest effect:  $b = 0.15$ , 95% CI = [0.09, 0.20],  $\beta = .15$ . Thus, participants who underestimated the effect of friction (relative to beliefs) on others' turnout were more likely to support policies that could constrain voting. In a more conservative test, this effect held in a model controlling for gender, age, income, education, race, voter fraud concerns, past voting experience, partisanship, and ideology:  $b = 0.05$ , 95% CI = [0.003, 0.10],  $\beta = .05$ . In additional conservative tests, these effects largely held when we predicted each policy support measure individually, rather than as a single factor, with and without controls (*SI Appendix, Table S6*). In short, voters who discounted the effect of friction on others' turnout tended to support policies that increase friction on voting.

**Planning.** Vote planning can increase turnout (18), in part by helping people anticipate friction. Half of our participants were given the option of a vote planning exercise. Those who opted to plan held stronger political beliefs (indicated by an index averaging across all belief variables) than those who did not,  $d = 0.38$ , suggesting that they might have cast their ballot regardless. In contrast, planners did not notably differ from nonplanners in aspects of friction such as perceived voting difficulty (i.e., subjective friction),  $d = 0.08$ , or voting knowledge,

$d = 0.10$  (see Fig. 2). These results suggest that when deciding whether to plan their vote, our participants were insensitive to friction: Those who might have benefited the most from vote planning—those who had weak political beliefs or who would have a difficult time voting—were not more open to planning their vote.

## Discussion

In a large-scale exploratory study of eligible US voters, we compared the actual and perceived roles of political beliefs (e.g., ideology, voting is a civic duty) and friction (e.g., conflicts with work or childcare) on voter turnout in the 2020 election. We found that potential voters overwhelmingly attributed turnout to beliefs over friction, with this tendency emerging both for perceptions of others' turnout as well as their own.

The tendency to overlook friction was particularly striking in participants' open-ended responses, with nearly all participants citing beliefs and very few referring to friction. Our participants seemed not to spontaneously think of friction unless explicitly reminded by question wording. Moreover, even when explicitly prompted to consider friction (in the close-ended items), participants downplayed the effects of friction relative to beliefs. This was also evident in our analyses of Republican and Democratic presidential campaign videos, which revealed that both campaigns gave minimal attention to friction. Participants' interest in vote planning also proved to be insensitive to friction.

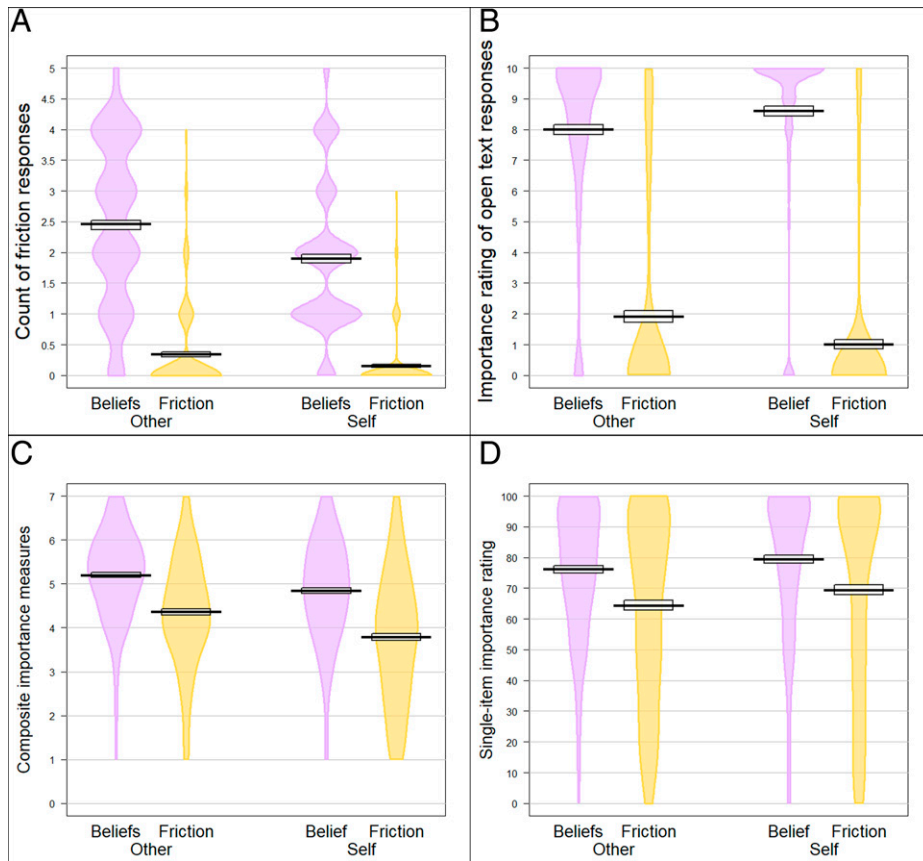
This discounting of friction is notable given the importance and attention that is placed on elections in the United States. This underestimation may stem from Americans' strong beliefs that their actions are primarily driven by autonomy and intentionality (11, 12). It would be interesting to explore differences between these perceived effects versus actual effects in less autonomy-focused cultures.

