

Why Don't People Vote in U.S. Primary Elections? Assessing Theoretical Explanations for Reduced Participation*

Alan S. Gerber, Gregory A. Huber, Daniel R. Biggers, David J. Hendry

Abstract

Primary election participation in the United States is consistently lower than general election turnout. Despite this well-documented voting gap, our knowledge is limited as to the individual-level factors that explain why some general election voters do not show up for primary contests. We provide important insights into this question, using a novel new survey to examine three theoretical perspectives on participation never before empirically applied to primary races. Compared to general elections, we find that for U.S. House primary elections sizable segments of the electorate consider the stakes lower and the costs of voting greater, feel less social pressure to turn out and hold exclusionary beliefs about who should participate, and are more willing to defer to those who know and care more about the contests. Multivariate analysis reveals that these attitudes explain validated primary election participation. These findings point to new directions for future research.

Citation:

Gerber, Alan S., Gregory A. Huber, Daniel R. Biggers, and David J. Hendry. 2017. "Why Don't People Vote in Primaries? Assessing Theoretical Explanations for Reduced Participation in Primary Elections." *Electoral Studies* 45: 119-129. doi: 10.1016/j.electstud.2016.11.003.

*This research was supported by a grant from the William and Flora Hewlett Foundation. The Hewlett Foundation bears no responsibility for the study design, findings, interpretations, or other aspects of the research. All aspects of the research are solely the responsibility of the authors.

Primary elections are the most common means by which U.S. political parties select their general election candidates. In fact, in many congressional districts where the distribution of voter preferences is such that one party is virtually guaranteed to win the general election, participation in the primary serves as the only viable means by which citizens can influence who will represent the district. Yet despite the crucial nature of these contests, participation rates are often exceedingly low in absolute terms and in comparison to general elections (e.g., Gans 2010).

Although this “turnout gap” between primary and general election participation is well documented, our knowledge is relatively limited about why it exists. Scholars have examined the correlates of primary participation including, for example, investigations of the demographic and socioeconomic characteristics and policy preferences of primary voters, as well as the extent to which this group is representative of general election participants, nonvoters, or the population as a whole (Bartels 1988; Geer 1988; Kaufmann et al. 2003; Norrander 1989). Other work evaluates how the structure of the primary (open or closed), the nature of the contest (primary or caucus), and/or the characteristics of the campaign (e.g., competitiveness or spending) affect who participates (Jewitt and Treul 2014; Karpowitz and Pope Forthcoming; Kaufmann et al. 2003; Kenney and Rice 1985; Norrander 1986). Some previous research also addresses differences in the costs of participation between primary and general elections with respect to classical calculus-of-voting models (Aldrich 1980; Jewitt 2014), while others empirically investigate the individual- and structural-level causes of participation in primaries among those who participate in general elections (Geer 1988; Norrander 1986). But given that their individual-level focus is on general notions of civic duty, political interest, and the types of demographic and ideological

correlates used in general voting models, what remains unclear are the ways in which voters' *beliefs* about their own participation differ depending on the type of election in question.

In this paper, we leverage a novel new survey to gain insight into the reasons why voters who otherwise participate might sit out primary contests. In doing so, we test three distinct theories that have been used to explain turnout but, to our knowledge, have never been empirically evaluated in the context of primary elections: the calculus of voting in these contests, the social norms associated with participation, and the willingness to defer to those who know more or care more about the races. First, we posit that, in comparison to general elections for seats in the House of Representatives, U.S. citizens view the stakes as lower and the participatory costs as higher in primary elections for those same seats, which reduces the inclination to turn out. Second, we assert that the social norms associated with voting are weaker in primary contests, meaning that it is more socially acceptable to abstain. Additionally, many voters maintain restrictive expectations about who should participate in intra-party contests that they do not hold for inter-party contests. Third, given the greater informational burdens associated with primary contests, some voters may be more willing to defer to others who they think know or care more about the race. Together, these theories may explain at least part of the drop-off in participation from general to primary elections.

Our survey of a nationally representative sample of validated general election voters, some of whom also participate in primary contests, reveals evidence consistent with each of these hypotheses. In asking about House primary, House general, and presidential general elections, we find that voters do in fact appear to make distinct assessments of the costs and benefits of voting, the social norms associated with voting, and the acceptability of deference to other more knowledgeable or more qualified citizens across these different types of contests.

Further, these differential assessments based on contest type predict validated primary election turnout. While the effect sizes are modest, measures tapping each theoretical perspective exert a statistically significant influence in predicting which general election voters will also participate in House primaries. Controlling for all of these explanations together, as well as other individual-level and contextual factors, we continue to find support for our hypotheses, particularly those related to the costs of voting and social norms of primary engagement. The results provide some of the first evidence for how variation in beliefs across election types shapes citizen participation in primary elections in the United States.

1. Voting in Primary Elections

Here we present three theoretical accounts of the turnout gap between primary and general elections and describe how they are consistent with observed participatory patterns.

1.1 Stakes are Low, Voting is Hard

At least one potential explanation for depressed primary participation rates is rooted in the standard calculus-of-voting model (Downs 1957; Riker and Ordeshook 1968), which emphasizes the relative costs and benefits of electoral participation. This model is often formalized as concluding that an individual votes if $p*b > c$, where p is the probability that one's vote is pivotal in deciding the election, b represents the stakes of the election (the benefits to the voter if her preferred candidate, rather than another candidate, wins), and c is the net cost of voting (including becoming informed, turning out, complying with norms, etc.). In this account, participation in primaries may be lower because the stakes of primary elections are smaller (i.e., b is relatively small) and the choice itself is more difficult because of the limited information available to voters (i.e., c is relatively large; Aldrich 1980; Neimi 1976), a problem that is exacerbated by the lack of party labels as decision-making shortcuts. Meanwhile, because

primary electorates are often smaller and the field of viable candidates larger, the chance that one's vote may decide an election is also larger (i.e., p is larger), which may increase the potential returns to voting.

Other research expands the standard calculus-of-voting model to consider how campaign environments and social norms can be incorporated as variation in the cost of voting. Campaigns may reduce the cost of voting by providing information. Similarly, social norms about participation may impose a cost to not voting that can offset the cost of becoming informed and making it to the polls (Aldrich 1993; Blais 2000; Riker and Ordeshook 1968). The influence of both of these factors may differ in primaries relative to general elections because of more limited campaigning in primaries and (perhaps) a lower sense of civic duty associated with participation in intra-party contests.

Despite the widespread use of the basic calculus-of-voting model to explain turnout (Blais 2000), however, we know of no work that systematically tests the idea that voters perceive differences in its relevant theoretical constructs for primary elections relative to other election types. Doing so requires direct measurement of citizens' beliefs. While some studies have examined common factors that explain voting across different election types (e.g., Sigelman et al. 1985), including specific comparisons of primaries to general elections (Geer 1988; Kaufmann et al. 2003; Norrander 1989; Nownes 1992), and others have focused on the correlation between demographics, standard measures of interest and engagement, campaign activity, and reported campaign contact to explain primary voting (Bartels 1988; Geer 1988; Jewitt and Treul 2014; Kaufmann et al. 2003; Kenney and Rice 1985; Norrander 1986, 1989), none directly measure citizen perceptions of the costs and benefits.

1.2 Social Norms about Participation are Weaker and Exclusionary

A second potential explanation for low U.S. primary turnout relates to the strength and nature of social norms about participating in these contests. Extensive work in social psychology demonstrates the powerful influence that social norms exert on behavior (Cialdini and Goldstein 2004), and prior work shows that increasing the threat of social disapprobation for failing to participate can increase participation (Gerber et al. 2008). In observational analyses, voting is more frequent among those who view it as a civic duty, report greater social pressure to participate, or whose perceived social consequences of not voting are larger (Blais 2000; Huckfeldt and Sprague 1995). Experimentally, outreach that emphasizes the descriptive norm of voting raises participation rates (Gerber and Rogers 2009), while increasing the visibility of the decision to vote or abstain has been found to be among the most effective types of messages for increasing participation (Gerber et al. 2008, 2010; Mann 2010). Despite this rich literature, however, we know little about how potential voters perceive the specific social consequences of not voting in *primary* elections.

Further, the U.S. case is characterized by wide variation in the partisan composition of districts, and even the meaning that the party labels themselves take on, in primary election campaigns. It is possible that the partisan structure of primaries in many states (temporarily setting aside the question of differences in formal rules across states) creates expectations about appropriate behavior. Partisanship is a social and psychological orientation as well as an ideological one (Greene 2002). As such, eligible voters may perceive partisan and more general social pressure to participate in certain intra-party contests and abstain from others. For example, individuals may believe that they should not vote in a particular party's primary election if they do not strongly identify with that party or if they might not vote for the party's eventual nominee

in the general election. Normative social pressure may also discourage individuals from crossing party lines, or lead those who do not identify with either the Democratic or Republican Parties to believe that primaries ought to be reserved for party members, even when formal rules do not prohibit their participation. To date, however, no studies have empirically examined the potentially unique influence of primary-specific social norms.

1.3 Citizens Defer in Primaries to those Who Know and Care More

A final explanation we advance relates to the potential for citizens to be more willing to abstain in intra-party contests out of deference, either to those who are better informed or who care more about the issues at stake. In the absence of party cues, potential voters may need to acquire substantially more information to make decisions in primary elections than in many general elections. It is therefore plausible that citizens would be aware of their relative lack of information and consequently be willing to defer to their more-knowledgeable fellow citizens, particularly if they believe that those who vote will make decisions with which they would likely agree.

Previous work is consistent with these contentions. Supporting the idea that people understand they often lack an informational basis for democratic decision-making, Gerber et al. (2011) show that Americans are less likely to punish or reward elected officials for their policy positions when they understand that their own views are not well-informed. Similarly, experiments in laboratory settings suggest that non-participation by the less informed may be an equilibrium strategy when citizens know there are more informed individuals available to make decisions on their behalf (Battaglini et al. 2008, 2010; Feddersen and Pesendorfer 1996, 1999). In the often information-poor context of local elections, ANONYMOUS find that citizens who believe those who vote share their interests are less likely to vote in local municipal elections,

even when their preferences in fact diverge from those who participate. More generally, McMurray (2010, 2013) presents a model of rational abstention in which low-information voters are more likely to abstain if the pool of expected voters is sufficiently well-informed.

In addition to deferring to those who know more, citizens may also defer to those who appear to care more about the stakes in an election. There are a variety of reasons for such deference. For one, in a U.S. primary election, where the objective is to choose a party's nominee, some may reasonably believe that they will support their party's nominee, whoever is chosen, while those who feel strongly about the outcome may be less willing to do so. As such, deferring to those who care more may be a way to ensure that the eventual nominee is a candidate who will perform better in the later inter-party contest. Similarly, potential voters may perceive that those citizens who care a great deal about the primary election are more invested in understanding which of the potential candidates is superior. Therefore, potential voters may believe that those who care more make appropriate substitutes for those who care less, simply by the standard of decision-making by an informed citizenry. Finally, apart from strategic motivations for deference to those who care more, citizens may also be motivated by a simple desire to accommodate those who appear to care a great deal about an outcome that is not of particular concern to them. To our knowledge, however, no previous work has attempted to measure citizen beliefs about the appropriateness of deference in elections.

2. Data

Despite the potential value of these theories in explaining the gap in turnout between general and primary elections, none have been assessed empirically, likely because of a dearth of adequate data. Testing hypotheses derived from these theories requires specific information about how citizens understand the costs, benefits, and norms of primary election participation

(compared to participation in general elections), as well as the extent to which they are likely to defer in these contests. To our knowledge, however, no prior research collects these measures. We therefore undertook a novel survey of citizens' attitudes toward participation in primary elections, asking respondents questions pertaining to constructs from each of the theories presented above with regard to primary (intra-party) elections to the U.S. House of Representatives, House general (inter-party) elections, and presidential general elections. As such, we can determine not only whether citizens possess attitudes consistent with the theories and whether those attitudes explain voting, but also how they vary across election types.

The survey we designed was fielded by YouGov/Polimetrix from June 27 to July 3, 2014. In keeping with our desire to compare primary versus general election participation, we drew a nationally representative sample of registered voters who voted in either the 2010 or 2012 general elections (as determined by matches to voter files). In addition, the sample was stratified to ensure that 25% were individuals who voted in either or both of the 2010 and 2012 congressional primaries, with all vote histories appended to the survey responses. Our sample thus consists of general election voters, some of whom also participate in House primary elections. The final dataset contains 2,000 completed surveys. Exact question wording appears in the supplemental appendix. All analyses use analytic weights.¹

3. Results

We first examine the extent to which American general election voters have attitudes toward primary election participation consistent with each of the three explanations posited

¹ 6,058 individuals were invited to take the survey, 2,723 started it, and 2,334 completed it.

AAPOR response rate 5 is 38.5% and response rate 6 is 43.5% (American Association for Public Opinion Research 2011).

above. Although the differences are modest, in comparison to general presidential and House contests, a sizable percentage of our sample does in fact view primary elections as lower-stake races involving a more difficult choice. Similarly, vis-à-vis general elections, many respondents feel weaker social pressure to turn out in primary contests, maintain exclusionary views about participation in these contests, and display a greater propensity to defer to more knowledgeable and interested citizens. Further, we find that even after controlling for many common demographic and contextual covariates strongly correlated with the propensity to vote, many of these beliefs predict turnout. As such, it is not simply the case that segments of the electorate possess viewpoints consistent with our theories, but also that these viewpoints correlate with participation in primary contests.

3.1 The Stakes of Primary Voting are Low and Voting is Hard

Three variables appear in the standard calculus-of-voting model: a citizen's perceptions of the probability her vote will decide an election, the importance of the election, and the costs of voting. How do perceptions of these quantities vary across election types? To address this question, we asked respondents to answer parallel questions measuring each concept for the three types of elections. For the likelihood of casting a pivotal ballot, we asked respondents how much they agreed that "My vote matters a great deal for who wins."² Importance was measured by asking whether "The outcome of the election has a big effect on my life." Finally, the cost of voting was proxied by asking whether "It is easy for me to figure out which candidate to vote for."

² Response options were strongly agree, somewhat agree, somewhat disagree, or strongly disagree. Unless otherwise specified, all questions gauging agreement with a statement have these response options.

For each election type, the proportion of respondents who agreed (somewhat or strongly) with each item is displayed in Table 1. Because the items capture aspects of variation in pivotality across high- and low-turnout contests (i.e., possibly tapping knowledge of an objective reality), as well as subjective perceptions of the cognitive ease of distinguishing between candidates, we present the proportion agreeing with a statement for each election type both for the full sample as well as for different levels level of political knowledge.³ Per the first row, it appears that respondents, on average, perceive that their votes have the smallest effect on who wins presidential elections and the largest on House general elections, with primaries surprisingly somewhere in between (ex ante, we expected the general perception to be that voters

³ We thank an anonymous reviewer for the suggestion of breaking down responses by levels of political knowledge. Political knowledge was assessed via a five-question battery asking respondents whether they know (1) the length of a Senate term, (2) what office John Roberts holds, (3) what office Janet Yellen holds, (4) what Medicare is, and (5) that foreign aid is the smallest part of the federal budget among several given choices. Respondents who answered all five knowledge questions make up the knowledge sample reported in Tables 1-4. The low-knowledge sample reported in Tables 1-4 consists of respondents in the knowledge sample that correctly answered 0, 1, or 2 of these questions. The high-knowledge sample reported in Tables 1-4 consists of respondents in the knowledge sample that correctly answered 3, 4, or 5 of these questions. The low-knowledge and high-knowledge samples make up about 37% and 63% of the knowledge sample, respectively. In addition, we constructed an alternative knowledge measure that coded missing responses as incorrect responses. Tables SA 1-SA4 of the supplemental appendix report parallel analyses to that in Tables 1-4 of the main text using this alternative knowledge measure.

are most pivotal in primary elections, in which races are generally decided by a smaller number of ballots). Further, this pattern holds for the knowledge subsamples as well. In terms of importance, the pattern follows conventional assessments about the stakes of each type of election: Respondents perceive presidential elections as personally more important than House elections, with both perceived as more important than House primaries ($p=.052$ for the high-knowledge subsample comparison of House general and House primary elections; $p<.001$ for all other comparisons). If one thinks of the benefit of voting as roughly perceived importance weighted by perceived pivotality, the benefits of voting in primaries appear to be lower than for other types of contests. Focusing on averages for the full sample, this suggests that House elections have an average benefit score of about .60, presidential elections about .59, and House primary elections about .54.

[Insert Table 1 about Here]

The third row of Table 1 illustrates that accounting for perceptions of costs makes voting in primaries even less attractive, while perhaps offsetting the benefits of voting in general elections for House seats. On average, for the full sample, respondents are least likely to agree that it is easy to figure out which candidate to vote for in a primary election (75%), with these percentages five and seven points larger for House general and presidential general elections, respectively ($p<.001$). Similar differences in magnitude obtain for the various knowledge subsamples ($p<.01$ for all comparisons of House primaries to either House general or presidential general elections). Overall then, in considering a simple calculus-of-voting model, primary elections both offer the least apparent benefit to voting and the greatest perceptions of the costs of doing so.

