

CHANGING THE CLOCK THE ROLE OF CAMPAIGNS IN THE TIMING OF VOTE DECISION

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Abstract Time of vote decision research has shaped our understanding of the nature and influence of campaigns. Traditionally, time of decision has been viewed primarily as a reflection of individual-level characteristics, especially political interest or attentiveness. We use eight waves of panel survey data to evaluate how campaign context interacts with attentiveness to affect time of decision in the 2008 US presidential election. Our data show that less politically interested respondents living in locations where campaigning was most intense made up their minds earlier than those living elsewhere, but there is no such difference among the most interested. Rather than time of decision simply constraining campaign effects, these results suggest that campaigns structure the time of decision.

Research on timing of vote decision has a rich history in the public opinion literature, playing a critical role in our understanding of the nature and influence of political campaigns. Indeed, the minimal effects paradigm of the early Columbia School studies rested on the results of time of decision analyses (Lazarsfeld, Berelson, and Gaudet 1944). Traditionally, time of decision has been viewed primarily as a reflection of voters' individual-level attributes, essentially a "stable individual trait determined by one's position in the social structure" (Chaffee and Rimal 1996, 271). Specifically, early deciders are thought to be the highly engaged and informed voters, while late deciders are the least interested and least attentive segment of the electorate (e.g., Whitney and Goldman 1985).

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In contrast, we argue that time of decision depends on not only the characteristics of the individual voter, but also the nature of the campaign environment. While previous research has recognized the potential for electoral context to matter (e.g., [Gopoiian and Hadjiharalambous 1994](#)), researchers have typically lacked the fine-grained data about the dynamics of voter preferences necessary to thoroughly explore such variation within a campaign. In this note, we use the multi-wave Associated Press–Yahoo!News Election Panel Study (APYN) to examine time of decision in the 2008 US presidential election. Using a duration model, we examine the relationship between political interest, campaign intensity, and time of decision. Results show that less interested voters living in battleground states settle on a candidate much earlier than less interested voters living in safe states, closing the well-established gap in time of decision between those who pay more and less attention to politics.

This result builds on the literature on time of decision by highlighting that time of decision does not simply mediate campaign effects, but rather seems to itself depend on the campaign. More generally, previous research lamented time of decision patterns because they implied that electoral outcomes depend disproportionately on uninterested late deciders. In contrast, our analysis suggests that the information-rich environment of battleground states speeds the decision-making of less interested voters. As such, uninterested voters still making up their minds in the closing days of the campaign are more likely to reside in uncompetitive states. This finding is an important contribution to the time of decision literature, given the critical role of battleground states in determining election outcomes.

Explaining Time of Decision

Research has consistently found that most voters make up their minds well before the start of the fall campaign, suggesting that campaigns play little role in that decision ([Berelson, Lazarsfeld, and McPhee 1954](#); [O’Keefe, Mendelsohn, and Liu 1976](#); [Chaffee and Choe 1980](#); [Plumb 1986](#); [Kogen and Gottfried 2012](#)). This interpretation has been challenged, but most of the critiques attempt to reassess the role of campaigns—either by disputing the share of early deciders or by broadening the set of campaign effects to include reinforcement of early decisions—without fundamentally challenging the basic conclusion. We offer a somewhat different perspective. Rather than time of decision constraining campaigns, we suggest the reverse is also true: Campaigns structure the time of decision.

Previous research has identified various situational conditions that influence timing, but this work has typically focused on the way structural characteristics of elections—for example, the level of office in question, the presence of an incumbent or minor party candidate, or the perceived competitiveness of a contest—lead voters who decided early in one election to decide later in another ([O’Keefe, Mendelsohn, and Liu 1976](#); [Whitney and Goldman 1985](#); [McGregor 2012](#)). The

potential for variation *within* a single election, which reflects campaign dynamics, has received less attention. To the extent that campaign information makes voters' task easier (or more difficult), more information should hasten (or delay) the timing of their decisions. We thus expect campaign information to especially influence the least interested voters because they are most in need of information and least equipped to resist appeals they receive.¹ For these less interested voters, campaign information should provide the motivational and informational resources these voters often lack, thereby accelerating their decision-making. Using seven waves from a longitudinal survey and exploiting geographic variation across states in campaign intensity for the US presidency, we evaluate the interaction of campaign context and political interest on time of decision.

