

**Changing Times:  
Political Advertising and Information Seeking in an Era of Viewer Choice**

By  
John G. Geer  
Vanderbilt University

Richard Lau  
Rutgers University

Lynn Vavreck  
UCLA

**Abstract:**

With presidential candidates spending millions of dollars airing ads on television, social scientists have sought to understand their effects. But our efforts to develop this understanding have, frankly, not kept up with the changing times. Over the course of the last decade, *how* candidates send messages to the public, and how the public receives those messages, has shifted dramatically. We now live in an era where citizens have much more control over their information environment than they did just twenty years ago. These changes require that we not only adjust our theories about the possible influence of ads, but develop new research designs to capture these effects. We need, therefore, to update our theoretical and empirical understanding of how ads influence the electorate. This paper attempts to do just that by developing a theory of information seeking in an era of *viewer choice*, and then testing that theory with an innovative experiment from the 2008 presidential campaign.

## **Changing Times: Political Advertising and Information Seeking in an Era of Viewer Choice**

Over the last forty years, social scientists have invested a substantial amount of time and energy studying the effects of political advertising on the public (see Gadarian and Lau 2011, or Iyengar 2011, for recent reviews). This investment is understandable, given the importance of advertising in our electoral process. Presidential candidates, for example, typically spend 70% of their war chests on producing and airing political ads (West 2010). In the 2010 midterm elections, candidates for the House, Senate and Governor aired 2.8 million spots, spending 1.4 billion dollars in the process.<sup>1</sup> Observers predict that President Obama in 2012 will raise over 1 billion dollars himself,<sup>2</sup> with much of that money to be used to purchase advertising. When we include the potential spending on the Republican side during the upcoming presidential campaign, we will likely be north of 2 billion dollars. This kind of investment underscores the value of determining the influence these spots have on the public.

The importance of political advertising goes beyond just estimating effects, however. This subject speaks to the very workings of a democracy. Campaigns serve as a vital and often underappreciated institution that link politicians and voters (Kelley 1960; Riker 1996; Geer, 2006; Kam 2006; Vavreck 2009). Candidates during the course of a campaign send messages to the public (e.g. ads on television, radio, etc.), who imperfectly receive and process those messages, and who then at the end of the campaign, render a decision about which candidate is best suited to govern. This exchange helps make accountability possible, as the public gathers information about the respective qualifications of the contenders, their past accomplishments, and their proposals for solving current problems.

Over the course of the last decade or so, *how* candidates send messages to the public has changed, just as it changed in the 1950s with the rise of television or in the 1920s with the advent of radio. We now live in an era where citizens have much more control over their information environment than they did just twenty years ago. Sunstein (2001, 2009) was among the first to point out that the changes in our mediums of communication (e.g. the Internet, growth of cable television) affect how citizens gather information about the world around them. Many of us can choose between more than 200 different cable television channels, we can tune into just as many radio stations, and we can surf the Internet with an ever expanding number of sites to visit. The increasing use of DVRs further allows consumers to watch the programming they prefer. Citizens, in short, have much more *control* over their information environment than just a few years ago, choosing whether to gather political information, and if they decide to follow politics, shaping the content of that information.

---

<sup>1</sup>These data come from the Wesleyan Media Project presented during a public forum at Wesleyan University on December 3<sup>rd</sup>, 2010.

<sup>2</sup> <http://www.cnsnews.com/news/article/2012-presidential-candidates-not-expecte>

Prior to these changes it was safe to assume that almost everyone—even those with little or no interest in politics—came across some political information, even if that exposure was unintentional (e.g. Blumer and Katz 1974; Prior 2007). But this is no longer the case. These changes in the public’s information environment require that we not only adjust our theories about the possible influence of ads, but develop new research designs to capture these effects. Scholars have in fact started to tackle how shifts in the news media affect citizens’ behavior (e.g. Prior 2007; Iyengar 2008), however, research on political advertising has not kept up with these changing times. Instead, we continue to rely on a model where politicians send messages to the public, who are largely passive targets of those messages, and we use research designs forcing subjects to view advertisements even though this is no longer reflective of how ads are often encountered today.<sup>3</sup> In the era of “broadcast news” before the explosion of cable television and the Internet (Prior, 2007), this approach was reasonable. But since we now live in the era of *viewer choice*,<sup>4</sup> we need to update our theoretical and empirical understanding of how ads influence the electorate. This paper attempts to do just that.

We start by developing a theory of information seeking that reflects these changes in the mass media. In the broadcast news era, information tended to find voters. In the era of viewer choice, voters now find information. This change requires us to theorize about how this new relationship might work. We, then, test our argument and its implications with an innovative experiment that randomly assigns respondents to one of two main conditions: choice or forced-exposure. In the choice condition we allow respondents to choose up to four ads they want to watch from a set of promotional and attack ads from the 2008 presidential election. In the forced condition, we randomly assign respondents to view specific sets of ads or no ads at all. Our research design thus bridges the divide between the typical laboratory experiment with forced exposure to media messages, and observational data where exposure is measured rather than manipulated.

A compelling test of our argument requires that we secure answers to two different, but related sets of empirical questions. First, what factors lead citizens to *seek out* political information during an election campaign? We need this baseline information before we can pursue our second set of questions: what are the *consequences* of viewer-chosen (or demand-driven) vs unchosen (or inadvertent/forced) exposure to those ads? The answers to these questions will move us toward an improved understanding of advertising effects in the new information environment of the 21<sup>st</sup> century.

---

<sup>3</sup> See Arceneaux and Johnson (2010); Gaines and Kuklinski (2011); Iyengar et al (2008); and Valentino et al (2009) for important exceptions.

<sup>4</sup> Sunstein in the first edition of his book published in 2001 writes about the era of “media choice.” Our argument has much in common and in fact draws inspiration from this research and extensions of it by Prior (2007). But we chose this term to focus attention on the viewer, rather than the media.

## Toward a Theory of Political Information Seeking

Our theory of information seeking rests upon two key dimensions. The first involves thinking about the motivations of individuals to gather information. The second focuses on the context underlying those decisions – the information environment in which people live -- paying close attention to the structure of presidential campaigns which in large part determines that environment.

While some individuals find politics fascinating and cannot consume enough political information, most people most of the time pay little attention to politics. In fact, many Americans would rather follow stories about Joe Paterno or Lady Gaga than watch news coverage of political events. This is hardly a new conclusion. But it becomes important when we realize that in politics, as with most activities, interest influences attention and learning. People who love gardening know all sorts of arcane facts about the activity; those who are interested in the stock market are the first to learn of the latest moves by the Federal Reserve. This idea is well-represented by standard measures of political interest and, slightly less directly, by strength of party identification, which in many ways is a more motivationally-oriented close cousin to political interest. Generally speaking, the chronically more *politically engaged* citizens – those with the greatest interest in politics, and the strongest political identifications -- will be the first to become aware of, learn something about, and form evaluations of the different candidates running for political office.

But for politics, such engagement is *not* the only motivation that shapes whether someone follows political events. Citizens in a democracy have an *obligation* to pay some attention to political matters. Wolfinger and Rosenstone (1980) wrote about civic duty, as have many others since.<sup>5</sup> This sense of obligation, we contend, is widespread. In a survey done by Pew in 2010, for example, 69% of adults who follow news at all (which was 93% of the sample) reported that they did so because of a civic obligation to stay informed (Pew Internet and Public Life Survey, December 2009-January 2010). In a similar Pew survey in 2009, 91% agreed that it was their duty as a citizen to always vote (Pew Research Center for the People and the Press Values Survey, March 2009). In other words, the vast majority of Americans view voting or staying informed about political matters as an obligation. Everyone does not, of course, fulfill this responsibility, but enough people ultimately do that we can use this diffuse motivation to help develop a general theory of political information seeking. The important point is that because of this obligation, more people will engage in political behavior, attending to and learning something about the candidates competing for office and even spending the time to go to the polls on Election Day to register a choice, than would be expected by expressed interest alone.

Attention to politics, as a result, may work differently than attention to things like

---

<sup>5</sup> See in particular a new paper by Blais and Achen (2011).

sports, business, or mystery novels. If someone has no interest in sports, they do not follow it at all because they have literally *no* interest. But in politics the demands of a democracy, at least theoretically, mean that very few citizens will pay no attention to politics. They may have very low engagement, but there is a “floor” in the level of attention, driven by our obligations as a citizen, that does not exist for most other topics. The data mentioned above about the near consensus on the need to be informed or to vote underscores our general point. Obligation shapes how we seek political information in a way that has not been fully appreciated in past work. Thus individual differences in political engagement, combined with an almost universal sense of citizen duty to pay some attention to politics, are very important determinants of political information seeking.

But they are not the only determinants. The context of the campaign plays a very important role as well. Increased coverage of politics by the news media, like almost any other topic, will generally make most people more attentive to and knowledgeable about it. In the days following the the shooting of Congresswoman Giffords, to take a recent example, a January 2011 Pew survey found about 80% of the public reporting paying attention to this tragedy. Intense media coverage penetrates the public’s awareness of events and people. Just as virtually every American was aware of the tragedy in Tucson, so almost everyone becomes aware of who is battling to become our president as Election Day nears. News media coverage of a political campaign increases as Election Day approaches. In a sense, the increasing media attention to politics *activates* obligation, which motivates many of those generally less engaged citizens to gather sufficient political information to make a semi-informed choice between the competing candidates.