Crucially, the tendency to overlook friction in favor of beliefs in determining voter turnout was tied to policy support. Discounting friction was linked to increased support for policies

**Table 3. Perceived effects of beliefs and friction on turnout**

Measure type	Variable	Target	Mean (SD) / Count (%)	Beliefs–friction difference effect size
Open text (% of participants who noted at least one response for each factor)	Beliefs	Self	1,168 (91.25%)	1.84
	Friction	Self	152 (11.88%)	
	Beliefs	Other	1,170 (91.41%)	1.54
	Friction	Other	297 (23.20%)	
Open text (No. of responses listed for each factor)	Beliefs	Self	1.84 (1.23)	1.23
	Friction	Self	0.15 (0.45)	
	Beliefs	Other	2.44 (1.37)	1.23
	Friction	Other	0.32 (0.70)	
Open text (mean importance attributed to each factor)	Beliefs	Self	8.46 (3.03)	1.59
	Friction	Self	1.02 (2.82)	
	Beliefs	Other	7.85 (3.03)	1.25
	Friction	Other	1.81 (3.55)	
Composite	Beliefs	Self	4.81 (1.23)	0.80
	Friction	Self	3.83 (1.44)	
	Beliefs	Other	5.16 (1.06)	0.74
	Friction	Other	4.37 (1.27)	
Single-item	Beliefs	Self	77.94 (24.38)	0.29
	Friction	Self	69.23 (32.64)	
	Beliefs	Other	75.76 (21.64)	0.38
	Friction	Other	64.67 (29.89)	

Effect sizes are in Cohen's  $d$  for continuous measures and Cohen's  $h$  for proportions (% of participants who noted at least one response for a factor). Descriptive statistics shown are mean and standard deviation for continuous variables, and count and proportion for binary variables (% of participants who noted at least one response for a factor).



**Fig. 1.** Perceived effects of beliefs and friction on turnout. (A–D) Note: Difference between the mean perceived effects of beliefs (purple) and friction (yellow) on voter turnout. The different panels represent: (A) number of open-ended responses participants listed, (B) importance ratings participants gave for their open-ended responses, (C) composite importance measures, and (D) single-item importance measures. Dark horizontal bars represent the mean, and light boxes represent the 95% confidence interval for the mean.

that could dampen turnout, even in conservative analyses that accounted for an array of demographic and political covariates. This relation between recognizing friction and policy support is relevant to current debates around voting rights (7). Liberals often view conservatives' support for friction-increasing policies as deliberate attempts at voter suppression. Yet our research suggests that at least some support for these policies may simply reflect failure to recognize these policies' harmful impact on would-be voters.