3.2 Social Norms about Participation Are Weaker and Exclusionary for Primary Elections

We next examine whether the pattern outlined above is offset or reinforced by beliefs about the norms associated with primary participation. In order to do so empirically, we first ask whether citizens perceive particular social consequences for not staying informed or not voting in primary elections that differ from these consequences for other types of elections.

To measure norms, we asked respondents whether their friends and family would be disappointed if they either did not vote or did not stay informed, and whether they would feel bad if they did not vote. Table 2 displays the proportion of respondents agreeing (strongly or somewhat) with each statement.⁴ Again, these figures are further broken down by levels of political knowledge. Beginning with row 1 and examining the full sample, only about 28% of respondents agree that if they do not vote in a primary election, their friends and family will be disappointed. However, the figures for the House general and presidential elections are 33% and 38%, respectively, representing proportional increases of 16% and 34% ($p < .001$). Similar relative increases in agreement for House general and presidential general over House primary elections occur for the various knowledge subsamples as well ($p < .01$ for all comparisons). Thus,

⁴The three social norms items presented in Table 2 included a “Don’t know” response category. The results presented here code these responses as non-missing and therefore respondents who said that they do not know the answers to these questions are part of the denominator in the calculation of the proportion agreeing. In Table SA 16 of the supplemental appendix, we present parallel analyses in which we code “Don’t know” responses as missing. Across the board, coding “Don’t know” as missing leads to similar substantive conclusions as those presented in the main text.

social sanctions for not voting appear to be larger for House general elections than for primaries, and even larger still for presidential elections.

[Insert Table 2 about Here]

By contrast, the second row of Table 2 shows that the penalty for not remaining informed appears to differ little across election types, whether examining the full sample or looking within the various knowledge subsamples. Focusing on the full sample, on average only about 32% of respondents agree that not being informed would have serious social consequences. As it requires much more information to choose candidates in primaries (within a party) than general elections (across parties), the similarity of the minimal pressures to remain informed likely depresses primary turnout more than equalizing it across elections. Finally, the third row shows that overall personal assessments of guilt—a measure of internalized norms—appear to follow the pattern for expected social disapprobation of abstention. In the full sample, 59% of respondents agree that they feel bad if they do not vote in primaries, with the figures 12% and 25% higher for House general and presidential elections, respectively ($p < .001$), with similar patterns of relative magnitude occurring for the various knowledge subsamples.⁵

⁵ It may be the case that party identifiers perceive partisan-specific social pressure. To address this, we examined whether perceptions of the social consequences of not voting differ for individuals of different party orientations, using both the item about friends and family being disappointed as well as a direct measure that asks whether individuals should feel obligated to participate in their party's primary. In both cases, as strength of partisanship increases, expressed norms about voting and expectations about the social consequences of not doing so are larger, and these effects are substantively meaningful (see Table SA5 in the supplemental appendix).

There is also evidence that citizens hold surprisingly pervasive views that primaries should be restricted to strong adherents of each party. As shown in Table 3, while these views do not attract majority support, about a third of respondents in the full sample agree that only those who (1) will surely vote for a party's candidate in the general election or (2) strongly identify with a party should participate in that party's primary contest. Further, an interesting pattern emerges in which low-knowledge respondents show greater agreement with these restrictions, while high-knowledge respondents show less agreement. To the extent that respondents interpreted these statements to be about formal rules for participation rather than a subjective perception about appropriate behavior, this knowledge gap comports with our ex ante intuition.

Moving on to the remaining items about exclusionary norms, in the full sample 23% agree that those who do not identify with a major party should not participate in primaries, and fully 44% agree that partisans should not cross party lines when the law allows it. For these items, low-knowledge respondents exhibit less agreement than high-knowledge respondents. The wording of the final item about crossing party lines in particular places respondents' agreement with the action in question more firmly in the realm of subjective perceptions than formal rules, consistent with the idea that less knowledgeable individuals have a higher tolerance for participation in party activities by non-party members. Ex ante, we did not have a strong directional expectation with respect to these items, but they are compatible with the idea that high-knowledge individuals are more likely than low-knowledge individuals to be concerned with issues such as party loyalty.⁶

⁶ As we show in Table SA6 in the supplemental appendix, the views exhibited in Table 3 are held not only by strong partisans, but also by those with weak or no attachments. As expected,

[Insert Table 3 about Here]

Cumulatively, these data reveal new insights into the nature of social expectations for participation in primaries. General norms about the importance of voting and staying informed are weaker for primaries than for general elections. This weaker social pressure is compounded by the fact that norms about who ought to participate in primaries are somewhat exclusive.

3.3 Citizens Defer In Primaries to Those Who Know and Care More

We also examine the possibility that citizens choose not to vote out of deference, either to those who are better informed or who care a great deal more about the issues at stake. In one general question, on a scale from “Everyone should vote in every election” (1) to “The people who know the most should vote” (7), 25% of respondents provided responses closer to the latter position. In a similarly structured question, 18% of respondents agreed more with the statement that “The people who care the most should vote” (7) over “Everyone should vote in every election” (1). Out of concern that individuals may be unwilling to state directly that they would forgo voting if others cared more about some outcome, we also asked whether, in general, the

across the four measures, support for exclusionary norms tends to increase with strength of partisanship. But even about a quarter of those who do not identify with the Democratic or Republican Parties also believe that only people committed to a party’s eventual nominee, or who strongly identify with a party, should vote in its primary. Further, and unsurprisingly, some exclusionary attitudes are correlated with state primary rules. Compared to those living in states with no formal restrictions on who can participate in either party’s primary, other respondents are more likely to agree that non-identifiers should not vote in primaries and that it is wrong to vote in the primary of another party ($p < .05$ and $p < .1$, one-tailed, respectively). No similar pattern emerges for the items from Table 2.

respondent would defer to others if those others cared more about a decision. On a four-point scale from “Very likely” to “Not at all likely,” 48% of respondents indicated it was very or somewhat likely that they would do so. These distributions provide initial evidence that at least some portion of the population would be willing to abstain if they thought others knew more or cared more deeply about an electoral outcome.

Are these conditions more likely to be met in intra-party primary elections? We first examine the extent to which individuals believe that they have sufficient information to decide for whom to vote in the different types of contests. The first two rows of Table 4 show the proportion of respondents by election type and knowledge levels who agree (strongly or somewhat) with the statements that they (1) are well qualified to choose which candidate to vote for and (2) know a great deal about each candidate. Column (1) shows that while the vast majority of respondents from the full sample (84%) agree they are qualified to choose candidates in a primary election, only 74% agree that they know a great deal about each candidate. By contrast, citizens are more likely to agree that they are well qualified to pick candidates, and that they know a great deal about them, in congressional and presidential general elections, a pattern similar to the item in Table 1 about the ease of figuring out which candidate to choose ($p < .001$). Further, the responses of the various knowledge subsamples reveal that respondents in the high-knowledge group are more likely to consider themselves to be well qualified to choose which candidate to vote for and to say that they know a great deal about each candidate than respondents in the low-knowledge group for all three types of elections considered ($p < .001$).

[Insert Table 4 about Here]

These data show that, on average, individuals perceive themselves as less informed about, and less concerned with the outcome of, primary elections than either congressional or

presidential general elections. However, knowing and caring less may not lead individuals to abstain if they perceive that those who do vote have different ideological and policy preferences. As the last row of the table shows, respondents are also more likely to agree with the statement, “If I don't vote, the people who will vote in my place will do a good job of picking the right candidate for me,” for primaries than for the other two types of elections. In the full sample, about 25% of respondents agree that other voters can substitute for them in the primary, compared to only 20% in House general elections and 13% in presidential general elections ($p < .001$), providing preliminary evidence that people might be relatively more willing to defer to others in primary elections. This same pattern is also evident for each of the knowledge subsamples ($p = .099$ for comparison of House primary elections to House general elections for the high-knowledge group; $p < .001$ for all other comparisons).

3.4 Do Individual-Level Perceptions Explain Variation in Primary Voting?

Above we presented evidence about individual-level and election-type variation in perceptions of (1) the costs and benefits of voting, (2) social expectations about voting in primaries, and (3) the value of deferring to others. Does variation in these perceptions explain variation in who votes? To assess the relative importance of these different theoretical perspectives, we take advantage of the fact that we also have a validated measure of primary participation that identifies the survey participants who voted in either the 2010 or 2012 primary elections for their particular congressional districts. Again, everyone in the sample was a registered voter who voted in either the 2010 or 2012 November general elections, and our analysis is therefore useful for understanding the factors associated with some general election voters also participating in primary elections.

To assess the relationship between voting and these survey measures, we estimate ordinary least squares (OLS) regression models that predict primary voting. The dependent variable is dichotomous, coded as 1 if a respondent voted in either or both primaries and 0 if they did not.⁷ Because these are observational data we cannot ascertain whether the observed relationships are causal (i.e., we do not randomly assign beliefs), but the analyses nonetheless provide initial evidence about the association between beliefs and real variation in primary participation. To assess the robustness of each finding, we also estimate models that control for common covariates of primary participation (education, age, gender, race, political interest, political knowledge, strength of partisanship, and income).⁸

Initially, we present models in Table 5 testing the calculus-of-voting model. Given our strong priors about the directionality of these relationships, we report one-tailed p-values for our statistical tests of the theories outlined above. In columns (1) and (2) we include measures of agreement with whether one's vote matters for the outcome, that who wins the election is important, and that it is easy to figure out how to vote in the primary election. In our earlier tabulations, we displayed the proportion of respondents who agreed with each statement. Here, we utilize the full range of responses to create a scale from 0 (strongly disagree) to 1 (strongly agree) for each statement. Per the standard calculus-of-voting equation, greater agreement with

⁷ These regressions are therefore linear probability models, which makes direct interpretation of estimates easier. For each OLS model presented in this section, we also estimated a parallel logistic regression model with similar results. See supplemental appendix Tables SA9 and SA11.

⁸ Estimates for these controls are suppressed in the main text and presented in Tables SA7 and SA10 of the supplemental appendix.

each statement is expected to be associated with greater turnout.⁹ The results in column (1) provide some support for this perspective. Individuals who strongly rather than somewhat agree that their vote matters a great deal are 5 percentage points ($p < .01$) more likely to vote, while the same shift in agreement with the ease of figuring out who to vote for is correlated with an increase in primary voting of about 6 points ($p < .01$). Believing the primary election is important has a small and statistically insignificant effect on voting. In the column (2) specification where we include a large set of covariates that are correlated both with primary participation and holding these views, the magnitudes of the estimates are reduced by more than 50%.¹⁰

⁹ We also interacted the measure that one's vote matters for the outcome with perceptions of election importance. In the standard calculus-of-voting perspective, agreeing with both statements should be associated with a greater likelihood of voting. However, the estimated interactive effect is negatively signed and statistically insignificant. We note that the two interacted measures are highly correlated: 60% of respondents score the same on both components.

¹⁰ For each set of covariates of theoretical interest in Table 5, we present a version without demographic controls (columns 1, 3, 5, and 7) and a version with demographic controls (columns 2, 4, 6, and 8). Because we have missing information for some of the control covariates for some respondents, the sample sizes for the models in Table 5 vary depending on whether the control variables are included. To explore the extent to which the variation in results across models is due to differences in effects as opposed to differences in sample composition, in Table SA20 of the supplemental appendix, we reestimate the models in columns 1, 3, 5, and 7 of Table 5 using only the subsample with non-missing data for the control covariates. Substantive results are very

[Insert Table 5 About Here]

Next, we assess the importance of norms in columns (3) and (4) using two distinct measures. The first is an additive Social Norms Scale composed of the three items shown in the first column of Table 2, rescaled to range from 0 to 1, with higher values indicating greater agreement.¹¹ The second is an additive Exclusionary Norms Scale composed of the 4 items

similar. The only differences between models using the full sample and models using the reduced sample are that the interactions between exclusionary norms and strong partisanship, leaning partisanship, and being a political independent differ with respect to statistical significance. Directions of all estimated effects are identical.

¹¹ For the norms items, we also included a “don’t know” response and coded it at the midpoint. Specifically, the items in Table 2 were coded on a five-point scale from “strongly disagree” to “strongly agree,” with the “don’t know” responses making up the middle category. This is implicitly an assumption that respondents who state that they do not know are neither agreeing nor disagreeing. The Social Norms Scale has a standard deviation of .28 and reliability coefficient (alpha) of .78. Inter-item correlations range from .42 to .79 ($p < .01$). For all of the regression models using the Social Norms Scale in Tables 5 and 6, we present parallel analyses in Tables SA18 and SA19, respectively, of the supplemental appendix using a version of the scale in which we code “don’t know” responses as missing. This has little substantive impact on the results for the models in Table 5. For the models in Table 6, coding the “don’t know” responses as missing leads to generally the same substantive results, with two exceptions. First, responses to the question of whether the outcome of the election has a big effect on the respondent’s life goes from generally being marginally non-statistically significant to statistically

shown in Table 3, again rescaled to range from 0 to 1, with higher values indicating greater agreement.¹² According to the theoretical expectations, higher scores on the Social Norms Scale should be positively associated with voting in primaries, while higher scores on the Exclusionary Norms Scale should be correlated with lower participation rates. This is exactly what we find. The estimates in the column (4) specification with controls included indicate that the magnitudes of these effects are also substantial. A one-standard deviation increase in the Social Norms Scale is associated with a 3-point increase in rates of voting, while a similar increase in the Exclusionary Norms Scale is associated with a 3-point decrease in the rate of voting (both $p < .01$).

One notable feature of the items included in the Exclusionary Norms Scale is that some people who support those views may nonetheless meet their own self-expressed conditions for participation. For example, if one believes that only people who will support a party's candidate in the general election should vote in that party's primary election, strong partisans are unlikely to find themselves conflicted between their own party's nominee and that of the other party. By

significant in predicting primary turnout. Second, the Social Norms Scale itself goes from generally being statistically significant to marginally non-statistically significant.

¹² The Exclusionary Norms Scale has a standard deviation of .35 and reliability coefficient (alpha) of .75. Inter-item correlations range from .39 to .50 ($p < .01$). Principal components factor analysis of the items in Tables 2 and 3 support the idea that they tap distinct attitude constructs. The analysis generates two distinct factors (eigenvalues of 2.564 and 1.837 for the first two factors and less than 1 for all additional factors), with the Table 2 items loading onto one factor and the Table 3 items loading onto another (using varimax rotation). Factor loadings and eigenvalues are presented in Table SA17 of the supplemental appendix.

contrast, those who are less tightly tied to their party but believe they should support it in the general election if they vote in the primary may feel they cannot commit to doing so. For this reason, in columns (5) and (6) we interact the Exclusionary Norms Scale with indicators for different levels of partisan attachment. We expect exclusionary norms to be associated with lower turnout for those who have weaker partisan attachments.

The results in columns (5) and (6) somewhat support this expectation. Focusing on the column (6) results with controls, for all groups (strong partisans, weak partisans, partisan leaners, and pure independents) exclusionary norms are associated with reduced participation, but the point estimates are largest for weak partisans (-.221, $p < .01$) and independents (-.127, $p < .1$). These point estimates are largely statistically indistinguishable from one another, but they nonetheless show that the group that is empirically most likely to deviate from its party (weak partisans, as opposed to strong partisans and partisan leaners) has turnout behavior most correlated with holding exclusionary norms.¹³

Finally, we consider whether variation in the willingness to defer to others is associated with differences in primary participation. Deference is measured as agreement with the statement, “If I don’t vote, the people who will vote in my place will do a good job of picking the right candidate for me.” Examining columns (7) and (8), the point estimate for this measure’s impact on primary voting is negatively signed (though not achieving conventional levels of statistical significance in the column (8) specification with controls; $p = .163$), indicating that the

¹³ We also investigated the extent to which the relationship between adherence to exclusionary norms and participation varies by party identification. OLS regressions using exclusionary norms to predict primary voting, estimated separately for Democratic and Republican respondents, are presented in supplemental appendix Table SA8.

willingness to defer makes abstention less of a personal concern. The column (7) specification suggests that moving from strongly disagreeing to strongly agreeing that others will do a good job of picking a candidate is associated with a 12-point decrease in primary participation.