But the news media are not the only players in the game. Candidates, through their paid political advertisements, also shape the information environment. This intensity or richness of the information environment becomes a key part of our story given the logic of the Electoral College that encourages presidential candidates to focus attention differentially across the fifty states. Those states that are competitive--the “battleground” states--will draw much more attention from candidates in their quest to win the presidency. The “non-battleground” states will not see many visits from candidates, nor as much money spent on airing ads and building organizations to turn out the vote (Shaw 2006). Thus the incentives of the Electoral College create variance in how difficult it will be for citizens to fulfill their civic obligation to become at least minimally informed about the candidates and issues in the upcoming election. If the world around us is so full of information about those candidates and issues that no special effort is required to learn something about them, as it is in the battleground -- great, that will suffice for most people. But if that information is harder to come by, as in general it will be in non-battleground states, then some effort to actively seek out information about the candidates could be required.

This effect of a more intense information environment on political attention and knowledge acquisition is not unlimited, however, and eventually even political junkies can

reach a saturation point where they believe they have already seen every ad and learned every fact there is to learn. So the effects of greater information availability on political knowledge should be curvilinear for most citizens: increasing at first, but eventually leveling off and possibly even reversing. Thus chronic differences in political engagement should be most important early in a campaign and in non-battleground states, where media coverage is not so intense that virtually everyone is exposed to some political information. This suggests a positive interaction between political engagement and living in a non-battleground state. But as Election Day approaches a sense of obligation to participate becomes more and more salient, even for those who normally express little interest in politics – at least if they have not yet been able to decide how to vote. And again, decision uncertainty should be particularly motivating for those living in non-battleground states, where viewing additional political ads could be particularly beneficial in helping the undecided make a vote decision.

To summarize, chronic individual differences in political engagement (interest, motivation, etc.), and contextual (Electoral College driven) differences in the richness of the local information environment, combine to explain political information seeking. Political interest/engagement partially elucidates differences in attention to and knowledge about politics, as such constructs do in almost any other domain. Those differences should be most apparent at times (when an election is *not* imminent) and in places (non-battleground states) when the larger media environment is not otherwise filled with political information. At the same time, a widespread sense of civic duty to be at least minimally informed about politics leads virtually all citizens to feel the need to gather some political information. That need will be particularly strong as an election nears, among the undecided, and in non-battleground states. Put most simply, our theory holds that discretionary political information seeking will be greatest when its need is greatest – when the media environment has not already provided sufficient political information “for free,” and when chronic differences in political engagement have not otherwise led the individual to gather that information.

### **Design**

To assess the workings of this new information environment for citizens requires that we collect data that actually allows subjects to make choices. The typical survey, even if merged with relevant contextual data, still treats the public as passive recipients of political information. We need to collect data with these new realities in mind.

In this regard, we joined the Cooperative Campaign Analysis Project (CCAP), a 6-wave panel study conducted during the 2008 presidential campaign (Jackman and Vavreck 2009). The first wave was conducted in December of 2007, and subsequent waves were in January, March, September, October, and November of 2008. Our study was fielded during the October and November waves of CCAP. For details on sample matching and the YouGov/Polimetrix approach to constructing representative samples, see Vavreck and Rivers (2007). For specific information about the construction of the CCAP sample and its overall representativeness, see

Jackman and Vavreck (2010). All analyses include a standard set of demographic variables to control for any small differences in these indicators across the various conditions of our experiment.<sup>6</sup>

Our experiment has six conditions and just under 1500 subjects. Some subjects (n=123) were randomly assigned to a control group who received no additional treatment but answered the questions described below. Three experimental groups (each comprised of approximately 125 subjects) received the following instructions.

*All candidates make a number of different ads which they air at different times and in different locations throughout the campaign. Some people normally see a lot of political ads, and some people hardly see any. To make sure that everyone has seen at least one ad from Senator McCain and one from Senator Obama, we ask you now to take a minute to view one 30 second ad from each candidate by clicking the "View Ads" button now. The computer will randomly select one of the ads recently aired by each candidate for you to see. (We apologize if you have already seen one or both of these ads).*

One experimental group was then shown two positive ads (one from McCain, the other from Obama, in random order), a second experimental group was shown two negative ads (one from each candidate, again in random order), and a third experimental group was shown one positive and one negative ad (one from each candidate, in random order, varying which candidate had the positive ad and which the negative ad). A fourth experimental group, with 240 subjects, read the same instructions except they were told we wanted to make sure that everyone had seen at least *two* ads from each candidate, after which they viewed all four ads used for the first three experimental groups. These five treatment groups constitute the *forced exposure* portion of the experiment.

Slightly over half of our subjects (N=757) were randomly assigned to the *choice* condition. These subjects received the following instructions:

*All candidates make a number of different ads which they air at different times and in different locations throughout the campaign. Some people normally see a lot of political ads, and some people hardly see any. We want to give you the opportunity to watch some advertisements from the presidential election that have been airing on television recently. There are four 30-second ads to choose*

---

<sup>6</sup> Because our design employs a randomized experiment, in the analyses that follow, we use all CCAP cases in the our "pool" of respondents, not just those who YouGov/Polimetrix matched to members of the target sample. All analyses reported below were replicated with the smaller matched sample and produce basically the same pattern of results, although of course with somewhat larger standard errors because of the smaller number of cases and therefore a bit higher significance levels.

*from, and you can watch as few or as many as you like. Simply click on the box below any ad you are interested in seeing and we will show you the ad you have chosen. After viewing any ad, you will be able to select another if you would like.*

Subjects in the choice condition were given the opportunity to view the same ads that subjects in our other experimental conditions were forced to view. Each available box included a brief description of the ad content which made its sponsor and positive or negative nature obvious.<sup>7</sup>

After viewing all ads people had been assigned, or chose, to watch, subjects in all conditions answered several additional questions, including ratings of the importance, accuracy, and fairness of each candidates' "advertising in this election;" along with standard questions measuring trust in government and external political efficacy. We formed summary scales of all of these concepts by averaging together the multiple individual questions that represent each concept.<sup>8</sup>

All subjects were contacted again after the election and asked to participate in the final wave of the study when, in addition to the common core questions, subjects were asked the same questions they had been asked in the October wave about the nature of the candidates' political ads, trust in government, and political efficacy. Nearly all of the original subjects (93%) participated in both the pre- and post-election phases of the study.

Two unique aspects of this survey are worth mentioning. First, registered voters comprise our pool of respondents. The decision to focus on registered voters in the 2008 presidential election is a reasonable decision, but it does mean that our sample has fewer citizens with little or no interest in politics than if we included unregistered citizens. This concern is not, however, a major one, since we have sufficient variance on political engagement to test our key hypotheses.<sup>9</sup>

---

<sup>7</sup> "John McCain promotes his foreign policy experience;" "Barack Obama discusses the role of youth, enthusiasm, and energy in the campaign;" "John McCain claims his opponent is not ready to lead;" "Barack Obama argues that his opponent would bring 'more of the same.'"

<sup>8</sup> The reliability (coefficient alpha) of the 3-item scales measuring evaluations of the candidate's political ads varied between .86 and .89. The reliability of the 4-item trust in government scale was .65 in the October wave and .68 in the post-election wave. The 2-item external efficacy scale had a reliability of .69 in the October wave and .75 in the post-election wave.

<sup>9</sup> Despite CCAP's registered voter sample, respondent's had varying levels of interest and engagement with campaign information. For example, only 45% of CCAP respondents report watching political talk shows on television and a quarter never talk to friends about politics. Forty percent of the respondents indicate that they are only somewhat or not much interested in politics and current affairs and even though the survey was conducted on-line, 31% say they did not use the Internet to find political information during the week prior to their interview (during the general election campaign). Still more surprising, only 30% of the sample reads political blogs of any type and fewer, only 20% have ever posted anything to a political blog site. Finally, CCAP asked

Second, CCAP selected fifteen states at the outset of the study as likely “battleground” states, and respondents were double-sampled from those states.<sup>10</sup> Assuming that most respondents do not choose their place of residence because of its competitiveness in national politics,<sup>11</sup> we treat “battleground status” as a naturally-occurring “manipulation” of the number of political ads respondents have been exposed to in their daily lives. Granting this assumption, we have an exogenous measure of media exposure which avoids the all too common problem of selection effects that often complicate our efforts to tell a compelling causal story.

### **Initial Results: Who Chooses to Look at Political Ads?**

Given that we know little about how choice works; we will start with some basic findings about the decisions made by respondents. These first analyses are limited to the respondents who were randomly assigned to the choice condition of our experiment. We start by asking how often people chose to look at one or more candidate advertisements during the heat of a presidential election campaign -- early to mid October. Figure 1 provides an initial answer. The left side of the top panel shows that just under half of our respondents, 47%, chose to view at least one political ad, with 10% looking at all four, with an overall mean of 1.6 ads viewed. On the right side of the panel we see that slightly more respondents looked at Obama ads (35%) than McCain ads (32%), while considerably more respondents chose to view positive ads (40%) than negative ads (28%).

\*\*\*\*\* Insert Figure 1 about here \*\*\*\*\*

The middle panel of Figure 1 distinguishes between respondents living in battleground and non-battleground states. Any way you slice the data, respondents living in non-battleground states were more likely to voluntarily choose to look at the two major candidates’ political ads – about 15% more likely, overall. The bottom panel shows the proportion of respondents who chose to look at any political ads, controlling on political interest (left side of the panel) and strength of party identification (right side of the panel). As predicted, political engagement – interest and strength of party identification – is clearly associated with discretionary political information gathering. These findings provide strong preliminary support

---

respondents to report what kinds of campaign information they encountered “yesterday.” Only 14% of the sample visited a candidate’s website on any given day (this number remains consistent across the waves of CCAP) and 40% report that they did not talk about politics on any given day.

