

# **Perceptions vs. Actual Exposure to Electoral Competition: Testing Effects on Participation**

*Michael P. McDonald*

Associate Professor, George Mason University

*Caroline J. Tolbert*

Professor, University of Iowa

## **Abstract**

Seminal work by Ferejohn and Fiorina (1974) find no link between perceptions of electoral competition and voting behavior, casting into doubt the rational choice framework as it relates to voting. We find that citizens' perceptions of electoral competition are grounded in reality.

Individuals' perceptions of electoral competition are related to exposure to a close race in their U.S. House district (midterm election) or state (presidential election). However, perceptions are colored by "wishful thinking" in that individuals believe their favored candidate will win a close election (Uhlener and Grofman 1986). Once we control for the confounding influence of wishful thinking, we find that perceptions of electoral competition are associated with voting. Although numerous studies find increased turnout with higher levels of electoral competition, this is the first to find evidence of links between actual electoral competition, perceived electoral competition, and voting behavior.

**Acknowledgements:** We would like to thank the Pew Research Center. Partial funding for the Pew survey came from the Project on Electoral Competition. Foundations that provided funding for the project include the Armstrong Foundation, the Carnegie Corporation of New York, the JEHT Foundation, the Joyce Foundation, and the Kerr Foundation.

## **Introduction**

Many scholars consider political competition to be a necessary condition for a functioning representative democracy (e.g., Schumpeter 1942; Przeworski 1991). An extensive literature is devoted to the effects of electoral competition on political outcomes. Some studies link electoral competition to participation, but few scholars have examine how individuals' "perceptions" of electoral competition affect their voting behavior. Ferejohn and Fiorina (1974, 525), drawing upon data presented in Riker and Ordeshook (1968, 38), argue there is "rather little difference" between individuals' perceptions that an election is close and their voting propensities. If individuals' perceptions of electoral competition are unrelated to their actions, this casts in doubt whether rational choice contributes to our understanding of voting behavior. Further, it suggests that electoral competition is a democratic value that only political elites (and scholars) find necessary for democracy.

This early work contrasts with subsequent analyses. In a meta-analysis, Blais (2000, 60) reports electoral competition is consistently correlated with voter turnout across nations. Yet, elite behavior to mobilize voters may be responsible for the relationship between a close election and voting propensities, rather than individuals' perceptions. Voting scholars often measure electoral competition using only indirect measures such as vote margins or campaign expenditures, not direct measures of individuals' perceptions. Despite "strong reasons to believe...rational choice theory" (Blais 2006, 119) we might suspect that elite behavior primarily drives the relationship between competition and voting since average Americans possess little political knowledge on which to correctly base their perceptions (e.g., Campbell et al 1960; Delli Carpini and Keeter 1993; Lewis Beck et al 2008). Further confounding the connection between perceptions and behavior is that individuals are prone to overestimate the probability that an election is competitive (Granberg and Brent 1983; Uhlaner and Grofman 1986).

Three decades have passed since scholars have explored how individuals' perceptions of competition may affect their voting propensities. We take up this research agenda again through

an analysis of two surveys, a 2006 October Pew Research Center survey and the 2008 Cooperative Comparative Analysis Panel (CCAP) survey. These surveys are promising candidates to study perceptions of electoral competition because both ask respondents specific questions about perceptions of electoral competition in two settings, the high-stimulus 2008 presidential election and the lower-stimulus 2006 midterm congressional election. If we find that actual levels of competition are related to perceptions of competition and voting propensities, then we can re-establish a crucial link between democratic conditions and citizen's behavior.

### **Electoral Competition and Voter Turnout**

Scholars document substantial variation in electoral competition across American congressional and state legislative races (Cox and Munger 1989; Konisky and Ueda 2008; McDonald and Samples 2006; Squire 2000; Schickler, Citrin and Sides 2003). Approximately ten percent of recent U.S. House elections are 'marginal' using Mayhew's (1974) ten point victory margin in recent congressional elections (Jacobson 2008). In recent presidential elections, about a fifth of the states are considered 'battlegrounds' where candidates focus the lion's share of their campaign visits, mobilization efforts, and television ads (Holbrook and McClurg 2005; Shaw 2006). Thus exposure to actual electoral competition each election varies dramatically over the fifty states and 435 congressional districts, making it a suitable explanatory variable. Over the past half century the number of competitive U.S. House race and presidential swing states has markedly decreased, making exposure to electoral competition a rare phenomena for many Americans (Cain, Donovan and Tolbert 2008).

Numerous studies identify a positive relationship between electoral competition, as measured by the winning candidate's vote margin, and voter turnout (e.g., Barzel and Silverberg 1973; Brown et al. 1999; Blais and Dobrzynska 1998; Cox and Munger 1989; Fitzgerald 2005; Franklin 2004). In a meta-analysis, Blais (2000) finds that higher levels of electoral competition predict higher voter turnout in twenty-seven of thirty-two studies testing for the relationship. The literature conflicts somewhat as to which office is determinative. For example, Leighley and

Nagler (1992, 731-732) find that senatorial and gubernatorial vote margins in a respondent's state increase their probability of voting, but not the presidential vote margin. Fitzgerald (2005) finds that competitive presidential races increase aggregate state turnout over a twenty-year period, while competitive gubernatorial and senate races have a similar effect in midterm years (see Cain, Donovan and Tolbert 2008 for a related finding).

Actual vote margins are highly correlated with campaign activity. Another approach to studying electoral competition and turnout uses campaign expenditures as the independent variable of interest (e.g., Tolliver and Willett 1973; Settle and Abrams 1976; Copeland 1983; Jackson 1996a; Kahn and Kenny 1999; Holbrook and McClurg 2005). These studies find greater levels of campaign expenditures are related to higher levels of voter turnout. Fewer scholars have focused on turnout and House races. Cox and Munger (1989) examine the link between victory margin, expenditures and turnout in House elections and find elites decide to expend more money in close elections. When simultaneously controlling for both, they find independent effects of campaign spending and electoral competition on voter turnout (Cox and Munger 1989; see also Tolliver et al 1975). Others have corroborated this finding; when House incumbents face opposition, campaign expenditures have a significant and positive influence on aggregate participation rates, controlling for district level demographic factors (Jackson 1996a).<sup>1</sup>

These alternative measurement frameworks may appear similar but they belie a deeper theoretical distinction. Downs' (1957) familiar rational choice voting framework posits that voters participate when their expected benefits (B), as measured as their benefit of electing one candidate over another multiplied by the probability of casting the decisive vote (P), is greater than their costs (C). Riker and Ordeshook (1968) subsequently added civic duty (D) to the vote equation:  $C < PB + D$ . This rational choice framework is most consistent with those scholars who measure electoral competition in terms of vote margins. In this "investment" framework (Stigler 1972; Ferejohn and Fiorina 1974), the onus is upon voters to make their expected benefit

calculations, based in part on electoral competition or the probability of being the decisive voter, and then decide if they will vote.

Since the probability of a voter casting the decisive vote is practically zero in most large-scale elections, the act of voting appears irrational on face value (Tullock 1967). It then follows that other theoretical models of voting behavior may be more successful at explaining why people vote. Ferejohn and Fiorina (1974) propose that voters minimize the likelihood that they will regret not voting if their least favorite candidate wins. Riker and Ordeshook (1968) propose that civic duty is the key determinant, paving the way for subsequent studies of social capital (e.g., Putnam 2000). Stigler (1972) argues that consumer consumption models are more applicable, which is consistent with numerous studies of campaign expenditures and studies of campaign techniques, such as Gerber and Green's (2000) voter mobilization studies (see also Arceneaux and Nickerson 2009).

Ferejohn and Fiorina (1974) dealt Down's rational choice framework a further blow by pointing out that voters' perceptions of electoral competition are seemingly unrelated to their voting propensities. The analysis in their seminal *American Political Science Review* article, which attempts to fully model Riker and Ordeshook's calculus of voting, is presented in Table 1. A comparison of the similar values in the two rows for individuals' evaluations if the election was 'close' or 'not close' leads them to conclude that "P appears to make little difference" (p.525).

