

Negative Advertising, External Political Efficacy, and Vote Choice in U.S. Senate Elections

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Abstract

Campaign advertising serves as the principal means of communication between candidates and voters in large scale elections in the U.S. We argue that the relative balance of negative advertising put forth by major party candidates influences citizens' decisions at the ballot box, but that this impact is conditioned by party identification and external political efficacy. Voters with high external political efficacy support the political system, and thus, should respond to the content of the attacks, we hypothesize by lowering their support for the candidate disproportionately targeted by negative advertising. In contrast, voters with low levels of external political efficacy dislike the overall political climate, and thus should respond by punishing the source of negative attacks rather than the target. These responses, we predict, will be muted for party identifiers who filter political stimuli through their partisan lenses. Using data from the 1998-2004 American National Election Studies and Wisconsin Advertising Project, we find evidence consistent with our expectations for voters in U.S. Senate elections.

Campaign advertising is the primary means by which candidates try to communicate with voters in large scale election in the United States. This makes understanding how voters respond to political campaigns central for understanding representation in the U.S. Of particular concern is the tone of political campaigns. Journalists routinely denounce negative campaigns, and voters resoundingly report that they do not like negative advertising. However, the consensus view among most election observers is that negative advertising works. As described in more detail below, most scholars generally agree at least that negative advertising stimulates voter turnout. It does so in part because negative advertising draws sharper contrasts between candidates and because it appeals to the aversion that voters feel regarding risk and uncertainty about candidates (e.g. Marcus and MacKuen 1993; Finkel and Geer 1998). In short, scholars believe that negative advertising impacts turnout largely because it provides information about the candidates being attacked.

While participation is enhanced by negative advertising, less is known about how negative advertising might affect actual vote *choice*. The turnout literature appears to assume that negative ads provide voters with more negative information about a candidate, thereby driving voters to the polls to vote against that candidate. We argue that the process is not so simple. Negative advertising does provide information about the target of the attacks, but it also provides information about the source of the attacks (e.g. Banda 2012; Neal and Carsey 2006). Furthermore, we argue below that how voters react to negative attacks from one candidate directed toward another should be conditioned by their feelings of external political efficacy as well and their partisan predispositions.

In more concrete terms, voters with a higher level of external political efficacy have a more positive view of the political system. When faced with a negative campaign, they should focus on the content of the negative information rather than be angered by presence of the negativity. In contrast, those with low external political efficacy have a negative view of the political system. When confronted with a negative campaign, such voters should find

the source of the negativity more distasteful than the actual content of the messages. The result, then, is that voters with high external political efficacy should increasingly support the candidate who disproportionately attacks her opponent while voters with low external political efficacy should support the attacker less as she becomes more negative. In other words, those with high levels of external political efficacy should punish the target of negative advertisements while those with low levels of external political efficacy should punish the source of those attacks. Finally, given the dominant role played by party identification in filtering political information and shaping voter preferences for candidates, this entire process should be felt much more strongly among political Independents compared to those holding a party identification.

We use data drawn from the American National Election Studies and the Wisconsin Advertising Project to test our theory of citizen responsiveness to negative advertising in U.S. Senate elections from 1998 through 2004.¹ The results of our analysis provide strong support for our prediction among political Independents. As expected, the impact of negative advertising on vote choice is much more muted for partisans.

Campaigns, Negative Advertising, and Voting Behavior

While the general question of whether or not campaigns matter for voters has largely been answered in the affirmative (e.g. Johnston et al. 1992; Holbrook 1996; Carsey 2000), the specific mechanism through which they affect voters remains unclear. Much of the recent work on campaign effects focuses on the tone of political advertising and its impact on voter turnout. Goldstein and Ridout (2004) argue that television advertising is the primary means

¹The data were obtained from a project of the University of Wisconsin Advertising Project includes media tracking data from TNSMI/Campaign Media Analysis Group in Washington, D.C. The University of Wisconsin Advertising Project was sponsored by a grant from The Pew Charitable Trusts. The opinions expressed in this article are those of the authors and do not necessarily reflect the views of the University of Wisconsin Advertising Project or The Pew Charitable Trusts.

by which most modern campaigns attempt to persuade the electorate. Political advertising pursues the goal of winning political battles by “creating and delivering biased messages” to voters Goldstein and Ridout (2004, 2005). By far the most scholarly attention within this area has been devoted to the potential impact of negative campaigns and campaign advertising on voter turnout.