<sup>10</sup> The 15 states were Colorado, Florida, Iowa, Maine, Michigan, Minnesota, Nevada, New Hampshire, New Mexico, North Carolina, Ohio, Oregon, Pennsylvania, West Virginia, and Wisconsin. On average, the McCain and Obama campaigns spent a little over 23 million dollars on television advertising in each of those 15 states, compared to about 3.2 million dollars in each of the remaining non-battleground states (Lau et al, 2009).

<sup>11</sup> There are recent data that suggest that some people are choosing where to live on the basis of the partisan leanings of the area – liberals moving to more Democratic areas of the country, conservatives to more Republican areas (Bishop 2008). But that criterion is different than selecting where you live because of the *competitiveness* of the state’s partisan environment, and we have seen no evidence to suggest that people are actually doing that.

for our theory that individual differences in political engagement and the competitive context will both shape choice in important ways.

But such bivariate results can only offer a preliminary view. The results from a multivariate analysis of these data are presented in Table 1, where as a first cut the dependent variable is a simple dichotomy noting whether subjects chose to voluntarily look at *any* political ads. All analyses include as controls variables representing gender, race, education, family income, age, and liberal-conservative identification, and for the most part they produce the type of effects (or non-effects) one would expect. To save space, we focus our discussion on the variables that our theory says should be most important.

We hypothesized above that political engagement and uncertainty should both be positively associated with discretionary information search, particularly in non-battleground states where the need for additional information should be greater. Model 1 includes only the unconditional effects of all predictors. As expected, political Interest, strength of party identification, decision uncertainty, and living in a non-battleground state are all positively associated with discretionary information search, with all but decision uncertainty having a statistically significant effect in the model. Translating the logistic regression coefficients of model 1 into probabilities (holding all other variables in the equation at their modal or median values<sup>12</sup>), we find that the most politically interested voters are 23 percentage points more likely to look at additional political ads compared to respondents with no political interest, while strong partisans are 17% more likely to view additional political ads compared to independents. These findings are hardly surprising, but they bolster the starting points of our theoretical argument.

\*\*\*\*\* Insert Table 1 about here \*\*\*\*\*

We have already seen preliminary support in Figure 1 for the idea that discretionary search will be more common in low-density media environments such as non-battleground states where the need for such information is presumably greater. Model 1 of Table 1 provides further confirmation of this finding from a full multivariate equation: controlling on all other variables in the model, citizens living in non-battleground states are about 7% more likely to choose to view additional political ads.<sup>13</sup> Moreover, our theory predicts a positive interaction

---

<sup>12</sup> A 50 year old politically moderate white male with a high school education and median family income.

<sup>13</sup> As a further test of the notion that people in the non-battleground have to initiate their encounters with political information more than people in the battleground, if we consider the more than 16,000 registered voters in the October wave of entire common content CCAP dataset, 17% of those living in the battleground report “watching a video of one of the candidates on the Internet yesterday” compared to 24% of those who do *not* live in the battleground, a 7-point difference that resembles very closely our result about choosing to view ads. Similarly, CCAP asked respondents about visiting candidates’ web sites and discussing a candidate with other people. All of these activities were asked in terms of things the respondent might have done “yesterday” – the day before his or her interview. People in the non-battleground, as we expect, report higher rates of visiting candidates’ web sites (10% in the battleground versus 14% in the non-battleground); and, they report higher rates of talking about

between political engagement and living in non-battleground states. We found no support for this hypothesis using political interest as the measure of engagement, but as shown in model 2 of Table 1 and the top half of Figure 2, the effect of strength of party identification *is* significantly greater in non-battleground states, increasing the probability of choosing to view one or more political ads by almost 23-points (compared to an increase of about 5-points in battleground states).

\*\*\*\*\* Insert Figure 2 about here \*\*\*\*\*

Our theory also predicts that decision uncertainty will lead to discretionary information search, particularly in non-battleground states where the benefits of viewing additional political ads should be greatest. We constructed a scale of voter uncertainty from responses to two questions, the first asking respondents if they knew how they were going to vote in the upcoming presidential election, the second asking people who answered “Yes” to the first question, how certain they were of that decision.<sup>14</sup> While the unconditioned effect of voter uncertainty (shown in model 1 of Table 1) is positive but nonsignificant, the interaction between being undecided and living in a non-battleground state (shown in model 2) is, as expected, positive and highly significant. The nature of this interaction is displayed in the bottom half of Figure 2. Uncertainty actually decreases the probability of viewing additional political ads in battleground states by about 15% (“I’ve already seen all of these ads – looking at them again is not going to help me make up my mind!”), but increases the probability of viewing additional ads by almost twice that amount in non-battleground states.

Before we move on, note that the constant term in this first equation indicates that even political independents with no professed interest in politics have a .39 probability of choosing to view at least one political ad, strong confirmation of our assumption that just about everyone feels some obligation to be at least minimally informed about an upcoming presidential election. This finding is important, since it provides evidence for our conceptual point that attention to politics has a “floor” not present when considering interest in other activities. Can you imagine that someone with no interest in football or opera would have a 39% chance of reading a story on the topic? It does indeed seem that obligation encourages even those with little self-professed interest in politics to gather some information.

---

candidates with other people (46% in the battleground compared to 53% in the non-battleground). These additional observational results lend credence and serve as a robustness check on our experimental results presented above. Whether measured through self-reports of political information exchange or directly observed behavior in response to experimental manipulations, late in the campaign, people who live in the non-battleground seek out more political information than people who live in the information-rich, well-saturated American battleground.

<sup>14</sup> At this point in the campaign, 76% of our respondents had absolutely “Made up their minds” how they were going to vote (or reported they had already voted, early), and another 3% said they had already decided not to vote. (Ultimately 7% of our sample reported not voting.) But 4% of our respondents were totally “Unsure” how they were going to vote, with the remainder at various stages of uncertainty.

Our initial analysis has treated information search with a very broad brushstroke, as if all political information was more or less equivalent. Clearly, that is not always the case. In the era of viewer choice, it is useful to distinguish between seeking *balanced* information about all major candidates in a race, and seeking imbalanced/biased or *confirmatory* information that is slanted toward one's preferred candidate. We would expect that *undecided* respondents who are still intending to vote should be particularly motivated to seek out *balanced* campaign information (which should best help them decide how to vote); again, especially if they live in non-battleground states where the need for additional information should be greatest. On the other hand, those who have already decided how they are going to vote may engage primarily in *confirmatory* information search (if they are even going to bother to look at *any* additional political information). This tendency should be particularly pronounced in strong partisans.

Table 2 presents an analysis of *balanced information seeking* – which we define as choosing to view at least one ad from *each* major party candidate. Such search is relatively rare, occurring less than 17% of the time in the choice condition. Our theory suggests that undecided citizens who are still intending to vote should be especially motivated to seek additional information about both candidates to help them reach a decision, particularly if they live in non-battleground states where the need for additional information is greatest. The unconditional effect of being undecided (shown in model 1 of Table 2) is positive but not significant. But as shown in model 2, uncertain respondents living in non-battleground states are significantly more likely to seek additional balanced information about the candidates – about 20-points more likely. This interaction is illustrated in the top half of Figure 3.

\*\*\*\*\* Insert Table 2 and Figure 3 about here \*\*\*\*\*

Table 3 presents an analysis of *confirmatory information search* – seeking more information about your preferred candidate than about the non-preferred candidate. Analysis is restricted to respondents who said, in the October wave of the survey, that they planned to vote for either McCain or Obama. The dependent variable is simply the number of ads viewed from your chosen candidate minus the number of ads viewed from his opponent. Confirmatory search is indicated by a positive difference score. The modal behavior among likely McCain and Obama voters is indeed confirmatory search, as the mean of this dependent variable is .26. Of these likely voters who conducted a biased discretionary search – watching more ads from one candidate than the other – 87% conducted a confirmatory search and only 13% conducted what we might call (for lack of a better term) *perverse* search – seeking out disproportionate information about the nonpreferred candidate.

Strength of partisanship is the most theoretically important predictor of confirmatory search, and as shown in model 1 of Table 3, overall partisanship increases the probability of confirmatory search by 14% across the full range of the variable. We take this finding a step further, arguing that while strength of partisanship should be positively related to confirmatory information search in general, that pattern should be particularly pronounced in non-

battleground states – a hypothesis that is confirmed in model 2 of Table 3. As displayed in the bottom half of Figure 3, strong partisans are only 3-points more likely than independents to seek additional confirmatory information if they live in battleground states, but they are fully 24-points more likely than independents to seek out additional confirmatory information if they live in non-battleground states.

\*\*\*\*\* Insert Table 3 about here\*\*\*\*\*

Together, these results provide support for our theory of political information seeking. The *demand* for political information, motivated by chronic differences in political engagement (general political interest and strength of party identification) plus an almost universal obligation to be at least minimally informed about politics, and the *supply* of easily available political information provided by the media environment, combine to determine discretionary political information search. Thus we have a reasonable understanding of when people seek out additional political information in the new media environment. But, so what? That is, does choice influence how we think about the consequences of exposure to political information?