Ferejohn and Fiorina fail to consider a potential confounding factor. Citizens appear to engage in "wishful thinking" (Uhlener and Grofman 1986: 112) by overestimating the likelihood that their favored candidate will win a close election (see also, Brown 1982; Granberg and Brent 1983). The descriptor "wishful thinking" suggests this is a psychological phenomenon, whereby an individual imagines a favorable outcome when tasked with forecasting an election (Carroll 1978). Yet, Uhlener and Grofman argue that individuals tend to over-estimate electoral competition based on available information found in their social networks, the media, and their past experiences of unexpected events upsetting campaign dynamics. They argue that more

educated persons have more information available to make a correct prediction, and find that more educated persons are more likely to correctly forecast that an election is uncompetitive (p.122).

The paradigm that voters' perceptions of electoral competition are relevant to their voting decisions has been dismissed as a dead end or has become such a part of conventional wisdom that it "cannot be wrong" (Blais 2006, 119) despite any direct evidence in its support. We re-examine the link between perceptions of electoral competition and voting behavior. Little research has been published on perceptions of electoral competition in the last thirty-five years, and none with the advantage of modern empirical methods. We hypothesize, consistent with Downs' investment model, that perceptions of electoral competition are driven by actual exposure to electoral competition in one's congressional district or state. We expect electoral competition is positively associated with perceptions of electoral competition, but is far from a perfect match. Consistent with Uhlaner and Grofman's (1986) concept of wishful thinking, we expect education, political knowledge, and interest should be associated with perceptions of competitive races. That is, errors in perceptions of electoral competition result from a lack of basic political knowledge and are confounded by those drawn into paying attention to campaigns. Finally, we expect perceptions of electoral competition to be associated with turnout and the probability of voting in the election, once we control for the potentially confounding effects.

### **A Two-Stage Analysis of Perceptions of Competition and Effects on Voting**

We explore perceptions of electoral competition and individual level voting behavior in two contexts, the low stimulus 2006 midterm congressional election and the high stimulus 2008 presidential election. We analyze two data sources: a 2006 October Pew Research Center survey and the 2008 Cooperative Comparative Analysis Panel (CCAP) survey.

These surveys, although conducted by different organizations, include questions designed by the authors to probe a respondent's belief about electoral competition. As much as possible, we choose variables and define them in a similar manner so that the findings are comparable for

the two analyses. Differences among these surveys unfortunately limit our ability to conduct exactly identical analyses. The Pew survey includes questions that permit us to replicate fully Uhlaner and Grofman's (1986) 'wishful thinking,' while the CCAP includes questions that permit us to indirectly test this theoretical framework. A strength of the CCAP's panel component, where the same individuals are interviewed at multiple times in the campaign, permits us to ask identical questions about perceptions of competition in the presidential race in the respondent's state both before and after the November election. We can use pre-election perceptions of electoral competition to model reported post-election turnout.

We develop a two-stage model where perceptions of electoral competition are predicted by actual electoral competition in a respondent's congressional district or state, as well as demographic, partisan and informational variables. In the second stage, perceptions of electoral competition are used to predict turnout in the election. In both stages, the dependent variable is either binary or ordered categorical, so we use logistic regression or ordered logit models, where appropriate. Coefficients are reported with standard errors clustered by congressional district or state, depending on the survey, given the multilevel nature of these data (Primo et al 2007).

### **2006 Pew Survey Research Survey**

We analyze a Pew Survey Research 2006 pre-election survey to investigate perceptions of electoral competition in the 2006 House elections. The random digit dialed survey consists of 2,006 adults interviewed from October 17-22, 2006, two weeks prior to the November general election. Respondents were matched to their House district by geo-coding their zip code.<sup>2</sup> A supplemental oversample of four hundred respondents living in House districts with a competitive race, as determined by five nationally recognized election handicappers, allows us to better estimate attitudes and behaviors of persons living in the few competitive districts.<sup>3</sup> While the selection criteria produced post-hoc errors on what was indeed a competitive House election, it ensured that that despite a paucity of competition in House elections a generous number of respondents living in districts with competitive House races would be interviewed.<sup>4</sup>

The question used as the dependent variable in the first stage of our analysis asked respondents self-identified as registered to vote, “What’s your impression – in the race for the U.S. House in your district, is one candidate heavily favored to win or do you think this will be a close contest?” This question wording is designed to probe for perceptions of electoral competition without directly invoking the word ‘competitive,’ which might be an unfamiliar term and thus require interviewers to provide a definition to respondents that might inadvertently bias responses. Since we are interested in whether or not an individual perceives of an election as competitive, in constructing this binary variable, we code those who believed the race was competitive as a 1, and those who said one candidate was heavily favored along with those who could not or would not provide an answer a 0. Election handicappers, academics, and the public surprisingly disagree by wide margins the levels of competition in House elections. Election handicappers varied their designation of “toss-up” or “leaning” House elections around forty or 9% of all House seats. Mayhew (1974) defines a ‘marginal’ election as one where the victory margin is less than ten percentage points. According to Mayhew, sixty-one or 14% of all House seats in 2006 had a marginal election.<sup>5</sup> In stark contrast, 57% of registered voters reported that their district’s election “will be a close contest,” 23% reported that “one candidate is heavily favored,” and 20% did not know or refused to answer.

Among the chief independent variables of importance in our analysis is a measure of electoral competition. We construct this variable for House districts by subtracting the victory margin between the top two candidates from one, such that the measure varies along the full [0, 1] range with higher values indicating a more competitive election. The causality may seem to flow in the wrong direction, in that vote margins predict pre-election perceptions of competition. However, we believe this approach is sound. The Pew survey was conducted two weeks prior to the election and election dynamics did not likely change greatly between the time when respondents were interviewed and when votes were tabulated.

We replicate Uhlaner and Grofman’s analysis of ‘wishful thinking’ in the 1980 presidential

election by analyzing respondents' propensities to overestimate the competitiveness of their 2006 House elections.<sup>6</sup> Table 2 shows the percentages of respondents who reported a Democrat or Republican House candidate as their candidate of choice, and their belief as to which parties' candidate would win the election – Democrat, Republican or unknown – and if 'one candidate is heavily favored' or the election 'will be a close contest.' Consistent with 'wishful thinking,' we see that respondents who intended to vote for Republican or Democratic candidates more often predicted that their party's candidate will win a close election than the other party's candidate. For example, in elections where the victory margin was less than ten percentage points, 35% of respondents who support the Republican candidate believe that their candidate will win a close election, compared with 11% who believe the Democrat will win. Conversely, 48% of the Democratic candidates' supporters thought their candidate will win a close election, while 9% thought the Republican will win.

Respondents' predictions are modestly related to the realized margin of victory: where the margin of victory was less than ten percentage points, 64% of respondents predicted a close contest, and where the margin was more than ten percentage points, 56% reported a close contest. To illustrate that this is not merely an artifact of the choice of what constitutes a marginal election, incredibly 60.7% of respondents reported the election was close even when there was only one major party candidate (the average victory margin in these races, where a minor party candidate may be present, was 92.8 percentage points). In races where the margin of victory was more than ten percentage points, respondents' with a favored partisan candidate that lost the election slightly less frequently predicted that their candidate of choice was heavily favored, but sizable percentages still predicted their favored candidate would win a close election.

To test for wishful thinking in a multivariate model predicting if an individual believes a House election will be close, we create two variables identifying respondents who intend to vote for a party's (Democrat or Republican) candidate and if they believe that their candidate of choice will win. If wishful thinking is present, these variables should be positively related to perceptions

of electoral competition. To further probe the role of education and media, we include as additional independent variables a political knowledge scale, which is a combination of responses to two factual questions about politics,<sup>7</sup> a seven-point education scale, and a binary measure of respondents' attentiveness to election news.<sup>8</sup> As further control variables, we include a respondent's age, gender, and whether or not they are white non-Hispanic.