Data and Method

The APYN panel tracked vote intentions and political attitudes of American adults over the course of the 2008 election.² The panel included nine pre-election interviews, six of which contained a presidential trial heat between Barack Obama and John McCain, and two of which included post-election interviews. To our knowledge, this is the only available data set with so many repeated measures of vote intention in a US election, which allows for better measurement of time of decision. We are able to operationalize time of decision as the point in time from which a respondent selects the same candidate across all subsequent interviews including final vote choice.³

1. Although we focus on interest as a key source of heterogeneity, other sources, such as levels of candidate ambivalence, also seem plausible. For example, Nir and Druckman (2008) found that two-sided news coverage in a Minnesota senatorial race delayed time of decision for voters ambivalent between the candidates.

2. The APYN was a collaboration between the AP and Yahoo Inc., with support from GfK Knowledge Networks. The baseline was fielded on November 2, 2007, to 3,548 adult panelists; 76.5 percent completed the interview, resulting in a cumulative response rate (CUMRR1) of 11.2 percent using the formula specified in Callegaro and DiSogra (2008), a multiplicative combination of panel recruitment response rate (AAPOR3), household profile rate, and survey completion rate. CUMRR1 for subsequent waves: 12.6 percent (W2); 12.4 percent (W3); 12.1 percent (W4); 11.7 percent (W5); 10.2 percent (W6); 10.3 percent (W7); 10.2 percent (W8); 9.8 percent (W9); 10.5 percent (W10); and 10.0 percent (W11). Baseline respondents were invited to every wave; 1,068 completed all waves, and 1,870 completed one post-election wave. The post-election survey was administered in English or Spanish, depending on the respondent's choice. More information about the survey methodology can be found at <http://www.knowledgenetworks.com/ganp/election2008/index.html>. See the online appendix for question wording and further survey details.

3. Much of the existing literature relies on recall measures asking respondents, post-election, to recall when they made up their minds about their vote choice (e.g., Gopoian and Hadjiharalambous 1994; Nir and Druckman 2008). Previous research has questioned the accuracy of recall measures and documented discrepancies between recall and panel measures like ours (Plumb 1986; Chaffee and Rimal 1996; Fournier et al. 2001). Each approach has deficiencies—for instance, our approach fails to capture possible changes between waves (Steinbrecher and Schoen 2013)—but the recall measure seems especially susceptible to memory errors, since people may come to their vote decision through a slow, cumulative process instead of a single, memorable moment.

We use a duration model to examine time of decision, because the outcome is fundamentally about time *until* a voter decides. Settling on a candidate marks a transition between two states, from pre-decision (what we call unsettled) to decision. We estimate the probability of this transition using a discrete-time model because the data were collected in discrete periods (Singer and Willett 2003; Box-Steffensmeier and Jones 2004).⁴

It is useful to define some terminology of this approach. The first term is what duration models typically refer to as *survival*, which refers to the duration until the event takes place. In our case, survival is how long respondents remain in the pool of voters who have not yet settled on a candidate. The second term is *hazard*, which refers to the conditional probability of an event occurring at a particular point in time, given survival to that point. Our approach models these hazards and, from them, the probability that voters will have decided by various points in the campaign calendar (that is, $1-Survival_t$).⁵

Time is a key variable for this analysis because it captures the duration of indecision, operationalized as a vector of binary indicators for each wave excluding the April baseline, as a general and flexible way of accounting for duration dependence (Box-Steffensmeier and Jones 2004). *Interest* is a five-point measure taken from a question that asked respondents to report their interest in following news about the campaign.⁶ Our measure of campaign intensity is an indicator for residence in a *Battleground* state.⁷ Model controls include party identification, gender, race, age, education, and income. Importantly, both interest and party identification are taken from the 2007 baseline survey, helping alleviate concerns about endogeneity with the campaign.