### **A Few Consequences of Choice**

While the era of viewer choice has many potential consequences, we focus on just three. First, we examine how choice alters the public's evaluations of the ads themselves. Second, we consider how choice affects learning about candidates, asking whether citizens are better able to cast an informed vote when they choose the ads they see. Third, we look at how choice affects the impact *negative* ads may have on the public sense of trust and efficacy. These three topics offer a chance to consider narrow effects, such as perceptions of the ads, wider behavioral effects, such as voting, and then finally broader system level effects, namely trust and efficacy. Our basic research strategy is to compare the attitudes and behaviors of subjects who had been *assigned* to view 0, 2, or 4 ads in one of our experimental conditions to subjects in our choice condition who had freely *chosen* to view 0 – 4 of those same ads. Before considering these consequences empirically, we will provide some basic motivations about how choice, more generally, might affect citizens' opinions.

Theoretically, choice is important because it gives a decision maker some real control over a situation (Weiner, 1980). Although there are individual differences in how strongly this motivation is felt, a desire for control is an almost universal human value (Bandura, 1997; Rotter, 1966). Indeed, this desire is so strong that people often act as if they have control over situations when in fact they do not (the illusion of control: Langer, 1975; Thompson, Armstrong, and Thomas, 1998). Extreme lack of control – hopelessness – has severe psychological consequences (Seligman, 1975), while returning control over something even as trivial as taking care of a house plant to people who live in virtually a decision-free environment (e.g., a nursing home) can have demonstrably positive results (Langer and Rodin, 1976). Choice confers responsibility for the consequences of one's actions, and thus choice is often

accompanied by greater motivation and commitment (Iyengar and Lepper, 2000). As a first cut it is reasonable to assume that people choose to do the things they want to do, although it is remarkable easy to deceive people into believing they have control when in fact the situational demands are sufficient to induce virtually everyone to comply with a particular request (Aronson, 1969). Choice can increase the *perceived* attractiveness of actions that, objectively, are not really all that fun, interesting, and exciting (Brehm, 1956; Festinger, 1957; Festinger and Carlsmith, 1959). Since most people like to maintain positive self-images, we often distort our perceptions and preferences to justify our choices, even in situations that were not really under a person's control.

With this past work on choice serving as a theoretical starting point, we hypothesize that people who voluntarily choose to view the political ads should evaluate these spots more highly than subjects in our various no-choice conditions. People who are *assigned* to view those same ads in an experiment -- or people who are haphazardly exposed to a candidate's ads during an election campaign -- include both people who have a real need for the information and people who have no use for the information in the ads whatsoever, and would never have voluntarily chosen to view the information had they been given a choice. On average, then, people who actively choose to view a candidates' political ads should benefit more from seeing the ads than people who are randomly assigned (or haphazardly exposed) to see the same ads.

We combined ratings of how important, accurate, and fair each candidate's ads were into overall summary evaluations of the candidate's ads. Because subjects in our choice conditions could have chosen to view the ads in part *because* they like them (or their sponsor), the dependent variable in this analysis comes from the post-election wave of the survey, 2-4 weeks after the October wave of the study when subjects chose, or were assigned, to view several of the candidates' ads. We include the lagged evaluations of the candidates' ads from the October wave of the study as a covariate in the analysis, so that the results can be interpreted as *change* in evaluations of the candidates ads in the 2-4 weeks after the initial October wave of the study as a consequence of exposure to those ads.<sup>15</sup>

The results of this analysis are shown in Table 4. To the familiar set of predictors from earlier analyses, we add dummy variables indicating if respondents reported voting for either of the two major party candidates.<sup>16</sup> As expected, the lagged measure of the dependent variable and these two vote choice dummy variables are all highly significant predictors in each

---

<sup>15</sup> Such an analytic strategy usually biases the coefficient for the lagged term upward, assuming unmeasured aspects of the dependent variable were similarly unmeasured in the lagged variable. We have no interest in the magnitude of the lagged term per se. Our focus is on the consequences of various *measured* aspects of the situation, most importantly the random choice manipulation.

<sup>16</sup> We reverse the dummy variable for media context so that it now represents living in a battleground state. As such, this dummy variable is a surrogate for inadvertent exposure to the candidates' ads, which is general should be greater in battleground states. With one exception, with variable has no significant effect in any of the remaining analyses, however, as we would expect.

equation. We are most interested in the effects of viewing the available positive and/or negative ad from each candidate, and the interaction of exposure with choice. Our hypothesis predicts a positive interaction of ad exposure and choice on evaluations of the candidate's ads, and this is exactly what we find for exposure to Barack Obama's positive (but not his negative) spot. Choosing to view Obama's positive ad increases overall evaluations of Obama's ad campaign by over a tenth of the entire scale, compared to a slight drop in evaluations from those who were assigned to view that same spot. The results for evaluations of John McCain's ads are slightly different. For McCain, forced (that is, randomly assigned) exposure to his positive ad was associated with a significant decrease in evaluations of his ads. By contrast, voluntary viewing of McCain's positive ad essentially eliminated the decline in evaluations. The results here are not as strong as for Obama's ads. The differences could be a product of a number of factors, such as Obama's ad being better than McCain's. Despite these variations, the data do offer partial support for our contentions. In both equations, evaluations of the candidate's ad campaign were increased when subjects chose to view the candidate's positive ads relative to the forced viewing conditions. Viewing one additional negative ad, however, whether chosen or not, had no measurable effect on overall evaluations of the candidates' ad campaigns.

\*\*\*\*\* Insert Table 4 about here \*\*\*\*\*

The analysis in Table 4 is based on the idea that, on average, the information in the ads *actually is* more useful to the subset of people who choose to view an ad than from a larger group of people that includes both those who would choose to view the ads *and* those who would decline to view them. But if choice is sufficient to induce cognitive dissonance, as a great deal of research has shown it to be, we cannot distinguish between the ads really being more useful to subjects who chose to view them, and perceptual distortion meant to minimize cognitive dissonance after what turned out to be a poor decision/waste of time. In all likelihood, the choice condition includes some combination of both types of subjects. Although the candidates who sponsor these ads probably do not care which process is at work, normatively the consequences of voluntary exposure to political information are much greater if it involves real learning and attitude change.

Our next hypothesis broadens our focus by considering the role choice plays in voting, in general, and "correct voting," in particular. Lau, Andersen, and Redlawsk (2008) report that exposure to a politically rich media environment where the candidates are filling the airways with their ads can increase the probability of a high quality "correct" vote decision by up to 10% in U.S. presidential elections. A correct vote is a normative concept, defined as voting for the candidate who, as objectively as can be determined, best represents your own values and priorities.<sup>17</sup> Most of this exposure (and *all* of it, in the earlier years) would be of the

---

<sup>17</sup> See Lau and Redlawsk (1997, 2006; Lau et al, 2008) for details of the operationalization of this concept, and its validity.

“haphazard” type of traditional media effects. We expect political interest and choice to interact in shaping how exposure to political ads influences the probability of voting correctly. Citizens with high political interest already know a lot about the candidates and have probably already seen most of their political ads. The potential benefits for exposure to additional political ads are slight, and probably limited mostly to subjects in the choice condition who realized they needed a bit more information about the candidates, or who know they have not already seen the ads we were showing in the experiment – but only if that information truly is useful. Distorting political perceptions to justify poor choices should not translate into better political decisions.

The story for people with low levels of political interest is likely to be quite different, however. People with low levels of political interest are much less likely to have already seen a large number of political ads. They truly should benefit from exposure to additional political ads (chosen or not) because they are likely to learn something new about the candidates – as long as they have the cognitive resources and political experience to process and comprehend this new information. Thus, we hypothesize that political interest,<sup>18</sup> choice, and exposure to political ads should interact to produce a higher probability of a correct vote.

Table 5 displays the results of a logistic regression testing this hypothesis. We followed as closely as possible with the CCAP survey items the procedures outlined by Lau et al (2008) for operationalizing correct voting with the ANES surveys. Although the two surveys have many different items, they yield comparable levels of correct voting in the 2008 election.<sup>19</sup> In past research, political knowledge, political interest, and strength of party identification have usually been significant predictors of correct voting, as they are in Table 5. All else equal, political knowledge increases the probability of a correct vote by 13%, while the estimated effects of political interest and strength of party identification are more than twice as strong. Here we are most interested in the 3-way interaction of interest, choice, and the number of ads viewed, and as we predict, the interaction term is highly significant and substantively quite large.

Figure 4 illustrates the nature of this interaction. The top half of the figure shows the joint effect of political interest and the number of ads viewed in the choice condition, representing the modern era of viewer choice; while the bottom half of the figure shows those same effects in the no choice condition, which represents what we might have found in a traditional “broadcast news” era campaign environment. As predicted, involuntary exposure to political ads has a slight negative effect among those with high levels of political interest, but

---

<sup>18</sup> We explicitly say political *interest* here rather than the more general term “political engagement” that we have used earlier to signal we are talking explicitly about political interest and not strength of partisanship. Voting for the candidate from your party is one of many criteria that counts towards a correct vote, and quite properly we expect (and find) that strength of party identification predicts correct voting. To eliminate any possibility of “building in” predicted relationships, we restrict the operationalization of this hypothesis to political interest.

<sup>19</sup> The CCAP estimates range between 84.8 and 85.5% correct, while the ANES estimates range from 85.6 to 86.7% correct. See Ha and Lau, 2010, for more details.

a moderately strong (10%) positive effect for subjects who chose to view those same ads. But the effects are dramatically different among those with low levels of political interest. In the no choice condition, involuntary exposure to political ads increased their probability of voting correctly from .69 to almost .94. Among low interest voters in the choice condition, however, voluntary exposure to those same political ads has a moderately negative effect. Choice operates the way we anticipated among those with high levels of political interest, but additional information seems to confuse those with low levels of political interest.