While early work showed that negative campaigning reduced turnout (e.g. Ansolabehere et al. 1994; Ansolabehere and Iyengar 1995; Kahn and Kenney 1999), more recent studies suggest that increasingly negative campaigns either do not effect turnout (Clinton and Lapinski 2004) or stimulate turnout (e.g. Finkel and Geer 1998; Goldstein and Freedman 2002; Kahn and Kenney 2004; Brader 2005; Geer 2006; Geer and Lau 2006; Lau, Sigelman, and Rovner 2007; Jackson and Carsey 2007, but see Krupnikov 2011). Several explanations for the mobilization result have been offered by scholars (see Finkel and Geer 1998 and Jackson and Carsey 2007 for overviews). Some argue that voters respond because negative campaigns clearly distinguish between candidates (e.g. Carsey 2000) and reduce uncertainty about them (Alvarez 1997). Citizens may also weigh negative information more heavily than positive information (Garramone et al. 1990), and negative attacks may produce stronger emotional responses among risk-averse voters (Marcus and MacKuen 1993; Finkel and Geer 1998). In particular, negative advertising is meant to raise feelings of concern, anxiety, and even fear among voters about an opposing candidate in the upcoming election. In short, negative advertising likely stimulates turnout because it provides information about the target of the attacks which voters find useful for deciding whether, and presumably for whom, to vote.

A subset of the extant research has examined whether negative advertising affects subsets of voters differently from others, but again, the results are mixed.² Scholars who argue that negative advertising demobilizes voters suggest the effect is particularly strongly felt by

²For an analysis of the direct effects of negative advertisements on the voting behavior of individuals, see Ridout and Franz (2011).

political Independents — citizens expected to be relatively susceptible to campaign stimuli more generally (Zaller 1992; Ansolabehere and Iyengar 1995; Kahn and Kenney 1999; Lau and Pomper 2001, 2004). However, this result has not emerged in several other studies (e.g. Finkel and Geer 1998; Freedman and Goldstein 1999; Goldstein and Freedman 2002; Jackson and Carsey 2007), nor does the original conclusion reached by Kahn and Kenney appear to be supported (Jackson and Sides 2006). What has gone largely unexamined thus far is whether different subsets of the electorate respond differently to campaign negativity, and whether that response varies based on the source and target of negative attacks (but see Neal and Carsey 2006).

Negative Campaigns and Vote Choice

Virtually all citizens dislike negative advertisements (Geer 2006). However, we argue that voters will differ regarding how they respond to negative advertisements in terms of forming preferences about candidates. Carsey (2000) argues that the effect of campaigns on the choices made by voters is indirect, or more specifically, that campaign messages interact with voter attributes to produce a response in voter preferences regarding the candidates running in a given contest. We make a similar argument here. That is, we do not expect campaign negativity to have a simple direct effect on vote choice. Rather, we expect the influence of negativity to depend upon two individual-level attributes held by voters: their degree of external political efficacy, and whether or not they identify with a political party.

External Political Efficacy

An extensive literature exists on political efficacy, both internal and external, and its related concepts: trust in government and political alienation. External political efficacy refers

to individuals' "beliefs about the potential for ordinary citizens to play a meaningful role in the political process, with an emphasis more on the ultimate fairness of both procedures and outcomes than on the responsiveness of incumbent authorities *per se* to popular demands" (Craig, Niemi, and Silver 1990, 299). In other words, citizens feel high levels of external political efficacy when they believe that they can effectively participate in politics and that government is responsive to their participation. External political efficacy is conceptually different than internal political efficacy, which refers to individual citizens' beliefs that they themselves can understand and participate in politics (Acock, Clarke, and Stewart 1985; Craig, Niemi, and Silver 1990; Niemi, Craig, and Mattei 1991). External political efficacy is a key indicator of the quality of a democratic system (Easton 1975; Iyengar 1980; Finkel 1985; Craig, Niemi, and Silver 1990).

Low levels of external political efficacy indicate a system that is perceived to be nonresponsive to citizen input while high levels are indicative of a system that functions efficiently and in response to the will of the people. Put another way, citizens who feel low levels of external political efficacy hold negative views about the political process while those who feel high levels of external efficacy hold more positive views of how politics is conducted.

We argue that external political efficacy conditions the way voters respond to negative campaign messages. Those with high external political efficacy view the political system as working and the political process as fair. Such citizens have accepted negative campaigns as part of that functioning system. As a result, negativity itself will not turn such voters off, leaving room for the information contained in negative attacks to shape how they view the candidates in the contest. As the balance of negative attacks moves toward a particular candidate, meaning that the candidate experiences a greater share of the total attacks in the campaign, voters with high external efficacy should become less supportive of the target of those attacks. Thus, our first hypothesis is:

H1: As the share of negative ads in a campaign directed at a particular candidate increases, voters with high levels of external political efficacy should become less supportive of the candidate who is the target of those attacks.

