

# Not Which Sources But When: How Temporal Dynamics in Selective Exposure Shape Polarization

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## Abstract

Why do partisans have polarized perceptions even though existing work shows that their media diets are relatively balanced? We argue that partisans vary in terms of when they pay attention to the news, not just in terms of the ideological media sources they follow. Leveraging the national election surveys across six decades as well as the discontinuity in the news environment that was induced by the collapse of the Lehman Brothers, we show that partisans vary their political attentiveness in response to whether news events are congenial to their party. Panel data analysis along with supplementary simulation analysis sheds light on the importance of this finding by demonstrating how temporal variation in attention to the news media can lead to partisan polarization even if partisans have the same media diets.

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## Introduction

Polarization is a defining feature of contemporary American politics (See Prior 2013 for a review). Evidence of polarized perceptions—even on purely factual matters—abounds (Abramowitz 2010; Bartels 2002; c.f. Bullock et al. 2015). Many observers have linked this phenomenon to partisan selective exposure (e.g. Levendusky 2013; Stroud 2008), the idea that citizens purposefully choose media outlets that match their existing political predispositions.<sup>1</sup> Yet empirical evidence of partisan selective exposure is surprisingly tenuous outside controlled experimental settings (Garrett 2009; Gentzkow and Shapiro 2011; Prior 2013; Webster and Ksiazek 2012). Indeed, studies using behavioral measures of media consumption have consistently shown that most Americans, except for a handful of extreme partisans, do not have skewed media diets (Guess 2016; Peterson, Goel and Iyengar 2018). Although there are strong theoretical reasons to believe that a high-choice media environment contributes to polarization (Van Aelst et al. 2017), the lack of evidence for widespread partisan selective exposure raises an important question: Why do partisans have polarized perceptions even though they have relatively balanced media diets?

In this paper, we suggest that an alternative conceptualization of selective exposure can provide part of the answer. Although selective exposure is typically conceptualized as an outlet-based phenomenon in which citizens choose what to consume, we argue that it can also be a temporal behavior in which citizens choose when to consume political information. Just as sports fans ‘flee with their eyeballs’ when their team’s performance is too depressing to watch (Fernandez 2015), we hypothesize that people pay less attention to politics when their own partisan team is losing and pay more attention when their team is winning. If people want to avoid cognitive dissonance and maximize the entertainment value of politics, deciding when (and when not) to consume news may well be a simpler strategy than intentionally picking media sources that match their political predispositions. Even people following centrist or balanced news sources can receive one-sided information flows to the extent that they do not pay attention to the news when their party underperforms.<sup>2</sup> While choosing what news to consume and when to tune it out can both lead to biased information flows, much existing research on selective exposure has focused on the former while paying scant attention to the latter. Our aim is to fill this important gap in the literature.

To empirically test our hypothesis, we employ two empirical strategies. First, we use American National Election Studies (ANES) data to investigate how partisans have differed in their media consumption

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<sup>1</sup>The other prominent explanation is partisan motivated reasoning, in which partisan identification biases the way people interpret political information (e.g. Bartels 2002)

<sup>2</sup>Based on this conceptualization, we use general news consumption and political attentiveness as our dependent variables.

and political engagement over the last six decades. Second, we utilize the sudden and dramatic change in the economic news environment that was induced by the collapse of Lehman Brothers in September 2008. We use the rolling cross-section as well as panel component of the 2008 National Annenberg Election Survey (NAES) to see whether the sudden influx of bad economic news—an event that typically does not bode well for the incumbent party in an election year—affected partisans’ media consumption differently. Both approaches show that partisans choose how actively to follow politics in a manner that is consistent with our argument. Using a simulation model, we demonstrate how the temporal dynamics of selective exposure can lead to polarization<sup>3</sup> of political beliefs even when partisans have the balanced media diets.

This article makes an important theoretical contribution to the ongoing debate about the extent of partisan selective exposure by shifting our attention to the question of when partisans choose to consume news, rather than what news partisans choose to consume. Empirically, by showing partisans temporally tune in and out of politics in divergent ways, we demonstrate that scholars may have underestimated the actual extent to which partisans expose themselves to congenial information.

## **Mixed Evidence on Partisan Selective Exposure**

Consumers of information are predisposed to maximize its expected utility, so they are motivated to seek attitude-congruent information and avoid attitude-incongruent information that would create mental discomfort (Festinger 1962). This simple yet powerful theory has yielded the prediction that partisans prefer to be exposed to information that conforms to their existing political dispositions. Extensive empirical evidence collected in lab- and survey-based studies details the existence of partisan selective exposure (e.g., Iyengar and Hahn 2009; Knobloch-Westerwick 2012; Levendusky 2013; Metzger, Hartsell and Flanagin 2015; Stroud 2010; Winter, Metzger and Flanagin 2016). This pattern dates to the earliest studies of campaign effects (Lazarsfeld, Berelson and Gaudet 1948).

However, behavioral evidence of the extent of partisan selective exposure raises doubts about the notion that most Americans actually expose themselves to like-minded partisan media. A study of millions of website visits finds that most of the largest news websites attract similar amounts of traffic from citizens

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<sup>3</sup>By polarization, we refer to polarization of politically-relevant perceptions broadly. Depending on the type of information partisans consume, polarization can occur in the realm of policy attitudes (policy polarization) and/or feelings toward other partisans (affective polarization).

across the partisan aisle (Gentzkow and Shapiro 2011).<sup>4</sup> Thirty per cent of daily visitors to the *New York Times* website are conservatives, for example, and one quarter of daily visitors to the Fox News website are Independents and Democrats. Real-world data collected in different times, settings, and platforms all reinforce the finding that most Americans have mixed media diets (Bakshy, Messing and Adamic 2015; Flaxman, Goel and Rao 2016). Even during an election as polarizing as the one in 2016, most partisans were exposing themselves to mainstream media sites (Peterson, Goel and Iyengar 2018).

The behavioral data that report limited evidence of partisan selective exposure also show an overwhelming amount of nonpolitical media consumption. One study finds that, over three months in a non-election year, 96 per cent of internet users read less than one news article per week (Flaxman, Goel and Rao 2016). Other web traffic data paint a similar picture: less than 4 per cent of all web visits are to news articles (Peterson, Goel and Iyengar 2018). Another study that finds evidence of substantial exposure to cross-cutting partisan news among ten million Facebook users reports that 87 per cent of all articles shared comprise nonpolitical content such as entertainment, sports, and travel (Bakshy, Messing and Adamic 2015).

By focusing on partisan media sources, studies on selective exposure have implied that the electorate is consuming a full plate of political media choices. However, these striking statistics on nonpolitical media consumption—which are in sync with long-standing evidence of a general lack of political interest and knowledge (Carpini and Keeter 1996)—hint at one overlooked way in which partisans might minimize cognitive dissonance: by choosing not to pay attention to politics when their party is losing.

## The Temporal Dynamics of Selective Exposure

How does belief-polarization persist when the real-world evidence of partisan selective exposure is so scarce? We suggest that the temporal dynamics of selective exposure speak to this important puzzle. People may temporally adjust their political interest level upwards or downwards in response to the flows of good or bad news about their party. This approach allows them to maximize exposure to pleasing information and minimize exposure to displeasing information without having to seek partisan sources. Therefore, the evidence that Americans have mostly centrist or mixed political media diets would only mean that partisans' perceptions would not be polarized if we also assumed that the level of political en-

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<sup>4</sup>The discrepancy may arise from the fact that the real world contains many more distractions than controlled settings do. See also Guess (2016) on the explanation for this gap.

gagement across partisan groups is independent of the performance of the incumbent party. However, this assumption that partisans' media consumption is independent of party performance seems very implausible because it implies that either: (1) partisans would find politics equally enjoyable when their side underperforms or (2) partisans would remain equally attentive to politics when following politics becomes less enjoyable.