\*\*\*\*\* Insert Table 5 and Figure 4 about here \*\*\*\*\*

Our last implication considers hypotheses about the possible system level effects of choice. Since Ansolabehere, Iyengar, Simon, and Valentino's (1994) argued for a "demobilization" effect, scholars of political communication have studied the consequences of exposure to negative political advertisements, looking most often for decreases in turnout, but also for declines in system-supporting attitudes such as trust in government and political efficacy (see Patterson 2002; Buchanan 2004; Lau et al, 2007). Most of this evidence comes either from experiments where subjects are randomly assigned and *forced* to view different ads, or from observational studies of actual campaigns in which the "tone" of the candidates' campaigns is coded and people's exposure to candidates' ads is assumed to be driven by habits related to media use (e.g., Geer, 2006; Geer and Lau, 2006; Lau and Pomper, 2001). However, the cognitive dissonance, the responsibility resulting from *choosing* to view an attack ad should reverse (or at least lessen) the adverse consequences associated with exposure to negative ads. These observations suggest that exposure to negative political ads can decrease trust in government and political efficacy, but only when that exposure is inadvertent or forced. Negative advertisements that a person actively chooses to view should have no such deleterious consequences.<sup>20</sup> This prediction is important and leads us to think in new directions about the consequences of exposure to negative ads.

We measured trust in government and external political efficacy in both the October and November waves of the survey. We treat the post-election measures of each of these variables as dependent variables, and regress them on our standard set of control variables, a dummy variable indicating voting for the winning candidate in the elections, political interest, strength of party identification, the dummy variable indicating living in a battleground state, the choice manipulation, the number of negative ads viewed in the pre-election wave of the study, the interaction between choice and the number of negative ads viewed, and the lagged measure of the dependent variable from the pre-election wave of the study. As with the analysis reported in Table 4 earlier, the results can be interpreted as predicting *change* in the two political attitudes under consideration.

---

<sup>20</sup> We concentrate on these two dependent variables because past research suggests they are most likely to respond to exposure to negative ads; see Lau et al, 2007).

The results in Table 6 suggest we were half right. Although several of the variables included in the trust in government equation (in addition to the lagged dependent variable) proved to be significant predictors of change, viewing negative political ads had absolutely nothing to do with respondent's trust in government. On the other hand, political efficacy responded exactly as hypothesized. When subjects in our no choice conditions were forced to view 1 or 2 negative ads, their efficacy declined. But the efficacy beliefs of subjects who chose to view those same negative ads actually significantly *increased* across the two waves of the study.

\*\*\*\*\* Insert Table 6 about here \*\*\*\*\*

## Discussion

The way citizens gather information about candidates during a campaign has changed. Many more opportunities now exist for the public to select the information they receive about candidates. We have learned from Sunstein, Prior, Iyengar, and others that this development matters. The era of broadcast news is over and the era of viewer choice is in full swing. Given these changes, scholars must adjust how they study campaigns, in general, and political advertising, in particular. This paper is one effort to judge *whether* and *how* choice matters for the electorate. There is no doubt about “whether” it matters. This paper, along with other recent research, has shown just that. “How” it matters is a bit more complicated. In the case of presidential campaigns, the rise of choice in campaign information is interlaced with the realities of the Electoral College. This 18<sup>th</sup> century invention gives presidential contenders good reason to focus on the close states and pay far less attention to the lopsided ones. The so-called battleground states, as a result, are awash in various activities of the candidates, whereas the non-competitive states are a bit starved for information. We say starved not because there is not a lot of information available for the public to consume —regardless of residence— but because our data show those respondents in non-battleground states to be much more willing to look at advertisements when given the choice. As Election Day approaches, those who live in states like Ohio or Florida have probably seen enough messages from the contenders and have little additional curiosity. But those individuals living in states like Tennessee or Rhode Island seem much more willing to look at spots when given a chance.

The rise of “choice” also has potentially important implications for how we think about the impact of negative ads. There has been mounting evidence that the increase in attack politics has had adverse effect on the public (Geer 2010; Lau et al 2007). Specifically, it is eroding attitudes toward the political system, such as trust in government and the feeling that an individual's participation matters. But the assumption of this past work has been that voters are, in effect, strapped down in a chair and forced to watch negative ads. Even prior to the rise of cable TV and the Internet, voters could mute the TV, flip channels, or head to the refrigerator when an advertisement airs. But with advances in technology, there are far more opportunities for the public to choose the ads they watch. Or to use the terms of this paper,

there has been a shift from involuntary reception to voluntary or discretionary reception. That shift should have a big influence of the impact of negative ads on the public. Our data provides modest confirmation of these hypotheses. More data are needed to assess these possibilities, but future scholars need to be sensitive to these developments as we continue to assess the impact of negativity on the political system.

The increased ability of the public to seek campaign information in the current viewer choice era has a number of upsides. The findings that choice leads to more correct voting should come as good news. Lau et al (2008) worried the citizens living in non-battleground states (who at the extremes are on average 10% less likely to vote correctly) could be short-changed because their views would not be as well-represented by elected officials. But that worry is based on a view of a largely passive public sitting around and waiting for the candidates to run ads on their local television stations. Citizens who have the motivation and opportunity to seek out their own political information can overcome those disadvantages, as we have found in our study. There is always worry about the quality of the choices made by the public. It appears that allowing people to choose which ads to watch increases the ability of citizens to make “correct” (that is, in accordance with their own values and preferences) choices. It should also be of comfort that undecided voters tend to undertake “balanced” searches, as opposed to searching for one-sided information. In some ways, these data should ease worries that the undecided voters make choices in problematic ways. Starting with Converse (1964), there has been a long-standing concern that independent and undecided voters make bad or perhaps nearly random choices, lacking the information and sophistication to vote wisely. A few have countered this view (e.g. Kelley 1983; Popkin 1991; Lau and Redlawsk 1997, 2001). But a general fear exists that those least able to make good choices are actually shaping the outcome of close elections. Such concerns may well be valid, but we have shown that undecided voters seek to hear both side of the argument. That is a comforting finding. As Kam (2006) has argued, we want voters to hear both sides, and *that* behavior seems more likely to come from the undecided, not the usually better informed partisans.

There is, of course, a darker side to this argument. That those who have made up their minds who to vote for tend to undertake “confirmatory” information searches is hardly a surprise. Such a finding is consistent with the logic first spelled out by Festinger (1957) many years before (see also Sears and Friedman, 1967). But an information environment shaped increasingly by “choice” should yield a strengthening of voter’s preferences, not a reconsideration of them. That is, we can expect increasing polarization to take place, assuming most of the public has made up their minds already (see Sunstein 2001). In the era of broadcast news, the public was more likely to come across information inconsistent with their choice. That information would lessen the prospect for polarization—something that seems in short supply these days. Deliberation is good in theory, but getting people to deliberate (even in their own minds) is, we suspect, becoming increasingly difficult.

As noted at the outset of this paper, campaigns are important democratic institutions.

By linking politicians and the public, the campaign provides the opportunity to advance accountability and responsiveness. Scholars often question the ability of the campaign to achieve these goals (e.g. Kelley 1960; Buchanan 2004; Jamieson 1992; Patterson 2002) because campaigns do not inform the public. Candidates tend to be vague, misleading, and far too harsh in the appeals they make to the public. But such critical assessments of campaigns may need some reconsideration. We are entering a new era where the link between citizens and candidates is undergoing fundamental change. That the public has more choice over the information they get has far-reaching implications. We have only scratched the surface here. But we need to rethink the theoretical link between citizens and politician, and then make sure we collect data that will shed light on the changing nature of this most basic democratic connection.

## References

- Ansolabehere, S., Iyengar, S., Simon, A., and Valentino, N. 1994. "Does Attack Advertising Demobilize the Electorate?" *American Political Science Review*, 88(September): 829-838.
- Arceneaux, Kevin, and Martin Johnson. 2010. "Does Media Fragmentation Produce Mass Polarization? Selective Exposure and a New Era of Minimal Effects." Paper presented at the 106<sup>th</sup> annual meeting of the American Political Science Association, Sept 2 - 5, Washington D.C.
- Arceneaux, Kevin, Martin Johnson, and Chad Murphy. 2010. "Hostile Media Judgments, Polarized Political Communication, and Selective Exposure." Unpublished manuscript.
- Aronson, Elliot. 1969. "The Theory of Cognitive Dissonance: A Current Perspective." In L. Berkowitz (Ed.). *Advances in Experimental Social Psychology*, Vol. 4, pp. 1-34. New York: Academic Press.
- Bandura, A. 1997. *Self-Efficacy: The Exercise of Control*. New York: W.H. Freeman and Company.
- Bennett, W. Lance, and Shanto Iyengar. 2008. "A New Era of Minimal Effects? The Changing Foundations of Political Communication." *Journal of Communication*, 58(December): 707 - 731.
- Blais, Andre, and Christopher H. Achen. 2011. "Taking Civic Duty Seriously: Political Theory and Voter Turnout." Unpublished manuscript, University of Montreal.
- Blumler Jay G. and Elihu Katz. 1974. *The Uses of Mass Communications: Current Perspectives on Gratifications Research*. Beverly Hills, CA: Sage.
- Brehm, Jack. 1956. "Post-Decision Changes in Desirability of Alternatives." *Journal of Abnormal and Social Psychology*, 52(3), 384 - 389.
- Buchanan, Bruce. 2004. *Presidential Campaign Quality*. New York: Prentice Hall.
- Clinton, Joshua and John Lapinski. 2004. "'Targeted' Advertising and Voter Turnout." *Journal of Politics*, 67: 69-96.
- Coe, K., D. Tewksbury, B.J. Bond, K.L. Drogos, R.W. Porter, A. Yahn, & Y. Zhang, Y. 2008. Hostile news: Partisan use and perceptions of cable news programming. *Journal of Communication*, 58, 201-219.