The models presented in Table 5 provide some support for each theoretical perspective addressed in the paper. However, we have not yet assessed the strength of each perspective in explaining primary participation when measures relevant for each are included simultaneously. Thus, in Table 6 we estimate models that incorporate all of the measures relevant for each theoretical perspective, and the results generally support the same theoretical accounts. In column (1), five of the six independent variables are statistically significant ($p < .05$). Supporting the basic calculus-of-voting logic, believing one's vote matters for the outcome and that it is easy to figure out for whom to vote are both associated with greater turnout. The effects of both norm measures are also substantively large and statistically significant. Furthermore, the measure of willingness to defer to others is associated with a statistically significant reduction in turnout. When we include all of the demographic and attitudinal covariates in the column (2) specification, three of the measures—ease of choosing candidates and the two norms scales—remain statistically significant ($p < .1$). Those who strongly agree rather than somewhat agree that it is easy to figure out which candidate to choose are roughly three points more likely to vote in a primary. A one-standard deviation increase in the social norms scale raises the propensity to vote by just over two points, while an identical movement on the exclusionary norms scales reduces the likelihood of participation by about three points.

[Insert Table 6 About Here]

A remaining concern may be that we have not yet accounted for important differences in the election contexts that respondents experience, given the sometimes wide variation across

U.S. states with respect to electoral rules, and across congressional districts with respect to electoral competitiveness. Therefore, as a final step in our analysis we include as additional control variables measures of the openness of a respondent's state's major-party primaries, primary campaign spending, and primary divisiveness or fractionalization. For primary openness, we code Primary Rules as 0 if the major-party primaries in a respondent's state are open to anyone (even other party members), 0.25 if one of the Democratic or Republican parties holds an open primary and the other allows in-party members and non-affiliated registrants, 0.5 if both major-party primaries are open only to in-party members and non-affiliated registrants, 0.75 if one of the Democratic or Republican parties holds a closed primary and the other allows in-party members and non-affiliated registrants, and 1 if both major parties hold closed primaries. Subjects living in the so-called "top-two" or "jungle" primary states of California, Louisiana, and Washington, in which candidates from all parties compete against one another in an open primary contest and the top two vote getters, regardless of party, move on to the general election, are coded as 0.¹⁴

¹⁴ While we prefer this scale of openness for simplicity, we note that prior work has shown that different forms of closed and open primary systems may lead to qualitatively different results depending on the outcome in question (e.g., Calcagno and Westley 2008; Gerber and Morton 1998). In supplemental appendix Table SA 12 we present OLS specifications using dichotomous indicators for whether a primary system is open, semi-open, or top-two/jungle (with closed systems as the excluded category) as alternative measures of primary openness. Results are substantively very similar between these specifications and the models presented in Table 6.

For spending, which proxies the level of campaign activity in the primary, we include logged campaign spending in the 2014 Republican and Democratic primaries.¹⁵ We also include an indicator for the 22 subjects in our sample who could not be matched to their congressional districts.¹⁶

Column (3) adds these spending variables. Inclusiveness of the state's primaries significantly affects turnout, with participation about seven points higher in completely open than in completely closed systems ($p < .01$). Democratic (but not Republican) spending is also associated with primary turnout ($p < .05$). Importantly, however, controlling for these factors does not reduce the effects of perceived ease of selecting a candidate and social and exclusionary norms on participation. Furthermore, the assessed value of one's vote to the outcome is now a positive and statistically significant predictor as well ($p < .1$). Column (4) adds to this specification state-level fixed effects that control for primary rules and all other unmeasured state-level factors and the results remain robust, though the effects of the Social and Exclusionary Norms Scales are slightly smaller, while that of the extent to which one's vote matters is substantially greater.

Finally, columns (5) and (6) use within-party fractionalization (e.g., Canon 1978; Hernsson and Gimpel 1995) from the 2014 congressional primary elections as an alternative to spending to capture primary competitiveness. Formally, the measure of fractionalization takes

¹⁵ Formally, we use $\log(1 + \text{amount spent})$ such that primaries with no expenditures are assigned a value of zero. Results are similar if we use 2012 campaign spending (available in the replication materials).

¹⁶ In general, these contextual variables do not explain the theoretical variables we focus on here (see supplemental appendix Tables SA13 and SA14).

the form of $Fractionalization_{j,k} = 1 - \frac{\sum_i p_i^2}{N_{j,k}}$ where $N_{j,k}$ is the number of candidates competing in party j 's primary election in district k and p_i is the proportion of the vote received by candidate i .¹⁷ This measure is therefore calculated for each party from each district and ranges from 0 to 1, with values closer to 0 indicating less within-party fractionalization, and values closer to 1 indicating more within-party fractionalization. If a candidate received 100% of the vote in a particular district's party primary, that party's fractionalization score would be 0. If a party did not hold a primary in a given district, the fractionalization score for that party in that district was coded as missing. Therefore, the column (5) and (6) specifications in Table 6 are limited to respondents from districts that held primary elections for both the Democratic and Republican Parties.^{18,19}

¹⁷Data were gathered from the U.S. Federal Election Commission (Federal Election Commission 2015); publication available at <http://www.fec.gov/pubrec/fe2014/federalections2014.pdf>, last accessed 19 June 2016. Candidates who ran unopposed without holding a vote were assumed to have received 100% of the vote. Democratic and Republican partisans who did not appear on the regular ballot but ran write-in campaigns with fundraising activities that were required to be reported to the Federal Election Commission were considered primary candidates.

¹⁸In other words, the models in columns (5) and (6) of Table 6 eliminate respondents from the least competitive districts in the general election by excluding those districts in which one or the other of the major parties does not even field primary candidates.

¹⁹Because we have missing information for some of the contextual measures for some subjects, the sample sizes of the models presented in Table 6 differ depending on which measures are included. To explore the extent to which the variation in results between the specifications in

Although the estimates for the effects of within-party fractionalization do not themselves achieve conventional levels of statistical significance, controlling for them does lead to some differences in the estimated effects of the theoretical variables of interest. Specifically, the ease of figuring out the candidate for whom to vote (for the models with and without state fixed effects) and adherence to social norms about voting (for the model with state fixed effects) are no longer statistically significant predictors of turnout. The magnitudes of the estimated effects of the theoretical variables of interest are similar whether we use the fractionalization measures or the campaign spending measures to capture competitiveness, with the use of the fractionalization measure leading to slightly larger estimates for the question of whether the outcome of the election has a big effect on the respondent's life, and slightly smaller estimates for the question of whether it is easy to figure out the candidate for whom to vote. In the end, the overall picture is that even after accounting for a number of individual- and contextual-level covariates strongly associated with participation, general support remains for our theoretical predictions.²⁰

columns 1 and 2 and those in columns 3-6 is due to differences in effects as opposed to differences in sample composition, in Table SA21 of the supplemental appendix, we reestimate the models in columns 1 and 2 of Table 6 using only the subsample with non-missing data for the contextual covariates. Substantive results in terms of direction and statistical significance are identical with the exception that the effect of how easy the respondent finds it to figure out which candidate to vote for becomes non-statistically significant when restricted to the party fractionalization subsample.

²⁰ These results are robust to estimating 2012 primary turnout only (as opposed to pooling 2010 and 2012 primary voters) and using 2012 campaign spending information, as well as controlling

4. Conclusion

Despite the importance of primary elections in shaping who gets elected and, by extension, who is represented, what policies are implemented, and the degree of polarization among elected representatives, turnout is substantially lower in primary elections than in general elections in the United States. This drop-off has long been identified by scholars, pundits, and practitioners alike as a phenomenon with immense political consequences, yet we know surprisingly little about the individual-level factors that explain the participatory gap between these two types of contests. In this article, we provided new insights into this question by advancing three theories of turnout and measuring important constructs from these theories across electoral contexts. Using a novel survey of general-election voters, we show that voters view candidate selection as more difficult, and their decisions as less meaningful, both of which alter the calculus of voting in a way that makes voting in primary contests less likely than in other types of elections. In addition, individuals appear to feel less social pressure to participate in these contests, and often believe that turnout should be limited to those more invested in the party and more committed to voting for it in the general election. Finally, larger percentages of voters express a willingness to defer to those who know and care more than them in primary than in general elections. These results provide, to our knowledge, the first direct evidence that these individual-level considerations are relevant when voters decide whether to participate in intra-party primary elections.

The effects noted are relatively modest and only explain a portion of the difference in turnout across races. Indeed, although all of the noted relationships appear in a bivariate setting,

for whether the congressional and presidential primary elections were held on the same day (see supplemental appendix Table SA 15).

some become non-significant predictors of turnout when controlling for certain demographic and contextual factors. In particular deference to those who care more about the election outcome stands out as a predictor whose effect disappears when individual- and contextual-level controls are considered. In addition, our analyses suffer from some key limitations. The first, and most important, is our inability to draw causal conclusions about these relationships due to the observational nature of our data. Because we do not experimentally manipulate attitudes, we are unable to rule out the possibility that the findings derive from our failure to include some omitted variable(s) that instead explain the observed relationship. Second, because of our focus on contextual factors relevant for the primary election, we have not considered how the anticipated or historical general election context in particular districts might impact primary turnout. Any correlation between general election factors that explain primary turnout and the measures we included would lead to bias in our estimates. Third, to the extent that we can draw firm conclusions, they are limited to a subset of the electorate; namely, recent general election voters, some of who participated in at least one of two recent primaries. While we believe that this is the most relevant group for addressing our research question (why general election voters do or do not show up for primary contests), we cannot speak to the prevalence of these beliefs across segments of the electorate less inclined to participate, or the extent to which any such opinions differentially affect their decisions to turn out in primary and general elections.

These limitations point to fruitful avenues for future work to explore. With regard to the first, scholars should test the theories posited here experimentally, either via surveys or in the field. For example, one could envision exposing individuals to messages that attempt to alter the perceived costs and benefits or social norms of voting in primary elections, measuring whether such a change occurs, and then seeing if this attitudinal change affects reported interest in voting

or other participatory indicators. Similar efforts could be undertaken in the field, with outcomes measured using changes in observed political behavior. To address the second limitation, future work could attempt to predict primary turnout using measures of past general-election competitiveness, or measures constructed by directly asking survey respondents for their beliefs or assessments about how competitive a future general election contest will be. A lack of inter-party competition in past elections or a perceived lack of competitiveness in the future general election that follows a particular primary contest could reasonably be expected to influence the decision to turn out in a primary. Regarding the third limitation, future work could examine different types of voters to determine whether the demonstrated relationships hold for other, less engaged members of the electorate, who likely participate even less in primary contests than the population we study here. Additionally, while we suspect that these attitudinal differences at least partially explain the turnout gap between general elections and other, less salient, contests (e.g., local elections), future work should directly test this argument.

These concerns aside, our work appears to be the first to directly link our theories to the decisions made by American voters about whether to turn out in primary contests. In doing so, we have presented new data that provides some of the first empirical evidence about the individual-level beliefs that correlate with the gap in voting between primary and general elections. These findings provide important insight into the efforts to understand the consequences of low turnout in primary elections and the barriers faced in efforts to increase participation and improve the representativeness of the electorate.

References

- Aldrich, John H. 1980. *Before the Convention*. Chicago: University of Chicago Press.
- Aldrich, John H. 1993. "Rational Choice and Turnout." *American Journal of Political Science* 37(1): 246-278.
- American Association for Public Opinion Research. 2011. "Standard Definitions." Available from http://www.aapor.org/AM/Template.cfm?Section=Standard_Definitions2&Template=/CM/ContentDisplay.cfm&ContentID=3156.
- Bartels, Larry M. 1988. *Presidential Primaries and the Dynamics of Public Choice*. Princeton: Princeton University Press.
- Battaglini, Marco, Rebecca B. Morton, and Thomas R Palfrey. 2008. "Information Aggregation and Strategic Abstention in Large Laboratory Elections." *American Economic Review: Papers and Proceedings* 98(2): 194-200.
- Battaglini, Marco, Rebecca B. Morton, and Thomas R Palfrey. 2010. "The Swing Voter's Curse in the Laboratory." *Review of Economic Studies* 77(1): 61-89.
- Blais, Andre. 2000. *To Vote or Not to Vote*. Pittsburgh: University of Pittsburgh Press.
- Calcagno, Peter T., and Christopher Westley. 2008. "An Institutional Analysis of Voter Turnout: The Role of Primary Type and the Expressive and Instrumental Voting Hypotheses." *Constitutional Political Economy* 19: 94-110.
- Canon, Bradley C. 1978. "Factionalism in the South: A Test of Theory and a Revisitation of V.O. Key." *American Journal of Political Science* 22(4): 833-848.
- Cialdini, Robert B., and Noah J. Goldstein. 2004. "Social Influence: Compliance and Conformity." *Annual Review of Psychology* 55: 591-621.
- Downs, Anthony. 1957. *An Economic Theory of Democracy*. New York: Harper and Row.

- Feddersen, Timothy J., and Wolfgang Pesendorfer. 1996. "The Swing Voter's Curse." *American Economic Review* 86(3): 408-424.
- Federal Election Commission. 2015. "Federal Elections 2014: Election Results for the U.S. Senate and the U.S. House of Representatives." Available at <http://www.fec.gov/pubrec/fe2014/federalections2014.pdf>.
- Feddersen, Timothy J., and Wolfgang Pesendorfer. 1999. "Abstention in Elections with Asymmetric Information and Diverse Preferences." *American Political Science Review* 93(2), 381-398.
- Gans, Curtis. 2010. "Final Primary Report: 2010 Elections." *Center for the Study of the American Electorate*. Available at: <http://www.american.edu/loader.cfm?csModule=security/getfile&pageid=2407498>
- Geer, John G. 1988. "Assessing the Representativeness of Electorates in Presidential Campaigns." *American Journal of Political Science* 32(4): 929-945.
- Gerber, Alan S., and Todd Rogers. 2009. "Descriptive Norms and Motivation to Vote: Everybody's Voting and so Should You." *Journal of Politics* 71(1): 178-191.
- Gerber, Alan S., Donald P. Green, and Christopher W. Larimer. 2008. "Social Pressure and Voter Turnout: Evidence from a Large-Scale Field Experiment." *American Political Science Review* 102(1): 33-48.
- Gerber, Alan S., Donald P. Green, and Christopher W. Larimer. 2010. "An Experiment Testing the Relative Effectiveness of Encouraging Voter Participation by Appealing to Feelings of Pride or Shame." *Political Behavior* 32(3): 409-422.
- Gerber, Alan S., Gregory A. Huber, David Doherty, and Conor M. Dowling. 2011. "Citizens' Policy Confidence and Electoral Punishment: A Neglected Dimension of Electoral Accountability." *Journal of Politics* 73(4): 1206-1224.
- Gerber, Elisabeth R., and Rebecca B. Morton. 1998. "Primary Election Systems and Representation."

- Journal of Law, Economics, & Organization* 14(2): 304-324.
- Greene, Steven. 2002. "The Social-Psychological Measurement of Partisanship." *Political Behavior* 24(3): 171-197.
- Hernsso, Paul S., and James G. Gimpel. 1995. "District Conditions and Primary Divisiveness in Congressional Elections." *Political Research Quarterly* 48(1): 117—134.
- Huckfeldt, Robert, and John Sprague. 1995. *Citizens, Politics, and Social Communication*. New York: Cambridge University Press.
- Jewitt, Caitlin E. 2014. "Packed Primaries and Empty Caucuses: Voter Turnout in Presidential Nominations." *Public Choice* 160(3): 295-312.
- Jewitt, Caitlin E., and Sarah A. Treul. 2014. "Competitive Primaries and Party Division in Congressional Elections." *Electoral Studies* 35: 140-149.
- Karpowitz, Christopher F., and Jeremy C. Pope. Forthcoming. "Who Caucuses? An Experimental Approach to Institutional Design and Electoral Participation." *British Journal of Political Science*.
- Kaufmann, Karen M., James G. Gimpel, and Adam H. Hoffman. 2003. "A Promise Fulfilled? Open Primaries and Representation." *Journal of Politics* 65(2): 457-476.
- Kenney, Patrick J., and Tom W. Rice. 1985. "Voter Turnout in Presidential Primaries: A Cross-Sectional Examination." *Political Behavior* 7(1): 101-112.
- Mann, Christopher B. 2010. "Is there Backlash to Social Pressure? A Large-Scale Field Experiment on Voter Mobilization." *Political Behavior* 32(3): 387-407.
- McMurray, Joseph C. 2010. "Empirical Evidence of Strategic Voter Abstention." *Working Paper*.
- McMurray, Joseph C. 2013. "Aggregating Information by Voting: The Wisdom of the Experts versus the Wisdom of the Masses." *Review of Economic Studies* 80(1): 277-312.
- Niemi, Richard G. 1976. "Costs of Voting and Nonvoting." *Public Choice* 27: 115-119.

- Norrander, Barbara. 1986. "Selective Participation: Presidential Primary Voters as a Subset of General Election Voters." *American Politics Research* 14(1-2): 35-53.
- Norrander, Barbara. 1989. "Ideological Representativeness of Presidential Primary Voters." *American Journal of Political Science* 33(3): 570-587.
- Nownes, Anthony J. 1992. "Primaries, General Elections, and Voter Turnout: A Multinomial Logit Model of the Decision to Vote." *American Politics Quarterly* 20(2): 205-226.
- Riker, William H., and Peter C. Ordeshook. 1968. "A Theory of the Calculus of Voting." *American Political Science Review* 62(1): 25-43.
- Sigelman, Lee, Philip W. Roeder, Malcolm E. Jewell, and Michael A. Baer. 1985. "Voting and Nonvoting: A Multi-Election Perspective." *American Journal of Political Science* 29(4): 749-765.