In conclusion, our work finds that Americans underestimate the impact of friction relative to beliefs on voter turnout. This

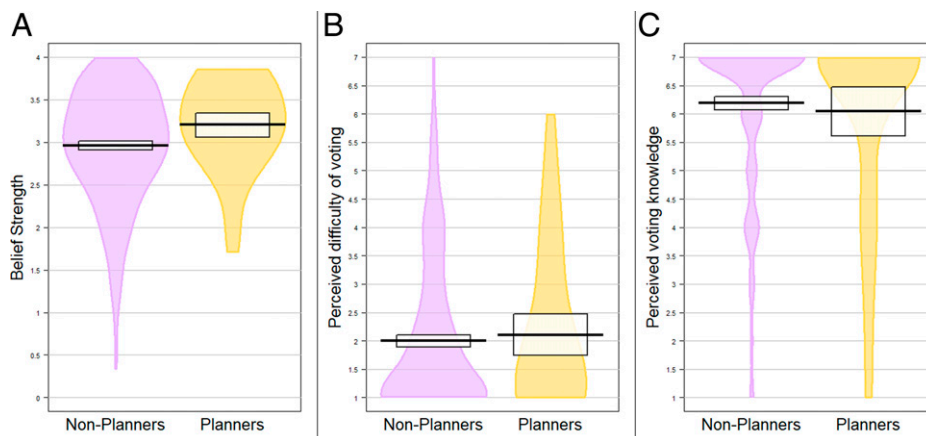
robust tendency can inform current debates surrounding voting rights, requirements, and restrictions.

## Materials and Methods

All data, code, materials, and auxiliary results are available via the following repository: <https://osf.io/4rk2c/>

The research was approved by INSEAD's institutional review board, and all participants gave their informed consent to participate.

**Participants.** Sample demographics (weighted and unweighted) can be found in Table 4. Participants were 1,280 eligible US voters recruited via the Prodege



**Fig. 2.** Differences between vote planners and nonplanners. (A–C) Note: Belief strength represents the composite strength of beliefs, calculated as the mean of partisanship strength, ideology strength, (dis)like for Donald Trump, and (dis)like for Joe Biden, support for one's favorite candidate, believing that one's vote matters, and civic duty. Dark horizontal bars represent the mean, and light boxes represent the 95% confidence interval for the mean.

**Table 4. Weighted and unweighted sample demographics**

Variable	Unweighted	Weighted
<b>Gender</b>		
Female	735 (57.4%)	666 (52.0%)
Male	545 (42.6%)	614 (48.0%)
<b>Age group (y)</b>		
18–29	199 (15.5%)	262 (20.4%)
30–44	322 (25.2%)	302 (23.6%)
45–64	469 (36.6%)	439 (34.3%)
65 and over	290 (22.7%)	278 (21.7%)
<b>Race/ethnicity</b>		
Asian	43.0 (3.4%)	53 (4.1%)
Black	107.0 (8.4%)	138 (10.8%)
Hispanic	113.0 (8.8%)	148 (11.6%)
Other	48.0 (3.8%)	25 (2.0%)
White	969.0 (75.7%)	916 (71.5%)
<b>Education</b>		
No high school diploma	18 (1.4%)	54 (4.2%)
High school only	284 (22.2%)	391 (30.6%)
Some college	298 (23.3%)	310 (24.2%)
Associate degree	191 (14.9%)	129 (10.1%)
Undergraduate degree	333 (26.0%)	256 (20.0%)
Graduate degree	156 (12.2%)	140 (10.9%)
<b>2020 vote</b>		
Did not vote	124 (9.7%)	148 (11.5%)
Voted	1,156 (90.3%)	1,132 (88.5%)

and Prolific Academic online sample pools. An additional 1,142 participants completed the pre-election survey but not the postelection survey (53% retention) and were therefore not included in analyses. Participants were US residents of 10 competitive states: Arizona, Iowa, Maine, Michigan, Nebraska, Nevada, New Hampshire, North Carolina, Pennsylvania, and Wisconsin. We defined competitive states as ones in which pre-election polling consistently showed a less than 10% margin between Donald Trump and Joe Biden (the main presidential nominees). Only competitive states were selected for analysis because most US states employ a “winner-takes-all” system in the Electoral College that can dissuade potential voters from turning out for parties or nominees unlikely to win the majority of their state’s vote. Participants were further informed that one participant would be randomly selected to receive a \$100 bonus if they accurately completed both parts of the study.

Iterative Proportional Fitting (also known as raking) (19) was used to poststratify the survey sample to match the demographics of the 10 included states on gender, age, race, and education based on data from the 2019 American Community Survey (20). Nonetheless, qualitatively identical results were obtained for the unweighted sample (*SI Appendix, Tables S2 and S3*).