- Converse, Phillip E. 1964. "The Nature of Belief Systems in Mass Publics." In *Ideology and Discontent*, edited by David Apter. New York: Free Press.
- Festinger, Leon. 1957. *A Theory of Cognitive Dissonance*. Stanford, CA: Stanford University Press.
- Festinger, Leon, J. Merrill Carlsmith. 1959. "Cognitive Consequences of Forced Compliance." *Journal of Abnormal and Social Psychology*, 58(2): 203–210.
- Franz, Michael, Paul B. Freedman, Kenneth M. Goldstein and Travis N. Ridout. 2007. *Campaign Advertising and American Democracy*. Philadelphia: Temple University Press.
- Freedman, Paul, and Ken Goldstein. 1999. "Measuring Media Exposure and the Effects of Negative Campaign Ads," *American Journal of Political Science*, 43(4): 1189-1208.
- Gaines, Brian J., and James H. Kuklinski. 2011. Experimental Estimation of Heterogeneous Treatment Effects Related to Self-Selection." *American Journal of Political Science*, 55(July): 724 - 736.
- Gadarian, Shana K., and Richard R. Lau. 2011. "Candidate Advertisements." In James Druckman, Donald Green, James Kuklinski, and Arthur Lupia (eds) *Handbook of Experimental Political Science* (pp 214 - 227). New York: Cambridge University Press.
- Geer, John. 2006. In *Defense of Negativity: Attack Ads in Presidential Campaigns*. Chicago: University of Chicago Press.
- Geer, John. 2010. "Fanning the Flames," paper at Shorenstein Center, Harvard University.
- Geer, John G., and Richard R. Lau. 2006. "A New Approach for Studying Campaign Effects." *British Journal of Political Science*, 36(April): 269 - 290.
- Goldstein, Ken, and Paul Freedman. 2002. "Campaign Advertising and Voter Turnout: New Evidence for the Stimulation Effect." *The Journal of Politics*, 64 (3). 721-740.
- Goldstein, Ken, and Paul Freedman. 2000. "New Evidence for New Arguments: Money and Advertising in the 1996 Senate Elections." *Journal of Politics*, 62(4):1087-1109.
- Green, Donald and Lynn Vavreck. 2008. "Analysis of Cluster-Randomized Experiments: A Comparison of Alternative Estimation Techniques." *Political Analysis*, 16: 138-152.
- Ha, Shang E., and Richard R. Lau. 2010. "Personality Traits and Correct Voting." Paper presented at the 106<sup>th</sup> annual meeting of the APSA, Sept 2 - 5, Washington D.C.

- Huddy, Leonie, Stanley Feldman, Charles Taber, and Gallya Lahav. 2005. "Threat, Anxiety, and Support of Antiterrorism Policies." *American Journal of Political Science*, 49(July): 593 - 608.
- Iyengar, Shanto. 2011. *Media Politics: A Citizen's Guide*. New York: Norton.
- Iyengar, Shanto, and Kyu Hahn, 2009. "Red media, blue media: Evidence of ideological selectivity in media use." *Journal of Communication*, 59, 2009, 19-39.
- Iyengar, Shanto, and Donald R. Kinder. 1987. *News that Matters*. Chicago: University of Chicago Press.
- Iyengar, Shanto, Jon Krosnick and Kyu Hahn. 2008. "Selective exposure to campaign communication: The role of anticipated agreement and issue public membership." *Journal of Politics*, 70: 186-200.
- Jackman, Simon and Lynn Vavreck. 2009. Cooperative Campaign Analysis Project (CCAP), YouGov/Polimetrix, Inc., [producer, distributor] , Palo Alto, CA — Release 2.0
- Jackman, Simon and Lynn Vavreck. 2010. "Primary politics: race, gender, and age in the 2008 democratic primary." *Journal of Elections, Public Opinion & Parties*, 20: 153-86.
- Jamieson, Kathleen. 1992. *Dirty Politics*. Oxford: Oxford University Press.
- Kahn, Kim, and John G. Geer. 1994. "Creating Impressions: An Experimental Investigation on Political Advertising on Television." *Political Behavior* 16(1):93-116.
- Kam, Cindy D. 2006. "Political Campaigns and Open-Minded Thinking." *Journal of Politics* 68(4): 931-945.
- Kelley, Stanley. 1960. *Political Campaigning*. Washington DC: Brookings Institution.
- Kelley, Stanley. 1983. *Interpreting Elections*. Princeton, NJ: Princeton University Press.
- Langer, Ellen J. 1975. "The Illusion of Control." *Journal of Personality and Social Psychology*, 32 (2): 311–328.
- Langer, Ellen J., and Judith Roden. 1976. "The Effects of Choice and Enhanced Personal Responsibility for the Aged: A Field Experiment in an Institutional Setting." *Journal of Personality and Social Psychology*, 34(August): 191 - 198.
- Lau, Richard R., David J. Andersen, and David P. Redlawsk. 2008. "An Exploration of Correct

- Voting in Recent U.S. Presidential Elections." *American Journal of Political Science*, 52(April): 395 - 411.
- Lau, Richard R., John G. Geer, and Lynn Vavreck. 2009. "How News Coverage of Ads Conditions the Effectiveness of Campaign Ads." Paper presented at the 105<sup>th</sup> annual meeting of the American Political Science Association, Toronto.
- Lau, Carolyn G., Alexandra C. Lau, and Richard R. Lau. 2009. "A Preliminary Look: Candidate Spending and visits by State, Election 2008." Typescript.
- Lau, Richard R., and Gerald M. Pomper. 2001. "Effects of Negative Campaigning on Turnout in U.S. Senate Elections, 1988-1998." *Journal of Politics*, 63(August): 804 - 819.
- Lau, Richard R. and David P. Redlawsk. 1997. "Voting Correctly." *American Political Science Review*, 91(September): 585 - 599.
- Lau, Richard R. and David P. Redlawsk. 2001. "Advantages and Disadvantages of Cognitive Heuristics in Political Decision Making." *American Journal of Political Science*, 45(October): 951 - 971.
- Lau, Richard R., and David P. Redlawsk. 2006. *How Voters Decide: Information Processing During Election Campaigns*. New York: Cambridge University Press.
- Lau, Richard R, Lee Sigelman, and Ivy Brown Rovner. 2007. "The Effects of Negative Political Campaigns: A Meta-Analytic Reassessment." *Journal of Politics*, 69(November): 1176 - 1209.
- Lipsitz, Keena. 2004. "Democratic Theory and Political Campaigns." *Journal of Political Philosophy* 12(2): 163-189.
- Lipsitz, Keena. 2009. "The Consequences of Battleground and Spectator State Residency for Political Participation." *Political Behavior* 31(2): 187-209.
- Marcus, George E., W. Russell Neuman, and Michael MacKuen. 2000. *Affective Intelligence and Political Judgment*. Chicago: University of Chicago Press.
- Mutz, Diana C. 2006. *Hearing the Other Side: Deliberative vs. Participatory Democracy*. New York: Cambridge University Press.
- Patterson, Thomas. 2002. *The Vanishing Voter*. New York: Knopf.
- Patterson, Thomas and Robert McClure. 1976. *The Unseeing Eye*. New York: Putnam.

- Popkin, Samuel. 1991. *The Reasoning Voter*. Chicago: University of Chicago Press.
- Prior, Markus. 2007. *Post-Broadcast Democracy*. New York: Cambridge University Press.
- Prior, Markus (2010). You've Either Got It or You Don't? The Stability of Political Interest over the Life Cycle. *Journal of Politics*, 72 (3): 747-766.
- Riker, William H. 1996. *The Strategy of Rhetoric*. New Haven: Yale University Press.
- Rotter, Julian B. 1966. "Generalized Expectancies of Internal versus External Control of Reinforcements". *Psychological Monographs* 80 (whole no. 609).
- Sears, David O., and Jonathan L. Freedman. 1967. "Selective Exposure to Information: A Critical Review." *Public Opinion Quarterly*, 31(2): 194 - 213.
- Seligman, M.E.P. (1975). *Helplessness: On Depression, Development, and Death*. San Francisco: W.H. Freeman.
- Sunstein, Cass R. 2009. *Republic.com 2.0*. Princeton: Princeton University Press.
- Thompson, Suzanne C., Wade Armstrong, and Craig Thomas. 1998. "Illusions of Control, Underestimations, and Accuracy: A Control Heuristic Explanation." *Psychological Bulletin*, 123 (2): 143–161.
- Valentino, Nicholas A., Antoine J. Banks, Vincent L. Hutchings, and Anne K. Davis. 2009. "Selective Exposure in the Internet Age: The Interaction between Anxiety and Information Utility." *Political Psychology*, 30 (August): 591 - 613.
- Weiner, Bernard. 1980. *Human Motivation*. New York: Holt, Rinehart & Winston.
- West, Darrell. 2010. *Air Wars*. Washington DC: CQ Press.
- Wolfinger, Raymond E., and Steven J. Rosenstone. 1980. *Who Votes?* New Haven, CT: Yale University Press.