Results

We start by reporting the basic distribution of time of decision using our data, shown in figure 1.⁸ In this descriptive look, we find—like previous research—a

4. The outcome variable is an indicator of event occurrence—settling on either Obama or McCain—that is coded zero at each wave until the voter settles on a candidate (i.e., zero if the voter is undecided, her current preference does not match her subsequent preference, or her preference is for a minor candidate). The event indicator is coded one only in the first wave at which candidate preference matches all subsequent interviews, after which point she exits the risk pool.

5. Following previous research, models are estimated for voters only.

6. We also find similar results when using a measure of political knowledge (the percent of factual questions about politics that the respondent correctly answered). See the online appendix for these results.

7. Battleground states include Florida, Indiana, Michigan, New Hampshire, New Mexico, Nevada, North Carolina, Ohio, Pennsylvania, and Virginia, based on the *New York Times* classifications of early fall campaign advertising expenditures. Results are similar when using Huang and Shaw's (2009) classification based on advertising and appearances. Although a narrow measure of campaign intensity, it does capture variation in the quantity of campaign information and effort. Theoretically, we expect that a broader set of features about campaign context would interact with individual attributes to shape time of decision.

8. Analysis restricted to waves with head-to-head matchup between Obama and McCain—April forward.

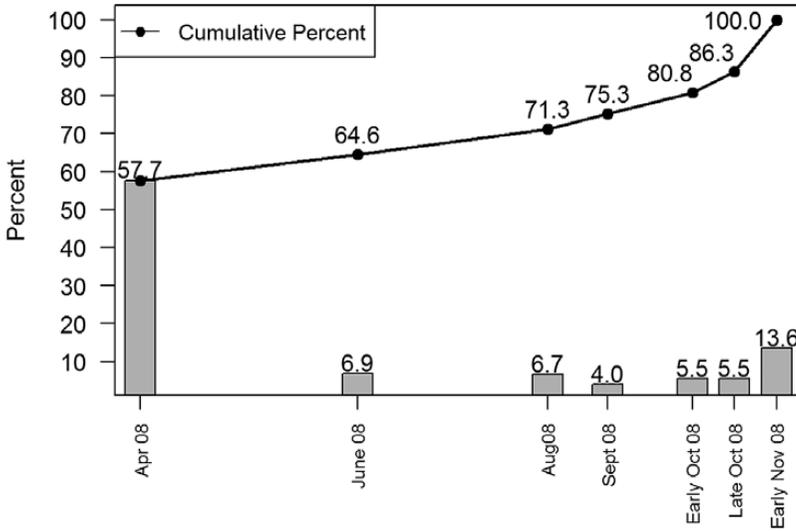


Figure 1. Percent Who Settle on a Candidate at Each Wave. Bars display the percent of voters who decide at each wave of the APYN Study (i.e., who begin maintaining a stable candidate preference from that interview across all subsequent interviews including self-reported vote). The line depicts the sum of these probabilities over time.

large share of voters deciding early. Nearly 58 percent of voters settled on a candidate by April 2008, some seven months before Election Day. By early September, this percentage rises to include three-quarters of all voters.

Given this pattern, it is perhaps no wonder that researchers have concluded that campaigns play a minimal role in voter decision-making. However, we see at least two problems with this interpretation. First, the 25 percent of voters who decide during the fall campaign are certainly sufficient to shape the election outcome. Indeed, media polls consistently found that fewer than 10 percent of voters were undecided in any given cross-sectional survey during this time; snapshot polls mask fluid preferences as voters’ decision-making unfolds—that is, the polls do not capture the *same* 10 percent across different surveys. Second, we argue that the time of decision in [figure 1](#) is not exogenous to campaigning; the pattern, in part, actually *reflects* the campaign.

To test this expectation, we estimate the hazard of settling on a candidate as a function of each time indicator, interest, and campaign intensity. [Table 1](#) displays coefficients from the models using these three sets of key variables.⁹ The estimates from models 1 and 2 confirm the conventional wisdom—many

9. For space considerations, [table 1](#) does not report coefficients for control variables. Full results are reported in the online [appendix](#).