The dependent variable in our second stage analysis is respondents' voting propensities for their 2006 U.S. House race. Pew Survey Research constructed an eight point likely voter index based on eight questions probing vote intention, past voting behavior, current registration status, and interest in the election. This measure may not be an accurate measure of vote intention for the office of U.S. House since voters may vote for higher offices on a ballot, such as governor or Senate, but choose to abstain or 'roll-off' for the House election (e.g., Cox and Munger 1989). Indeed, we are interested in accounting for roll-off since levels of electoral competition may be related to this behavior. To measure a respondent's intention to vote for a House candidate we identify respondents who state a candidate preference on a generic ballot for U.S. House and who score '7' or '8' on Pew's eight-point likely voter scale. By this measure, 56.0% of respondents registered to vote indicated that they would vote in the House election.

We use many of these same variables in the second stage model predicting vote propensity, with the exception that we exclude attentiveness to election news, which is a component of Pew's likely voter index, and the two variables testing for wishful thinking. We add to the second stage model of voting propensities the dependent variable in the first stage, a respondent's belief that the election is competitive. We further add as independent variables if a respondent self-identifies as a Democrat or Republican, the square of age to account for decreasing turnout levels for the eldest persons typically observed in voting studies, and a structural variable – the close of voter registration – that is known to affect voting propensities.

### **Findings: 2006 Midterm Election**

Table 3 provides estimates of the probability that an individual believed their House race would be close in the 2006 general election. Heightened levels of electoral competition in House elections do appear to filter into the public's consciousness. Since the measure of electoral competitiveness varies across its full [0, 1] range, a respondent living in a maximally competitive district is 26 percentage points more likely to report their election is competitive than in a maximally uncompetitive election (these propensities are calculated for a base probability equal to fifty 50%). Perceptions of House races are to a significant degree a rational reflection of reality, despite the much lower number of competitive districts than battleground states in presidential races.

The statistics reported in Table 3 also support 'wishful thinking' (Uhlener and Grofman 1986) evident in the simple cross-tabulations in Table 2. Respondents who reported intending to vote for a Democratic or Republican candidate, and also believed that their candidate would win, are more likely to report that the election will be close. Democratic supporters were slightly more likely to report their House race would be close, with a probability of 10 percentage points compared to 7 points for Republicans. The lower confidence of Democratic supporters may be a function of the 2006 election. Democrats wrested control from Republicans by defeating Republican incumbents, many of who resided in Republican-leaning districts (Jacobson 2008). This shift of the electoral battlefield into Republican districts may have evoked more wishful thinking among Democrats.

Delving deeper into Uhlener and Grofman (1986) thesis, we find evidence consistent with their postulation that better educated individuals are more likely to make correct forecasts of election outcomes. Respondents with greater political knowledge and high levels of education are less likely to say the House race in their district was close. However, contrary to their prediction that "persons who pay more attention to the news should make less 'wish fulfilling' predictions" (p.121), we find that those who report paying attention to campaign news in the media are *more*

likely to report their House election will be close. Thus, avid followers of political news may be more susceptible to wishful thinking.

Aside from these theoretically important variables the demographic controls for age and gender are not statistically significant. Race matters, with white non-Hispanics less likely to report that their contest will be close at the  $p < .10$  level than racial minorities. This result is somewhat puzzling since minorities tend to reside in uncompetitive Voting Rights districts. Minorities residing in these heavily Democratic minority-majority House districts may have had little information to base their evaluations on, since the media and the campaigns would have been largely non-existent in these uncompetitive races.

Our analysis of respondents' voting propensities for the 2006 House elections is presented in Table 4. The control variables are in the expected direction, suggesting the models have construct validity.<sup>9</sup> We find actual electoral competition is unrelated to voting propensities, while perceptions of electoral competition are. Individuals who believe the House race in their district is close are significantly more likely to vote, holding other factors constant. To be certain that this relationship is not an artifact of including or excluding either actual or perceived electoral competition from the model, we present results from three models. When perceptions are excluded in Model 1, we see that actual electoral competition is unrelated to voting propensities. When actual vote margin is excluded in Model 2, perceptions are shown to be related to voting propensities. When both variables are included in Model 3, actual competition is unrelated while perceptions are related to voting propensities. While these results may seem to provide evidence that actual competition is unrelated to voting propensities in House elections, recall that actual levels of electoral competition enter into a respondent's thinking in the first stage, when respondents' develop their beliefs about electoral competition. We thus suggest that attempts to model the effects of electoral competition on individual level voting may face endogeneity problems, unless they account for individual-level perceptions of competition.

## **2008 Cooperative Comparative Analysis Panel.**

Do we find similar patterns in higher information presidential elections? The Cooperative Comparative Analysis Panel is a collaborative effort of over 60 political scientists from 25 institutions to produce a six-wave panel study conducted on the internet during the 2008 Presidential campaign. The survey is drawn from a national sample of nearly 18,000 adult respondent (14,000 of which completed all six waves) stratified by battleground and non-battleground states. Nine states that makeup both battleground and early primaries were oversampled such that they are equal in population with the non-battleground.<sup>10</sup> Polimetrix used matched random sampling to alleviate problems with the non-representativeness of internet surveys to produce a representative national sample.<sup>11</sup> The 2008 CCAP follows the same approach as the 2006 Cooperative Congressional Election Study (CCES) which uses sample matching to construct a representative sample of registered voters. Even without the weights there is little disagreement that internet surveys can be used effectively for experimental and panel studies. Using this technique, the CCES produced more precise estimates than more conventional probability designs such as RDD phone surveys (Vavreck and Rivers 2008). Each team of researchers designed a module of questions to a sample of 1000 respondents. Questions about perceptions of competition in the presidential race in the respondents' state ran on the final pre-election wave October, and the post-election wave November. We measure perceptions of competition before the election and whether the same respondent voted post-election, potentially alleviating some problems with causation.

In the 2008 CCAP, our critical outcome variable in stage one measures perceptions of competition in the presidential race in the respondent state with the following question: "Please think about the role that your state played in determining the president in the general election. Compared to other states, do you think your state is very important, somewhat important, not important or not at all important?" Higher values mean the respondent felt their state was more important in selecting presidential candidates. In the pre-election wave, 40% of respondents said

their state was “very important”, 31% “somewhat important,” 17.5% “not very important.” The percentages dropped slightly post-election, with 34% saying competition in their state was “very important,” 29% “somewhat important” and 21% “not very important.” Since battleground for the 2008 presidential election arguably was decided in a handful of states, the low percentage of respondents who report their state is “not very important” suggest that individuals overestimate their home state’s importance, much like they do the competitiveness of their 2006 House elections and previous presidential elections (Uhlener and Grofman 1986). As this is an ordered categorical dependent variable, we use ordered logit in the analysis that follows for this dependent variable.

In Figure 1 the percentage of respondents that felt their state was “very important” in the 2008 presidential race for each state is presented. Citizens residing in battleground states are much more likely to indicate their state is “very important,” compared to the other response categories, as are respondents from large population states. For example, over 80% of respondents from Florida and Ohio felt their state was “very important” in selecting presidential candidates, and nearly as many from Pennsylvania responded the same way. These were the three largest battleground states in 2008. Respondents from North Carolina, Virginia responded similarly. Very few individuals from Idaho likely made this an outlier case in the scatterplot distribution. Figure 2 shows the difference between those saying their state was “very important” and “somewhat important” in selecting presidential candidates.

Notice that this question doesn’t use the word “competition” but rather couches electoral competition in a way that average citizens can understand in terms of state influence. Respondents are aware of the unequal distribution of Electoral College votes among the states (e.g., Kallenbach 1960; Sterling 1981; Gelman, Katz, and King 2004). Respondents in Electoral College rich states more often report that their state is important, and this effect is additive for respondents in battleground states. For example, California is a large population state with many Electoral College votes but relatively safe for Democratic presidential candidates. Roughly the

same proportion of Californian respondents said their state was very important versus somewhat important. But in Florida, Ohio and Pennsylvania, large states that are also closely contested presidential battlegrounds, more respondents indicated their state was very influential, rather than only somewhat.

We measure actual competition in a respondent's state using a similar metric to that used for the House race analysis.<sup>12</sup> As before, we expect actual competition in the presidential race to shape perceptions of a state's importance. Since this dependent variable also captures the concept of the size a state's contribution to the Electoral College, these models control for the population size (logged). We expect respondents from larger states will be more likely to aware they live in an important state.