In contrast, voters with low levels of external political efficacy view the political system as not working and as unfair. Such citizens would not accept negative campaigning as a normal part of a healthy system. As such, voters with low external political efficacy are likely to react to the negativity itself rather than the information content in negative ads. Rather than the content of those ads hurting the target of the attacks in these voters' eyes, they will instead punish the source of the negativity because those attacks feed their already negative view of the political process. This prediction is consistent with evidence showing that voters form opinions about both the targets and the sponsors of negative attacks (Banda 2012) and that too much negativity can produce a backlash among some voters Lau and Pomper (2001). Thus, as the balance of negative attacks moves toward one candidate experience a greater share of the negative attacks, voters with low external political efficacy will be less supportive of the source of those attacks rather than of the target. Thus, our second hypothesis is:

H2: As the share of negative ads in a campaign directed at a particular candidate increases, voters with low levels of external political efficacy should become less supportive of the candidate who is the source of those attacks.

Partisanship

Since Campbell et al. (1960), many scholars have understood party identification to provide a fundamental perceptual screen through which citizens view and experience the political world. Bartels (2002) argues that such a partisan bias “significantly inhibits what would otherwise be a strong tendency toward convergence in political views in response to shared political experience,” noting that “partisanship is...a pervasive dynamic force shaping

citizens' perceptions of, and reactions to, the political world" (138, see also Stokes 1966; Kunda 1990; Carsey and Layman 2006; Taber and Lodge 2006). Of course, a large literature shows that party identification has a strong direct effect on individual-level vote choice. Here, we argue that the process by which political stimuli — like the tone of campaign advertising — influences voters will also depend on how those voters filter information through their partisan lenses.

Political Independents by definition lack a partisan filter through which to view new political information. As a result, we expect our first two hypotheses to apply for political Independents.

Partisans should respond differently — in fact, partisans may not respond at all to the mix of negative advertising they experience regarding their vote choice regardless of their level of external political efficacy. While negativity might drive them to the polls, we suggest that once they get there, the mix of negative advertising may not alter their preference for a particular candidate. Rather, partisans may continue to support candidates from their own party at high rates regardless of the mix of negative advertising to which they are exposed. If, for example, the majority of negative ads aired in a campaign target the Republican candidate, we expect that to simply reinforce the predispositions of Democratic voters while we expect Republican voters to either discount the attacks of their candidate or simply blame the Democratic candidate as the source of negativity. If partisan voters do respond, the effects predicted from H1 and H2 above should be more muted for voters who have a partisan identity. Thus, our third hypothesis is:

H3: The conditional effects of negative advertising and political efficacy on voter preferences for candidates should be stronger for political Independents compared to voters who have a partisan identification.

To summarize, we argue that negative messages should affect voters differently depending

on their partisanship and their level of external political efficacy. Voters who are relatively content with the political system should respond to the information contained in negative advertising, thereby lowering their support for a candidate who is increasingly the target of negative attacks. In contrast, voters who do not believe the political system is working well will punish the source of the negativity more than the target of it. This pattern should emerge most clearly for voters who lack a partisan filter, but should become more muted or even disappear for those who see the world through partisan lenses.

Data and Methods

We test the three hypotheses generated from our theory using data from the Wisconsin Advertising Project's (WiscAds) 1998, 2000, 2002, and 2004 data sets combined with American National Election Studies (ANES) data on voters, focusing on U.S. Senate elections. The WiscAds data record each airing of each political ad run in many of the largest media markets (DMAs) in the U.S.³ Each ad is coded for many criteria, the most important for this research being the tone of the ad. Advertisements are coded as positive, negative, or contrast. Positive ads focus on communicating information about the sponsor, negative ads focus on the sponsor's opponent, and contrast ads contain both negative and positive information. Because both negative and contrast ads include negative information, we code both types of ads as negative for use in our analysis.⁴

We then generated counts of the total number of ads and the total number of negative ads sponsored by each major party candidate in the general election by media market. We then merged these media market level advertisement data with individual level data from

³In 1998, the project collected data from the 75 largest media markets. The 2000-2004 data contains ads aired in the 100 largest media markets.

⁴Many other studies use a similar coding strategy. See Jackson and Carsey (2007) for an example and further discussion.

the American National Election Studies (ANES) time series cumulative file, again from 1998 through 2004. The ANES records each respondent’s county of residence which we used to match respondents with media markets.