**Table 1**  
**Choosing to Look at Any Political Ads**

	<i>Model 1</i>			<i>Model 2</i>	
	Coeff	S.E.	Full Dose Prob.	Coeff	S.E.
Political Interest	.997**	(.371)	.23	1.115**	(.377)
Strength PID	.676**	(.213)	.17	.160	(.307)
Non-BG State	.282 <sup>@</sup>	(.153)	.07	-.078	(.197)
StrengthPID X Non-BG				.954*	(.420)
Uncertainty	.226	(.334)	.05	-.677	(.470)
Uncertainty X Non-BG				1.975**	(.691)
<i>Control Variables</i>					
Female	-.007	(.162)		-.001	(.163)
Black	-.591 <sup>@</sup>	(.324)		-.572 <sup>@</sup>	(.328)
Years of Education	-.084	(.359)		-.095	(.362)
Family Income	-.047	(.349)		-.043	(.352)
Age	-.062	(.410)		-.078	(.414)
Ideology (Conservative)	-.340	(.268)		-.343	(.271)
Constant	-.455*	(.214)		-.681**	(.233)
Nagelkerke R <sup>2</sup>	.057			.078	
Omnibus Chi-squar	32.521*** (10 df)			44.951***(12 df)	
<sup>@</sup> $p < .08$ * $p < .05$ ** $p < .01$ *** $p < .001$					

**Note:** Table entries are logistic regression coefficients, with standard errors in parentheses. All variables have been recoded to have a 1-point range. The “Full Dose” column represents the change in the predicted probability of looking at any ad as each independent variable changes from its lowest to its highest value, holding all other variables in the equation at their median or modal value. N = 745.

**Table 2**  
**Balanced Information Search**

	<i>Model 1</i>			<i>Model 2</i>	
	Coeff	S.E.	Full Dose Prob.	Coeff	S.E.
Political Interest	.838	(.521)	.09	.894 <sup>@</sup>	(.525)
Strength PID	.027	(.279)	.00	.021	(.280)
Non-BG Stat	.248	(.203)	.03	.547*	(.268)
Uncertainty	.645	(.422)	.07	-.126	(.649)
Uncertainty X Non-BG				1.480 <sup>@</sup>	(.854)
<i>Control Variables</i>					
Female	-.125	(.214)		-.104	(.214)
Black	.200	(.401)		.193	(.402)
Years of Education	.626	(.465)		.649	(.463)
Family Income	-.031	(.448)		-.049	(.449)
Age	-.792	(.534)		-.836	(.535)
Ideology (Conservative)	.208	(.351)		.211	(.351)
Constant	-1.989***	(.295)		-2.170***	(.323)
Nagelkerke R <sup>2</sup>	.027			.034	
Omnibus Chi-squar	12.087	(10 df)		15.204	(11 df)

<sup>@</sup>  $p < .09$     \* $p < .05$     \*\* $p < .01$     \*\*\* $p < .001$

**Note:** Table entries are logistic regression coefficients, with standard errors in parentheses. All variables have been recoded to have a 1-point range. The “Full Dose” column represents the change in the predicted probability of balanced search as each independent variable changes from its lowest to its highest value, holding all other variables in the equation at their median or modal value. N = 745.

**Table 3**  
**Confirmatory Information Search,**  
**Likely McCain or Obama Voters Only**

	<i>Model 1</i>			<i>Model 2</i>	
	Coeff	S.E.	Full Dose Prob.	Coeff	S.E.
Political Interest	.144	(.448)	.03	.132	(.449)
Strength PID	.692**	(.257)	.14	.174	(.363)
Non-BG State	.117	(.168)	.02	.057	(.172)
Strength PID X Non-BG				1.001*	(.503)
<i>Control Variables</i>					
Female	.099	(.177)		.077	(.177)
Black	-.529	(.346)		-.498	(.347)
Years of Education	-.214	(.401)		-.242	(.402)
Family Income	-.610	(.388)		-.583	(.388)
Age	-.609	(.445)		-.600	(.444)
Ideology (Conservative)	-.616*	(.288)		-.602*	(.288)
Nagelkerke R <sup>2</sup>	.038			.067	
Omnibus Chi-square	21.306** (9 df)			25.376** (10 df)	

\* $p < .05$     \*\* $p < .01$

**Note:** Table entries are ordinal logistic regression coefficients, with standard errors in parentheses. Analysis restricted to likely McCain and Obama voters. All variables have been recoded to have a 1-point range. The models include separate “cut points” for the different levels of the dependent variable. The “Full Dose” column represents the change in the predicted probability of confirmatory search as each independent variable changes from its lowest to its highest value, holding all other variables in the equation at their median or modal value. N = 648.

**Table 4**  
**Effects of Choice on Change in Evaluations of Candidates' Ads**

	<i>Obama Ads</i>		<i>McCain Ads</i>	
	B	S.E.	B	S.E.
Lagged DV	.555***	(.027)	.550***	(.027)
McCain Voter	-.140*	(.063)	.205**	(.068)
Obama Voter	.238***	(.065)	-.243***	(.065)
Political Interest	-.178*	(.076)	-.136 <sup>@</sup>	(.079)
Strength PID	.080 <sup>@</sup>	(.045)	-.045	(.047)
Battleground State	-.043	(.032)	.006	(.033)
Choice	.042	(.051)	-.071	(.052)
Viewed Positive Ad	-.053	(.049)	-.105*	(.050)
Viewed Negative Ad	.015	(.049)	-.051	(.050)
Choice X Positive Ad	.172*	(.074)	.091	(.075)
Choice X Negative Ad	-.072	(.076)	.096	(.083)
<i>Control Variables</i>				
Female	.049	(.034)	.055	(.035)
Black	.206**	(.074)	-.106	(.076)
Years of Education	-.043	(.077)	.050	(.079)
Family Income	-.040	(.071)	-.066	(.073)
Age	-.048	(.086)	-.256**	(.089)
Ideology (Conservative)	-.329***	(.082)	.355***	(.083)
Constant	1.178***	(.101)	1.136***	(.102)
Adjusted R Square	.693		.694	
N	1010		1013	

<sup>@</sup>  $p < .09$     \*  $p < .05$     \*\*  $p < .01$     \*\*\*  $p < .001$

**Note:** Table entries are unstandardized regression coefficients, with standard errors in parentheses. All predictors have been recoded to have a 1-point range.

**Table 5**  
**Effects of Choice, Interest, and Exposure to Candidate's Ads**  
**on Correct Voting**

	Coeff	S.E.	Full Dose Prob.
Political Knowledge	1.035 <sup>@</sup>	(.590)	.13
Political Interest	2.456 <sup>@</sup>	(1.439)	.30
Strength PID	2.218***	(.294)	.33
Battleground State	-.176	(.223)	-.02
Total Ads Viewed	.183	(.185)	.06
Choice	.711	(.585)	.06
Interest X Ads Viewed	-.809 <sup>@</sup>	(.487)	
Interest X Choice	-2.946 <sup>@</sup>	(1.574)	
Choice X Ads Viewed	-.660*	(.267)	
Interest X Choice X Ads Viewed	1.980**	(.699)	
<i>Control Variables</i>			
Female	-.040	(.234)	
Black	.214	(.503)	
Years of Education	-.228	(.546)	
Family Income	.905 <sup>@</sup>	(.534)	
Age	-.645	(.584)	
Ideology (Conservative)	1.039*	(.426)	
Constant	1.906**	(.569)	
Nagelkerke R <sup>2</sup>	.165		
Omnibus Chi-square (16 df)	89.436***		

<sup>@</sup>  $p < .10$     \* $p < .05$     \*\* $p < .01$     \*\*\* $p < .001$

**Note:** Dependent variable is the unweighted means measure of correct voting, but the results are almost identical for the unweighted sums measure. Table entries are logistic regression coefficients, with standard errors in parentheses. All variables have been recoded to have a 1-point range except for Total Ads Viewed (and thus its interaction with political interest and choice), which ranges from 0 to 4. The “Full Dose” column represents the change in the predicted probability of a correct vote as each independent variable changes from its lowest to its highest value, holding all other variables in the equation at their median or modal value.