What do humans generally do when the team they are rooting for underperforms? In the world of sports, fans simply stop watching games (e.g., Fernandez 2015). We argue the same phenomenon occurs in politics. In fact, scholars often draw a parallel between partisans and sports fans because they both derive expressive benefits from cheering for their teams (e.g., Green, Palmquist and Schickler 2004; Mason 2015). The psychological underpinnings of media consumption also remain similar across the two worlds. People actively choose and watch media that maximizes their sense of gratification, whether that is by arousing positive emotions or by releasing tension and stress (Atkin 1973). Just as most people do not enjoy learning about how their team is underperforming, consuming political news when their party is, or is expected to be, losing is less gratifying. This may cause some to tune out of politics altogether.

Furthermore, many academic studies have long intimated that citizens' political interests ebb and flow depending on party performance. In emphasizing the role of information environments in partisan learning, Jerit and Barabas (2012, p. 674) note that individuals can 'scrutinize, counterargue, and reject' flows of uncongenial information, which results in partisans having more political knowledge about issues that have positive implications for their party. Gelman et al. (2016) document that partisans' willingness to respond to public opinion polls varies by their party's performance. Notably, Democrats answered polls at a much lower rate after Obama performed poorly in the first 2012 presidential debate against Romney, but more of them opted to participate when he 'recovered' in later debates. The common strand that runs across studies of the dynamics of partisan engagement and learning is that citizens are more engaged when their partisan team is performing well. From what we know about the link between political interest and news consumption, it is natural to assume that the amount of news partisans consume depends on whether their party is perceived to be winning or losing.

It is more plausible and much simpler for partisans to avoid cognitive dissonance by deciding when to consume news rather than by purposefully picking media sources that match their existing political dispositions. We empirically test the temporal selective exposure hypothesis by focusing on presidential performance, the most easily accessible and salient partisan heuristic for whether things are going well for

one's own party. In addition, given the much wider spectrum of choices the internet provides compared to what the traditional news media offers (Prior 2007; Tewksbury 2003), we expect that the dynamics of temporal selective exposure would be better observed with respect to online news consumption. We test this hypothesis by investigating how partisans change their online and offline news consumption depending on the party performance.

Finally, although our central argument is that temporal changes in news consumption can subject partisans to biased information flows *even if* their media diets are balanced, it is also possible that temporal selective exposure *exacerbates* biased media diets (i.e., partisan selective exposure in the traditional sense). This can happen, for example, if people stop following only non-like-minded sources, not just any outlet, when exposed to the news flows unfavorable to one's party. We test this possibility as well.

## Study 1: Temporal Dynamics of Political Attentiveness from 1952 to 2016

Do partisans tune in and out of politics depending on their party's performance? According to our argument, we should find that partisans' political interest fluctuates over time in response to the successes and failures of the incumbent party. In Study 1, we examined partisan differences in political attentiveness across 28 election cycles. Defining the overall valence of news flows as less friendly to the incumbent party (i.e., uncongenial to in-partisans and congenial to out-partisans) when the sitting president performs poorly, we examined how partisan groups' political attentiveness changes over a range of presidential performances.

### Data and Methods

We drew on the Time Series Cumulative Data of the ANES, which pools 31 representative cross-section surveys of the American electorate since the 1948 election.<sup>5</sup> We used 28 surveys collected between 1952 and 2016 that include both the independent and dependent variables (N = 59,174).<sup>6</sup>

We used in-partisanship and presidential performance as two key independent variables. We recoded the 7-point party ID into a dummy variable where 0 indicates identification with the non-incumbent party (e.g., Republicans in 2016) and 1 indicates identification with the incumbent party (e.g., Democrats in 2016). Independents leaning toward either party were treated as partisans. Pure independents were

<sup>5</sup>Appendix A provides more detailed information about the measurement of the key variables.

<sup>6</sup>This includes all of the ANES time series surveys collected between 1952 and 2016, except for 1974, which did not include our dependent variable.

excluded. As a proxy of presidential performance, we used presidential approval ratings gathered by the Gallup Poll in September of each election year.<sup>7</sup>

The main outcome variable in Study 1 is political interest. Specifically, we use the ‘interest in the elections’ variable provided by the ANES.<sup>8</sup> This variable is rescaled to range from 0 to 1 where 0 indicates ‘not much interested,’ 0.5 ‘somewhat interested,’ and 1 ‘very much interested.’

## Analysis

To test our hypothesis on temporal selective exposure, we estimated the following regression model:

$$Y_{i,t} = \beta_0 + \beta_1 Perform_t + \beta_2 Inpartisan_{i,t} + \beta_3 Perform_t \otimes Inpartisan_{i,t} + \epsilon_{i,t} \quad (\text{Equation 1})$$

where  $t$  denotes the survey year;  $Y_{i,t}$  is political interest;  $Perform_t$  is the incumbent president’s Gallup Poll approval rating in year  $t$  (ranging from 33 per cent to 76 per cent), rescaled to 0-1;  $Inpartisan_{i,t}$  is a dummy variable indicating whether respondent  $i$  identified with the incumbent president’s party in year  $t$ ;  $\beta_1$  is the predicted difference in political interest over a range of presidential performance for out-partisans;  $\beta_1 + \beta_3$  is the predicted difference in political interest over presidential performance for in-partisans; and  $\beta_3$  captures how the relationship between political attentiveness and presidential performance differs between in-partisans and out-partisans—i.e.,  $\beta_1 + \beta_3 - \beta_1 = \beta_3$ .

Conceptually, our research design is the one in which respondents were ‘assigned’ to different levels of presidential performance—and thus to different valences of news coverage of the incumbent party. If partisans do not modify their political engagement in response to the incumbent party’s performance, we should find this ‘treatment’ affects political attentiveness in the same way regardless of whether one identifies with the incumbent party—i.e.,  $\beta_3 = 0$ . On the other hand, if people enjoy political news when their party performs better and adjust their political attentiveness accordingly, we should find that the effects of the ‘treatment’ are heterogeneous across partisanship. More specifically, in-partisans should become more politically attentive relative to out-partisans when the incumbent president is popular than when he performs poorly—i.e.,  $\beta_3 > 0$ .

We did not have *a priori* expectations about the ‘main effect’ of presidential performance. One can imagine a scenario where it is generally negative (or positive) regardless of whether our hypothesis is true.