Table 1: Calculus of Voting Attitudes

Survey Item	House Primary				House General				Presidential General			
	Full Sample	Knowledge Sample	Low Knowledge	High Knowledge	Full Sample	Knowledge Sample	Low Knowledge	High Knowledge	Full Sample	Knowledge Sample	Low Knowledge	High Knowledge
My vote matters a great deal for who wins	0.739 [.439]	0.726 [.446]	0.715 [.452]	0.733 [.443]	0.764 [.425]	0.758 [.429]	0.734 [.442]	0.772 [.420]	0.706 [.456]	0.697 [.460]	0.698 [.460]	0.697 [.460]
The outcome of the election has a big effect on my life	0.731 [.444]	0.717 [.451]	0.747 [.435]	0.699 [.459]	0.785 [.411]	0.787 [.410]	0.774 [.419]	0.795 [.404]	0.835 [.371]	0.833 [.373]	0.819 [.386]	0.842 [.365]
Easy to figure out which candidate to vote for	0.754 [.431]	0.750 [.433]	0.661 [.474]	0.805 [.397]	0.800 [.400]	0.805 [.397]	0.704 [.457]	0.866 [.341]	0.818 [.386]	0.825 [.380]	0.758 [.429]	0.867 [.340]
Observations	1981	1631	603	1028	1981	1631	603	1028	1981	1631	603	1028

Note: Cell entries are proportions of respondents agreeing with statement (strongly or somewhat), using survey weights, with standard deviations in brackets. Knowledge sample is the subset of respondents that answered all of a five-question knowledge battery. Low knowledge sample made 0, 1, or 2 correct responses; high knowledge sample made 3 or more correct responses.

Table 2: Social Norms Attitudes

Survey Item	House Primary				House General				Presidential General			
	Full Sample	Knowledge Sample	Low Knowledge	High Knowledge	Full Sample	Knowledge Sample	Low Knowledge	High Knowledge	Full Sample	Knowledge Sample	Low Knowledge	High Knowledge
If I do not vote my friends and family are disappointed in me	0.282 [.450]	0.280 [.449]	0.272 [.446]	0.284 [.451]	0.327 [.469]	0.335 [.472]	0.314 [.465]	0.348 [.477]	0.379 [.485]	0.379 [.485]	0.361 [.481]	0.390 [.488]
If I do not stay informed my friends and family are disappointed in me	0.312 [.463]	0.310 [.463]	0.299 [.458]	0.317 [.466]	0.328 [.469]	0.333 [.471]	0.303 [.460]	0.351 [.477]	0.306 [.461]	0.315 [.464]	0.264 [.441]	0.347 [.476]
I feel bad the next day if for some reason I cannot vote	0.586 [.493]	0.570 [.495]	0.518 [.500]	0.602 [.490]	0.655 [.475]	0.649 [.478]	0.566 [.496]	0.699 [.459]	0.730 [.444]	0.728 [.445]	0.649 [.478]	0.777 [.417]
Observations	1993	1643	609	1034	1993	1643	609	1034	1993	1643	609	1034

Note: Cell entries are proportions of respondents agreeing with statement (strongly or somewhat), using survey weights, with standard deviations in brackets. Knowledge sample is the subset of respondents that answered all of a five-question knowledge battery. Low knowledge sample made 0, 1, or 2 correct responses; high knowledge sample made 3 or more correct responses.

Table 3: Exclusionary Norms Attitudes

Survey Item	Proportion Agreeing			
	Full Sample	Knowledge Sample	Low Knowledge	High Knowledge
Only those committed to the party's candidate should vote in its primary	0.328 [.469]	0.317 [.466]	0.389 [.488]	0.274 [.446]
Only those who strongly identify with a party should vote in its primary	0.316 [.465]	0.313 [.464]	0.360 [.480]	0.284 [.451]
Independents should not vote in party primaries	0.225 [.417]	0.217 [.412]	0.208 [.406]	0.222 [.416]
It would be wrong to vote in the other party's primary	0.437 [.496]	0.429 [.495]	0.394 [.489]	0.450 [.498]
Observations	1997	1645	609	1036

Note: Cell entries are proportions of respondents agreeing with statement (strongly or somewhat), using survey weights, with standard deviations in brackets. Knowledge sample is the subset of respondents that answered all of a five-question knowledge battery. Low knowledge sample made 0, 1, or 2 correct responses; high knowledge sample made 3 or more correct responses.

Table 4: Deference Attitudes

Survey Item	House Primary				House General				Presidential General			
	Full Sample	Knowledge Sample	Low Knowledge	High Knowledge	Full Sample	Knowledge Sample	Low Knowledge	High Knowledge	Full Sample	Knowledge Sample	Low Knowledge	High Knowledge
I am well qualified to choose	0.839	0.842	0.770	0.887	0.870	0.870	0.772	0.930	0.946	0.952	0.917	0.973
which candidate to vote for	[.368]	[.365]	[.422]	[.317]	[.336]	[.336]	[.420]	[.255]	[.225]	[.214]	[.276]	[.162]
I know a great deal about	0.736	0.735	0.636	0.796	0.783	0.791	0.682	0.857	0.835	0.841	0.730	0.909
each candidate	[.441]	[.442]	[.482]	[.404]	[.412]	[.407]	[.466]	[.350]	[.371]	[.366]	[.445]	[.288]
If I don't vote, others will do a	0.249	0.250	0.300	0.220	0.202	0.196	0.274	0.149	0.132	0.129	0.197	0.088
good job of picking candidate	[.432]	[.433]	[.459]	[.415]	[.402]	[.397]	[.446]	[.356]	[.339]	[.335]	[.398]	[.283]
Observations	1979	1631	604	1027	1979	1631	604	1027	1979	1631	604	1027

Note: Cell entries are proportions of respondents agreeing with statement (strongly or somewhat), using survey weights, with standard deviations in brackets. Knowledge sample is the subset of respondents that answered all of a five-question knowledge battery. Low knowledge sample made 0, 1, or 2 correct responses; high knowledge sample made 3 or more correct responses.

Table 5: Correlates of Primary Election Participation Among General Election Voters

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
My vote matters a great deal	0.144 [0.054]***	0.040 [0.058]						
Outcome of election has big effect on my life	-0.031 [0.053]	0.072 [0.057]						
Easy to figure out which candidate to vote for	0.167 [0.044]***	0.067 [0.046]*						
Social Norms Scale			0.205 [0.041]***	0.124 [0.043]***	0.194 [0.041]***	0.127 [0.042]***		
Exclusionary Norms Scale			-0.119 [0.032]***	-0.085 [0.032]***				
Strong PID * Exclusionary Norms Scale					-0.119 [0.052]**	-0.016 [0.048]		
Weak PID * Exclusionary Norms Scale					-0.221 [0.060]***	-0.219 [0.068]***		
Leaner PID * Exclusionary Norms Scale					-0.068 [0.063]	-0.049 [0.060]		
Independent * Exclusionary Norms Scale					-0.127 [0.081]*	-0.163 [0.088]**		
Others will do a good job of picking candidate							-0.120 [0.040]***	-0.044 [0.045]
PID Weak Partisan (Yes = 1)		0.030 [0.033]		0.012 [0.032]	-0.026 [0.046]	0.079 [0.047]*		0.013 [0.032]
PID Partisan Leaner (Yes = 1)		-0.021 [0.031]		-0.034 [0.031]	-0.082 [0.043]*	-0.019 [0.041]		-0.036 [0.032]
PID Independent (Yes = 1)		0.007 [0.036]		-0.025 [0.035]	-0.091 [0.049]*	0.021 [0.049]		-0.021 [0.036]
Constant	0.056 [0.031]*	-0.112 [0.118]	0.193 [0.023]***	-0.035 [0.116]	0.241 [0.035]***	-0.068 [0.115]	0.285 [0.017]***	0.030 [0.117]
Controls	No	Yes	No	Yes	No	Yes	No	Yes
Observations	1,983	1,636	1,983	1,636	1,983	1,636	1,983	1,636
R ²	0.028	0.147	0.023	0.148	0.032	0.152	0.007	0.139

Note: Cell entries are OLS coefficient estimates with robust standard errors in brackets. Dependent variable is an indicator for whether respondent voted in either the 2010 or 2012 primary elections (Yes = 1). All analyses use survey weights. ***p<.01; **p<.05; *p<.1, one-sided tests for costs and benefits of voting, social and exclusionary norms, and deference variables.

Table 6: Correlates of Primary Election Participation Among General Election Voters, Additional Specifications

	(1)	(2)	(3)	(4)	(5)	(6)
My vote matters a great deal	0.130 [0.053]***	0.031 [0.057]	0.040 [0.056]	0.069 [0.051]*	0.045 [0.060]	0.081 [0.055]*
Outcome of election has big effect on my life	-0.063 [0.055]	0.048 [0.059]	0.049 [0.059]	0.054 [0.055]	0.065 [0.065]	0.072 [0.060]
Easy to figure out which candidate to vote for	0.160 [0.045]***	0.071 [0.047]*	0.065 [0.047]*	0.060 [0.046]*	0.048 [0.050]	0.042 [0.050]
Social Norms Scale	0.136 [0.048]***	0.084 [0.049]**	0.086 [0.049]**	0.059 [0.048]	0.088 [0.049]**	0.052 [0.048]
Exclusionary Norms Scale	-0.106 [0.034]***	-0.080 [0.034]***	-0.070 [0.033]**	-0.056 [0.033]**	-0.082 [0.035]**	-0.064 [0.034]***
Others will do a good job of picking candidate	-0.094 [0.042]**	-0.031 [0.046]	-0.033 [0.046]	-0.030 [0.043]	-0.022 [0.050]	-0.012 [0.046]
PID Weak Partisan (Yes = 1)		0.023 [0.032]	0.019 [0.032]	0.027 [0.029]	0.034 [0.035]	0.039 [0.033]
PID Partisan Leaner (Yes = 1)		-0.028 [0.032]	-0.034 [0.032]	-0.030 [0.030]	-0.035 [0.036]	-0.034 [0.033]
PID Independent (Yes = 1)		-0.007 [0.035]	-0.011 [0.035]	-0.010 [0.035]	-0.043 [0.036]	-0.044 [0.036]
Primary Rules (0-1, 0 = Open)			-0.071 [0.024]***		-0.062 [0.027]**	
Democratic Primary Spending (logged)			0.005 [0.002]**	0.002 [0.003]		
Republican Primary Spending (logged)			-0.002 [0.003]	-0.000 [0.003]		
Democratic Fractionalization Index (0 - 1)					0.039 [0.045]	0.070 [0.057]
Republican Fractionalization Index (0 - 1)					0.039 [0.041]	-0.043 [0.053]
Missing Congressional District Info			0.394 [0.112]***	0.348 [0.130]***	0.378 [0.109]***	0.336 [0.129]***
Constant	0.092 [0.034]***	-0.085 [0.121]	-0.065 [0.126]	0.075 [0.168]	-0.081 [0.128]	-0.198 [0.148]
State Fixed Effects?	No	No	No	Yes	No	Yes
Controls	No	Yes	Yes	Yes	Yes	Yes
Observations	1,983	1,636	1,632	1,632	1,363	1,363
R ²	0.047	0.153	0.167	0.237	0.183	0.256

Note: Cell entries are OLS coefficient estimates with robust standard errors in brackets. Dependent variable is an indicator for whether respondent voted in either the 2010 or 2012 primary elections (Yes = 1). All analyses use survey weights. ***p<.01; **p<.05; *p<.1, one-sided tests for costs and benefits of voting, social and exclusionary norms, and deference variables.

Supplemental Appendix for:

**Why Don't People Vote in U.S. Primaries? Assessing Theoretical Explanations
for Reduced Participation**

This Supplemental Appendix contains the following material:

Supplemental Appendix 1: Question Wording

Supplemental Appendix 2: Tables SA1-SA15

Table SA1: Calculus of Voting Attitudes, Alternative Knowledge Measure

Table SA2: Social Norms Attitudes, Alternative Knowledge Measure

Table SA3: Exclusionary Norms Attitudes, Alternative Knowledge Measure

Table SA4: Deference Attitudes, Alternative Knowledge Measure

Table SA5: Social Norms Attitudes by Party Identification

Table SA6: Exclusionary Norms Attitudes by Party Identification

Table SA7: Correlates of Primary Election Participation Among General Election Voters,
with Controls Displayed

Table SA8: Predicting Voting by Exclusionary Norms, Broken Down by Partisanship

Table SA9: Logistic Regression, Correlates of Primary Election Participation Among
General Election Voters

Table SA10: Correlates of Primary Election Participation Among General Election
Voters, Additional Specifications, with Controls Displayed

Table SA11: Logistic Regression, Correlates of Primary Election Participation Among
General Election Voters, Additional Specifications

Table SA12: Correlates of Primary Election Participation Among General Election
Voters, Additional Specifications, with Controls Displayed, Alternative Openness
Measure

Table SA13: Relationship Between Calculus of Voting, Norms, and Deference Attitudes
and Campaign Spending Variables

Table SA14: Relationship Between Calculus of Voting, Norms, and Deference Attitudes
and Party Fractionalization Variables

Table SA15: Correlates of 2012 Primary Election Participation Among General Election
Voters

Supplemental Appendix 1 – Question Wording

There are many elections in the United States, ranging from elections for local office to presidential elections. Additionally, there are primary elections, in which parties select their candidates for the general election, and general elections, in which candidates from the two main parties and certain others compete for office. We'd like to ask you your views about some of these different types of elections. Please tell us how much you agree with each of the following statements.

In a presidential election
In an election for the US House
In a primary election for the US House

I am well qualified to choose which candidate to vote for
My vote matters a great deal to who wins
The outcome of the election has a big effect on my life
If I don't vote, the people who will vote in my place will do a good job of picking the right candidate for me
I know a great deal about each candidate's policy positions, experience, and other qualities
It is easy for me to figure out which candidate to vote for

Strongly agree
Somewhat agree
Somewhat disagree
Strongly disagree

Primary elections are subject to different rules and procedures from general elections in the United States. Please tell us how much you agree with each of the following statements, or if you simply don't know.

I know where to go to cast my ballot in the congressional primary election
The line to vote will be longer in a congressional primary than in a typical general election

Strongly agree
Somewhat agree
Somewhat disagree
Strongly disagree
Don't know

Please tell us how much you agree with each of the following statements:

in a presidential election,
in a congressional election,
in a congressional primary election,

If I do not vote my family and friends are disappointed in me...
If I do not stay informed about what is going on my family and friends are disappointed in me...
I feel bad the next day if for some reason I cannot vote...

Strongly agree
Somewhat agree

Somewhat disagree
Strongly disagree
Don't know

Suppose you didn't vote in a presidential election. For each of the excuses below, what sort of reaction would you expect from your family and friends?

I didn't know enough about which candidate to vote for, so I stayed home

Suppose you didn't vote in an election for the US House. For each of the excuses below, what sort of reaction would you expect from your family and friends?

I didn't know enough about which candidate to vote for, so I stayed home

Suppose you didn't vote in a Primary Election for the US House. For each of the excuses below, what sort of reaction would you expect from your family and friends?

I didn't know enough about which candidate to vote for, so I stayed home

Very acceptable
Somewhat acceptable
Somewhat unacceptable
Very unacceptable

Setting aside the formal rules and procedures for primary elections, people have ideas about who ought to vote in primary elections. Please tell us how much you agree with each of the following statements, or if you simply don't know.

Only those who are committed to supporting the party's candidate in the general election should vote in that party's primary election.

Only those who strongly identify with a party should participate in its primary.

Independents should not vote in party primaries, even if they are legally eligible to do so.

Party members should feel obligated to vote in their party's primary.

Even if you are allowed to do so, it would be wrong to vote in the other party's primary.

Strongly agree
Somewhat agree
Somewhat disagree
Strongly disagree
Don't know

Some people think that everyone should vote in every election, while other people think that it is more important to let those who **care** the most about the outcome of an election choose the winning candidate. On a scale of 1 to 7, where 1 is everyone should vote in every election and 7 is the people who **care** most should vote, where would you place yourself?

1 – Everyone should vote in every election

7 – The people who **care** the most should vote

Some people think that everyone should vote in every election, while other people think that it is more important to let those who **know** the most about what is at stake choose the winning candidate. On a scale

of 1 to 7, where 1 is everyone should vote in every election and 7 is the people who **know** the most should vote, where would you place yourself?