**Design.** Our study used a pre-post survey design, with participants surveyed before and after the 2020 US presidential election. Data collection for the pre-election survey took place between October 15 and 24, 2020, and data collection for the postelection survey took place between November 3 and 7, 2020.

**Measures.** The primary measures used in the study are listed below. See the OSF repository for complete materials.

**Pre-election Survey.**

**Beliefs.**

**Partisanship.** “Do you think of yourself as a ...” (7-point scale; 1 = *strong Democrat*, 7 = *strong Republican*).

**Ideology.** “In general, how would you describe your own political viewpoint?” (7-point scale; 1 = *very liberal*, 7 = *very conservative*).

**Preferred candidate.** “If the 2020 presidential election were held today, who, if anyone, would you vote for if the candidates were:” (*Joe Biden, the Democrat; Donald Trump, the Republican; Another candidate; wouldn’t vote; Don’t know/not sure; Prefer not to say*).

**Candidate support.** If participants reported in the previous item that they intended to vote for either Biden or Trump, they rated how they would “describe

[their] support for [name of preferred candidate]” (3-point scale; 1 = *strongly support*, 3 = *slightly support*; *Don’t know/not sure*).

**Believing that one’s vote matters.** “How much do you think that your vote matters?” (7-point scale; 1 = *My vote doesn’t matter at all*, 7 = *My vote really matters*).

**Civic duty.** “To what extent do you think voting is your duty as an American?” (7-point scale; 1 = *not at all my duty*, 7 = *very much my duty*).

**Liking for main candidates.** “To what extent do you like or dislike Joe Biden” and “To what extent do you like or dislike Donald Trump” (7-point scale; 1 = *strongly dislike*, 7 = *strongly like*).

**Friction.**

**Subjective friction.** “Please indicate below how easy or difficult it will be for you to vote in the upcoming election” (7-point scale; 1 = *very easy*, to 7 = *very difficult*) and “please indicate below how much of a hassle it would be for you to vote in the upcoming election” (1 = *not a hassle at all*, to 7 = *a huge hassle*).

**Time demands.** “Please indicate below how many minutes do you expect it will take you to complete your remaining voting process? This includes every step necessary for you to successfully vote” (0–10 min; 10–20 min; 20–40 min; 40–60 min; 60–80 min; 80–100 min; 100–120 min; 120–150 min; 150–180 min; 3–6 h; over 6 h).

**Travel time.** “Please indicate below how many minutes do you anticipate it will take to travel to your designated polling place in the 2020 election?” (*under 5 min; 5–10 min; 10–20 min; 20–30 min; 30–40 min; 40–50 min; 50–60 min; over an hour*).

**Intended mode of travel to the polls.** “Please indicate below if you were to vote in person in the 2020 election, how would you get to the polling place?” (*by car; walking; by public transit; other*).

**Vehicle ownership.** “Please indicate below do you own a motorized vehicle (car, truck, van, or motorcycle)?” [*yes; no, but I usually have access to a vehicle (for example, via a family member); no*].

**Voting knowledge.** Participants rated how confident they are that they know how to vote in person or by mail based on their intended mode of voting (7-point scale; 1 = *Not at all confident*, to 7 = *very confident*). They also rated whether they knew where their polling place was (*yes; probably; no*). These measures were not included in the narrow friction model.

**Past voting.** Participants reported whether they had voted before in a US election, whether they had voted before using their intended mode of voting, and whether they had voted before while living at their current address (*yes; no; unsure*). These measures were not included in the narrow friction model.

**Perceived Turnout Drivers.** Participants reported their perceptions of the importance of beliefs and friction in driving turnout. Participants completed three types of importance measures: (a) a *free response measure*, in which participants listed important drivers of turnout and then rated each driver’s importance; (b) a *composite measure*, in which participants rated the importance of specific types of beliefs and frictions on a 7-point scale; and (c) a *single-item measure*, in which participants rated the overall importance of beliefs and friction. Participants completed each importance measure twice: once with regard to their own turnout (self-rating) and once with regard to the turnout of “people in the United States” in general (other rating).