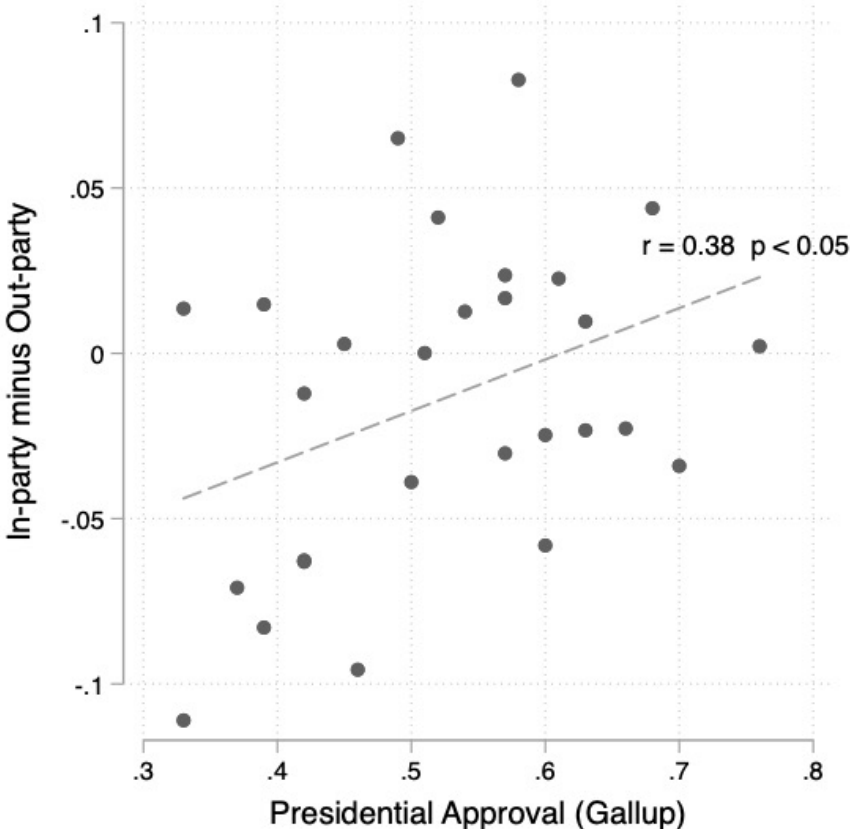
<sup>7</sup>The raw data can be found at <http://www.gallup.com/interactives/185273/presidential-job-approval-center.aspx>.

<sup>8</sup>We focus on ‘interest in the elections’ variable because only this item was measured consistently throughout the ANES time-series data. Other indicators of political interest and media consumption were measured more sparsely.

For example, it is possible that people generally become more politically engaged under an unpopular president who faces national crises that require urgent actions. It is also possible that they become more engaged under a popular president out of general excitement. But to the extent that either of these patterns exists, the null hypothesis predicts that partisans’ engagement levels would move in tandem, whereas our hypothesis predicts that they would diverge. According to our argument, we should find a partisan difference in political attentiveness across presidential performance levels. Therefore, the key quantity of interest throughout the results reported below is the estimate of  $\beta_3$ —the difference-in-differences estimate of people switching their political attentiveness on and off.

**Results**

Figure 1: Partisan Difference in Political Interest Over Presidential Approval



Note. ANES time-series data (1952 to 2016). The dots depict the partisan difference (in-partisans minus out-partisans) in political interest in each election cycle (n = 28). Political interest is rescaled to 0-1, where 1 indicates following the elections ‘very closely’

Before presenting the regression estimates, we begin with a graphical analysis at the aggregate level.



Table 1: Difference in Political Interest by Presidential Performance and In- and Out-Partisanship

	(1)	(2)	(3)	(4)	(5)	(6)
In-Partisans	-0.056*	-0.054*	-0.043*	-0.040*	-0.039*	-0.036*
	(0.021)	(0.021)	(0.018)	(0.019)	(0.014)	(0.015)
Presidential Performance	-0.150**	-0.156**				
	(0.034)	(0.032)				
In-Partisan $\times$ Performance	0.106**	0.102**	0.067*	0.065+	0.063*	0.059*
	(0.035)	(0.036)	(0.031)	(0.034)	(0.025)	(0.027)
Constant	0.647**	0.640**	0.582**	0.572**	0.558**	0.551**
	(0.025)	(0.023)	(0.004)	(0.004)	(0.017)	(0.020)
N	47805	47805	47789	47805	47805	47789
Weights	No	Yes	No	Yes	No	Yes
Year Fixed Effects	No	No	Yes	Yes	Yes	Yes
Individual Controls	No	No	No	No	Yes	Yes

Note: Estimates of Equation 1. Republicans are coded as in-partisans under Republican administrations (e.g., 2008), and Democrats are coded as in-partisans under Democratic administrations (e.g., 2012). Political interest is rescaled 0-1 such that 1 indicates being ‘very much interested’ in the elections. Presidential performance is measured by approval ratings in Gallup Polls fielded in September of each year. Poll ratings are rescaled to 0-1 where 0 and 1 respectively indicate 33 percent and 76 percent. Presidential performance is subsumed by year fixed effects in columns 3 to 6. Columns 5 and 6 includes individual-level pretreatment covariates (demographics) and their interactions with party ID (coefficients omitted). Standard errors are adjusted for year clusters. <sup>+</sup>  $p < 0.1$  \*  $p < 0.05$  \*\*  $p < 0.01$

In Figure 1, we plot the average partisan difference in political interest (in-partisan minus out-partisan) in each election cycle over the past six decades (1952 to 2016) against the popularity of the incumbent president in a given time. Consistent with our hypothesis, we find that in-partisans become more disinterested relative to out-partisans under an unpopular president and become more interested under a popular president. The aggregate-level partisan difference in political interest and Gallup polls over the 28 election cycles are correlated at  $r = 0.38$  ( $p < 0.05$ ).

Table 1 reports the estimates of Equation 1. Columns 1 and 2 present the baseline model (with and without weights). The estimate of  $\beta_3$  indicate a 10 to 11-percentage point gap ( $p < 0.01$ ) in the association between presidential popularity and political interest across partisanship. This is a substantial change. To put the number in context, consider that college graduates and non-college graduates differ by 17 percentage points in terms of political interest in the ANES surveys. To gauge the robustness of this result, we add year-fixed effects in Columns 3 and 4 to account for common time-trends, and individual-level controls in Columns 5 and 6. The results are consistent across these specification choices.

In Appendix B, we draw on additional battery of items measuring political interest (e.g., how much one cares who wins presidential election) news consumption. We find that the patterns are generally consistent across various items measuring political interest (see Table B2), but not those measuring news exposure

(see Table B3). Taken as a whole, the null hypothesis that partisans' changes in political attentiveness over time is parallel across presidencies is generally inconsistent in our analysis of the ANES data, although the evidence was not clear whether the pattern held for people's news consumption behaviors as well. The obvious advantage of the ANES data is that it allows us to examine the patterns of temporal selective exposure spanning six decades. However, there are two important caveats. One is the well-documented limitations in the ANES news exposure measures (see Bartels 1993; Dilliplane, Goldman, and Mutz 2012; Prior 2009), which make it difficult to reliably estimate how people modify their news consumption behaviors. The unreliability of the self-reported measures may have contributed to null findings. While we do find more pronounced support for our hypothesis focusing on the measures of political interest, such findings serve only as suggestive evidence for whether partisans actually adjust their overall exposure to news media depending on whether their team is 'winning.'

A more serious concern is that two election cycles in which the popularity of the sitting president varies may also be different along other dimensions. Most obviously, they are at least two years apart—and unspecified time effects can be substantial. In this regard, presidential popularity is a 'bundled treatment' where multiple factors vary simultaneously. Critically, we could not hold all the possible differences constant because we had only 28 comparison points. Therefore, while Study 1 allowed us to describe partisan divergence in news exposure in context with the popularity of the incumbent president, it did not allow us to fully explain why the divergence exists. It remains unclear whether it is presidential performance *per se* or an extraneous time effect that drives the observed pattern.