1 – Everyone should vote in every election

7 – The people who **know** the most should vote

Suppose you were deciding on a course of action with someone, and you learned that they cared a great deal more than you did about what to do. How likely would you be to give in to them because they cared more than you did?

Not at all likely

Not very likely

Somewhat likely

Very likely

For each of the following elections, compared to you, how much do you think the people who vote **know** about which candidate ought to win?

Presidential election

House primary election

Know much less

Know somewhat less

Know about the same

Know somewhat more

Know much more

Supplemental Appendix 2 – Tables SA1-SA15

Table SA1: Calculus of Voting Attitudes, Alternative Knowledge Measure

Survey Item	House Primary			House General			Presidential General		
	Full Sample	Low Knowledge	High Knowledge	Full Sample	Low Knowledge	High Knowledge	Full Sample	Low Knowledge	High Knowledge
My vote matters a great deal for who wins	0.739 [.439]	0.734 [.442]	0.743 [.437]	0.764 [.425]	0.745 [.436]	0.779 [.415]	0.706 [.456]	0.714 [.452]	0.699 [.459]
The outcome of the election has a big effect on my life	0.731 [.444]	0.757 [.429]	0.710 [.454]	0.785 [.411]	0.769 [.422]	0.798 [.401]	0.835 [.371]	0.83 [.376]	0.840 [.367]
Easy to figure out which candidate to vote for	0.754 [.431]	0.684 [.465]	0.812 [.391]	0.800 [.400]	0.716 [.451]	0.869 [.338]	0.818 [.386]	0.759 [.428]	0.867 [.340]
Observations	1981	865	1116	1981	865	1116	1981	865	1116

Note: Cell entries are proportions of respondents agreeing with statement (strongly or somewhat), using survey weights, with standard deviations in brackets. Low knowledge sample made 0, 1, or 2 correct responses; high knowledge sample made 3 or more correct responses. No response coded as incorrect response.

Table SA2: Social Norms Attitudes, Alternative Knowledge Measure

Survey Item	House Primary			House General			Presidential General		
	Full Sample	Low Knowledge	High Knowledge	Full Sample	Low Knowledge	High Knowledge	Full Sample	Low Knowledge	High Knowledge
If I do not vote my friends and family are disappointed in me	0.282 [.450]	0.280 [.449]	0.283 [.451]	0.327 [.469]	0.303 [.460]	0.347 [.476]	0.379 [.485]	0.371 [.483]	0.385 [.487]
If I do not stay informed my friends family are disappointed in me	0.312 [.463]	0.302 [.460]	0.32 [.467]	0.328 [.469]	0.301 [.459]	0.349 [.477]	0.306 [.461]	0.257 [.437]	0.346 [.476]
I feel bad the next day if for some reason I cannot vote	0.586 [.493]	0.552 [.498]	0.614 [.487]	0.655 [.475]	0.599 [.490]	0.701 [.458]	0.730 [.444]	0.675 [.469]	0.774 [.418]
Observations	1993	870	1123	1993	870	1123	1993	870	1123

Note: Cell entries are proportions of respondents agreeing with statement (strongly or somewhat), using survey weights, with standard deviations in brackets. Low knowledge sample made 0, 1, or 2 correct responses; high knowledge sample made 3 or more correct responses. No response coded as incorrect response.

Table SA3: Exclusionary Norms Attitudes, Alternative Knowledge Measure

Survey Item	Proportion Agreeing		
	Full Sample	Low Knowledge	High Knowledge
Only those committed to the party's candidate should vote in its primary	0.328 [.469]	0.383 [.487]	0.282 [.450]
Only those who strongly identify with a party should vote in its primary	0.316 [.465]	0.345 [.476]	0.293 [.456]
Independents should not vote in party primaries	0.225 [.417]	0.221 [.415]	0.228 [.420]
It would be wrong to vote in the other party's primary	0.437 [.496]	0.411 [.492]	0.458 [.499]
Observations	1997	872	1125

Note: Cell entries are proportions of respondents agreeing with statement (strongly or somewhat), using survey weights, with standard deviations in brackets. Low knowledge sample made 0, 1, or 2 correct responses; high knowledge sample made 3 or more correct responses. No response coded as incorrect response.

Table SA4: Deference Attitudes, Alternative Knowledge Measure

Survey Item	House Primary			House General			Presidential General		
	Full Sample	Low Knowledge	High Knowledge	Full Sample	Low Knowledge	High Knowledge	Full Sample	Low Knowledge	High Knowledge
I am well qualified to choose which candidate to vote for	0.839 [.368]	0.776 [.417]	0.889 [.314]	0.870 [.336]	0.794 [.405]	0.932 [.252]	0.946 [.225]	0.913 [.282]	0.973 [.162]
I know a great deal about each candidate	0.736 [.441]	0.658 [.474]	0.799 [.401]	0.783 [.412]	0.688 [.464]	0.860 [.347]	0.835 [.371]	0.744 [.437]	0.909 [.288]
If I don't vote, others will do a good job of picking candidate	0.249 [.432]	0.294 [.456]	0.212 [.409]	0.202 [.402]	0.265 [.442]	0.151 [.358]	0.132 [.339]	0.191 [.394]	0.084 [.278]
Observations	1979	864	1115	1979	864	1115	1979	864	1115

Note: Cell entries are proportions of respondents agreeing with statement (strongly or somewhat), using survey weights, with standard deviations in brackets. Knowledge sample is the subset of respondents that answered all of a five-question knowledge battery. Low knowledge sample made 0, 1, or 2 correct responses; high knowledge sample made 3 or more correct responses.

Table SA5: Social Norms Attitudes by Party Identification

Survey Item	Proportion Agreeing						
	Strong Democrat	Not Very Strong Democrat	Lean Democrat	Independent	Lean Republican	Not Very Strong Republican	Strong Republican
House Primary - If I don't vote, my friends and family will be disappointed	0.328 [.470]	0.246 [.432]	0.203 [.403]	0.226 [.419]	0.307 [.463]	0.290 [.455]	0.325 [.469]
Party members should feel obligated to vote in their party's primary	0.682 [.466]	0.596 [.492]	0.565 [.497]	0.462 [.499]	0.660 [.475]	0.672 [.471]	0.816 [.389]
Observations	526	252	220	307	218	190	280

Note: Cell entries are proportions of respondents agreeing with statement (strongly or somewhat), using survey weights, with standard deviations in brackets.

Table SA6: Exclusionary Norms Attitudes by Party Identification

Survey Item	Proportion Agreeing						
	Strong Democrat	Not Very Strong Democrat	Lean Democrat	Independent	Lean Republican	Not Very Strong Republican	Strong Republican
Only those committed to a party's candidate should vote in its primary	0.350 [.477]	0.289 [.454]	0.207 [.406]	0.260 [.439]	0.378 [.486]	0.354 [.479]	0.425 [.495]
Only those who strongly identify with a party should vote in its primary	0.349 [.477]	0.252 [.435]	0.246 [.432]	0.246 [.431]	0.386 [.488]	0.318 [.467]	0.388 [.488]
Independents should not vote in party primaries	0.287 [.453]	0.213 [.411]	0.097 [.297]	0.126 [.333]	0.195 [.397]	0.257 [.438]	0.335 [.473]
It would be wrong to vote in the other party's primary	0.421 [.494]	0.367 [.483]	0.294 [.457]	0.356 [.480]	0.535 [.500]	0.531 [.500]	0.568 [.496]
Observations	529	252	220	307	219	190	280

Note: Cell entries are proportions of respondents agreeing with statement (strongly or somewhat), using survey weights, with standard deviations in brackets.

Table SA7: Correlates of Primary Election Participation Among General Election Voters, with Controls Displayed

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
My vote matters a great deal	0.144 [0.054]***	0.040 [0.058]						
Outcome of election has big effect on my life	-0.031 [0.053]	0.072 [0.057]						
Easy to figure out which candidate to vote for	0.167 [0.044]***	0.067 [0.046]*						
Social Norms Scale			0.205 [0.041]***	0.124 [0.043]***	0.194 [0.041]***	0.127 [0.042]***		
Exclusionary Norms Scale			-0.119 [0.032]***	-0.085 [0.032]***				
Strong PID * Exclusionary Norms Scale					-0.119 [0.052]**	-0.016 [0.048]		
Weak PID * Exclusionary Norms Scale					-0.221 [0.060]***	-0.219 [0.068]***		
Leaner PID * Exclusionary Norms Scale					-0.068 [0.063]	-0.049 [0.060]		
Independent * Exclusionary Norms Scale					-0.127 [0.081]*	-0.163 [0.088]**		
Others will do a good job of picking candidate							-0.120 [0.040]***	-0.044 [0.045]
Number of Correct Knowledge Items		0.010 [0.009]		0.007 [0.010]		0.008 [0.010]		0.007 [0.010]
High School Education (Yes = 1)		0.085 [0.029]***		0.069 [0.030]**		0.067 [0.030]**		0.074 [0.030]**
4-Year College Education (Yes = 1)		0.177 [0.035]***		0.163 [0.036]***		0.162 [0.036]***		0.169 [0.036]***
Post-Graduate Education (Yes = 1)		0.227 [0.041]***		0.207 [0.041]***		0.209 [0.041]***		0.209 [0.041]***
Age		-0.002 [0.004]		0.001 [0.004]		0.001 [0.004]		0.001 [0.005]
Age ²		0.009 [0.004]*		0.007 [0.004]		0.007 [0.004]		0.008 [0.005]*
Female (Yes = 1)		-0.068 [0.025]***		-0.066 [0.026]**		-0.066 [0.026]**		-0.067 [0.026]***
Non-White (Yes = 1)		0.015 [0.035]		0.024 [0.035]		0.025 [0.034]		0.023 [0.035]
Political Interest = Some (Yes = 1)		-0.076 [0.030]**		-0.093 [0.028]***		-0.094 [0.027]***		-0.100 [0.029]***
Political Interest < Some (Yes = 1)		-0.020 [0.036]		-0.040 [0.036]		-0.039 [0.036]		-0.053 [0.036]
PID Weak Partisan (Yes = 1)		0.030 [0.033]		0.012 [0.032]	-0.026 [0.046]	0.079 [0.047]*		0.013 [0.032]
PID Partisan Leaner (Yes = 1)		-0.021 [0.031]		-0.034 [0.031]	-0.082 [0.043]*	-0.019 [0.041]		-0.036 [0.032]
PID Independent (Yes = 1)		0.007 [0.036]		-0.025 [0.035]	-0.091 [0.049]*	0.021 [0.049]		-0.021 [0.036]
Income Tercile = 1		-0.012 [0.034]		-0.014 [0.034]		-0.014 [0.034]		-0.018 [0.034]
Income Tercile = 3		0.037 [0.040]		0.035 [0.040]		0.037 [0.040]		0.033 [0.040]
Income Tercile = 4		-0.011 [0.033]		-0.016 [0.033]		-0.013 [0.033]		-0.014 [0.032]
Income Tercile = 5		-0.033 [0.054]		-0.033 [0.054]		-0.033 [0.055]		-0.034 [0.055]
Income Refused		0.066 [0.060]		0.064 [0.059]		0.067 [0.060]		0.062 [0.060]
Constant	0.056 [0.031]*	-0.112 [0.118]	0.193 [0.023]***	-0.035 [0.116]	0.241 [0.035]***	-0.068 [0.115]	0.285 [0.017]***	0.030 [0.117]
Observations	1,983	1,636	1,983	1,636	1,983	1,636	1,983	1,636
R ²	0.028	0.147	0.023	0.148	0.032	0.152	0.007	0.139

Note: Cell entries are OLS coefficient estimates with robust standard errors in brackets. Dependent variable is an indicator for whether respondent voted in either the 2010 or 2012 primary elections (Yes = 1). All analyses use survey weights. ***p<.01; **p<.05; *p<.1, one-sided tests for costs and benefits of voting, social and exclusionary norms, and deference variables.

Table SA8: Predicting Voting by Exclusionary Norms, Broken Down by Partisanship

	Dems.	Reps.	Dems.	Reps.	Dems.	Reps.	Dems.	Reps.
Exclusionary Norms Scale	-0.154 [0.037]***	-0.081 [0.060]*	-0.091 [0.042]**	-0.075 [0.059]	-0.176 [0.052]***	-0.015 [0.103]	-0.057 [0.052]	-0.010 [0.095]
PID Weak Partisan (Yes = 1)			0.025 [0.046]	-0.042 [0.048]	-0.022 [0.056]	-0.096 [0.083]	0.070 [0.064]	0.016 [0.072]
PID Partisan Leaner (Yes = 1)			-0.109 [0.032]***	-0.048 [0.051]	-0.156 [0.043]***	-0.041 [0.082]	-0.109 [0.041]***	-0.015 [0.074]
Weak Partisan * Exclusive Primary Norms (0 - 1)					-0.058 [0.093]	-0.146 [0.139]	-0.172 [0.111]*	-0.149 [0.126]
Leaning Partisan*Exclusive Primary Norms (0-1)					0.080 [0.078]	-0.126 [0.143]	0.02 [0.088]	-0.076 [0.135]
Number of Correct Knowledge Items			0.001 [0.012]	0.031 [0.018]*			0.002 [0.012]	0.030 [0.018]*
High School Education (Yes = 1)			0.052 [0.043]	0.095 [0.054]*			0.051 [0.043]	0.092 [0.054]*
4-Year College Education (Yes = 1)			0.132 [0.049]***	0.195 [0.060]***			0.131 [0.048]***	0.192 [0.061]***
Post-Graduate Education (Yes = 1)			0.228 [0.060]***	0.187 [0.074]**			0.232 [0.059]***	0.187 [0.074]**
Age			0.000 [0.006]	0.005 [0.007]			0.000 [0.006]	0.004 [0.007]
Age ²			0.007 [0.006]	0.004 [0.007]			0.006 [0.006]	0.004 [0.007]
Female (Yes = 1)			-0.101 [0.035]***	-0.044 [0.046]			-0.100 [0.034]***	-0.045 [0.046]
Non-White (Yes = 1)			-0.009 [0.038]	0.103 [0.076]			-0.009 [0.038]	0.102 [0.076]
Political Interest = Some (Yes = 1)			-0.044 [0.036]	-0.122 [0.050]**			-0.043 [0.036]	-0.124 [0.050]**
Political Interest < Some (Yes = 1)			0.027 [0.051]	-0.101 [0.065]			0.029 [0.050]	-0.101 [0.065]
Income Tercile = 1			0.013 [0.044]	0.043 [0.065]			0.014 [0.044]	0.045 [0.065]
Income Tercile = 3			-0.022 [0.053]	0.112 [0.066]*			-0.021 [0.052]	0.116 [0.066]*
Income Tercile = 4			0.047 [0.047]	-0.042 [0.056]			0.044 [0.047]	-0.035 [0.057]
Income Tercile = 5			0.007 [0.073]	0.048 [0.110]			0.003 [0.073]	0.054 [0.113]
Income Refused			-0.006 [0.077]	0.045 [0.121]			0.002 [0.078]	0.041 [0.123]
Constant	0.250 [0.021]***	0.360 [0.034]***	0.062 [0.145]	-0.153 [0.196]	0.296 [0.032]***	0.405 [0.062]***	0.024 [0.143]	-0.154 [0.193]
Observations	993	686	832	553	993	686	832	553
R ²	0.018	0.004	0.149	0.188	0.037	0.024	0.153	0.190

Note: Cell entries are OLS coefficient estimates with robust standard errors in brackets. Dependent variable is an indicator for whether respondent voted in either the 2010 or 2012 primary elections (Yes = 1). All analyses use survey weights. ***p<.01; **p<.05; *p<.1, one-sided tests for costs and benefits of voting, social and exclusionary norms, and deference variables.