Table 1. Time of Decision by Political Interest During General Election

| | Model 1 | Model 2 | Model 3 |
|--|-------------------|-------------------|-------------------|
| Constant | -1.25** (0.29) | -1.64** (0.32) | -1.62** (0.34) |
| June | -1.86** (0.14) | -0.48 (0.51) | -0.85 (0.58) |
| August | -1.67** (0.15) | -0.73 (0.53) | -0.88 (0.59) |
| September | -2.01* (0.17) | -1.83* (0.66) | -2.05* (0.78) |
| Early October | -1.37* (0.16) | -0.70 (0.55) | -0.89 (0.62) |
| Late October | -0.99* (0.17) | -0.52 (0.54) | -0.86 (0.61) |
| Political interest | 0.11** (0.05) | 0.23** (0.06) | 0.22** (0.07) |
| Battleground state | 0.06 (0.10) | 0.06 (0.10) | -0.01 (0.58) |
| Political interest*June | | -0.39* (0.14) | -0.26 (0.16) |
| Political interest*August | | -0.26# (0.14) | -0.18 (0.16) |
| Political interest*September | | -0.05 (0.17) | 0.01 (0.21) |
| Political interest*Early October | | -0.19 (0.15) | -0.15 (0.17) |
| Political interest*Late October | | -0.13 (0.15) | -0.06 (0.17) |
| Battleground*June | | | 1.63 (1.15) |
| Battleground*August | | | 0.69 (1.26) |
| Battleground*September | | | 0.78 (1.46) |
| Battleground*Early October | | | 0.79 (1.36) |
| Battleground*Late October | | | 1.59 (1.40) |
| Battleground*Political interest | | | 0.04 (0.16) |
| Battleground*Political interest*June | | | -0.59# (0.32) |
| Battleground*Political interest*August | | | -0.34 (0.35) |

(Continued)

Table 1. (Continued)

| | Model 1 | Model 2 | Model 3 |
|---|---------|---------|-----------------|
| Battleground*Political interest*September | | | -0.21 (0.39) |
| Battleground*Political interest*Early October | | | -0.19 (0.37) |
| Battleground*Political interest*Late October | | | -0.37 (0.38) |
| AIC | 3059.6 | 3060.1 | 3071.8 |
| N | | 1123 | |

NOTE.—Cells contain coefficients from discrete time-duration models for deciding on a candidate among voters. The sample size is the number of voters. Controls for education, race, income, age, partisanship, and gender were also included. Standard errors are clustered by individual and appear in parentheses. A full set of estimates is available in online [appendix table A1](#).

$p < .10$; * $p < .05$; ** $p < .01$ (two-tailed test)

voters decide early, and those most interested in politics are especially likely to do so. The results in model 3, however, confirm our hypothesis about the role of the campaign. When examining the difference between politically interested voters and politically disinterested voters, the difference in the log-odds of settling on a candidate is related to both time *and* battleground status. The April baseline shows significant differences in time of decision by political interest—the least politically interested are less likely to have decided by April—but not by battleground state. By June, however, the initial relationship between interest and the probability of deciding is flipped in the battleground states among those voters who remain unsettled by June. In June, the politically disinterested and unsettled voters are more likely to make up their mind than are the highly interested unsettled voters. The model estimates in the table translate to a hazard of 0.43 for the least interested battleground voters and 0.07 for the most interested battleground voters—a difference of 0.36 that is statistically significant ($p < 0.10$).

Figure 2 illustrates this key model finding. The figure depicts the *cumulative probability* of settling on a candidate—that is, the probability that a voter made her decision at any point up to that interview, by interest levels and geography.¹⁰ From June forward, we find significant differences in the timing of decision among uninterested voters across campaign context.

10. The cumulative probability at wave t is $1 - \text{Survival}_t$. Unfortunately, no commonly accepted formula exists for computing standard errors for Survival_t in discrete duration models. Nevertheless, as shown in model 3 of table 1, the relationship between settling on a candidate and interest is especially sensitive to campaign intensity starting in June. This can also be seen by comparing the hazards at June among battleground-state voters—the least politically interested undecided voters are much more likely to make up their mind (0.43 [90 percent confidence interval from 0.20 to 0.68]) than highly interested undecided voters (0.07 [0.03, 0.14]), a difference of 0.36 that is statistically significant ($p < 0.10$).