## **Study 2: Evidence Leveraging the Sudden Change in the News Environment Induced by the Collapse of Lehman Brothers**

To address the shortcomings of Study 1, we leveraged the dramatic change in the news environment caused by the collapse of Lehman Brothers on September 15, 2008.<sup>9</sup> The amount of economic news coverage spiked after Lehman's collapse, and it is widely believed that the date that Lehman filed for bankruptcy marked 'the critical point at which the media shifted attention and the economy became more salient' (Holbrook 2009, p. 475). Holbrook's analysis shows that though news coverage of the economy started to increase in early September it did spike after Lehman's collapse (Holbrook 2009, Figure 3). This out-

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<sup>9</sup>This unexpected bankruptcy of the investment bank is widely deemed to be the starting point of the Great Recession.

break of bad economic news two months before the election did not bode well for the incumbent party. Therefore, we treated this event as a proxy for a sudden shift in the flow of information that was not congenial to in-partisans, with most extraneous time effects held fixed.<sup>10</sup> We hypothesized that, compared to Democrats, Republicans would pay less attention to politics and consume less media as the bad economic news flew in.

## Data and Methods

We employ two empirical strategies. First, we used the rolling cross-section component of the 2008 National Annenberg Election Study (NAES) for Study 2. The NAES interviewed a representative sample of U.S. adults selected through random-digit dialing between December 2007 and November 2008 (N = 57,967). We used a subsample of respondents interviewed between September 8 and October 19 (N = 10,268), a time window that runs from one week before the start of the economic meltdown (September 15, the date that Lehman Brothers filed for bankruptcy) to one month afterwards.

We used two approaches to measure news consumption—sources and frequency. First, we constructed an additive index of the number of political television programs, radio shows, newspapers, and online websites, which ranges from 0 to 17 (see Appendix B more information about measurement of the key variables in Study 2).<sup>11</sup> Respondents were asked which specific television or radio programs, newspapers, or websites they consumed during the past week, which we added up to count the number of news sources. This approach is similar to the program list technique that Dilliplane, Goldman, and Mutz<sup>12</sup> recommend as a more reliable and valid measurement of news exposure. Second, we measured the frequency of news consumption. Respondents were asked how many days during the previous week they consumed four type of media (television, radio, newspaper and the internet) for information about the campaign. We constructed the news exposure frequency index by taking the average of these items, which range from 0 to 7 days.

We also utilized other sets of questions on respondents' online engagement level, and constructed another additive index by counting the number of online political activities in which they engaged during

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<sup>10</sup>In Appendix C, we demonstrate that the public did receive the “treatment” by showing people’s perception that the country is heading “in the right direction” sharply dropped after the cutoff and continued to go down in the following weeks (see Figure C1).

<sup>11</sup>Those without internet access were not asked about online news use and therefore were omitted from the analyses on news exposure. This decision does not render our results invalid because internet access is highly unlikely to be affected by the ‘treatment’ (the economic meltdown), although the findings here are generalizable only to U.S. adults with internet access (78 per cent of the full sample had internet access). We chose to drop these individuals instead of coding their internet news use as 0 because doing so would introduce a floor effect. Nonetheless, we find very similar results when their online news use was treated as non-missing zeros.

<sup>12</sup>Dilliplane, Goldman and Mutz 2013.

the previous week. Types of activities included visiting a campaign website, watching an online campaign video, forwarding online campaign information, discussing politics online, and contributing to political blogs. Campaign interest measured how closely respondents were following the campaign.

Second, we used the National Annenberg Election Survey's panel data administered by Knowledge Networks/GfK between late 2007 and early 2009. Panel data provide a critical advantage, as they allow us to track the same individuals' prejudice levels over several years and varied political contexts. Panel respondents were originally recruited via randomdigit dialing or address-based sampling, and so are broadly representative of the non-institutionalized US adult population.

### **NAES Rolling-Cross Sectional Data Analysis and Results**

The key advantage of the NAES data is that it employs a rolling cross-section (RCS) design, in which a fresh sample is randomly drawn from the population each day. This allows us to capture a representative snapshot of the American electorate just before a critical event—a control group—and a snapshot afterwards—a treatment group. The treatment in this case is the dramatic change in the political news cycle caused by the collapse of the economy in mid-September 2008. Lehman Brothers' bankruptcy filing on September 15 set in motion a chain of events—the crisis of AIG, meltdown of the stock market, and subsequent bailout proposals—that continued to generate extremely bad news for the incumbent government, which was controlled by the Republican Party. We tested our hypothesis on temporal selective exposure by comparing how Republicans and Democrats changed their media consumption and political interests during that time.

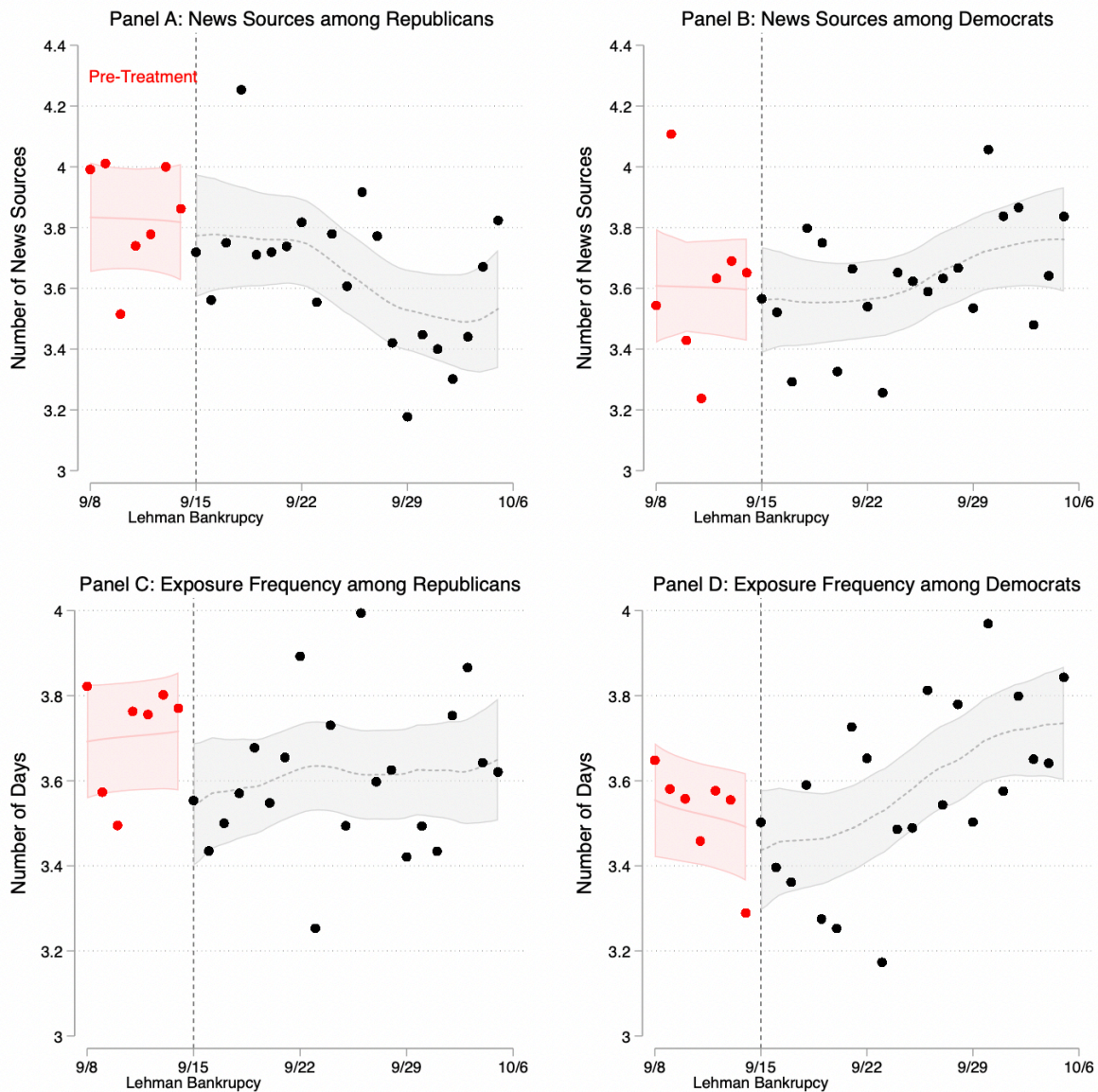
This RCS-based approach has a key advantage that resembles a feature of a randomized experiment: Since each respondent is essentially randomly assigned to an interview date, those in the control and treatment groups are expected to be comparable in terms of pre-existing characteristics. We have no good reason, other than chance alone, to suspect that baseline political attentiveness would be different between the control and treatment groups.<sup>13</sup> Furthermore, unlike in the cross-election comparisons, extraneous differences in political environment were mostly held constant, making it easier to determine whether bad news about the incumbent party's performance is driving partisans' adjustment of their media consumption.