The dependent variable in our analysis is self reported vote choice in U.S. Senate elections. We coded this variable 1 if a respondent reported voting for the Democratic candidate and 0 if they reported voting for the Republican candidate. This allows us to observe the effects of our independent variables on vote choice among those who voted for a major party candidate.⁵

Our three main independent variables of interest are party identification, external political efficacy, and the mix of negative advertising to which a voter was exposed. To measure party identification, we used two simple dichotomous variables indicating whether or not respondents identified with the Democratic or the Republican Parties. Independents serve as the comparison group for the purposes of modeling and ease of interpretation.⁶

To measure external political efficacy, we used the ANES external political efficacy index. This measure is generated from respondents’ answers to two questions. Respondents are asked to report their level of agreement or disagreement with the statements “[p]eople like me don’t have any say about what the government does” and “I don’t think public officials care much what people like me think.” Respondents may “agree strongly,” “agree somewhat,” “neither agree nor disagree,” “disagree somewhat,” or “disagree strongly” with both questions. To construct the external political efficacy index, all “agree” responses were scored 0, all “disagree” responses were scored 100, and “neither agree nor disagree” responses were scored 50. These values were then summed across questions and divided by the number of valid responses, leading to a measure with values of 0, 25, 50, 75, and 100. We rescaled this measure to run from 0 to 4, where low values indicated low levels of external political efficacy while higher values indicated higher feelings of external efficacy.

⁵Respondents who reported voting for a third party candidate or who did not vote were excluded from our analysis.

⁶We excluded respondents who were not Democrats, Republicans, or Independents from our analysis.

Measuring campaign negativity is more complicated, and previous work has employed different approaches. Jackson and Carsey (2007), for example, simply measure the total number of negative ads aired in a contest while controlling for the total number of positive ads in their models predicting turnout. Neal and Carsey (2006) separate similar measures into the number of negative and positive ads aired by each candidate. Stevens (2008) uses a proportional measure instead, arguing that the proportion of negativity to which respondents are exposed is an important factor in determining the true effect of negativity on turnout.⁷

Each of these measurement strategies has merit. We think that the negativity of a campaign message can be thought of as a signal to voters that has two attributes: loudness and clarity. The total number of negative ads seems to capture the relative loudness of the message across while the proportion of ads that are negative measures the clarity of the message. We created a measure that takes into account both how loud and how clear the negative message is. The formula we used to calculate this measure is made up of three parts and is shown in Equation 1.

$$\left(\frac{Attacks_D}{Attacks_D + Attacks_R} - 0.5 \right) * \left(\frac{Attacks_D + Attacks_R}{Total_D + Total_R} \right) * \left(\frac{Total_D + Total_R}{MeanDMATotal_{Year}} \right) \quad (1)$$

The first element of Equation 1 expresses the relative balance of negativity in advertising between the two candidates. Specifically, we divide the number of ads run by the Democrat attacking the Republican by the sum of the number of attack ads run by both of the candidates. We then centered this on zero by subtracting 0.5 from this quotient. The result is a measure that ranges from -0.5 to 0.5. A value of zero indicates a perfect balance in the number of ads that attack the Republican compared to the number that attack the Democrat. Negative values indicate that there were more ads attacking the Democrat than

⁷Others have used a measure of exposure to negative advertising based on the programs during which ads ran and the reported viewing habits of survey respondents (e.g. Freedman and Goldstein 1999; Freedman, Franz, and Goldstein 2004; Franz et al. 2007; Stevens 2008; Ridout and Franz 2011).

there were attacking the Republican, while positive values indicate the opposite.

The second element of Equation 1 is the total number of negative ads aired by the two major party candidates divided by the total number of all ads run in the same media market. This captures the proportion of ads overall that were negative, which ranges from 0 to 1. Low values of this proportion indicate a largely positive campaign advertising environment while higher values indicate an increasingly negative environment. Taken together, these first two elements capture the clarity of the negative message sent to voters. For example, imagine two media markets that experience 300 ads aired by the Democratic candidate attacking the Republican candidate and 100 ads aired by the Republican attacking the Democrat. Our first element would be $(300/400) - .5 = .25$. In a media market that saw no additional positive ads aired, the measure would remain .25, sending a relatively clear signal to voters that the campaign is negative and dominated by ads run by the Democratic candidate attacking the Republican candidate.

The clarity of that signal can be diminished in two ways. First, if the number of attack ads aired by the two candidates was more similar, it would be less clear to voters which candidate was doing most of the attacking and which candidate was receiving most of the attacks.

Second, the campaign might include a large number of positive ads. For example, suppose in our hypothetical media market, there were another 600 positive ads aired. In that case, the measure would reduce to $.25 * (400/1000)$, or $.25 * .4$ which equals .1. This adjustment toward zero reflects the notion that voters in the second media market did not receive the message of the negative ads as clearly as did voters living in the first.

The third element of Equation 1 is the total number of ads aired in a given media market compared to the average number of ads run in all media markets included in our study in each year. Adding this element allows us to weight the clarity of the negative

message measured thus far by how “loud” the message was relative to the average volume of campaign advertising voters experienced across media markets and years in these races. This is necessary because each media market saw different overall advertising efforts.