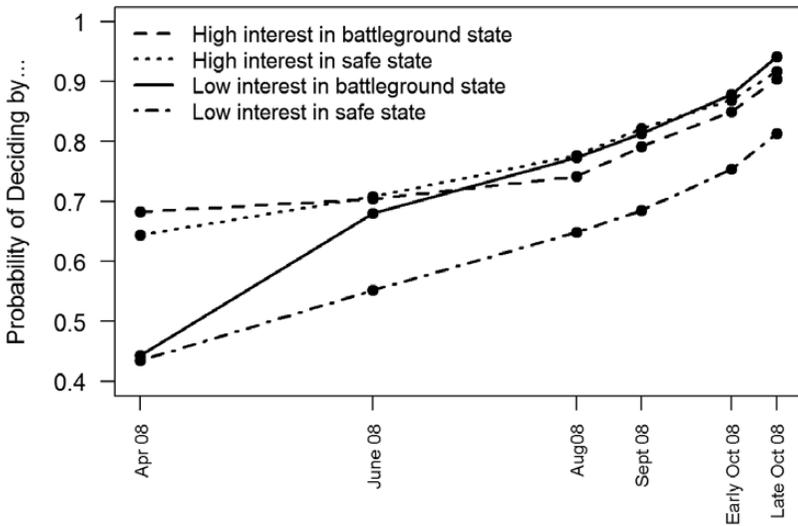


Figure 2. Estimated Cumulative Probability for Settling on a Candidate by Interest and Battleground Residence. Cumulative probability of having settled on a candidate by each interview. Estimates based on results for model 3 in table 1.

Overall, then, the campaign appears to have the effect of speeding up decision-making among less interested voters. Two points are worth noting about this emergence in June. First, presidential campaigns today begin their efforts well before the once-traditional post-convention kickoff. June is exactly when the campaigns began to invest in the general election. On television advertising alone, Obama spent \$4 million in June, \$33 million in July, and \$32 million in August, and McCain spent \$3.4 million in June, \$21 million in July, and \$19 million in August. Second, early deciders are not simply expressing a choice in June while later deciders do not; they are *maintaining* that choice across later interviews. Thus, the change in June reflects differences in the likelihood of repeating the previous candidate choice when asked again in all subsequent interviews. Decisions among the less interested are sustained throughout the summer and fall in the highly competitive battleground, even as they waver or fade elsewhere.

Discussion

In sum, our results suggest that the timing of the vote decision among the least attentive voters is conditional on their level of exposure to campaign information. In other words, time of vote decision seems to depend on both the

information environment and individual-level characteristics.¹¹ Although our analysis cannot speak to the specific mechanisms by which battleground states make a difference, the findings add to the growing body of research documenting that campaigns shape voter decision-making.

A lack of similarly structured panel surveys from other elections limits generalizability beyond the 2008 election, which was clearly a unique election. For instance, the 2008 presidential election was an open contest, and previous research concludes that individuals make up their minds more quickly when an incumbent is on the ballot (Chaffee and Choe 1980). Yet, our concern is less about the specific dynamics of this election cycle than about the more fundamental question about whether the campaign context shapes time of decision. At least in 2008, it appears the campaign mattered most for the least interested voters.

Given that time of decision is often taken as a starting point for evaluating the competency and persuadability of the electorate, the implications of the observed pattern should not be overlooked. Early research lamented that elections could turn on last-minute deciders who were only loosely connected to politics. In contrast, our results suggest that the intense campaign environment in a battleground state helps speed up decision-making for the less interested. As a consequence, the late deciders should be less likely to swing the election outcome because they live disproportionately in uncompetitive states. In 2008, 14 percent of voters made up their minds in the final weeks of the campaign, but fewer than one in four of them lived in a closely contested battleground state. Put another way, only 11 percent of voters in battleground states decided in the last two weeks of the election, and fewer than half of these voters had low levels of interest—which amounts to less than 1.5 percent of the electorate. This is enough to turn an exceptionally close election, to be sure, but 1.5 percent hardly amounts to a massive wave of disinterested last-minute decision-makers. Our results suggest that campaigns can help the least interested voters make up their minds as quickly as the most interested, so that the consequences of last-minute decision-making among the unsophisticated occurs where those voters are least likely to be decisive.