We are unable to directly replicate Uhlaner and Grofman's 'wishful thinking' analysis because a question asking which candidate a respondent expected to win *their* state was not asked. We proxy for potential wishful thinking by including the partisanship of the respondent, since it is well-established that a self-identified Democrat or Republican is much more likely to support their party's presidential candidate (e.g., Campbell, et al 1960).<sup>13</sup> We thus expect these partisans to more frequently report that their state is important. We expect 'wishful thinking' to be mitigated by greater education and political knowledge. We also suspect, consistent with our House analysis, that respondents' interested in the election will be predisposed to believe that their state is important.<sup>14</sup> Political knowledge is measured on 4-point scale, where three indicates the respondent could answer three factual questions about politics correctly and a zero, none of the questions correctly.<sup>15</sup> The models also control for basic demographic factors, including the respondent's age, gender and race/ethnicity.

Models predicting turnout in the November post-election survey are based on the respondent's reported turnout (coded '1', '0' for those who said they didn't vote). Explanatory variables include perceptions of competition in the respondent's state, and demographic and attitudinal variables. We also include an additional covariate measuring the days before the

election required to register to vote in the respondent's state to control for this structural factor.

### **Findings: 2008 Presidential Election**

Table 5 presents an empirical test of our two-stage model of perceptions of electoral competition and voting. The outcome variable is whether the respondent perceives the 2008 presidential race in their state is important, either pre-election (column 1) or post-election (column 2). The coefficients for presidential vote margin in the respondent's state are large and statistically significant, holding constant other factors. Similarly, individuals residing in large population states are significantly more likely to believe their state is influential. Consistent with the House analysis, perceptions of importance are based on the actual competitive environment, with the addition that individuals are aware of the institutional structure of the Electoral College.

We observe evidence of wishful thinking consistent with our House analysis. Partisans are more likely to report that their state is important in the presidential election, suggesting that those who have a horse in the race are hopeful that their candidate will win a close election in their state. Consistent with the mitigating effects of education and political knowledge, these estimated coefficients are negative. However, they are not statistically significant at conventional levels in the pre-election perceptions model. Education of the respondent reaches statistical significance at the  $p < .05$  level post-election, suggesting that more educated persons are able to learn about the lack of importance of their state as realized by the election outcome. We also see that respondents' pre-election interest is positively related to believing that a state is important to the presidential election outcome, a finding that is again consistent with our House analysis, but is contrary to Uhlaner and Grofman's (1986) prediction. This effect persists post-election, but is no longer statistically significant, suggesting that the over-estimation of importance wanes along with interest.

Our central turnout model for the 2008 presidential general election is reported in Table 6. Here, the dependent variable is reported turnout in November wave of the panel survey. The control variables' estimates generally conform to existing voting models, confirming the

construct validity of the models. As before, we run three models for our key independent variables. For Model 1, vote margin is alone. In Model 2, perceptions of state importance in October (pre-election), is alone. And in Model 3, these two variables are entered jointly. In no models is victory margin near statistical significance. As with our House analysis, perceptions of importance are positively related to post-election voting propensities. The coefficient for perceptions of importance is only weakly statistically significant using a two-tailed test at the  $p < .10$  level when entered alone, and is just shy of conventional  $p < .05$  levels when victory margin is included. Since we would not expect that perceptions of importance would be negatively related to turnout, we believe that a one-tailed test is appropriate, in which case perceptions are statistically significant at the  $p < .05$  level. Since this is a panel survey, with the same respondents are interviewed before and after the election, it provides more confidence in our findings. Self-reported voting post-election was in part driven by pre-election perceptions of importance in a respondent's state, which in turn were rational reflections of actual competition in their geographic area.

## **Discussion**

Does competition only shape elite behavior, or does it have consequences for average citizens? We have shown here that individuals' perceptions of electoral competition are conditioned on actual electoral competition and that their perceptions are relevant in predicting whether an individual will vote in both a high information presidential election and lower information midterm election. Thus, individuals' perception that the probability that their vote will count – the P term – matters to their voting behavior. Elite behavior alone is not driving the relationship between electoral competition and turnout observed in many studies (Blais 2006).

Consistent with Uhlaner and Grofman's (1986) analysis of the 1980 presidential election, we observe evidence of 'wishful thinking' in the 2006 House elections that is mitigated among higher educated individuals who are politically knowledgeable. However, contrary to Uhlaner and Grofman's expectations that information obtained from the news would similarly reduce

forecasting errors, we find the opposite. Individuals who pay attention to campaign news are more likely to state an election is competitive. We suspect that this result turns on their insight that “candidates (in a two-candidate race) try to foster the perception that their support approaches 50%” (1986: 121). Like a sporting event, individuals who assess that one candidate is favored to win will rationally pay less attention to campaign news since only a major change in the campaign dynamics will upset their predicted outcome. Those who believe the election will be close pay attention to the media to find out who is ahead. The media and the campaigns thus have an incentive to draw attention to campaigns by overstating the closeness of the election. For the media, heightened attention translates into more readers, listeners, or viewers, while for campaigns, it translates into more volunteers, donations, and people willing to vote.

In the 2008 presidential election we find that higher educated individuals who are politically knowledgeable are more likely to make the correct assessment of their state’s importance to the presidential election outcome.<sup>16</sup> Panel survey data and unique survey questions in the 2008 CCAP allow us to sort out the two-stage process, where actual electoral competition appears to increase perceptions of competition, and in turn perceptions that a race is close may increase the probability of voting, as reported post-election. We also note that more educated people appear to better process the actual election results when determining the level of importance of their state, post-election and that the effect of media attentiveness fades along with interest in the election.

Consistent with Downs and Riker and Ordeshook (1968), our findings suggest a voter’s decision to participate in an election may in part be rational. While this may seem obvious from conventional wisdom, these findings actually contrast with previous literature (Ferejohn and Fiorina 1974) that casts doubt on the link between perceptions of competition and voting propensities. By demonstrating that voters do indeed condition their voting decision on the probability that they will cast the decisive vote, we hope to reinvigorate research into this aspect of voting behavior. Furthermore, existing research predicting the effects of electoral competition on

individual-level political behavior may be missing a key step: modeling individual-level perceptions of electoral competition. More broadly, we may be interested in future research of fully modeling individuals' perceptions as they relate to the entire voting calculus: their perceived costs, benefits, probability of being decisive, and civic duty.

We also present these results for normative reasons. Scholars argue electoral competition matters, and the dearth of competitive U.S. House races can inhibit representation. Uncompetitive elections may not only weaken links between representatives and constituents, leading to less representative policy, but may depress turnout and participation. As Donovan argues (2007) electoral competition "is the mechanism that makes elections more responsive to the distribution of mass preferences, the mechanism that provides accountability, and the mechanism by which citizens are mobilized and engaged by representative democracy." If competitive elections matter for the most basic form of participation in a democracy, reformers have added ammunition to change the rules to improve elections in U.S. elections, such as redistricting, Electoral College or campaign finance reform. The majority of Americans residing in uncompetitive, or worse, uncontested U.S. House districts, or in states which are not designated as a 'battleground' may not be exposed to meaningful electoral competition. Some of these citizens will rightfully perceive a lack of electoral competition and will be less likely to vote, which may further erode their confidence in the democratic system. Declines in voter turnout over the past half-century may be thus driven in part by a presidential battleground that has shifted away from the largest states, like California, and by declining marginals in Congress.

## Endnotes

---

<sup>1</sup> Jackson also provides robust evidence that campaign activity in gubernatorial and U.S. Senate races increase turnout, with larger effects in midterm than presidential years (1996b, 1997, 2002; Jackson et al 1988; see also Patterson and Caldeira 1983; Caldeira et al 1985). Moving beyond aggregate data, Jackson finds that while individual characteristics are the principal determinants of voter registration status, campaign factors are the most important in explaining the turnout of those individuals who are registered to vote (1996b).