**Table 6**  
**Effect of Choice and Exposure to Negative Ads**  
**on Change in System-Supporting Political Attitudes**

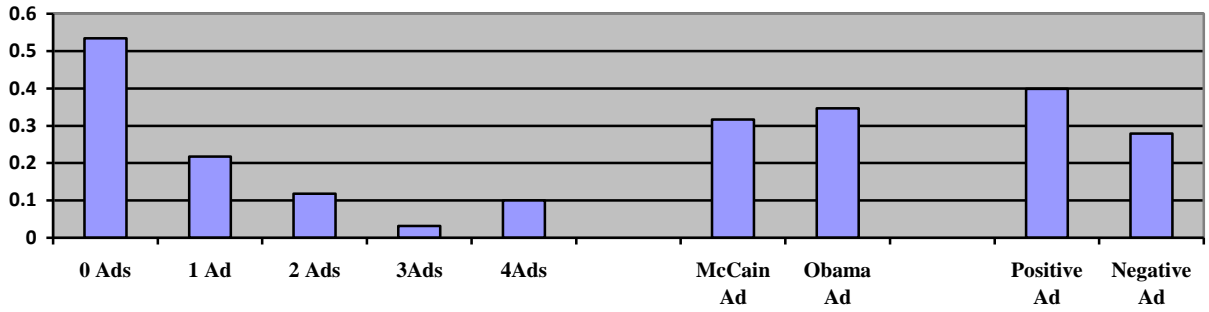
	<i>Trust in Government</i>		<i>Political Efficacy</i>	
	B	S.E.	B	S.E.
Lagged DV	.696**	(.025)	.635**	(.024)
Voted for Winner	.167**	(.030)	.391**	(.073)
Political Interest	-.195**	(.053)	.056	(.130)
Strength PID	.031	(.029)	.130 <sup>@</sup>	(.071)
Battleground State	-.045*	(.021)	.010	(.052)
Choice	-.023	(.029)	-.195	(.073)
Negative Ads Viewed	.000	(.016)	-.033	(.041)
Choice X Neg Ads Viewed	.007	(.026)	.125*	(.064)
<i>Control Variables</i>				
Female	-.027	(.022)	.037	(.054)
Black	.026	(.048)	.148	(.117)
Years of Education	.139**	(.050)	.174	(.125)
Family Income	-.037	(.046)	.048	(.114)
Age	-.012	(.056)	-.155	(.140)
Ideology (Conservative)	-.058	(.050)	.008	(.125)
Constant	.332**	(.048)	.693**	(.114)
Adjusted R Square	.489		.474	
N	1038		1037	

<sup>@</sup> $p < .07$     \* $p < .05$     \*\*  $p < .001$

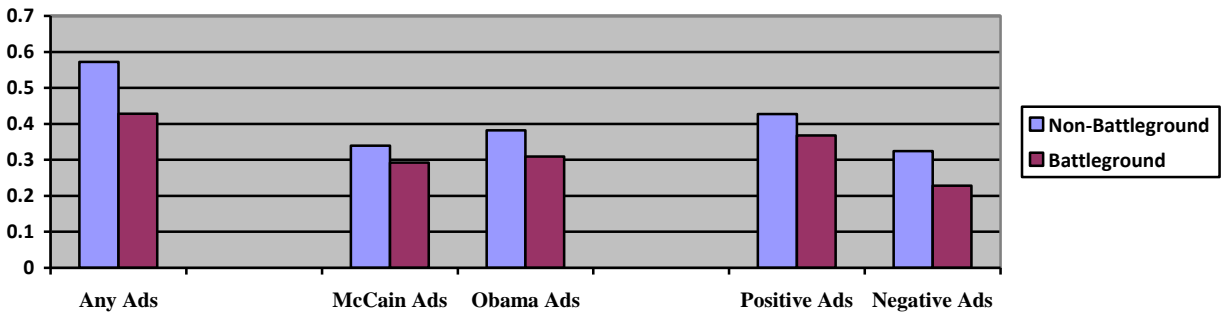
**Note:** Table entries are unstandardized regression coefficients, with standard errors in parentheses. All predictors have been recoded to have a 1-point range except for the Negative Ads Viewed variable (and its interaction with choice), which ranges from 0 to 2.

Figure 1  
Choosing to View Political Advertisements

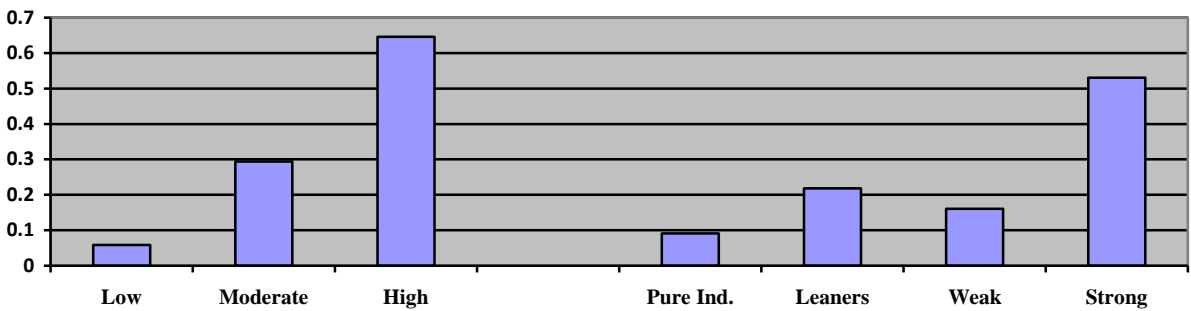
Panel A: All Respondents



Panel B: Viewing Ads, Controlling on Battleground Status

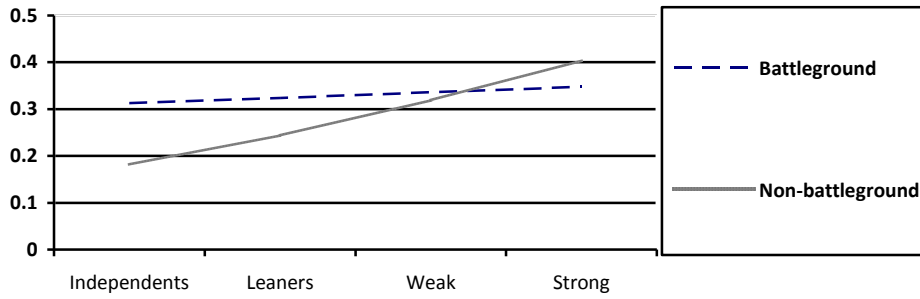


Panel C: Viewing Any Ad, Controlling on Political Interest and Strength of Party Identification

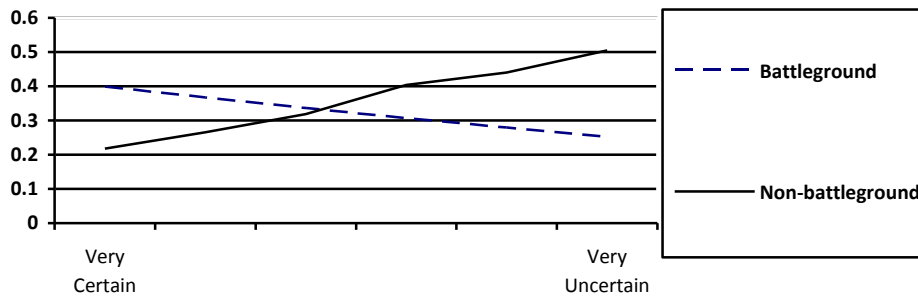


**Figure 2**  
**Probability of Choosing to View Any Additional Political Ads**

**Interaction of Strength of Party Identification and Battleground State**

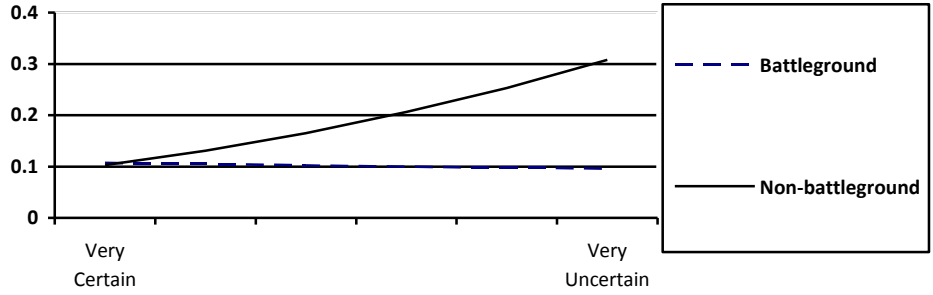


**Interaction of Decision Uncertainty and Battleground State**

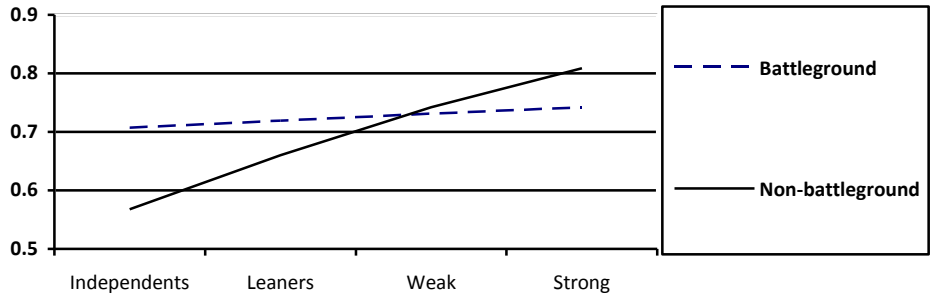


**Figure 3**  
**A More Nuanced View of Discretionary Political Information Search**

**Interaction of Decision Uncertainty and Battleground State on *Balanced* Search**

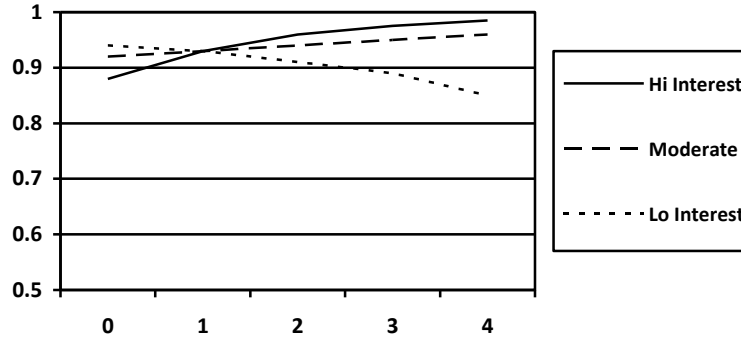


**Interaction of Strength of Party ID and Battleground State on *Confirmatory* Search**



**Figure 4**  
**Interaction of Choice, Political Knowledge, and Number of Ads Viewed,**  
**on the Probability of a Correc Vote**

**Choice Condition**



**No Choice Conditions**