The end result is a measure that ranges from -0.39 to 0.42.⁸ Values of zero reflect situations where voters received no meaningful signal regarding an imbalance in the negative information provided by the ads run by the candidates. As our measure increases in a positive direction, the signal voters receive is increasingly one of more negative attacks directed at the Republican by the Democratic opponent, whereas negative values indicates greater attacking of the Democratic candidate by the Republican opponent.

To fully capture all of the conditional relationships we wish to observe in a single equation requires the inclusion of three-way multiplicative interaction terms between measures of partisanship, external political efficacy, and advertising negativity. Such models frequently suffer from high levels of multicollinearity, and that is true for our model as well. The coefficient estimates and their individual levels of statistical significance are generally not informative regarding marginal impact of variables involved in such interactions (e.g. Brambor, Clark, and Golder 2006). Thus, we report the results from the model we estimate, but focus our interpretation on a range of predicted probabilities generated from those results.

Finally, we include a number of control variables in each model. We control for the presence of an incumbent in the race by including an variable that is equal to -1 when the incumbent is a Republican, 0 when there is no incumbent running, and 1 when the incumbent is a Democrat. We also include controls for a number of individual level characteristics such as a respondent’s age in years, their self-placed ideology on the seven point scale on which higher values indicate higher levels of conservatism, whether or not they are female, their level of education as measured by a seven point ordinal measure for which higher values indicator higher levels of educational achievement, and their racial background as indicated

⁸These values are rounded to two significant digits for ease of interpretation.

by a series of dichotomous indicators.⁹ Table 1 contains summary statistics for each of the variables used in our analysis. We estimate a logistic regression model to capture the effects of our independent variables of interest on respondents’ vote choice in Senate elections, which we report in the equation below.¹⁰

[Insert Table 1 here]

$$\begin{aligned}
 \text{Vote Choice} = & \alpha + \beta_1 \text{Democrat} + \beta_2 \text{Republican} + \beta_3 \text{Negativity} + \beta_4 \text{Efficacy} \\
 & + \beta_5 (\text{Negativity} * \text{Efficacy}) + \beta_6 (\text{Negativity} * \text{Democrat}) + \beta_7 (\text{Negativity} * \text{Republican}) \\
 & + \beta_8 (\text{Efficacy} * \text{Democrat}) + \beta_9 (\text{Efficacy} * \text{Republican}) + \beta_{10} (\text{Negativity} * \text{Efficacy} * \text{Democrat}) \\
 & + \beta_{11} \text{Ideology} + \beta_{12} \text{Education} + \beta_{13} \text{Age} + \beta_{14} \text{Female} + \beta_{15} \text{Black} + \beta_{16} \text{Asian} + \beta_{17} \text{Hispanic} \\
 & + \beta_{18} \text{Hispanic} + \beta_{19} \text{Native American} + \beta_{20} \text{Incumbency}
 \end{aligned}$$

Results

We present the results of our logistic regression model in Table 2. The highly interactive nature of our model makes attempts to directly interpret the constituent terms of the interactions virtually impossible. However, a likelihood ratio test comparing the model in Table 2 to one that excludes all of the interaction terms confirms that the model including the interaction terms fits the data better ($p = .03$).

⁹We left out the 22 respondents who identified as members of an “other” racial group. This decision did not affect the substance of our findings.

¹⁰The model we report in this paper does not take into account the hierarchical nature of our data, which are nested in years, states, and media markets. We estimated a model that included random intercepts for each of these three levels. Their inclusion did not affect the results of our analysis. Indeed, the random intercepts that our model generated were approximately equal to zero. This may be because we successfully modeled a large proportion of the variance that these random intercepts would have captured through the rest of our covariates. We therefore decided to omit the random intercepts in order to report a more parsimonious statistical model.

[Insert Table 2 here]

In Figure 1, we plot the predicted probabilities of having reported voting for the Democratic candidate for Senate as a function of the balance of negative ads aired in each voters media market. The figure is separated into three panels for three types of voters: Independents, Democrats, and Republicans. Within each panel, we consider voters with high external political efficacy and voters with low external political efficacy. We generated these predicted probabilities using 1,000 posterior simulations. We conditioned out the uncertainty generated by most of our control variables in order to focus on the effects of our independent variables of interest while minimizing the problems resulting from the presence of a high degree of multicollinearity typically produced by three-way interaction terms. We draw simulated parameter values for our substantive variables of interest and all of the interactions plus the constant and ideology. Including the later two elements centers our probability estimates, but does not affect the basic patten of results reported in Figure 1 We set ideology to take its modal value of four, which corresponds with an ideological outlook of “moderate.” For illustrative purposes, we used the lowest value of the external political efficacy measure — zero — to generate the predicted probabilities for low efficacy respondents and the highest value — four — to estimate predicted probabilities for high efficacy respondents.