**Free response importance measures.** In a series of free response items, participants listed up to five factors that would impact whether [“you”/“people in the United States”] would vote or not. We then showed them the factors they had just listed and asked them to rate how important each factor was on a 10-point scale. All responses were coded by two research assistants (unaware of our hypotheses) as mentioning friction, attitudes, both, or neither.

**Composite importance measures.** Participants indicated the importance of specific beliefs (e.g., “How strongly [I/they] identify as Republican or Democrat,” “Believing voting is [my/one’s] duty as an American”) and specific forms of friction (e.g., “How long it takes to get to the nearest polling place,” “Weather on election day”) in influencing their own and others’ turnout (7-point scale; 1 = *not at all important*, 7 = *extremely important*). We then averaged these responses by category (friction or beliefs) to create composite importance indices for beliefs and for friction.

**Single-item importance measures.** Participants rated the overall importance of beliefs (“How strong [your/their] political attitudes are and how important [you/they] think it is to vote”) and friction (“How easy it is for [you/them] to vote”) in driving turnout, using slider scales ranging from 0% (Not at all important) to 100% (Extremely important). In the other-rating single-item measure,

participants were incentivized for accuracy. Specifically, they were told that their estimates would be compared against the actual study's results, with accurate estimates (within  $\pm 5\%$  of the actual results) awarding participants with a chance of winning one of 10 prizes worth \$10 each.

#### Voting-Related Items.

**Intended mode of voting.** "If you do vote in the 2020 election, how will you vote?" [In person; By mail/absentee; Request ballot by mail and drop it off (at drop box or polling place) on election day; Request ballot by mail and drop it off (at drop box or polling place) before election day; Don't know/not sure].

**Perceived likelihood of voting.** Perceived likelihood of voting was measured using a 7-point scale (1 = definitely not going to vote, 7 = definitely going to vote), as well as percentage point scale items (0 to 100%, in 10% intervals) for likelihood of voting as well as for likelihood of not voting.

#### Political Variables.

**Friction-related policy support.** Participants were asked "To what extent do you support or oppose the following policies?" for six policies: automatic voter registration, adding polling places, hiring more poll workers, reducing polling places that serve relatively few people, exact name match, and exact signature match (last three items were reverse-coded; see full text in OSF repository materials).

**Partisanship.** "Do you think of yourself as a ..." (7-point scale; 1 = Strong Democrat, 7 = Strong Republican; "Not sure").

**Ideology.** "In general, how would you describe your own political viewpoint?" (7-point scale; 1 = Very liberal, 7 = Very conservative; "Not sure").

**Concerns about voter fraud and voting access.** Participants rated their agreement with the following statements: "Barriers that make it difficult to vote are a serious problem in the United States right now" and "Voter fraud is a serious problem in the United States right now" (7-point scale; 1 = strongly disagree, 7 = strongly agree).

**Planning.** A randomly selected 50% of participants read the following prompt and responded with "yes" or "no": "Would you like to go through a 5-10 minute process to help you plan your vote and think in advance about overcoming

obstacles to voting? Note that participation in this process is voluntary - it is completely up to you. You will not be paid for time spent on this process."

Those who agreed were shown the link to a vote-planning website as part of their debrief screen but were instructed not to click on it, as doing so might prevent their survey completion from being recorded.

**Demographics.** Participants reported demographics, including their gender, age, race/ethnicity, highest level of education attained, and household income.

#### Post-election Survey.

**Turnout.** Which of the following statements best describes your vote in the recent (2020) election? (I did not vote in the election; I tried to vote but did not or was not able to; I voted in the election).

#### Election-Day Friction. Work conflict (measured postelection).

"Regardless of whether you voted or not, would you have needed to ask for time off from work to vote?" (yes; no; other).

#### Childcare conflict (measured postelection).

"Regardless of whether you voted or not, would you have needed childcare to vote (that is, to ask someone who doesn't live in your household to watch over your children)?" (yes; no; other).

**Turnout Determinant Predictions.** Participants then completed the same free response importance measure of perceived drivers of turnout from part 1, but in the past tense (e.g., "In your view, what was a major influence on whether you voted or not?"). As in the pre-election survey, participants completed this both for themselves and for "people in the United States" in general.

**Data Availability.** All data used in this article is accessible via OSF (<https://osf.io/4rk2cl>) (21).

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