Table SA9: Logistic Regression, Correlates of Primary Election Participation Among General Election Voters

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
My vote matters a great deal	0.796 [0.347]**	0.345 [0.349]						
Outcome of election has big effect on my life	-0.181 [0.314]	0.686 [0.366]**						
Easy to figure out which candidate to vote for	0.925 [0.272]**	0.223 [0.325]						
Social Norms Scale			1.097 [0.233]**	0.682 [0.261]**	1.092 [0.259]**	0.687 [0.266]**		
Exclusionary Norms Scale			-0.639 [0.177]**	-0.355 [0.231]*				
Strong PID * Exclusionary Norms Scale					-0.292 [0.277]	0.083 [0.306]		
Weak PID * Exclusionary Norms Scale					-1.472 [0.445]**	-1.429 [0.591]**		
Leaner PID * Exclusionary Norms Scale					-0.507 [0.350]*	-0.321 [0.475]		
Independent * Exclusionary Norms Scale					-1.061 [0.749]*	-0.733 [0.718]*		
Others will do a good job of picking candidate							-0.718 [0.249]**	-0.188 [0.352]
Number of Correct Knowledge Items		0.072 [0.065]		0.065 [0.065]	0.264 [0.049]**	0.068 [0.066]		0.059 [0.065]
High School Education (Yes = 1)		0.622 [0.259]**		0.583 [0.253]**		0.578 [0.255]**		0.578 [0.251]**
4-Year College Education (Yes = 1)		1.238 [0.280]**		1.149 [0.278]**		1.140 [0.289]**		1.196 [0.272]**
Post-Graduate Education (Yes = 1)		1.448 [0.304]**		1.271 [0.289]**		1.295 [0.293]**		1.285 [0.290]**
Age		0.065 [0.044]		0.070 [0.050]		0.074 [0.053]		0.077 [0.049]
Age ²		-0.012 [0.038]		-0.018 [0.042]		-0.021 [0.044]		-0.02 [0.041]
Female (Yes = 1)		-0.300 [0.180]*		-0.287 [0.176]		-0.292 [0.180]		-0.248 [0.175]
Non-White (Yes = 1)		-0.183 [0.281]		-0.088 [0.275]		-0.014 [0.288]		-0.081 [0.276]
Political Interest = Some (Yes = 1)		-0.441 [0.203]**		-0.564 [0.186]**		-0.573 [0.187]**		-0.621 [0.200]**
Political Interest < Some (Yes = 1)		0.056 [0.280]		-0.146 [0.282]		-0.192 [0.301]		-0.234 [0.279]
PID Weak Partisan (Yes = 1)		0.106 [0.198]		0.033 [0.189]	0.281 [0.247]	0.462 [0.274]*		0.017 [0.189]
PID Partisan Leaner (Yes = 1)		-0.387 [0.256]		-0.434 [0.242]*	-0.237 [0.228]	-0.281 [0.283]		-0.472 [0.253]*
PID Independent (Yes = 1)		-0.154 [0.240]		-0.203 [0.239]	-0.117 [0.328]	0.056 [0.337]		-0.237 [0.230]
Income Tercile = 1		-0.325 [0.242]		-0.322 [0.267]		-0.295 [0.293]		-0.398 [0.259]
Income Tercile = 3		0.024 [0.269]		-0.013 [0.264]		0.048 [0.277]		-0.018 [0.270]
Income Tercile = 4		-0.219 [0.210]		-0.208 [0.208]		-0.168 [0.213]		-0.203 [0.202]
Income Tercile = 5		-0.294 [0.262]		-0.281 [0.265]		-0.255 [0.283]		-0.288 [0.261]
Income Refused		0.185 [0.323]		0.189 [0.312]		0.187 [0.323]		0.158 [0.305]
Constant	-2.198 [0.218]**	-5.557 [1.330]**	-1.433 [0.136]**	-4.788 [1.469]**	-2.250 [0.265]**	-5.108 [1.597]**	-0.904 [0.089]**	-4.776 [1.466]**
Observations	1,983	1,636	1,983	1,636	1,636	1,636	1,983	1,636

Note: Cell entries are logistic regression coefficient estimates with robust standard errors in brackets. Dependent variable is an indicator for whether respondent voted in either the 2010 or 2012 primary elections (Yes = 1). All analyses use survey weights.
 ***p<.01; **p<.05; *p<.01, one-sided tests for costs and benefits of voting, social and exclusionary norms, and deference variables.

Table SA10: Correlates of Primary Election Participation Among General Election Voters, Additional Specifications, with Controls Displayed

	(1)	(2)	(3)	(4)	(5)	(6)
My vote matters a great deal	0.130 [0.053]***	0.031 [0.057]	0.040 [0.056]	0.069 [0.051]*	0.045 [0.060]	0.081 [0.055]*
Outcome of election has big effect on my life	-0.063 [0.055]	0.048 [0.059]	0.049 [0.059]	0.054 [0.055]	0.065 [0.065]	0.072 [0.060]
Easy to figure out which candidate to vote for	0.160 [0.045]***	0.071 [0.047]*	0.065 [0.047]*	0.060 [0.046]*	0.048 [0.050]	0.042 [0.050]
Social Norms Scale	0.136 [0.048]***	0.084 [0.049]**	0.086 [0.049]**	0.059 [0.048]	0.088 [0.049]**	0.052 [0.048]
Exclusionary Norms Scale	-0.106 [0.034]***	-0.080 [0.034]**	-0.070 [0.033]**	-0.056 [0.033]**	-0.082 [0.035]**	-0.064 [0.034]**
Others will do a good job of picking candidate	-0.094 [0.042]**	-0.031 [0.046]	-0.033 [0.046]	-0.030 [0.043]	-0.022 [0.050]	-0.012 [0.046]
PID Weak Partisan (Yes = 1)		0.023 [0.032]	0.019 [0.032]	0.027 [0.029]	0.034 [0.035]	0.039 [0.033]
PID Partisan Leaner (Yes = 1)		-0.028 [0.032]	-0.034 [0.032]	-0.030 [0.030]	-0.035 [0.036]	-0.034 [0.033]
PID Independent (Yes = 1)		-0.007 [0.035]	-0.011 [0.035]	-0.010 [0.035]	-0.043 [0.036]	-0.044 [0.036]
Primary Rules (0 - 1, 0 = Open)			-0.071 [0.024]***		-0.062 [0.027]**	
Democratic Primary Spending (logged)			0.005 [0.002]**	0.002 [0.003]		
Republican Primary Spending (logged)			-0.002 [0.003]	-0.000 [0.003]		
Democratic Fractionalization Index (0 - 1)					0.039 [0.045]	0.070 [0.057]
Republican Fractionalization Index (0 - 1)					0.039 [0.041]	-0.043 [0.053]
Missing Congressional District Info			0.394 [0.112]***	0.348 [0.130]***	0.378 [0.109]***	0.336 [0.129]***
Number of Correct Knowledge Items		0.008 [0.009]	0.010 [0.009]	0.013 [0.009]	0.010 [0.010]	0.012 [0.010]
High School Education (Yes = 1)		0.075 [0.029]***	0.063 [0.029]**	0.061 [0.029]**	0.045 [0.031]	0.035 [0.031]
4-Year College Education (Yes = 1)		0.168 [0.035]***	0.156 [0.035]***	0.147 [0.035]***	0.135 [0.037]***	0.118 [0.037]***
Post-Graduate Education (Yes = 1)		0.218 [0.041]***	0.200 [0.040]***	0.200 [0.040]***	0.198 [0.043]***	0.193 [0.043]***
Age		-0.001 [0.004]	-0.002 [0.004]	-0.002 [0.004]	0.000 [0.005]	0.000 [0.004]
Age ²		0.008 [0.004]*	0.009 [0.004]**	0.009 [0.004]**	0.007 [0.005]	0.006 [0.004]
Female (Yes = 1)		-0.069 [0.025]***	-0.068 [0.025]***	-0.062 [0.024]***	-0.064 [0.027]**	-0.059 [0.026]**
Non-White (Yes = 1)		0.018 [0.034]	0.002 [0.034]	-0.023 [0.034]	0.006 [0.035]	-0.026 [0.033]
Political Interest = Some (Yes = 1)		-0.072 [0.030]**	-0.074 [0.030]**	-0.068 [0.029]**	-0.083 [0.033]**	-0.08 [0.032]**
Political Interest < Some (Yes = 1)		-0.011 [0.036]	-0.006 [0.036]	-0.001 [0.037]	-0.017 [0.038]	-0.015 [0.038]
Income Tercile = 1		-0.011 [0.034]	-0.014 [0.033]	-0.009 [0.033]	-0.025 [0.035]	-0.022 [0.034]
Income Tercile = 3		0.037 [0.040]	0.038 [0.040]	0.029 [0.037]	0.019 [0.044]	0.015 [0.041]
Income Tercile = 4		-0.013 [0.033]	-0.015 [0.032]	-0.001 [0.032]	-0.034 [0.035]	-0.010 [0.035]
Income Tercile = 5		-0.037 [0.054]	-0.033 [0.055]	-0.036 [0.054]	0.006 [0.062]	0.005 [0.062]
Income Refused		0.071 [0.059]	0.061 [0.060]	0.070 [0.059]	0.019 [0.067]	0.034 [0.067]
Constant	0.092 [0.034]***	-0.085 [0.121]	-0.065 [0.126]	0.075 [0.168]	-0.082 [0.128]	-0.198 [0.148]
State Fixed Effects?	No	No	No	Yes	No	Yes
Observations	1,983	1,636	1,632	1,632	1,363	1,363
R ²	0.047	0.153	0.167	0.237	0.184	0.256

Note: Cell entries are OLS coefficient estimates with robust standard errors in brackets. Dependent variable is an indicator for whether respondent voted in either the 2010 or 2012 primary elections (Yes = 1). All analyses use survey weights. ***p<.01; **p<.05; *p<.1, one-sided tests for costs and benefits of voting, social and exclusionary norms, and deference variables.

Table SA11: Logistic Regression, Correlates of Primary Election Participation Among General Election Voters, Additional Specifications

	(1)	(2)	(3)	(4)	(5)	(6)
My vote matters a great deal	0.674 [0.341]**	0.281 [0.351]	0.401 [0.363]	0.538 [0.608]	0.446 [0.455]	0.662 [0.626]
Outcome of election has big effect on my life	-0.368 [0.331]	0.568 [0.397]	0.455 [0.403]	0.757 [0.593]	0.577 [0.518]	0.893 [0.753]
Easy to figure out which candidate to vote for	0.849 [0.277]**	0.190 [0.334]	0.170 [0.351]	0.265 [0.501]	-0.006 [0.408]	0.047 [0.525]
Social Norms Scale	0.751 [0.283]**	0.349 [0.314]	0.365 [0.320]	0.087 [0.390]	0.448 [0.396]	0.148 [0.421]
Exclusionary Norms Scale	-0.525 [0.193]**	-0.315 [0.234]	-0.239 [0.235]	-0.229 [0.322]	-0.269 [0.277]	-0.356 [0.389]
Others will do a good job of picking candidate	-0.546 [0.253]**	-0.075 [0.348]	-0.159 [0.345]	-0.062 [0.407]	-0.009 [0.432]	0.071 [0.398]
PID Weak Partisan (Yes = 1)		0.098 [0.198]	0.005 [0.209]	0.268 [0.285]	0.066 [0.263]	0.346 [0.313]
PID Partisan Leaner (Yes = 1)		-0.400 [0.259]	-0.418 [0.263]	-0.267 [0.287]	-0.447 [0.351]	-0.274 [0.313]
PID Independent (Yes = 1)		-0.164 [0.240]	-0.202 [0.257]	-0.050 [0.271]	-0.404 [0.271]	-0.176 [0.340]
Primary Rules (0 - 1, 0 = Open)			-0.495 [0.177]**		-0.441 [0.196]**	
Democratic Primary Spending (logged)			0.028 [0.019]	-0.001 [0.025]		
Republican Primary Spending (logged)			-0.021 [0.017]	-0.010 [0.024]		
Democratic Fractionalization Index (0 - 1)					0.223 [0.303]	0.420 [0.528]
Republican Fractionalization Index (0 - 1)					0.365 [0.281]	-0.211 [0.727]
Missing Congressional District Info			1.956 [0.804]**	2.554 [1.057]**	2.123 [0.793]**	2.895 [1.032]**
Number of Correct Knowledge Items		0.069 [0.066]	0.088 [0.066]	0.084 [0.082]	0.089 [0.077]	0.074 [0.090]
High School Education (Yes = 1)		0.608 [0.258]**	0.525 [0.260]**	0.396 [0.289]	0.440 [0.305]	0.199 [0.292]
4-Year College Education (Yes = 1)		1.195 [0.281]**	1.144 [0.293]**	1.025 [0.345]**	1.053 [0.337]**	0.656 [0.353]**
Post-Graduate Education (Yes = 1)		1.405 [0.305]**	1.301 [0.316]**	1.309 [0.351]**	1.285 [0.360]**	1.178 [0.351]**
Age		0.061 [0.046]	0.066 [0.052]	0.031 [0.050]	0.080 [0.049]	0.033 [0.055]
Age ²		-0.010 [0.039]	-0.014 [0.043]	0.015 [0.042]	-0.026 [0.040]	0.012 [0.046]
Female (Yes = 1)		-0.324 [0.181]*	-0.313 [0.175]*	-0.423 [0.246]*	-0.308 [0.203]	-0.458 [0.285]
Non-White (Yes = 1)		-0.177 [0.293]	-0.334 [0.349]	-0.221 [0.319]	-0.172 [0.378]	-0.079 [0.292]
Political Interest = Some (Yes = 1)		-0.422 [0.208]**	-0.426 [0.216]**	-0.544 [0.260]**	-0.499 [0.253]**	-0.711 [0.318]**
Political Interest < Some (Yes = 1)		0.065 [0.295]	0.071 [0.316]	-0.022 [0.424]	-0.027 [0.337]	-0.194 [0.388]
Income Tercile = 1		-0.303 [0.250]	-0.331 [0.258]	-0.328 [0.290]	-0.315 [0.263]	-0.314 [0.308]
Income Tercile = 3		0.012 [0.278]	-0.002 [0.287]	0.187 [0.341]	-0.126 [0.367]	0.098 [0.354]
Income Tercile = 4		-0.218 [0.214]	-0.261 [0.222]	-0.076 [0.271]	-0.382 [0.252]	-0.121 [0.288]
Income Tercile = 5		-0.297 [0.270]	-0.373 [0.292]	-0.310 [0.437]	-0.199 [0.339]	-0.053 [0.484]
Income Refused		0.219 [0.321]	0.200 [0.339]	0.372 [0.532]	-0.018 [0.398]	0.280 [0.646]
Constant	-1.964 [0.218]**	-5.207 [1.425]**	-5.197 [1.602]**	-3.470 [1.609]**	-5.631 [1.613]**	-11.163 [1.947]**
State Fixed Effects?	No	No	No	Yes	No	Yes
Observations	1,983	1,636	1,632	1,632	1,363	1,363

Note: Cell entries are logistic regression coefficient estimates with robust standard errors in brackets. Dependent variable is an indicator for whether respondent voted in either the 2010 or 2012 primary elections (Yes = 1). All analyses use survey weights. ***p<.01; **p<.05; *p<.1, one-sided tests for costs and benefits of voting, social and exclusionary norms, and deference variables.

Table SA12: Correlates of Primary Election Participation Among General Election Voters, Additional Specifications, with Controls Displayed, Alternative Openness Measure

	(1)	(2)
My vote matters a great deal	0.061 [0.052]	0.076 [0.055]*
Outcome of election has big effect on my life	0.049 [0.057]	0.066 [0.062]
Easy to figure out which candidate to vote for	0.061 [0.046]*	0.047 [0.049]
Social Norms Scale	0.071 [0.050]*	0.065 [0.049]*
Exclusionary Norms Scale	-0.059 [0.033]**	-0.060 [0.034]**
Others will do a good job of picking candidate	-0.036 [0.045]	-0.037 [0.048]
PID Weak Partisan (Yes = 1)	0.016 [0.030]	0.031 [0.033]
PID Partisan Leaner (Yes = 1)	-0.035 [0.031]	-0.034 [0.034]
PID Independent (Yes = 1)	-0.014 [0.035]	-0.046 [0.036]
Open Primary (Yes = 1)	0.039 [0.026]	0.047 [0.027]*
Semi-Open Primary (Yes = 1)	0.061 [0.036]*	0.077 [0.040]*
Top-Two Primary (Yes = 1)	0.200 [0.045]***	0.336 [0.063]***
Democratic Primary Spending (logged)	0.004 [0.002]*	
Republican Primary Spending (logged)	-0.001 [0.003]	
Democratic Fractionalization Index (0 - 1)		-0.043 [0.043]
Republican Fractionalization Index (0 - 1)		-0.093 [0.048]*
Missing Congressional District Info	0.401 [0.116]***	0.349 [0.113]***
Number of Correct Knowledge Items	0.009 [0.009]	0.009 [0.010]
High School Education (Yes = 1)	0.063 [0.028]**	0.040 [0.030]
4-Year College Education (Yes = 1)	0.154 [0.035]***	0.129 [0.037]***
Post-Graduate Education (Yes = 1)	0.201 [0.040]***	0.194 [0.043]***
Age	-0.001 [0.004]	0.000 [0.004]
Age ²	0.008 [0.004]*	0.007 [0.004]
Female (Yes = 1)	-0.066 [0.024]***	-0.057 [0.026]**
Non-White (Yes = 1)	-0.006 [0.034]	-0.010 [0.033]
Political Interest = Some (Yes = 1)	-0.076 [0.029]***	-0.088 [0.032]***
Political Interest < Some (Yes = 1)	-0.008 [0.036]	-0.019 [0.038]
Income Tercile = 1	-0.012 [0.033]	-0.027 [0.035]
Income Tercile = 3	0.030 [0.038]	0.007 [0.041]
Income Tercile = 4	-0.021 [0.032]	-0.038 [0.035]
Income Tercile = 5	-0.047 [0.054]	-0.014 [0.060]
Income Refused	0.076 [0.059]	0.033 [0.066]
Constant	-0.141 [0.123]	-0.099 [0.123]
Observations	1,632	1,363
R ²	0.179	0.206

Note: Cell entries are OLS coefficient estimates with robust standard errors in brackets. Dependent variable is an indicator for whether respondent voted in either the 2010 or 2012 primary elections (Yes = 1). All analyses use survey weights. ***p<.01; **p<.05; *p<.1, one-sided tests for costs and benefits of voting, social and exclusionary norms, and deference variables.