[Insert Figure 1 here]

For each panel in Figure 1, the Y-axis reports the predicted probability of voting for the Democratic candidate for Senate while the X-axis reports the negativity of the campaign advertising environment. Negative values on the X-axis correspond to advertising environments in which the Democratic candidate is attacked more while positive values on the X-axis correspond to situations in which the Republican candidate is the target of a disproportionate share of the attacks. The Y axes show the predicted probability of voting for Democratic Senate candidates.

We present the predicted probabilities of voting for Democratic Senate candidates for Independent respondents in the top panel of Figure 1. These findings are consistent with our expectations from H1 and H2.

Looking first at Independents with a high level of external political efficacy, as the advertising environment shifts from one where the Democratic candidate is more clearly the target of negative advertising to one in which the Republican candidate is, the predicted probability of voting for the Democratic candidate increases. The predicted probabilities of voting for Democratic candidates generated here range from 0.10 in the least advantageous negative advertising environments for Democrats to 0.93 in the media markets in which the Republican candidate was the dominant target of attacks. Among voters with high external political efficacy, it appears that the balance of negativity in a political campaign works to the disadvantage of the candidate who is disproportionately targeted. This is exactly what H1 predicts.

In contrast, as the advertising environment in a media market shifts from one where the Democrat receives a disproportionate share of the negative attacks to one in which the Republican is the target of most attacks, the predicted probability of voting for Democratic candidates among low efficacy Independents decreases. The predicted probability of reporting a vote for a Democratic candidate ranges from 0.67 in the most anti-Democratic negative advertising environment to 0.08 in environments in which Republican candidates suffer the most from an imbalance of attacks. This finding is consistent with the idea that Independent voters with low external political efficacy are turned away from the candidate who is the source of negativity in a political campaign, which is what H2 predicts.

The next two panels of Figure 1 present similar figures for Democratic and Republican voters, respectively. H3 predicts that the effects of negative advertising and external political efficacy on vote choice will be diminished or eliminated among partisan voters relative

to political independents. That is exactly what we see in these two panels. The predicted probability of a Democratic voter supporting the Democratic candidate is always relatively high and never dips below 0.5.¹¹ This pattern we observe here is the opposite of that which we observe for Independents; low external efficacy Democrats appear to be more likely than high efficacy Democrats to support candidates who face more attacks. However, these patterns are very weak as evidenced by the modest differences in predicted probabilities among the two groups of Democrats and the overlapping confidence intervals. For Republican voters, the pattern that emerges is quite similar to that observed for Independents. However, the effects show for Republicans are much weaker than they are for Independents. Taken together, the findings for Democratic and Republican voters is consistent with our expectations predicted in H3 – the effects of negativity and external political efficacy should mirror those observed among Independents, but in a more muted fashion.

To summarize our findings thus far, we find that Independents are responsive to the mix of negative advertising present in their environments and that this response is conditioned by their feelings of external political efficacy. Highly efficacious independents appear to punish the targets of negative advertising while low efficacious Independents appear to punish the sources of campaign negativity. The conditional effects of campaign negativity and external political efficacy are, on the other hand, largely muted among voters with partisan identities.

Turning briefly to our control variables, an increase in a respondent's level of conservatism is associated with a decrease in the likelihood of voting for a Democratic candidate. Older respondents are relatively more likely to vote for Democratic candidates compared to younger voters. Black respondents are more likely to report having voted for Democratic Senate candidates. The estimated coefficient for our incumbency measure also indicates that moving from an election involving a Republican incumbent to an open seat election to a race

¹¹Recall that these are all ideologically moderate voters, so the relatively modest predicted probabilities here should not be surprising.

involving a Democratic incumbent leads to increases in the likelihood of reporting a vote for a Democratic candidate. The estimated coefficients for the remaining controls in the model do not appear to have independent effects on the likelihood of voting for a Democratic Senate candidate when controlling for all of the covariates in the model.

Conclusion

Taken as a whole, the results presented in this research suggest that citizens respond to the balance of negativity present in their campaign environments, but that response is not uniform across all citizens. Rather, it is conditioned by the degree of external political efficacy voters feel. Voters who have a generally positive view of the political system appear to accept negative advertising as part of that system and respond to the information contained on those attacks. In contrast, those with a low view of the political system appear to be off-put by a decidedly negative campaign and express their hostility toward such negativity by punishing its source. As we expected, however, the powerful filter of party identification limits the interactive impact of campaign negativity and external political efficacy primarily to those voters who do not identify with a party.

Regarding how scholars should think about voters, our findings provide another example of the importance of distinguishing the subsets of voters who are expected to respond to particular political stimuli. Voters are heterogenous not just in their attributes, but also in how they process political information. As a result, theories and methods that incorporate this heterogeneity are likely to outperform theories and methods that do not (e.g. Kropko 2012).