<sup>2</sup> Respondents were matched to their zip code by geo-coding their self-identified zip code. Zip codes do not perfectly follow congressional district lines. 31.5% of respondents were possibly assigned to more than one congressional district. Yet, only 19.2% had less than a 90% overlap with one congressional district. The congressional district that most overlapped a zip code was assigned to the respondent. Respondents' telephone exchanges were also matched to counties, which permitted assignment of 40.7% of the respondents with nonexistent or ambiguous zip codes. Matching error should generally be minimal and is not expected to be correlated to respondents' answers to question items.

<sup>3</sup> Competitive districts were identified where rankings by *Congressional Quarterly*, *The Cook Political Report*, *The Rothenberg Political Report*, *The New York Times*, and Larry Sabato's Crystal Ball agreed in early to mid-October. This yielded a list of forty competitive districts: Arizona-05, Arizona-08, California-11, Colorado-04, Colorado-07, Connecticut-02, Connecticut-04, Connecticut-05, Florida-13, Florida-22, Georgia-08, Georgia-12, Iowa-01, Iowa-03, Illinois-06, Illinois-08, Indiana-02, Indiana-08, Indiana-09, Kentucky-04, Minnesota-06, North Carolina-11, New Jersey-07, New Mexico-01, Nevada-02, New York-20, New York-24, New York-29, Ohio-01, Ohio-15, Ohio-18, Pennsylvania-06, Pennsylvania-07, Pennsylvania-08, Pennsylvania-10, Texas-17, Virginia-02, Vermont at-large, Washington-08, and Wisconsin-08.

---

<sup>4</sup> Of those districts in the over-sample, five elections were outside of Mayhew's (1974) ten point victory margin. Connecticut's 5<sup>th</sup> had a 10.3 percentage point victory margin, Indiana's 8<sup>th</sup> had a 22.0 margin, Iowa's 1<sup>st</sup> had an 11.8 margin, Ohio's 18<sup>th</sup> had a 24.1 margin, and Pennsylvania's 7<sup>th</sup> had a 12.8 margin. Districts with a 'marginal' outcome but were not surveyed included: Arizona-08, California-04, California-50, Florida-08, Florida-16, Idaho-01, Illinois-10, Indiana-03, Iowa-02, Kansas-03, Kentucky-04, Michigan-07, Michigan-09, Minnesota-01, Nebraska-02, Nebraska-03, New Hampshire-01, New Hampshire-02, New York-19, New York-25, New York-26, North Carolina-08, Ohio-02, Pennsylvania-04, and Wyoming at-large. The margin between two Democrats in Louisiana-02 and the combined Democratic and Republican vote in the Texas-23 special election were less than 10 percentage points. These elections both resulted in a run-off election between the top-two finishers.

<sup>5</sup> With the victory margin expressed as the difference between the two major party candidates only, commonly referred to as the "two-party vote," the number of House elections within a ten point range decreases to 59.

<sup>6</sup> We do not use the ANES because this instrument does sample randomly within states, as well as that our questions were placed on other survey instruments. The ANES data are problematic for studying contextual effects because of the Primary Sampling Unit (PSU) survey design. To accommodate face-to-face interviews, the ANES uses a multi-stage, stratified probability sample. While this method approximates a simple random sample for the population, it does not provide random samples within states, and can cause reliability issues in state- or congressional-level research designs (Donovan, Tolbert and Smith 2009). Given our use of multilevel data, we use surveys that draw random samples within states. The Pew survey has the advantage of oversampling competitive House districts.

<sup>7</sup> One question asked respondents which political party currently held majority control of the U.S. House, to which 58.4% of respondents correctly identified the Republican Party. A second

---

question asked respondents to name their member of the U.S. House, which 37.3% correctly did. A correct answer to each question is scored as a '1' and the two answers are summed to create a three-point knowledge scale ranging from [0, 2]. In supplemental analysis to confirm if the estimated effect of the knowledge scale is indeed linear across its range, we include these two variables separately in our statistical models and find the coefficients and their statistical significance are nearly identical, deviating only at the second significant digit.

<sup>8</sup> The media attentiveness variable is coded as '1' if a respondent reported following news about candidates and election campaigns "very closely" or "fairly closely" and '0' if "not too closely" or "not at all."

<sup>9</sup> The results for the control variables are generally consistent with previous studies. More educated persons are more likely to vote, older persons are more likely to vote with a downward trend for the eldest persons as evident in negative coefficient on the square of age, persons with more political knowledge are likely to vote, self-identified partisans are more likely to vote than the excluded reference category of independents, and those persons living in Election Day registration states are more likely to vote. The coefficients identifying if a respondent is female or white non-Hispanic are not statistically significant, but generally in the expected direction in that men and white non-Hispanics are more likely to vote in a midterm election. In all, these relationships suggest the model has construct validity.

<sup>10</sup> The oversampled states were FL, IA, MN, NV, WI, NH, NM, OH, PA.

<sup>11</sup> All results reported here utilize the sampling weights provided by Polimetrix. Additional detail on the Polimetrix's matched sampling procedures can be found in Ansolabehere (2007).

<sup>12</sup> The interval level variable varies from a low of .55 (in Hawaii) to .63 (Vermont) and .70 (Utah) to .99 in Missouri, North Carolina and Indiana and .97 in Florida and .95 in Ohio. Thus in Ohio, Obama received 5% more votes than McCain, but in Hawaii, Obama received 45% more votes than McCain. Ohio was a highly competitive state and Hawaii was not.

---

<sup>13</sup> We use binary variables for Republican and Democratic partisans, with independents as the reference group using a three-category party identification question.

<sup>14</sup> We measure political interest with a 3-point measure, where “very interested” was coded as ‘1’ and “somewhat interested” and “not that much” coded as ‘0’. Respondents were asked their level of interest in politics or current events in the October wave of the panel. 66% said very interested in the politics.

<sup>15</sup> Correct responses to three factual questions were summed to create the measure of political knowledge. Respondents were asked to correctly identify the job held by Nancy Pelosi (734 correctly answered and 159 did not), Ted Kennedy (875 correctly responded and 44 did not) and Condoleezza Rice (856 correctly answered and 103 did not). Summing the correct answers created a 4 points scale in which 67% answered all three questions correctly, 16% only 2 of the three and 13% none of the three.

<sup>16</sup> There is good reason to suspect this finding is robust, regardless of potential omitted variable bias. In our House models, excluding variables to test for ‘wishful thinking’ had no substantive effect on the other estimated coefficients.

## References

- Arceneaux, Kevin and David W. Nickerson. 2009. "Who is Mobilized to Vote? A Re-Analysis of 11 Field Experiments." *American Journal of Political Science* 53 (January): 1-16.
- Ansolabehere, Stephen. 2007. Cooperative Congressional Election Study, 2006: Common Content. [Computer File] Release 2: November 14, 2007. Cambridge, MA: M.I.T. [producer]. [<http://web.mit.edu/polisci/portl/cces/commoncontent.html>].
- Barzel, Yoram and Eugene Silberberg. "Is the Act of Voting Rational?" *Public Choice* 16(1): 51–58.
- Blais, Andre. 2000. *To Vote Or Not To Vote? The Merits and Limits of Rational Choice*. Pittsburgh: Univ. Pittsburgh Pres
- Blais, Andre. 2006. "What Affects Voter Turnout?" *Annual Review of Political Science*. 9: 111–25.
- Blais, Andre and A. Dobrzynska. 1998. "Turnout in Electoral Democracies." *European Journal of Political Research*. 18:167–81
- Brown, Clifford. 1982. "A False Consensus Bias in 1980 Presidential Preferences." *Journal of Social Psychology* 118(1): 137–138.
- Brown, Robert D., Jackson, Robert A., and Wright, Gerald C. 1999. "Registration, Turnout, and State Party Systems." *Political Research Quarterly* 52: 463–479.
- Cain, Bruce, Todd Donovan and Caroline Tolbert. Eds. 2008. *Democracy in the States: Experiments in Election Reform*. Washington DC: Brookings Institution Press.
- Caldeira, Gregory A., Patterson, Samuel C., and Markko, Gregory A. 1985. "The Mobilization of Voters." *Journal of Politics* 47: 490–509.
- Campbell, Angus, Philip Converse, Warren E. Miller, and Donald E. Stokes. 1960. *The American Voter*. New York: Wiley.
- Copeland, Gary W. 1983. "Activating Voters in Congressional Elections." *Political Behavior* 5(4): 391–401