Table SA13: Relationship Between Calculus of Voting, Norms, and Deference Attitudes and Campaign Spending Variables

	My vote matters a great deal	Outcome of election has big effect on my life	Easy to figure out which candidate to vote for	Social Norms Scale	Exclusionary Norms Scale	Others will do a good job of picking candidate
Primary Rules (0 = 1; 0 = Open)	0.030 [0.023]	0.013 [0.020]	-0.023 [0.021]	0.015 [0.019]	0.034 [0.025]	0.017 [0.024]
Democratic Primary Spending (logged)	-0.002 [0.002]	-0.003 [0.002]	-0.003 [0.002]	-0.004 [0.002]**	-0.004 [0.002]	0.003 [0.002]
Republican Primary Spending (logged)	0.002 [0.002]	0.001 [0.002]	0.001 [0.002]	-0.001 [0.002]	-0.001 [0.002]	0.001 [0.002]
Missing Congressional District Info	-0.021 [0.098]	0.020 [0.113]	0.026 [0.083]	-0.048 [0.105]	-0.165 [0.067]**	0.028 [0.067]
Number of Correct Knowledge Items	-0.005 [0.009]	-0.032 [0.008]***	0.003 [0.008]	-0.007 [0.008]	-0.011 [0.010]	-0.006 [0.008]
High School Education (Yes = 1)	-0.014 [0.025]	-0.062 [0.022]***	-0.046 [0.021]**	0.013 [0.022]	-0.068 [0.029]**	-0.053 [0.025]**
4-Year College Education (Yes = 1)	-0.014 [0.032]	-0.048 [0.024]**	-0.022 [0.024]	0.033 [0.024]	-0.044 [0.034]	-0.052 [0.029]*
Post-Graduate Education (Yes = 1)	-0.069 [0.031]**	-0.112 [0.028]***	-0.057 [0.025]**	-0.012 [0.027]	-0.064 [0.037]*	-0.041 [0.029]
Age	0.008 [0.004]**	0.008 [0.004]**	0.008 [0.004]**	-0.006 [0.004]*	-0.001 [0.005]	-0.009 [0.005]**
Age ²	-0.004 [0.004]	-0.006 [0.004]*	-0.006 [0.004]	0.008 [0.003]**	-0.001 [0.004]	0.007 [0.004]
Female (Yes = 1)	0.033 [0.020]	0.026 [0.019]	-0.021 [0.018]	-0.016 [0.019]	-0.026 [0.024]	-0.033 [0.020]
Non-White (Yes = 1)	0.054 [0.027]**	0.044 [0.026]*	0.048 [0.025]*	-0.001 [0.026]	0.013 [0.029]	0.015 [0.030]
Political Interest = Some (Yes = 1)	-0.115 [0.022]***	-0.160 [0.020]***	-0.162 [0.021]***	-0.094 [0.022]***	-0.022 [0.026]	0.052 [0.024]**
Political Interest < Some (Yes = 1)	-0.130 [0.032]***	-0.244 [0.029]***	-0.221 [0.029]***	-0.147 [0.028]***	-0.013 [0.037]	0.098 [0.030]***
PID = Weak Partisan (Yes = 1)	-0.088 [0.025]***	-0.074 [0.023]***	-0.087 [0.021]***	-0.035 [0.022]	-0.078 [0.030]**	-0.045 [0.025]*
PID = Partisan Leaner (Yes = 1)	-0.101 [0.025]***	-0.077 [0.023]***	-0.035 [0.021]*	-0.041 [0.022]*	-0.079 [0.030]***	-0.071 [0.026]***
PID = Independent (Yes = 1)	-0.161 [0.032]***	-0.130 [0.032]***	-0.137 [0.033]***	-0.043 [0.028]	-0.139 [0.030]***	-0.055 [0.031]*
Income Tercile = 1	-0.002 [0.032]	-0.021 [0.028]	-0.042 [0.031]	-0.008 [0.028]	0.016 [0.033]	-0.024 [0.031]
Income Tercile = 3	-0.037 [0.032]	-0.036 [0.026]	-0.011 [0.027]	-0.024 [0.026]	-0.014 [0.030]	0.003 [0.032]
Income Tercile = 4	-0.003 [0.029]	-0.028 [0.025]	-0.003 [0.024]	0.039 [0.025]	0.036 [0.036]	-0.014 [0.028]
Income Tercile = 5	0.040 [0.039]	-0.012 [0.038]	0.034 [0.034]	0.024 [0.040]	0.004 [0.045]	-0.075 [0.035]**
Income Refused	-0.069 [0.046]	0.002 [0.045]	-0.071 [0.037]*	-0.030 [0.042]	0.020 [0.051]	0.064 [0.037]*
Constant	0.505 [0.136]***	0.716 [0.110]***	0.633 [0.121]***	0.689 [0.110]***	0.540 [0.150]***	0.620 [0.138]***
Observations	1,632	1,632	1,632	1,632	1,632	1,632
R ²	0.131	0.156	0.188	0.076	0.043	0.066

Note: Cell entries are OLS coefficient estimates with robust standard errors in brackets. All analyses use survey weights. ***p<.01; **p<.05; *p<.1.

Table SA14: Relationship Between Calculus of Voting, Norms, and Deference Attitudes and Fractionalization Variables

	My vote matters a great deal	Outcome of election has big effect on my life	Easy to figure out which candidate to vote for	Social Norms Scale	Exclusionary Norms Scale	Others will do a good job of picking candidate
Primary Rules (0-1; 0 = Open)	0.009 [0.025]	0.012 [0.023]	-0.012 [0.023]	0.013 [0.023]	0.039 [0.029]	0.007 [0.026]
Democrat Primary Spending (logged)	0.005 [0.037]	-0.003 [0.034]	0.027 [0.033]	0.005 [0.034]	-0.021 [0.042]	-0.040 [0.034]
Republican Primary Spending (logged)	-0.074 [0.039]*	0.006 [0.034]	0.005 [0.032]	0.003 [0.035]	0.032 [0.038]	-0.003 [0.035]
Missing Congressional District Info	-0.058 [0.088]	0.043 [0.110]	0.039 [0.074]	-0.003 [0.098]	-0.113 [0.056]**	-0.017 [0.058]
Number of Correct Knowledge Items	-0.007 [0.010]	-0.035 [0.009]**	-0.001 [0.008]	-0.010 [0.009]	-0.018 [0.011]*	-0.004 [0.009]
High School Education (Yes = 1)	-0.005 [0.027]	-0.064 [0.025]**	-0.043 [0.024]*	0.011 [0.024]	-0.063 [0.032]**	-0.044 [0.028]
4-Year College Education (Yes = 1)	-0.009 [0.035]	-0.050 [0.027]*	-0.006 [0.026]	0.036 [0.027]	-0.042 [0.038]	-0.060 [0.032]*
Post-Graduate Education (Yes = 1)	-0.053 [0.035]	-0.097 [0.031]**	-0.044 [0.028]	0.008 [0.029]	-0.073 [0.040]*	-0.056 [0.031]*
Age	0.006 [0.004]	0.006 [0.004]	0.011 [0.004]**	-0.004 [0.004]	-0.003 [0.006]	-0.012 [0.005]**
Age ²	-0.002 [0.004]	-0.004 [0.004]	-0.009 [0.004]**	0.006 [0.004]	0.002 [0.005]	0.01 [0.004]**
Female (Yes = 1)	0.024 [0.022]	0.039 [0.022]*	-0.021 [0.019]	-0.006 [0.021]	-0.033 [0.026]	-0.036 [0.022]
Non-White (Yes = 1)	0.051 [0.032]	0.041 [0.031]	0.051 [0.029]*	-0.006 [0.029]	0.008 [0.032]	0.007 [0.034]
Political Interest = Some (Yes = 1)	-0.101 [0.024]**	-0.167 [0.022]**	-0.181 [0.023]**	-0.108 [0.025]**	-0.041 [0.028]	0.057 [0.027]**
Political Interest < Some (Yes = 1)	-0.115 [0.035]**	-0.245 [0.031]**	-0.221 [0.031]**	-0.143 [0.031]**	-0.012 [0.040]	0.105 [0.034]**
PID Weak Partisan (Yes = 1)	-0.097 [0.026]**	-0.089 [0.025]**	-0.087 [0.022]**	-0.038 [0.024]	-0.073 [0.033]**	-0.039 [0.027]
PID Partisan Leaner (Yes = 1)	-0.095 [0.028]**	-0.091 [0.025]**	-0.045 [0.023]*	-0.055 [0.024]**	-0.084 [0.033]**	-0.073 [0.029]**
PID Independent (Yes = 1)	-0.156 [0.036]**	-0.133 [0.036]**	-0.133 [0.037]**	-0.039 [0.031]	-0.147 [0.033]**	-0.067 [0.035]*
Income Tercile = 1	0.017 [0.034]	-0.003 [0.030]	-0.023 [0.034]	-0.015 [0.031]	-0.011 [0.036]	-0.039 [0.035]
Income Tercile = 3	-0.015 [0.037]	-0.024 [0.029]	0.023 [0.030]	-0.028 [0.030]	-0.049 [0.033]	-0.001 [0.037]
Income Tercile = 4	0.031 [0.030]	0.003 [0.026]	-0.002 [0.025]	0.047 [0.028]*	0.019 [0.039]	-0.029 [0.030]
Income Tercile = 5	0.044 [0.043]	0.005 [0.043]	0.014 [0.039]	0.002 [0.042]	-0.030 [0.050]	-0.063 [0.041]
Income Refused	-0.052 [0.049]	-0.008 [0.050]	-0.029 [0.042]	0.000 [0.044]	0.053 [0.058]	0.022 [0.043]
Constant	0.55 [0.130]**	0.735 [0.105]**	0.513 [0.128]**	0.570 [0.111]**	0.603 [0.170]**	0.766 [0.139]**
Observations	1,363	1,363	1,363	1,363	1,363	1,363
R ²	0.133	0.159	0.195	0.079	0.050	0.077

Note: Cell entries are OLS coefficient estimates with robust standard errors in brackets. All analyses use survey weights. ***p<.01; **p<.05; *p<.1.

Table SA15: Correlates of 2012 Primary Election Participation Among General Election Voters

	(1)	(2)	(3)	(4)
My vote matters a great deal	0.042 [0.048]	0.081 [0.052]*	0.042 [0.048]	0.081 [0.052]*
Outcome of election has big effect on my life	0.013 [0.052]	0.037 [0.052]	0.013 [0.052]	0.037 [0.052]
Easy to figure out which candidate to vote for	0.055 [0.041]*	0.034 [0.044]	0.055 [0.041]*	0.034 [0.044]
Social Norms Scale	0.057 [0.045]	0.021 [0.041]	0.057 [0.045]	0.021 [0.041]
Exclusionary Norms Scale	-0.049 [0.030]*	-0.041 [0.029]*	-0.049 [0.030]*	-0.041 [0.029]*
Others will do a good job of picking candidate	-0.006 [0.041]	-0.002 [0.042]	-0.006 [0.041]	-0.002 [0.042]
Number of Correct Knowledge Items	0.028 [0.008]***	0.029 [0.009]***	0.028 [0.008]***	0.029 [0.009]***
High School Education (Yes = 1)	0.013 [0.026]	0.012 [0.028]	0.013 [0.026]	0.012 [0.028]
4-Year College Education (Yes = 1)	0.035 [0.030]	0.045 [0.032]	0.035 [0.030]	0.045 [0.032]
Post-Graduate Education (Yes = 1)	0.068 [0.037]*	0.070 [0.040]*	0.068 [0.037]*	0.070 [0.040]*
Age	-0.004 [0.004]	0.001 [0.004]	-0.004 [0.004]	0.001 [0.004]
Age ²	0.008 [0.004]**	0.003 [0.004]	0.008 [0.004]**	0.003 [0.004]**
Female (Yes = 1)	-0.040 [0.022]*	-0.032 [0.024]	-0.040 [0.022]*	-0.032 [0.024]
Non-White (Yes = 1)	0.010 [0.033]	0.013 [0.030]	0.010 [0.033]	0.013 [0.030]
Political Interest = Some (Yes = 1)	-0.033 [0.026]	-0.044 [0.028]	-0.033 [0.026]	-0.044 [0.028]
Political Interest < Some (Yes = 1)	0.002 [0.031]	0.017 [0.034]	0.002 [0.031]	0.017 [0.034]
PID = Weak Partisan (Yes = 1)	0.034 [0.027]	0.043 [0.029]	0.034 [0.027]	0.043 [0.029]
PID = Partisan Leaner (Yes = 1)	-0.016 [0.027]	-0.015 [0.029]	-0.016 [0.027]	-0.015 [0.029]
PID = Independent (Yes = 1)	0.004 [0.032]	-0.007 [0.031]	0.004 [0.032]	-0.007 [0.031]
Income Tercile = 1	-0.040 [0.029]	-0.065 [0.029]**	-0.040 [0.029]	-0.065 [0.029]**
Income Tercile = 3	0.005 [0.035]	-0.012 [0.036]	0.005 [0.035]	-0.012 [0.036]
Income Tercile = 4	-0.006 [0.030]	0.001 [0.032]	-0.006 [0.030]	0.001 [0.032]
Income Tercile = 5	-0.010 [0.051]	-0.013 [0.053]	-0.010 [0.051]	-0.013 [0.053]
Income Refused	0.023 [0.054]	0.030 [0.056]	0.023 [0.054]	0.030 [0.056]
Primary Rules (0 - 1, 0 = Open)	-0.006 [0.054]	-0.025 [0.092]	-0.006 [0.084]	-0.025 [0.092]
Democratic Primary Spending (logged)	0.003 [0.002]		0.003 [0.002]	
Republican Primary Spending (logged)	-0.003 [0.003]		-0.003 [0.003]	
Missing Congressional District Info	0.179 [0.172]	0.207 [0.164]	0.179 [0.172]	0.207 [0.164]
Fractionalization Index 2012, Democratic Party (0 - 1)		0.069 [0.046]		0.069 [0.046]
Fractionalization Index 2012, Republican Party (0 - 1)		0.042 [0.043]		0.042 [0.043]
Cong. Primary Same Day as Pres. Primary (Yes = 1)			-0.469 [0.247]*	-0.458 [0.273]*
Constant	-0.014 [0.149]	-0.170 [0.174]	0.454 [0.263]*	0.288 [0.267]
State Fixed Effects?	Yes	Yes	Yes	Yes
Observations	1,622	1,488	1,622	1,488
R ²	0.198	0.213	0.198	0.213

Note: Cell entries are OLS coefficient estimates with robust standard errors in brackets. Dependent variable is an indicator for whether respondent voted in the 2012 primary election (Yes = 1). All analyses use survey weights. ***p<.01; **p<.05; *p<.1, one-sided tests for costs and benefits of voting, social and exclusionary norms, and deference variables.

Table SA16: Social Norms Attitudes, Coding "Don't know" responses as missing

Survey Item	House Primary				House General				Presidential General			
	Full Sample	Knowledge Sample	Low Knowledge	High Knowledge	Full Sample	Knowledge Sample	Low Knowledge	High Knowledge	Full Sample	Knowledge Sample	Low Knowledge	High Knowledge
If I do not vote my friends and family are disappointed in me	0.370 [.483]	0.364 [.481]	0.344 [.476]	0.376 [.485]	0.414 [.493]	0.419 [.494]	0.387 [.488]	0.439 [.497]	0.455 [.498]	0.454 [.498]	0.432 [.496]	0.468 [.499]
If I do not stay informed my friends and family are disappointed in me	0.390 [.488]	0.388 [.488]	0.376 [.485]	0.396 [.490]	0.399 [.490]	0.398 [.490]	0.362 [.481]	0.421 [.494]	0.368 [.482]	0.374 [.484]	0.315 [.465]	0.411 [.492]
I feel bad the next day if for some reason I cannot vote	0.656 [.475]	0.643 [.479]	0.590 [.492]	0.675 [.469]	0.725 [.447]	0.718 [.450]	0.643 [.480]	0.765 [.424]	0.787 [.409]	0.789 [.408]	0.705 [.457]	0.842 [.365]
Observations	1413	1176	435	741	1413	1176	435	741	1413	1176	435	741

Note: Cell entries are proportions agreeing with statement (strongly or somewhat), using survey weights, with standard deviations in brackets. Knowledge sample is the subset of respondents that answered all of a five-question knowledge battery. Low knowledge sample made 0, 1, or 2 correct responses; high knowledge sample made 3 or more correct responses. "Don't know" responses were coded as missing.