We begin with nonparametric graphical evidence. Figure 2 plot partisans' news consumption patterns

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<sup>13</sup>But see Gelman et al. 2016.

Figure 2: News Consumption around the Collapse of Lehman Brothers in 2008



Note: Solid and dotted lines plot kernel-weighted (Epanechnikov; bandwidth = 3 days) local averages with 95 per cent CIs. Circles plot weekly averages. Lehman Brothers filed for bankruptcy on 9/15. Independent leaners are coded as partisans.

between early September and early October. The solid and dotted lines plot kernel-weighted (Epanechnikov; bandwidth = 3 days) local averages with 95 per cent confidence intervals and the circles plot daily averages, comparing those interviewed before Lehman Brothers filed for bankruptcy on September 15 (i.e., the control group), those interviewed after the economy started collapsing (i.e., the treatment group). The key question here is whether the two slopes in Panel A and B differ in the expected direction. Specifically, our hypothesis predicted that Republicans (in-partisans) would become less attentive to political news

relative to Democrats as the economy started collapsing and bad news about the incumbent party was broadcast. We find straightforward evidence for this hypothesis. As shown in Panels A and B of Figure 1, the number of news outlets Republicans consumed decreased between early September and early October, a time during which Democrats' news consumption slightly increased. Similarly, in Panels C and D, we find that Republicans reported to consume news media less frequently after the financial crisis, whereas the opposite was the case for Democrats.

We provide formal estimates of these patterns using regression models where we compare the changes in news consumption before and after the treatment event (i.e., the collapse of the economy) between the partisan groups. In the regression models, those who were interviewed during the final week leading up to the Lehman collapse (between September 8 and September 14) serve as the control group.<sup>14</sup> We compare this group to five treatment groups—those interviewed in one to five weeks after the treatment.<sup>15</sup> The regression model is:

$$Y_i = \beta_0 + \beta_1 W_{1i} + \beta_2 W_{2i} + \beta_3 W_{3i} + \beta_4 W_{4i} + \beta_5 W_{5i} + \beta_6 Dem_i + \beta_7 W_{1i} \times Dem_i + \beta_8 W_{2i} \times Dem_i + \dots + \beta_{11} W_{5i} \times Dem_i + \epsilon_i \quad (\text{Equation 2})$$

where  $Y_i$  is a measure or proxy of news consumption;  $\{W_{1i}, W_{2i}, W_{3i}, W_{4i}, W_{5i}\}$  are dummy variables indicating whether respondent  $i$  was interviewed in Week 1 (9/15 to 9/21), Week 2 (9/22 to 9/28), Week 3 (9/26 to 10/6), Week 4 (10/7 to 10/13) or Week 5 (10/14 to 10/20) after the bankruptcy of the Lehman Brothers (the reference category is the control group);  $Dem_i$  is a dummy variable indicating respondent  $i$ 's identification with the Democratic Party<sup>16</sup>;  $\beta_0$  is the intercept capturing Republicans' average news consumption level before the treatment;  $\{\beta_1, \beta_2, \beta_3, \beta_4, \beta_5\}$  are the changes in news consumption in one to five weeks after the bankruptcy among Republicans;  $\{\beta_7, \beta_8, \beta_9, \beta_{10}, \beta_{11}\}$  are the coefficients on the interaction terms capturing the partisan differences in overtime changes. According to our hypothesis, the flow of bad news for the Republican Party should cause Democrats to become more attentive relative

<sup>14</sup>This timeline roughly matches the short-lived post-convention period, during which both partisan groups were becoming more attentive. We did not choose a wider bandwidth of the control group because doing so could make our estimates more vulnerable to history confounds (e.g., convention effects). We found similar, though less precise, estimates when we narrowed the control band width to 3 days or to just 1 day before the treatment. Appendix D details the robustness checks (see Tables D3 to D6).

<sup>15</sup>We define multiple treatment groups because do not have clear theoretical expectations for the immediacy and longevity of the treatment effects. On one hand, partisans may have switched political interest on or off immediately after the Lehman debacle, and then defaulted back to the usual campaign mode in the long run. On the other hand, because the economic turmoil continued throughout the rest of the campaign, the treatment effect may have grown even larger as the financial crisis continued to worsen.

<sup>16</sup>We assumed that the treatment would not have changed people's party ID, given its stability (Green, Schickler and Palmquist 2002). We found no significant difference in the proportion of partisans in the sample around the cutoff date (see Appendix C).

to Republicans, in which case  $\{\beta_7, \beta_8, \beta_9, \beta_{10}, \beta_{11}\}$ , the interaction coefficients, should take a *positive* sign.

Table 2: Changes in News Consumption after the Financial Crisis

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	News (Sources)	News (Sources)	News (Days)	News (Days)	Interest	Interest	Online (Acts)	Online (Acts)
Post-Treat Week 1 (9/16-9/22)	-0.065 (0.130)	-0.037 (0.123)	-0.145 (0.094)	-0.132 (0.088)	-0.008 (0.013)	-0.006 (0.012)	-0.328* (0.131)	-0.299* (0.127)
Post-Treat Week 2 (9/23-9/29)	-0.142 (0.122)	-0.162 (0.117)	-0.052 (0.093)	-0.069 (0.087)	0.002 (0.012)	-0.001 (0.012)	-0.480** (0.123)	-0.483** (0.122)
Post-Treat Week 3 (9/30-10/6)	-0.366** (0.124)	-0.284* (0.118)	-0.103 (0.094)	-0.044 (0.087)	0.014 (0.013)	0.020+ (0.012)	-0.633** (0.121)	-0.632** (0.119)
Post-Treat Week 4 (10/7-10/13)	-0.220+ (0.133)	-0.137 (0.125)	-0.094 (0.097)	-0.034 (0.090)	0.026* (0.013)	0.029* (0.012)	-0.261 (0.241)	-0.248 (0.221)
Post-Treat Week 5 (10/14-10/20)	-0.245+ (0.126)	-0.183 (0.121)	-0.060 (0.093)	-0.027 (0.089)	0.023+ (0.013)	0.022+ (0.012)		
Democrat	-0.228+ (0.119)	-0.199 (0.311)	-0.190* (0.089)	-0.169 (0.232)	-0.024* (0.012)	-0.015 (0.036)	-0.164 (0.133)	-0.748* (0.371)
Post Week 1 × Dem	0.025 (0.174)	0.021 (0.164)	0.086 (0.131)	0.085 (0.123)	0.003 (0.018)	0.003 (0.017)	0.237 (0.184)	0.236 (0.179)
Post Week 2 × Dem	0.104 (0.167)	0.126 (0.159)	0.107 (0.128)	0.124 (0.120)	0.032+ (0.017)	0.033* (0.016)	0.359* (0.174)	0.396* (0.173)
Post Week 3 × Dem	0.523** (0.169)	0.503** (0.159)	0.307* (0.129)	0.298* (0.121)	0.026 (0.018)	0.029+ (0.017)	0.443* (0.172)	0.495** (0.169)
Post Week 4 × Dem	0.306+ (0.179)	0.233 (0.168)	0.337* (0.133)	0.291* (0.124)	0.015 (0.019)	0.009 (0.017)	0.164 (0.323)	0.255 (0.299)
Post Week 5 × Dem	0.370* (0.172)	0.351* (0.164)	0.269* (0.128)	0.261* (0.121)	0.016 (0.018)	0.021 (0.017)		
Constant	3.838** (0.086)	2.127** (0.245)	3.709** (0.065)	2.098** (0.174)	0.794** (0.009)	0.539** (0.028)	1.189** (0.097)	1.107** (0.286)
N	7226	7226	7235	7235	9069	9069	1675	1675
Outcome Range	0-17	0-17	0-7	0-7	0-1	0-1	0-5	0-5
Covariates	No	Yes	No	Yes	No	Yes	No	Yes