- Cox, Gary W. and Michael C. Munger. 1989. Closeness, Expenditures, and Turnout in the 1982 U.S. House Elections. *The American Political Science Review* 83(1): 217–231.
- Carroll, John. 1978. “The Effect of Imagining an Event on Expectations for the Event: An interpretation in Terms of the Availability Heuristic.” *Journal of Experimental Social Psychology* 14: 88–96.
- Delli Carpini, Michael X. and Scott Keeter. 1993. “Measuring Political Knowledge: Putting First Things First.” *American Journal of Political Science* 37(4): 1179–1206
- Donovan, Todd. 2007. "A Goal for Reform: Make Elections Worth Stealing." *PS: Political Science and Politics*. (October): 681-86.
- Donovan, Todd, Caroline Tolbert, and Daniel Smith. 2009. "Political Engagement, Mobilization and Direct Democracy." *Public Opinion Quarterly*, 73 (1): 98–118.
- Downs, Anothony. 1957. *An Economic Theory of Democracy*. New York: Harper and Row.
- Ferejohn, John A. and Morris P. Fiorina. 1974. “The Paradox of Not Voting: A Decision Theoretic Analysis.” *The American Political Science Review* 68(2): 525–536.
- Fitzgerald, Mary. 2005. “Greater Convenience but not Greater Turnout: The Impact of Alternative Voting Methods on Electoral Participation in the United States.” *American Political Research* 33: 842–867.
- Franklin, Mark N. 2004. *Voter Turnout and the Dynamics of Electoral Competition in Established Democracies Since 1945*. New York: Cambridge University Press.
- Gerber, Alan S. and Donald P. Green. 2000. “The Effects of Canvassing, Telephone Calls, and Direct Mail on Voter Turnout: A Field Experiment” *The American Political Science Review* 94(3): 653–663.
- Gelman, Andrew; Jonathan Katz; and Gary King. 2004. “Empirically Evaluating the Electoral College,” in Ann N. Crigler, Marion R. Just, and Edward J. McCaffery, eds., *Rethinking the Vote: The Politics and Prospects of American Electoral Reform*. New York: Oxford University Press.

- Granberg, Donald, and Brent, Edward. 1983. "When Prophecy Bends: The Preference-Expectation Link in U.S. Presidential Elections, 1952–1980." *Journal of Personality and Social Psychology* 45(3):477-491.
- Holbrook, Thomas and Scott McClurg. 2005. "The Mobilization of Core Supporters: Campaigns, Turnout, and Electoral Composition in United States Presidential Elections." *American Journal of Political Science* 49 (4): 689–703.
- Jackson, Robert A. 2002. "Gubernatorial and Senatorial Campaign Mobilization of Voters." *Political Research Quarterly*. 55(4): 825–844.
- Jackson, Robert A. 1996a. The Mobilization of Congressional Electorates. *Legislative Studies Quarterly*, 21, 425–445.
- Jackson, Robert A. 1996b. "A Reassessment of Voter Mobilization." *Political Research Quarterly* 49: 331–349.
- Jackson, Robert A. 1997. "The Mobilization of U.S. State Electorates in the 1998 and 1990 Elections." *Journal of Politics* 59: 520–37.
- Jackson, Robert A., Brown, Robert D., & Wright, Gerald C. 1998. "Registration, Turnout, and the Electoral Representativeness of U.S. State Electorates." *American Politics Quarterly*, 26, 259–287.
- Jacobson, Gary. 2008. *The Politics of Congressional Elections, 7<sup>th</sup> Edition*. New York: Longman.
- Kahn, K.F. and P.J. Kenny. 1999. *The Spectacle of U.S. Senate Campaigns*. Princeton, NJ: Princeton University Press.
- Kallenbach, Joseph E. 1960. "Our Electoral College Gerrymander." *Midwest Journal of Political Science* 4(2): 162–91.
- Konisky, David and Michiko Ueda. 2008. "Uncontested Elections and Legislator Performance, Quality and Effectiveness." Paper presented at the Annual State Politics and Policy Meeting, Temple University.

- Leighley, Jan and Jonathan Nagler. 1992. "Individual and Systemic Influences on Turnout: Who Votes?" *Journal of Politics* 54: 718–741.
- Lewis-Beck, Michael S., William G. Jacoby, Helmut Norpoth, and Herbert F. Weisberg. 2008. *The American Voter Revisited*. Ann Arbor: University of Michigan Press.
- McDonald, Michael and John Samples, Eds. 2006. *The Marketplace of Democracy: Electoral Competition and American Politics*. Washington, DC: Brookings Institute Press.
- Malhotra, Neil and Jon A. Krosnick. 2007. "The Effect of Survey Mode and Sampling Inferences about Political Attitudes and Behavior: Comparing the 2000 and 2004 ANES to Internet Surveys with Nonprobability Samples." *Political Analysis* 15:286-323.
- Mayhew, David. 1974. "Congressional Elections: The Case of the Vanishing Marginals." *Polity* 6: 295–317.
- Patterson, Samuel C. and Gregory Caldeira. 1983. "Getting Out the Vote: Participation in Gubernatorial Elections." *American Political Science Review* 77(3): 675–89.
- Primo, David M., Matthew L. Jacobsmeier, and Jeffrey Milyo. 2007. "Estimating the Impact of State Policies and Institutions with Mixed-Level Data," *State Politics and Policy Quarterly* 7: 446–59.
- Przeworski, Adam. 1991. *Democracy and the Market: Political and Economic Reforms in Eastern Europe and Latin America*. New York, NY: Cambridge University Press.
- Riker, William H. and Peter C. Ordeshook. 1968. "A Theory of the Calculus of Voting." *The American Political Science Review* 62(1): 25–42
- Schickler, Eric, Jack Citrin and Jonathan Sides. 2003. "What if Everyone Voted? Simulating the Impact of Increased Turnout in Senate Elections." *American Journal of Political Science* 47: 75–90.
- Schumpeter, Joseph A. 1942. *Capitalism, Socialism and Democracy*. New York, New York: Harper and Row.

- Settle, Russell F. and Buron A. Abrams. 1976. "The Determinants of Voter Participation: A More General Model." *Public Choice* 27(1): 81–89.
- Shaw, Daron. 2006. *The Race to 270: The Electoral College and the Campaign Strategies of 2000 and 2004*. Chicago: University of Chicago Press.
- Squire, Peverill. 2000. "Uncontested Seats in State Legislative Elections." *Legislative Studies Quarterly* 25:131–46.
- Sterling, Carleton W. 1981. "Electoral College Misrepresentation: A Geometric Analysis." *Polity* 13(3): 425-49.
- Stigler, George J. 1972. "Economic Competition and Political Competition." *Public Choice* 13(1): 91–106.
- Tollison, Robert D.; Mark Crain; Paul Pautler; and Robert Clower. 1975. "Information and Voting: An Empirical Note." *Public Choice* 24(1): 43–50.
- Tollison, Robert D. and Willett, T. D. 1973. "Some Simple Economics of Voting and Not Voting." *Public Choice* 16(1): 59–71.
- Tullock, Gordon. 1967. *Towards a Mathematics of Politics*. Ann Arbor: University of Michigan Press.
- Uhlaner, Carole and Bernard Grofman. 1986. "The Race May be Close but My Horse is Going to Win: Wish Fulfillment in the 1980 Presidential Election." *Political Behavior* 8(2): 101–29.
- Vavreck, Lynn and Douglas Rivers. 2008. "The 2006 Cooperative Congressional Election Study." *Journal of Elections, Public Opinion and Parties*. 18: 355–66.

**Table 1. An Empirical Test of the Riker-Oredeshook Calculus of Voting**

Expected Closeness of Election Results ( <i>P</i> )	Citizen Duty Score ( <i>D</i> )					
	<u>High</u>		<u>Medium</u>		<u>Low</u>	
	High <i>B</i>	Low <i>B</i>	High <i>B</i>	Low <i>B</i>	High <i>B</i>	Low <i>B</i>
Close	91%	83%	85%	71%	63%	44%
Not Close	86%	74%	77%	71%	62%	39%

*Source:* Ferejohn and Fiorina (1974: 526).