Similarly, our results support the notion that the primary way campaigns are likely to affect voters is indirectly. That is, campaign effects are likely to be conditional on some attribute of the voters in question (e.g. Carsey 2000). Taken together, these two points

reinforce the idea that campaigns affect voters, but in sometimes subtle, partial, and conditional ways. There is little question now that campaigns matter for voters, and this study reinforces the value of a particular strategy for unpacking just how campaigns matter.

Finally, our findings raise several strategic considerations for candidates. At a general level, candidates must consider the potential costs and benefits of attacking their opponents. There are both potential gains and potential losses from such a strategy, and the balance between them depends at least in part upon the proportion of the electorate that does not identify with the Democratic or Republican parties as well as voters' feelings of external political efficacy. Going one step further, incumbent candidates should consider the impact their performance in non-election years has on the level of external political efficacy felt by citizens and the subsequent electoral consequences that may present.

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Table 1: Summary Statistics

	Mean	Standard deviation	Minimum	Maximum
Voted for Democratic Senator	0.53	0.50	0.00	1.00
Respondent is a Democrat	0.49	0.50	0.00	1.00
Respondent is a Republican	0.41	0.49	0.00	1.00
Negativity toward GOP candidate	-0.02	0.15	-0.39	0.42
External political efficacy	2.04	1.59	0.00	4.00
Incumbency	0.03	0.72	-1.00	1.00
Level of education	4.44	1.61	1.00	7.00
Age in years	47.61	16.94	18.00	99.00
Respondent is female	0.55	0.50	0.00	1.00
Respondent is Black	0.12	0.33	0.00	1.00
Respondent is Asian	0.02	0.15	0.00	1.00
Respondent is Hispanic	.07	0.25	0.00	1.00
Respondent is Native American	.03	0.17	0.00	1.00
Ideology (7 point)	4.29	1.46	1.00	7.00