Note. OLS estimates with robust standard errors. Control group bandwidth is 9/8-9/14 for all models. All dependent variables are continuous. Models in Columns 2, 4, 6 and 8 include pretreatment covariates (turnouts in previous elections and demographics) and their interactions with party ID (coefficients omitted). Full results are reported in Online Appendix D. +  $p < 0.1$  \*  $p < 0.05$  \*\*  $p < 0.01$

In Table 2, we fit this model using four outcome variables (number of news outlets, frequency of news exposure, interest in the campaigns, and online engagement), each with and without pre-treatment controls. The results support our hypothesis overall. Across different models, *all* 38 estimates of  $\{\beta_7, \beta_8, \beta_9, \beta_{10}, \beta_{11}\}$  are positive. Eighteen of the 33 estimates are statistically significant at  $p < 0.1$ . The null hypothesis that the average of  $\{\beta_7, \beta_8, \beta_9, \beta_{10}, \beta_{11}\}$  is above zero is rejected in Column 1 ( $p < 0.05$ ), Column 2 ( $p$

< 0.05), Column 3 ( $p < 0.05$ ), Column 4 ( $p < 0.05$ ), Column 7 ( $p < 0.1$ ) and Column 8 ( $p < 0.1$ ).<sup>17</sup> For example, on average, Democrats increased their weekly news consumption by about 0.27 outlets (standard error = 0.13) in the weeks following the cutoff, relative to Republicans (Column 1). This effect amounts to about three tenths of the difference between college graduates and non-college graduates (difference = 0.90). Comparing the pairs of models with and without controls (e.g., Columns 1 vs. 2), we find that the findings are virtually identical. This is not surprising because survey timing (i.e., assignment to groups) was randomized by the RCS design.

Comparing across different indicators of political attentiveness in Table 2, we find more salient effects on online engagement than on general news exposure or campaign interest. This finding is consistent with our expectation that people switch on and off their news consumption more easily on the internet than on other news media channels. In Table 3, we further examine this possibility by disaggregating the news consumption variables into online channels (Columns 1 to 4) versus offline channels (Columns 5 to 8) and running separate analyses.<sup>18</sup> The results show that partisans' divergent changes in news exposure reported above are driven mostly by changes in *online* news consumption. Fifteen of the 20 interactions in Columns 1 to 4 are statistically significant in the expected direction. The averages of  $\{\beta_7, \beta_8, \beta_9, \beta_{10}, \beta_{11}\}$  are significant at  $p < 0.01$  across different models.<sup>19</sup> By contrast, the effects were much less noticeable on offline channels (see Columns 5 to 8). We fail to reject the null hypothesis that the average of the five interactions in all of these models.

In Appendix E, we also explore the possibility that temporal selective exposure enhances 'partisan' selective exposure in the traditional sense (i.e., partisan media diets), such that Republicans' decrease in news consumption comes largely from non-conservative sources, and Democrats' increase comes from liberal sources. We do not find evidence for this hypothesis. Instead, we find that partisans' changes in news consumption (or lack thereof) were generally consistent the ideological spectrum of news sources.

There are two reasonable alternative explanations for our results. First, despite the random selection of

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<sup>17</sup>The survey items for the outcome variables measured respondents' behaviors "in the past week." Thus, responses from those interviewed in Week 1 (between 9/15 and 9/21) could reflect what they did on Sep-tember 14 or earlier. While we do not drop them for transparency, Week 1 should be considered an interim period between the pre-treatment and post-treatment windows. When Week 1 is excluded, the average of the interaction terms is statistically significant in all but Column 5.

<sup>18</sup>Similar to general news exposure indices, offline news consumption was measured by counting the number of sources people received news from (Columns 5 and 6) as well as by calculating the average of the number of days people used each channel of communication for news (Columns 7 and 8) outside the internet.

<sup>19</sup>For example, Democrats' weekly online news consumption increased by about 0.15 source (standard error = 0.05) relative to Republicans, following the treatment event. To put this figure in context, consider that it rivals the observed difference between those who voted and those who did not vote during the 2008 primaries (difference = 0.14 source) and amounts to half of the between those with and without a college degree (difference = 0.30 source).



interview dates by the RCS design, there may have been some systematic differences between the control and treatment groups. One possibility is partisans' differential rates of survey participation.<sup>20</sup> If attentive Republicans, in particular, simply became less likely to respond to the survey after September 15, our results may have picked up the change in the composition of Republicans willing to respond to a political survey rather than the change in their media consumption or political interest.<sup>21</sup>

Table 3: Changes in News Consumption after the Financial Crisis by Media Channel

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Online	Online	Online	Online	Offline	Offline	Offline	Offline
	(Sources)	(Sources)	(Days)	(Days)	(Outlets)	(Outlets)	(Days)	(Days)
Post-Treat Week 1	-0.081	-0.077	-0.231	-0.203	-0.020	0.006	-0.082	-0.084
(9/16-9/22)	(0.051)	(0.048)	(0.180)	(0.172)	(0.097)	(0.092)	(0.090)	(0.084)
Post-Treat Week 2	-0.102*	-0.106*	-0.267	-0.273	-0.049	-0.057	0.000	-0.020
(9/23-9/29)	(0.049)	(0.047)	(0.176)	(0.168)	(0.094)	(0.091)	(0.090)	(0.084)
Post-Treat Week 3	-0.181**	-0.163**	-0.452*	-0.377*	-0.145	-0.100	0.053	0.090
(9/30-10/6)	(0.049)	(0.047)	(0.180)	(0.172)	(0.095)	(0.091)	(0.093)	(0.085)
Post-Treat Week 4	-0.093+	-0.064	-0.238	-0.130	-0.140	-0.095	-0.015	0.017
(10/7-10/13)	(0.051)	(0.049)	(0.186)	(0.178)	(0.101)	(0.096)	(0.093)	(0.087)
Post-Treat Week 5	-0.140**	-0.119*	-0.270	-0.195	-0.090	-0.078	0.025	0.019
(10/14-10/20)	(0.049)	(0.047)	(0.181)	(0.176)	(0.098)	(0.095)	(0.092)	(0.087)
Democrat	-0.087+	-0.049	-0.305+	-0.519	-0.226**	-0.258	-0.221*	-0.123
	(0.049)	(0.128)	(0.169)	(0.455)	(0.087)	(0.223)	(0.086)	(0.216)
Post Week 1 × Dem	0.124+	0.130+	0.263	0.266	-0.049	-0.050	-0.002	0.018
	(0.071)	(0.068)	(0.247)	(0.237)	(0.126)	(0.119)	(0.124)	(0.116)
Post Week 2 × Dem	0.102	0.112+	0.383	0.413+	0.058	0.056	0.043	0.056
	(0.069)	(0.066)	(0.243)	(0.232)	(0.124)	(0.119)	(0.122)	(0.114)
Post Week 3 × Dem	0.230**	0.233**	0.708**	0.715**	0.250*	0.271*	0.090	0.117
	(0.069)	(0.066)	(0.247)	(0.236)	(0.125)	(0.118)	(0.125)	(0.115)
Post Week 4 × Dem	0.134+	0.101	0.553*	0.430+	0.234+	0.171	0.246+	0.216+
	(0.072)	(0.068)	(0.255)	(0.245)	(0.132)	(0.125)	(0.128)	(0.119)
Post Week 5 × Dem	0.154*	0.152*	0.524*	0.504*	0.161	0.187	0.127	0.162
	(0.069)	(0.066)	(0.248)	(0.239)	(0.129)	(0.122)	(0.124)	(0.117)
Constant	0.859**	0.630**	3.618**	2.919**	2.858**	1.409**	3.661**	1.673**
	(0.036)	(0.101)	(0.122)	(0.355)	(0.066)	(0.179)	(0.062)	(0.164)
N	7226	7226	7235	7235	9069	9069	9069	9069
Outcome Range	0-6	0-6	0-7	0-7	0-13	0-13	0-7	0-7
Covariates	No	Yes	No	Yes	No	Yes	No	Yes