Supplementary Data

Supplementary data are freely available online at <http://poq.oxfordjournals.org/>.

References

Berelson, Bernard, Paul Lazarsfeld, and William McPhee. 1954. *Voting: A Study of Opinion Formation in a Presidential Campaign*. Chicago: University of Chicago Press.

11. As a robustness check against the alternative explanation that less interested voters are more prone to measurement error, which varies across the campaign (Enns and Richman 2013), we included several satisficing controls: minutes to complete W1, indicator for quickest 10 percent, indicator for 60+ minutes, and days to completion from initial interview request. Results were unchanged.

- Box-Steffensmeier, Janet M., and Bradford S. Jones. 2004. *Event History Modeling: A Guide for Social Scientists*. New York: Cambridge University Press.
- Callegaro, Mario, and Charles DiSogra. 2008. "Computing Response Metrics for Online Panels." *Public Opinion Quarterly* 72:1008–32.
- Chaffee, Steven H., and Sun Yuel Choe. 1980. "Time of Decision and Media Use in the Ford–Carter Campaign." *Public Opinion Quarterly* 44:53–69.
- Chaffee, Steven H., and Rajiv Nath Rimal. 1996. "Time of Vote Decision and Openness to Persuasion." In *Political Persuasion and Attitude Change*, edited by Diana C. Mutz, Paul M. Sniderman, and Richard A. Brody, 267–91. Ann Arbor: University of Michigan Press.
- Enns, Peter K., and Brian Richman. 2013. "Presidential Campaigns and the Fundamentals Reconsidered." *Journal of Politics* 75:803–20.
- Fournier, Patrick, Richard Nadeau, André Blais, Elisabeth Gidengil, and Neil Nevitte. 2001. "Validation of Time of Voting Decision Recall." *Public Opinion Quarterly* 65:95–107.
- Gopoian, J. David, and Sissie Hadjiharalambous. 1994. "Late Deciding Voters in Presidential Elections." *Political Behavior* 16:55–78.
- Huang, Taofang, and Daron Shaw. 2009. "Beyond the Battlegrounds? Electoral College Strategies in the 2008 Presidential Election." *Journal of Political Marketing* 8:272–91.
- Kogen, Lauren, and Jeffrey A. Gottfried. 2012. "I Knew It All Along! Evaluating Time-of-Decision Measures in the 2008 US Presidential Campaign." *Political Behavior* 34:719–36.
- Lazarsfeld, Paul F., Bernard Berelson, and Hazel Gaudet. 1944. *The People's Choice: How the Voter Makes Up His Mind in a Presidential Campaign*. New York: Columbia University Press.
- McGregor, Robert Michael. 2012. "Voter Sincerity and the Time-of-Voting-Decision." *Electoral Studies* 31:715–25.
- Nir, Lilach, and James N. Druckman. 2008. "Campaign Mixed-Message Flows and Timing of Vote Decision." *International Journal of Public Opinion Research* 20:326–46.
- O'Keefe, Garrett J., Harold Mendelsohn, and Jenny Liu. 1976. "Voter Decision Making 1972 and 1974." *Public Opinion Quarterly* 40:320–30.
- Plumb, Elizabeth. 1986. "Validation of Voter Recall: Time of Electoral Decision Making." *Political Behavior* 8:302–12.
- Singer, Judith D., and John B. Willett. 2003. *Applied Longitudinal Analysis: Modeling Change and Event Occurrence*. New York: Oxford University Press.
- Steinbrecher, Markus, and Harald Schoen. 2013. "Not All Campaign Panels Are Created Equal: Exploring How the Number and Timing of Panel Waves Affect Findings Concerning the Time of Voting Decision." *Electoral Studies* 32:892–99.
- Whitney, D. Charles, and Steven B. Goldman. 1985. "Media Use and Time of Vote Decision: A Study of the 1980 Presidential Election." *Communication Research* 12:511–29.