**Table 2. 'Wishful Thinking' in 2006 House Races**

Respondents' Candidate of Choice	Expected Election Winner and Closeness					Don't Know
	<u>Republican</u>		<u>Unknown</u>	<u>Democrat</u>		
	Heavily Favored	Close	Close	Close	Heavily Favored	
All	11%	19%	11%	27%	11%	20%
Republican	17%	37%	7%	13%	7%	19%
Democrat	8%	9%	7%	45%	17%	15%
<i>Election Outcome &lt; 10% Margin</i>						
All	13%	17%	16%	31%	5%	18%
Republican	18%	35%	21%	11%	2%	13%
Democrat	11%	9%	9%	48%	8%	15%
<i>Election Outcome &gt; 10% Margin, Democrat Winner</i>						
All	3%	15%	19%	20%	11%	32%
Republican	9%	33%	2%	20%	17%	20%
Democrat	3%	8%	7%	44%	23%	15%
<i>Election Outcome &gt; 10% Margin, Republican Winner</i>						
All	17%	23%	11%	21%	5%	22%
Republican	23%	41%	7%	8%	1%	19%
Democrat	14%	10%	6%	44%	12%	15%

Source: 2006 Pew survey, statistics compiled by authors

**Table 3. Modeling Perceptions of Electoral Competition within Respondent's U.S. House District for the 2006 Midterm Election, Pew Survey.**

Variables	Stage 1	
	<i>Perceive House Race Competitive</i>	
	<i>b (RSE)</i>	<i>p</i>
Competitive House Race (1- vote margin)	1.127 (0.238)	0.000
R's age	0.003 (0.003)	0.367
R's education	-0.059 (0.038)	0.125
R's female	-0.022 (0.112)	0.847
R's white non-Hispanic	-0.259 (0.156)	0.096
R Votes for Democrat/ Believe Democrat Will Win	0.416 (0.124)	0.001
R Votes for Republican/ Believe Republican Will Win	0.286 (0.129)	0.027
R's Attention to Campaign News	0.308 (0.134)	0.022
R's Political Knowledge	-0.237 (0.080)	0.003
Constant	-0.194 (0.357)	0.587
Log Likelihood	-992.63	0.000
Pseudo R <sup>2</sup>	0.03	
N	1,519	

Unstandardized logistic regression coefficients, with standardized errors in parentheses clustered by U.S. House District. Two-tailed significance test. Pew Research Survey 2006, Oct 17-22.

**Table 4. Modeling Voter Turnout for U.S. House for the 2006 Midterm Election, Pew Survey.**

Variables	Stage 2 (Model 1)		Stage 2 (Model 2)		Stage 2 (Model 3)	
	<i>House Vote Intention</i>		<i>House Vote Intention</i>		<i>House Vote Intention</i>	
	<i>b (RSE)</i>	<i>p</i>	<i>b (RSE)</i>	<i>p</i>	<i>b (RSE)</i>	<i>p</i>
Perceive House	--		0.243	0.042	0.246	0.043
Race Competitive			(0.119)		(0.122)	
Competitive House	0.011	0.970	--		-0.050	0.867
Race (1- vote margin)	(0.293)				(0.301)	
R's age	0.119	0.000	0.120	0.000	0.120	0.000
	(0.023)		(0.024)		(0.023)	
R's age squared	-0.001	0.000	-0.001	0.000	-0.001	0.000
	(0.000)		(0.000)		(0.000)	
R's education	0.080	0.041	0.083	0.034	0.083	0.034
	(0.039)		(0.039)		(0.039)	
R's female	-0.121	0.319	-0.116	0.339	-0.116	0.340
	(0.121)		(0.121)		(0.121)	
R's white non-Hispanic	0.145	0.403	0.156	0.360	0.160	0.360
	(0.174)		(0.171)		(0.175)	
R's Democratic	0.873	0.000	0.877	0.000	0.876	0.000
	(0.143)		(0.144)		(0.143)	
R's Republican	0.865	0.000	0.871	0.000	0.871	0.000
	(0.147)		(0.147)		(0.147)	
R's Political Knowledge	0.808	0.000	0.821	0.000	0.822	0.000
	(0.083)		(0.084)		(0.084)	
Closing Date to Register In R's State	-0.007	0.279	-0.007	0.274	-0.007	0.274
	(0.006)		(0.006)		(0.006)	
Constant	-4.946	0.000	-5.134	0.000	-5.100	0.000
	(0.683)		(0.653)		(0.689)	
Log Likelihood	-862.90	0.000	-860.87	0.000	-860.85	0.000
Pseudo R <sup>2</sup>	0.14		0.14		0.14	
N	1,497		1,497		1,497	

Unstandardized logistic regression coefficients, with standardized errors in parentheses, clustered by U.S. House District. Two-tailed significance test. Pew Research Survey 2006, Oct 17-22.

**Table 5. Modeling Perceptions of Competition in the Respondent's State (Pre and Post-Election) for the 2008 Presidential Election, CCAP Panel Survey.**

Variables	Stage 1 (Model 1) <i>Perceive State Important (Oct)</i>		Stage 1 (Model 2) <i>Perceive State Important (Nov)</i>	
	<i>b (RSE)</i>	<i>P</i>	<i>b (RSE)</i>	<i>p</i>
Competitive Presidential Race (1- vote margin)	8.807 (1.560)	0.000	5.624 (1.560)	0.000
State Population (log)	0.853 (0.177)	0.000	0.684 (0.201)	0.001
R's age	0.021 (0.006)	0.001	0.015 (0.006)	0.021
R's education	-0.079 (0.060)	0.185	-0.147 (0.052)	0.005
R's female	0.216 (0.161)	0.179	0.186 (0.209)	0.372
R's white non-Hispanic	-0.310 (0.254)	0.221	-0.439 (0.165)	0.008
R's Democratic	0.576 (0.185)	0.002	0.411 (0.189)	0.030
R's Republican	0.380 (0.224)	0.089	-0.424 (0.261)	0.104
R's Interested in Politics	0.455 (0.173)	0.009	0.118 (0.159)	0.216
R's Political Knowledge	-0.038 (0.114)	0.738	-0.160 (0.129)	0.457
Constant 1	19.727 (3.567)		13.467 (3.998)	
Constant 2	21.094 (3.618)		14.794 (4.066)	
Constant 3	21.417 (3.628)		14.875 (4.055)	
Constant 4	23.085 (3.678)		16.203 (4.168)	
Log Likelihood	118.06	0.000	99.06	0.000
Pseudo R <sup>2</sup>	.13		.09	
N	929		933	