Note. OLS estimates with robust standard errors. Control group bandwidth is 9/8-9/14 for all models. All outcome variables are continuous. Models in Columns 2, 4, 6 and 8 include pretreatment covariates (turnouts in previous elections and demographics) and their interactions with party ID (coefficients omitted). Full results are reported in Online Appendix D. +  $p < 0.1$  \*  $p < 0.05$  \*\*  $p < 0.01$

In Appendix C, we empirically check the potential differences between the control and treatment

<sup>20</sup>See Gelman et al. 2016.

<sup>21</sup>We note, though, that reluctance to respond to a political survey in and of itself can be seen as a strong sign of people tuning out of politics.

groups. Placebo tests using turnout in the past three elections (2004, 2006, and the 2008 primaries) found little difference between the two groups and little significant interaction between treatment and party ID (see Tables D1 and D2). More generally, we found little evidence of partisan difference in other pre-treatment variables; as demonstrated, controlling for these variables resulted in almost no changes in the estimates.

Another alternative explanation is that Republicans' general interest in politics was already in decline and our findings simply reflect an ongoing time trend, not a true turning point caused by the news flows at the outset of the Lehman collapse. We find the opposite pattern, however (see Table C3 in Appendix C). Republicans were becoming more engaged throughout the month prior to mid-September, until the economy started collapsing on September 15. Indeed, while partisans' interest in politics may well have changed over time even without the treatment, it is likely that it would have increased as the campaign efforts intensified and the impending election became closer. In this regard, the noticeable decline in political media consumption found only among Republicans would be highly unusual and unlikely if the null hypothesis were correct that partisans do not tune out the news when new information is unfavorable to one's party.

### NAES Panel Data Analysis and Results

We also test whether the same set of individuals adjust their media consumption in response to the changing political environment, this time using 2008 NAES panel data. Panel data provide a critical advantage, as they allow us to track the same individuals' media consumption over time in varied economic contexts. In sync with our previous analysis that exploits the collapse of Lehman Brothers in September, we explore whether partisans adjusted their media consumption before and after September. For this analysis, we use Wave 2—collected between January 1, 2008 and March 31, 2008 and Wave 5—collected between November 5, 2008 and January 20, 2009.<sup>22</sup> A simple mean comparison reveals that Democrats increased their media consumption more so than Republicans during this time period; the aggregated within-individual change in the total number of TV programs was 0.9 for Democrats and 0.55 Republicans respectively, and the partisan difference was statistically significant ( $p < 0.001$ ).

We formally test our hypothesis via the linear regression of within-individual change in total number

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<sup>22</sup>Media consumption questions were not asked in Wave 3 (April 2, 2008 - August 28, 2008), and Wave 4 was collected during the "treatment" period (August 29, 2008 - November 4, 2008), hence omitted in the analysis.

of TV programs on political partisanship measured in Wave 1.<sup>23</sup> Table 4 column (1) reports the weighted results without covariates, and column (2) reports the weighted results with covariates. Across these two specifications, we find that Democrats have increased the number of TV programs they watch more than Republicans between Wave 2 and Wave 5.

Table 4: Within-Individual Changes in Media Consumption and Economic Perceptions by Party ID

	DV = $\Delta$ Num. of TV Programs		DV = $\Delta$ Sociotropic Economic Perceptions			
	All		Dem Only		Rep Only	
	(1)	(2)	(3)	(4)	(5)	(6)
Dem (vs Rep)	0.264*** (0.077)	0.202** (0.078)				
$\Delta$ Num. of TV Programs			-0.005** (0.002)	-0.007*** (0.002)	-0.004 (0.004)	-0.003 (0.004)
Constant	0.544*** (0.057)	-0.648*** (0.204)	-0.240*** (0.010)	-0.265*** (0.050)	-0.675*** (0.014)	-0.207*** (0.078)
Weighted?	Yes	Yes	Yes	Yes	Yes	Yes
Covariates Included?	No	Yes	No	Yes	No	Yes
Observations	11,401	11,401	5,901	5,901	5,408	5,408
R <sup>2</sup>	0.001	0.018	0.001	0.008	0.0002	0.012

Note: Standard errors are in parentheses. Covariates are included to control for the impact of time-varying observed characteristics of individuals on the outcome. \* p<0.05; \*\* p<0.01; \*\*\* p<0.001

To empirically demonstrate the implications of temporal dynamics of selective exposure on polarization, we also test whether the change in perceptions of national economy is associated with change in media consumption. In this individual-level fixed effects regression setting, the model controls for both observed and unobserved time-invariant characteristics of individuals (Allison 2009). Perception of national economy was measured on a five-point scale, with 5 =national economy has gotten much better, and 1=national economy has gotten much worse. Therefore, change in sociotropic economic perceptions—the outcome we use—ranges from -4 to 4. As shown in columns (3) and (4) of Table 4, as Democrats increase the total number of TV programs, those same Democrats became more pessimistic about the state of the national economy over time. Consistent with our expectation, we find no association between change in news consumption and economic perception among Republicans as columns (5) and (6) show.

Granted, we are careful not to interpret the results on change in economic perceptions as conclusive evidence on polarization. Yet our results are consistent with our supplementary simulation analysis that shows how the flow of information partisans consume can become skewed even if they do not have skewed media diets (Appendix F).

<sup>23</sup>We thank an anonymous reviewer for suggesting this analysis. We used party ID reported in Wave 1 to address possible endogeneity concern.

## Conclusion

There is abundant evidence of polarized perceptions among partisans, but one dominant explanation for this polarization—partisan selective exposure—has found little to mixed empirical support. This leads to the conclusion that ‘neither the supply nor the demand for biased information is as widespread as is sometimes claimed’ (Van Aelst et al. 2017, p.14). This poses an important conundrum: If most Americans are not actively seeking media outlets that match their political predispositions, how does the contemporary media environment account for partisan polarization? Many will find it highly implausible that a high-choice information environment has nothing to do with polarization. The problem, however, is that ‘the mechanisms by which this might occur are not well understood’ (Leeper 2014, p. 28).<sup>24</sup>

The temporal dynamics of selective exposure helps explain this discrepancy. To the extent that learning about the underperformance of the incumbent government is a tough pill for in-partisans to swallow, switching off flows of bad news would be a much easier way to minimize cognitive dissonance than choosing a news source that fits their existing partisan dispositions. We hypothesized that partisans choose when, instead of which source, to pay attention to depending on how their own party performs. From this perspective, selective exposure can be conceptualized as a divergent fluctuation in political interest and amount of media consumption over time.