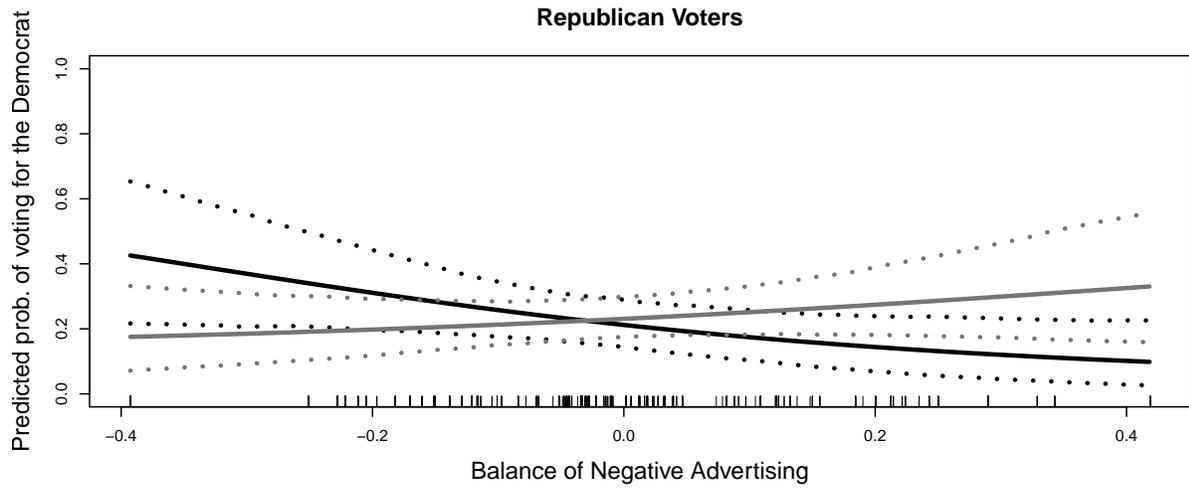
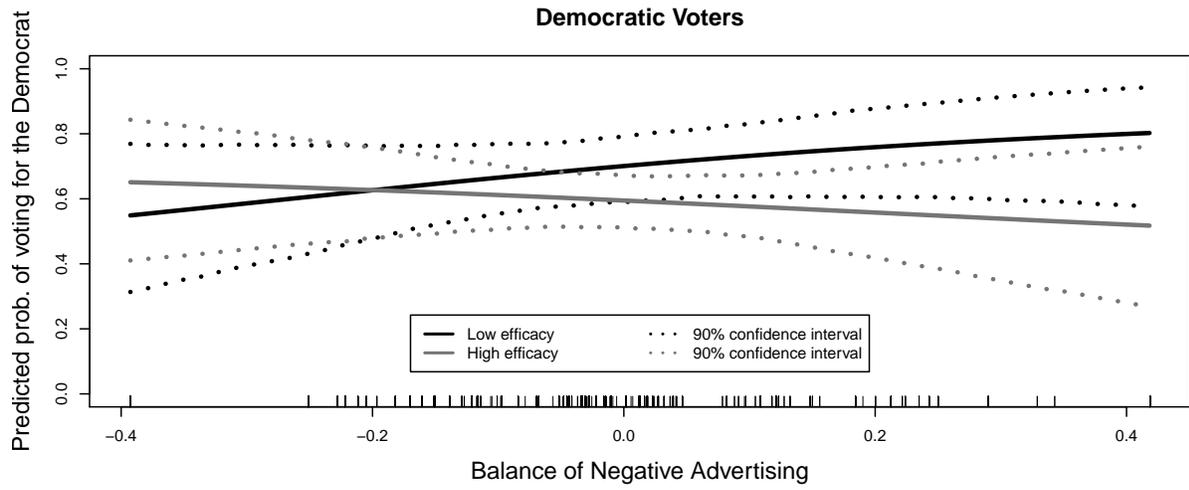
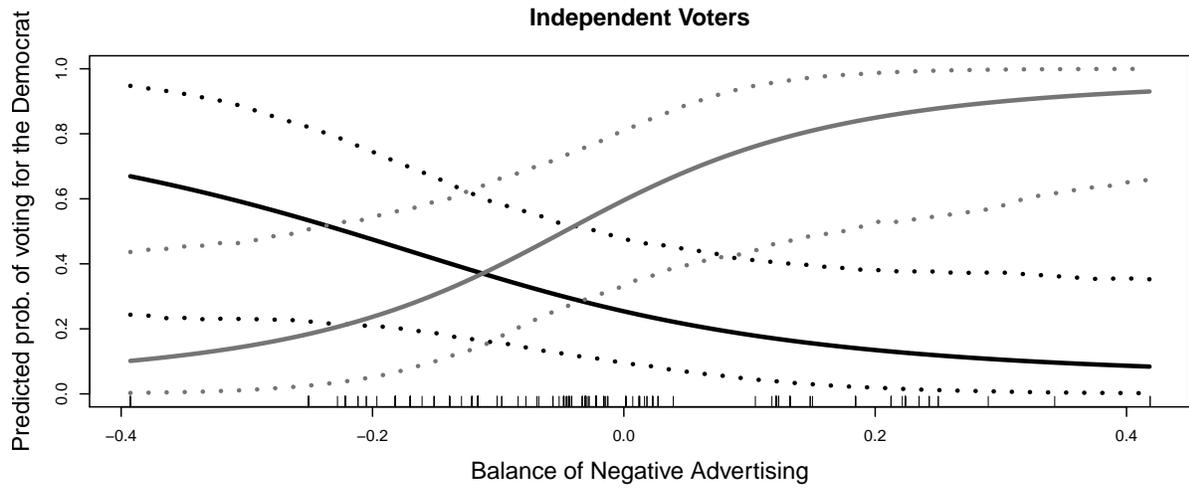
Table 2: The Effects of Negative Advertising, Party Identification, and External Political Efficacy on U.S. Senate Vote Choice: 1998-2004

	Estimated coefficient	Standard error
Respondent is a Democrat	2.04*	0.73
Respondent is a Republican	-0.16	0.73
Negativity towards GOP Candidate	-5.34	3.34
External political efficacy	0.40	0.27
Negativity * Efficacy	3.59*	1.65
Negativity * Democrat	6.94†	3.73
Negativity * Republican	2.83	3.65
Efficacy * Democrat	-0.52†	0.29
Efficacy * Republican	-0.37	0.29
Negativity * Efficacy * Democrat	-4.18*	1.78
Negativity * Efficacy * Republican	-2.70	1.73
Ideology (7 point)	-0.94*	0.09
Level of education	-0.08	0.07
Age in years	0.02*	0.01
Respondent is female	-0.20	0.20
Respondent is Black	1.96*	0.53
Respondent is Asian	0.23	0.75
Respondent is Hispanic	0.17	0.57
Respondent is Native American	-0.73	0.54
Incumbency	0.61*	0.12
Intercept	2.60*	0.94
BIC	788.5	
N	764	

Note: The preceding coefficients and standard errors were estimated using logistic regression.

† = $p \leq .1$ (two tailed)

* = $p \leq .05$ (two tailed)



Note: Predicted probabilities were generated using estimates reported in Table 2. Negative values on the X-axis correspond to situations where there are more ads attacking the Democrat while positive values correspond to situations where there are more ads attacking the Republican.

Figure 1: Predicting Vote Choice in U.S. Senate Elections
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