Table SA17: Principal Components Factor Analysis of Social and Exclusionary Norms

Principle Components Analysis (Unrotated)

	Eigenvalue	Difference	Eigenvalue Proportion	Cumulative Eigenvalue Proportion
Factor 1	2.564	0.728	0.366	0.366
Factor 2	1.837	1.146	0.262	0.628
Factor 3	0.691	0.055	0.099	0.727
Factor 4	0.636	0.065	0.091	0.818
Factor 5	0.571	0.102	0.082	0.900
Factor 6	0.469	0.237	0.067	0.967
Factor 7	0.232		0.033	1

Factor Loadings

Variable	Factor 1 Loading	Factor 2 Loading
Only those committed to a party's candidate should vote in its primary	0.620	-0.446
Only those who strongly identify with a party should vote in its primary	0.672	-0.430
Independents should not vote in party primaries	0.635	-0.394
It would be wrong to vote in another party's primary	0.619	-0.368
If I don't vote in a House primary, my friends and family will be disappointed	0.605	0.666
If I don't stay informed about a House primary, my friends and family will be disappointed	0.622	0.640
If for some reason I cannot vote in a House primary, I feel bad	0.434	0.557

Principal Components Analysis (Varimax Rotation)

	Variance	Difference	Variance Proportion	Cumulative Variance Proportion
Factor 1	2.287	0.172	0.327	0.327
Factor 2	2.114		0.302	0.629

Rotated Factor Loadings

Variable	Factor 1 Loading	Factor 2 Loading	Unique Variance
Only those committed to a party's candidate should vote in its primary	0.763	0.033	0.417
Only those who strongly identify with a party should vote in its primary	0.794	0.077	0.364
Independents should not vote in party primaries	0.742	0.082	0.442
It would be wrong to vote in another party's primary	0.714	0.093	0.481
If I don't vote in a House primary, my friends and family will be disappointed	0.065	0.897	0.191
If I don't stay informed about a House primary, my friends and family will be disappointed	0.094	0.888	0.203
If for some reason I cannot vote in a House primary, I feel bad	-0.002	0.706	0.502

Likelihood Ratio Test of Factor Independence vs. Saturated Model: chi-squared = 4059.624***

Table SA18: Correlates of Primary Election Participation Among General Election Voters, Dropping Don't Know Responses for Social Norms Scale

	(1)	(2)	(3)	(4)
Social Norms Scale	0.215 [0.045]***	0.118 [0.047]***	0.201 [0.045]***	0.123 [0.046]***
Exclusionary Norms Scale	-0.128 [0.037]***	-0.091 [0.037]***		
Strong PID * Exclusionary Norms Scale			-0.144 [0.059]***	-0.033 [0.055]
Weak PID * Exclusionary Norms Scale			-0.233 [0.067]***	-0.222 [0.078]***
Leaner PID * Exclusionary Norms Scale			-0.054 [0.074]	-0.025 [0.066]
Independent * Exclusionary Norms Scale			-0.138 [0.096]*	-0.209 [0.100]**
Number of Correct Knowledge Items		0.005 [0.011]		0.006 [0.011]
High School Education (Yes = 1)		0.087 [0.035]**		0.086 [0.035]**
4-Year College Education (Yes = 1)		0.164 [0.041]***		0.165 [0.041]***
Post-Graduate Education (Yes = 1)		0.224 [0.046]***		0.226 [0.046]***
Age		0.001 [0.005]		0.001 [0.005]
Age ²		0.007 [0.005]		0.006 [0.005]
Female (Yes = 1)		-0.076 [0.029]***		-0.077 [0.029]***
Non-White (Yes = 1)		0.046 [0.040]		0.048 [0.040]
Political Interest = Some (Yes = 1)		-0.070 [0.032]**		-0.072 [0.032]**
Political Interest < Some (Yes = 1)		-0.040 [0.041]		-0.037 [0.040]
PID = Weak Partisan (Yes = 1)		-0.003 [0.036]	-0.055 [0.053]	0.057 [0.054]
PID = Partisan Leaner (Yes = 1)		-0.024 [0.036]	-0.091 [0.051]*	-0.022 [0.049]
PID = Independent (Yes = 1)		-0.048 [0.041]	-0.107 [0.059]*	0.002 [0.058]
Income Tercile = 1		0.023 [0.040]		0.024 [0.040]
Income Tercile = 3		0.040 [0.046]		0.043 [0.046]
Income Tercile = 4		-0.026 [0.037]		-0.023 [0.037]
Income Tercile = 5		-0.074 [0.057]		-0.077 [0.057]
Income Refused		0.100 [0.065]		0.107 [0.065]
Constant	0.199 [0.025]***	-0.047 [0.129]	0.260 [0.040]***	-0.092 [0.128]
Observations	1,531	1,272	1,531	1,272
R ²	0.027	0.143	0.038	0.148

Note: Cell entries are OLS coefficient estimates with robust standard errors in brackets. Dependent variable is an indicator for whether respondent voted in either the 2010 or 2012 primary elections (Yes = 1). All analyses use survey weights. ***p<.01; **p<.05; *p<.1, one-tailed tests for social and exclusionary norms variables. "Don't know" responses for questions making up the social norms scale are coded as missing.

Table SA19: Correlates of Primary Election Participation Among General Election Voters, Additional Specifications, Dropping Don't Know Responses for Social Norms Scale

	(1)	(2)	(3)	(4)	(5)	(6)
My vote matters a great deal	0.137 [0.065]**	0.008 [0.068]	0.012 [0.066]	0.049 [0.060]	0.026 [0.071]	0.067 [0.064]
Outcome of election has big effect on my life	-0.033 [0.068]	0.104 [0.072]*	0.110 [0.071]*	0.108 [0.065]**	0.156 [0.077]**	0.155 [0.069]**
Easy to figure out which candidate to vote for	0.117 [0.056]**	0.072 [0.057]	0.063 [0.057]	0.050 [0.055]	0.044 [0.060]	0.024 [0.059]
Social Norms Scale	0.144 [0.055]**	0.062 [0.057]	0.065 [0.057]	0.037 [0.056]	0.060 [0.057]	0.025 [0.055]
Exclusionary Norms Scale	-0.111 [0.039]**	-0.084 [0.038]**	-0.076 [0.038]**	-0.067 [0.037]**	-0.087 [0.039]**	-0.074 [0.039]**
Others will do a good job of picking candidate	-0.102 [0.050]**	-0.026 [0.052]	-0.028 [0.052]	-0.019 [0.049]	-0.005 [0.057]	0.008 [0.052]
PID = Weak Partisan (Yes = 1)		0.007 [0.036]	0.002 [0.036]	0.009 [0.033]	0.037 [0.040]	0.040 [0.038]
PID = Partisan Leaner (Yes = 1)		-0.016 [0.038]	-0.022 [0.038]	-0.017 [0.035]	-0.012 [0.042]	-0.015 [0.038]
PID = Independent (Yes = 1)		-0.028 [0.041]	-0.031 [0.040]	-0.031 [0.041]	-0.070 [0.040]*	-0.069 [0.040]*
Primary Rules (0 = 1, 1 = Open)			-0.051 [0.028]*		-0.034 [0.032]	
Democratic Primary Spending (logged)			0.005 [0.003]**	0.004 [0.003]		
Republican Primary Spending (logged)			-0.000 [0.003]	0.002 [0.003]		
Democratic Fractionalization Index (0 - 1)					0.035 [0.050]	0.044 [0.064]
Republican Fractionalization Index (0 - 1)					0.058 [0.046]	-0.022 [0.060]
Missing Congressional District Info			0.373 [0.134]**	0.353 [0.152]**	0.340 [0.134]**	0.291 [0.153]*
Number of Correct Knowledge Items		0.007 [0.011]	0.008 [0.011]	0.012 [0.010]	0.012 [0.011]	0.014 [0.011]
High School Education (Yes = 1)		0.096 [0.033]**	0.084 [0.033]**	0.082 [0.033]**	0.064 [0.035]*	0.060 [0.035]*
4-Year College Education (Yes = 1)		0.177 [0.039]**	0.168 [0.040]**	0.151 [0.039]**	0.147 [0.042]**	0.125 [0.042]**
Post-Graduate Education (Yes = 1)		0.243 [0.045]**	0.223 [0.044]**	0.210 [0.045]**	0.234 [0.048]**	0.221 [0.048]**
Age		-0.001 [0.005]	-0.002 [0.005]	-0.002 [0.005]	0.002 [0.005]	0.002 [0.005]
Age ²		0.008 [0.005]	0.009 [0.005]*	0.009 [0.005]*	0.005 [0.005]	0.005 [0.005]
Female (Yes = 1)		-0.082 [0.029]**	-0.080 [0.028]**	-0.072 [0.027]**	-0.078 [0.031]**	-0.071 [0.029]**
Non-White (Yes = 1)		0.038 [0.040]	0.024 [0.040]	-0.000 [0.040]	0.021 [0.039]	-0.009 [0.037]
Political Interest = Some (Yes = 1)		-0.046 [0.035]	-0.046 [0.035]	-0.045 [0.033]	-0.045 [0.038]	-0.050 [0.036]
Political Interest < Some (Yes = 1)		-0.004 [0.041]	0.004 [0.041]	0.007 [0.042]	-0.000 [0.043]	-0.009 [0.043]
Income Tercile = 1		0.023 [0.040]	0.020 [0.039]	0.023 [0.038]	0.014 [0.040]	0.020 [0.040]
Income Tercile = 3		0.039 [0.045]	0.041 [0.045]	0.018 [0.042]	0.019 [0.050]	0.004 [0.045]
Income Tercile = 4		-0.024 [0.037]	-0.026 [0.036]	-0.017 [0.035]	-0.050 [0.039]	-0.031 [0.038]
Income Tercile = 5		-0.075 [0.057]	-0.070 [0.057]	-0.069 [0.056]	-0.042 [0.067]	-0.045 [0.068]
Income Refused		0.102 [0.065]	0.086 [0.066]	0.072 [0.065]	0.073 [0.075]	0.064 [0.075]
Constant	0.103 [0.041]**	-0.122 [0.141]	-0.129 [0.145]	0.038 [0.187]	-0.213 [0.150]	-0.327 [0.165]**
State Fixed Effects?	No	No	No	Yes	No	Yes
Observations	1,531	1,272	1,269	1,269	1,056	1,056
R ²	0.047	0.151	0.161	0.241	0.181	0.262

Note: Cell entries are OLS coefficient estimates with robust standard errors in brackets. Dependent variable is an indicator for whether respondent voted in either the 2010 or 2012 primary elections (Yes = 1). All analyses use survey weights. ***p<.01; **p<.05; *p<.1, one-tailed tests for costs and benefits of voting, social and exclusionary norms, and deference variables. "Don't know" responses for questions making up the social norms scale are coded as missing.

Table SA20: Correlates of Primary Election Participation Among General Election Voters, Complete Control Sample

	(1)	(2)	(3)	(4)
My vote matters a great deal	0.104 [0.059]**			
Outcome of election has big effect on my life	0.018 [0.058]			
Easy to figure out which candidate to vote for	0.167 [0.047]***			
Social Norms Scale		0.215 [0.045]***	0.213 [0.045]***	
Exclusionary Norms Scale		-0.117 [0.035]***		
Strong PID * Exclusionary Norms Scale			-0.068 [0.054]	
Weak PID * Exclusionary Norms Scale			-0.257 [0.069]***	
Leaner PID * Exclusionary Norms Scale			-0.094 [0.066]*	
Independent * Exclusionary Norms Scale			-0.163 [0.095]**	
Others will do a good job of picking candidate				-0.123 [0.046]***
PID = Weak Partisan (Yes = 1)			0.039 [0.049]	
PID = Partisan Leaner (Yes = 1)			-0.044 [0.045]	
PID = Independent (Yes = 1)			-0.030 [0.054]	
Constant	0.054 [0.032]*	0.188 [0.025]***	0.199 [0.034]***	0.286 [0.019]***
Observations	1,636	1,636	1,636	1,636
R ²	0.028	0.026	0.033	0.007

Note: Cell entries are OLS coefficient estimates with robust standard errors in brackets. Dependent variable is an indicator for whether respondent voted in either the 2010 or 2012 primary elections (Yes = 1). All analyses use survey weights. ***p<0.01; **p<.05; *p<.1, one-sided tests for costs and benefits of voting, social and exclusionary norms, and deference variables. Sample for all models is the set of respondents who have complete data for all of the control variables used in models 2, 4, 6, and 8 of Table 5. Models 1, 2, 3, and 4 of this table correspond to models 1, 3, 5, and 7 of Table 5.

Table SA21: Correlates of Primary Election Participation Among General Election Voters, Additional Specifications, Complete Control, Campaign Spending, and Fractionalization Samples

	(1)	(2)	(3)	(4)
My vote matters a great deal	0.091 [0.059]*	0.030 [0.057]	0.102 [0.065]*	0.031 [0.062]
Outcome of election has big effect on my life	-0.022 [0.061]	0.048 [0.059]	-0.014 [0.067]	0.067 [0.065]
Easy to figure out which candidate to vote for	0.161 [0.049]***	0.071 [0.048]*	0.174 [0.053]***	0.062 [0.051]
Social Norms Scale	0.141 [0.053]***	0.082 [0.049]**	0.161 [0.056]***	0.089 [0.050]**
Exclusionary Norms Scale	-0.106 [0.037]***	-0.081 [0.034]***	-0.120 [0.040]***	-0.091 [0.036]***
Others will do a good job of picking candidate	-0.096 [0.049]**	-0.029 [0.046]	-0.106 [0.053]**	-0.024 [0.051]
PID = Weak Partisan (Yes = 1)		0.023 [0.032]		0.039 [0.036]
PID = Partisan Leaner (Yes = 1)		-0.027 [0.032]		-0.028 [0.036]
PID = Independent (Yes = 1)		-0.007 [0.036]		-0.035 [0.036]
Number of Correct Knowledge Items		0.009 [0.009]		0.008 [0.010]
High School Education (Yes = 1)		0.076 [0.029]***		0.055 [0.031]*
4-Year College Education (Yes = 1)		0.169 [0.035]***		0.145 [0.038]***
Post-Graduate Education (Yes = 1)		0.220 [0.041]***		0.214 [0.044]***
Age		-0.001 [0.004]		0.000 [0.005]
Age ²		0.008 [0.004]*		0.007 [0.005]
Female (Yes = 1)		-0.068 [0.025]***		-0.062 [0.028]**
Non-White (Yes = 1)		0.016 [0.034]		0.015 [0.036]
Political Interest = Some (Yes = 1)		-0.071 [0.030]**		-0.081 [0.033]**
Political Interest < Some (Yes = 1)		-0.010 [0.036]		-0.019 [0.039]
Income Tercile = 1		-0.011 [0.034]		-0.024 [0.035]
Income Tercile = 3		0.037 [0.040]		0.025 [0.045]
Income Tercile = 4		-0.013 [0.033]		-0.026 [0.036]
Income Tercile = 5		-0.036 [0.054]		0.001 [0.062]
Income Refused		0.067 [0.059]		0.031 [0.067]
Constant	0.091 [0.036]**	-0.083 [0.121]	0.075 [0.038]**	-0.094 [0.130]
Observations	1,632	1,632	1,363	1,363
R ²	0.047	0.153	0.059	0.168

Note: Cell entries are OLS coefficient estimates with robust standard errors in brackets. Dependent variable is an indicator for whether respondent voted in either the 2010 or 2012 primary elections (Yes = 1). All analyses use survey weights. ***p<.01; **p<.05; *p<.1, one-sided tests for costs and benefits of voting, social and exclusionary norms, and deference variables. Models 1 and 2 of this table correspond to models 1 and 2 of Table 6 and use the sample of respondents who have complete data for the control variables and campaign spending variables in Table 6. Models 3 and 4 of this table correspond to models 1 and 2 of Table 6 and use the sample of respondents who have complete data for the control variables and party fractionalization variables in Table 6.

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for Reduced Participation

Alan S. Gerber
Yale University, Professor
Department of Political Science
Institution for Social and Policy Studies
77 Prospect Street, PO Box 208209
New Haven, CT 06520-8209
alan.gerber@yale.edu

Gregory A. Huber*
Yale University, Professor
Department of Political Science
Institution for Social and Policy Studies
77 Prospect Street, PO Box 208209
New Haven, CT 06520-8209
gregory.huber@yale.edu

Daniel R. Biggers
University of California, Riverside, Assistant Professor
Department of Political Science
2231 Watkins Hall, 900 University Avenue
Riverside, CA 92521
daniel.biggers@ucr.edu

David J. Hendry
Aarhus University, Assistant Professor
Department of Political Science
Bartholins Allé 7
8000 Aarhus C, Denmark
david.hendry@ps.au.dk

*Corresponding author.