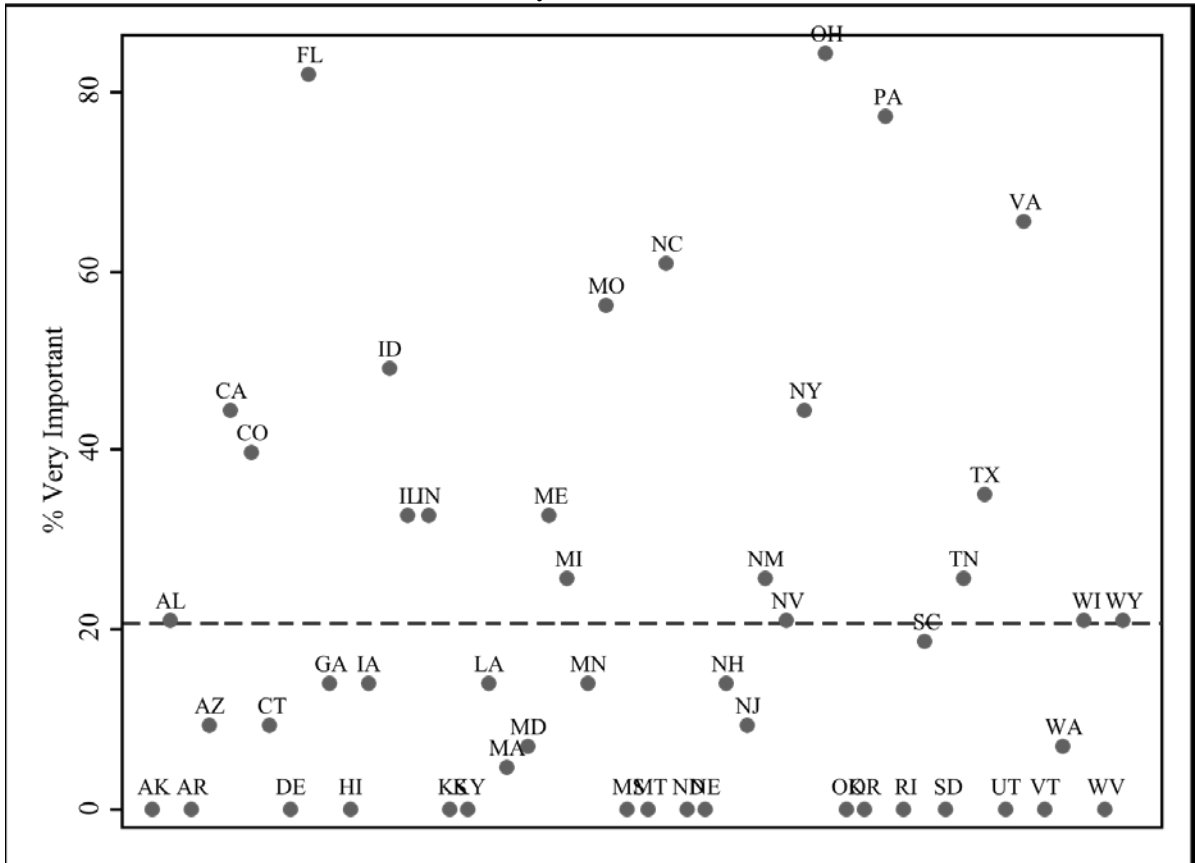
Understandardized ordered logit coefficients column 1 and 2, with standardized errors in parentheses clustered by state. Two-tailed significance test.

**Table 6. Modeling Voter Turnout (Post-election) for the 2008 Presidential Election, CCAP Panel Survey.**

Variables	Stage 2 (Model 1) <i>Voted (Nov)</i>		Stage 2 (Model 2) <i>Voted (Nov)</i>		Stage 2 (Model 3) <i>Voted (Nov)</i>	
	<i>b (RSE)</i>	<i>p</i>	<i>b (RSE)</i>	<i>P</i>	<i>b (RSE)</i>	<i>p</i>
Perceive Presidential Race Competitive ( <i>Oct</i> )	--		0.260 (0.154)	0.091	0.261 (0.135)	0.053
Competitive Presidential Race (1- vote margin)	0.902 (2.832)	0.750	--		-0.026 (2.574)	0.992
R's age	-0.168 (0.102)	0.099	0.002 (0.001)	0.049	-0.182 (0.107)	0.090
R's age squared	0.002 (0.001)	0.051	-.182 (.060)	0.089	0.002 (0.001)	0.049
R's education	-0.054 (0.181)	0.767	0.009 (0.184)	0.961	0.009 (0.185)	0.961
R's female	-0.725 (0.619)	0.242	-0.811 (0.638)	0.203	-0.811 (0.628)	0.197
R's white non-Hispanic	0.265 (0.401)	0.509	0.363 (0.429)	0.398	0.363 (0.404)	0.368
R's Democratic	0.974 (0.566)	0.085	0.937 (0.585)	0.100	0.937 (0.581)	0.107
R's Republican	0.857 (0.592)	0.147	1.042 (0.523)	0.046	1.042 (0.530)	0.049
R's Interested in Politics	1.135 (0.494)	0.022	1.113 (0.476)	0.019	1.113 (0.474)	0.019
R's Political Knowledge	0.080 (0.200)	0.687	.096 (.183)	0.599	0.096 (0.190)	0.613
Closing Date to Register In R's State	-0.078 (0.062)	0.209	-0.089 (0.060)	0.141	-0.089 (0.064)	0.165
Constant	5.359 (2.668)	0.045	5.633 (3.111)	0.070	5.652 (2.602)	0.030
Log Likelihood	-201.634	0.000	147.59	0.000	-197.64	0.000
Pseudo R <sup>2</sup>	.17		.18		.18	
N	936		933		933	

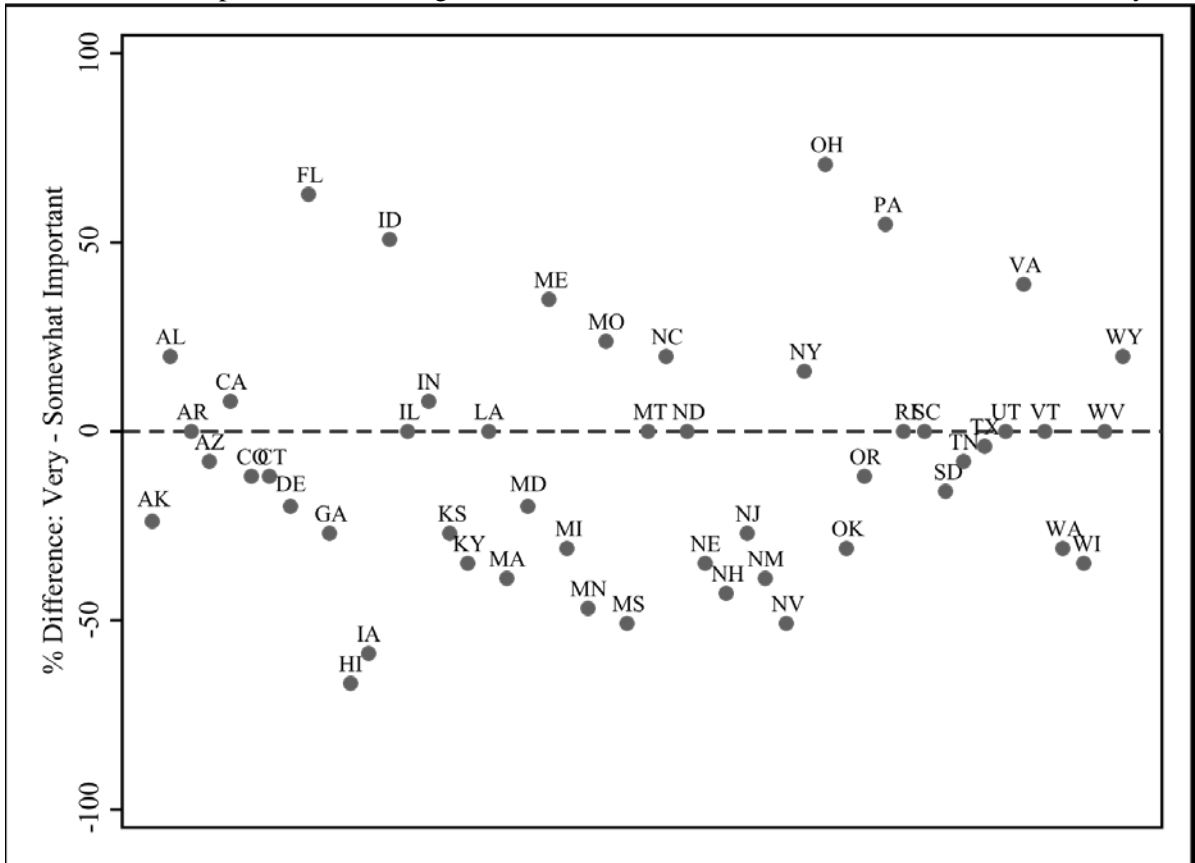
Understandardized ordered logit coefficients columns 1 and 2, logistic coefficients column 3, with standardized errors clustered by state.

**Figure 1.** Percent of Respondents who say their State is Very Important in Selecting Presidential Candidates, October 2008 Pre-election Survey



Dotted line represents the state average.

**Figure 2.** Difference Between the Percent of Respondents who say their State is Very Important and Somewhat Important in Selecting Presidential Candidates, October 2008 Pre-election Survey.



Dotted line represents the state average.