Using ANES data covering over half a century, we show how partisans’ level of political interest differs by presidential performance. Our empirical approach leveraging the collapse of Lehman Brothers in 2008 shows that a sudden increase in bad economic news—which typically does not bode well for the electoral fortunes of the incumbent party—affected in- and out-partisans differently. The former approach maximizes generalizability across time at the expense of internal validity, while the latter maximizes internal validity by holding many of the extraneous factors constant at the expense of generalizability. Across the two empirical strategies, we find consistent evidence that the amount of attention that partisans pay to politics is related to their party’s performance.

Our findings indicate that the stream of information that in-partisans receive in the long run may very well be different from what out-partisans are exposed to—and this may in turn generate polarization of political beliefs, even if most citizens do not rely on partisan sources (see also Davis and Dunaway 2016). Despite many mixed to null findings about partisan selective exposure, we argue that selective exposure

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<sup>24</sup>One suggested mechanism is a two-step communication flow in which those who watch partisan media affect others who do not watch partisan media. See Druckman, Levendusky and McLain 2018.

may have happened as partisans simply switched the news on and off based on whether their team was faring well. As such, previous studies focusing on imbalance in media diets may have failed to fully capture the imbalance in information diets.

Since the early studies in political communication (e.g. Berelson, Lazarsfeld and McPhee, 1954), two forms of selective exposure have remained at the center of scholarly attention: partisan selective exposure—the selection of media in synchrony with one’s existing political disposition—and apolitical selective exposure—people using nonpolitical media to avoid politics altogether (Arceneaux, Johnson and Murphy 2012; Stroud 2008; Prior 2007). What has received surprisingly little attention is how and when the second type of (apolitical) selective exposure affects partisan politics, particularly perceptual gaps across partisans. Students of public opinion are familiar with the fact that most people do little more than skim through the headlines when they follow politics (Carpini and Keeter 1996). But the question remains: when do citizens do more than that in this information environment where attention is the most coveted currency? Our study underscores the temporally dynamic nature of selective exposure: it is not necessarily that people stay away from politics all the time but that partisans occasionally pay closer attention when the headlines signal that the news they are about to consume will confirm their existing political dispositions. Tuning into politics only when things are going well for their own partisan team carries plausible implications for mass polarization. If politics is about ‘who gets what, when, and how’ (Lasswell 1936), the study of selective exposure needs to be about *when* as much as about *what*.

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## **Appendix**

Appendix A: Study 1 Measurement

Appendix B: Study 1 Full Regression Estimates and Robustness Checks

Appendix B: Study 2 Measurement

Appendix C: Study 2 Placebo Tests

Appendix D: Study 2 Full Regression Estimates and Robustness Checks

Appendix E: Analyses Using Program-Level Partisan Media Consumption Data (2008 NAES)

## A: Study 1 Measurement and Summary Statistics

In this appendix, we detail the measurement procedure in Study 1. We list the variable names in the ANES datafile. Full questionnaire wordings and more information about the data can be found at: <https://electionstudies.org/project/anes-time-series-cumulative-data-file>.

**In-partisanship.** We recoded the 7-point “Party Identification of Respondent” variable provided by the ANES (*VCF0301* in the time series cumulative data file) into a dummy variable where 0 indicates identification with the non-incumbent party (e.g., Republicans in 2016) and 1 indicates identification with the incumbent party (e.g., Democrats in 2016). Independents leaning toward either party were treated as partisans. Pure independents were excluded.

**Election interest.** We used “POLITICAL INTEREST: Interest in the Elections” (*VCF0310*) provided by the ANES. We rescaled the variable 0-1 so that 1 indicates the highest level of interest.

**Public affair interest.** We used “POLITICAL INTEREST: Interest in Public Affairs” (*VCF0313*) provided by the ANES. We rescaled the variable 0-1 so that 1 indicates the highest level of interest.

**Care who wins presidency** We used “POLITICAL INTEREST: Does Respondent Care Which Party Wins Congressional Election” (*VCF0311*) provided by the ANES. We rescaled the variable 0-1 so that 1 indicates “very much, pretty much.”

**Care who wins presidency** We used “POLITICAL INTEREST: Does Respondent Care Which Party Wins Presidential Election” (*VCF0311*) provided by the ANES. We rescaled the variable 0-1 so that 1 indicates “very much, pretty much.”

**Care who wins Congress** We used “POLITICAL INTEREST: Does Respondent Care Which Party Wins Congressional Election” (*VCF0312*) provided by the ANES. We rescaled the variable 0-1 so that 1 indicates “very much, pretty much.”

**TV** We used “MEDIA: Watch TV Programs about the Election Campaigns” (*VCF0724*) provided by the ANES. We rescaled the variable to binary (0,1) where 1 indicates “Yes, watched TV program(s) about the campaign”.

**Newspaper** We used “MEDIA: Number of Articles about Election Campaigns in Magazines” (*VCF0727*)<sup>25</sup> provided by the ANES. We rescaled the variable to binary (0,1) where 1 indicates “Yes, read newspaper(s) about the campaign”.

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<sup>25</sup>The variable label in the ANES file appears to have been misidentified as “magazines” instead of “newspaper” given the original items used to construct this variable (see ANES, 240).

**Radio** We used “MEDIA: Hear Programs about Campaigns on the Radio 2-Category” (*VCF0725*) provided by the ANES. We rescaled the variable to binary (0,1) where 1 indicates ”Yes, listened to radio program(s)”.

**Magazine** We used “MEDIA: Articles about Election Campaigns in Magazines” (*VCF0726*) provided by the ANES. We rescaled the variable to binary (0,1) where 1 indicates ”Yes, read magazine(s)”.

**TV (Days)** We used “MEDIA: Number of Days Watched National TV News in Past Week” (*VCF9035*) provided by the ANES. We rescaled the variable to 0-7 where 7 indicates ”Everyday”.

**Radio (Days)** We used “MEDIA: Number of Days Read Newspaper in Last Week” (*VCF9033*) provided by the ANES. We rescaled the variable to 0-7 where 7 indicates ”Everyday”.

**Presidential performance.** We used presidential approval ratings gathered by Gallup in September of each election year as a proxy for overall presidential performance. The lowest and highest ratings were respectively 24% and 76%. These numbers were rescaled to 0-1 in the regression analyses. The raw data can be found at <http://www.gallup.com/interactives/185273/presidential-job-approval-center.aspx>.

## B: Study 1 Full Regression Estimates and Robustness Checks

Table B1: Full Regression Estimates of Table 1

	(1)	(2)	(3)	(4)	(5)	(6)
In-Partisan	-0.056*	-0.054*	-0.043*	-0.040*	-0.031**	-0.029**
	(0.021)	(0.021)	(0.018)	(0.019)	(0.008)	(0.008)
Gallup	-0.150**	-0.156**				
	(0.034)	(0.032)				
In-Partisan × Gallup	0.106**	0.102**	0.067*	0.065+	0.050**	0.046**
	(0.035)	(0.036)	(0.031)	(0.034)	(0.016)	(0.016)
Democrat					-0.041**	-0.044**
					(0.009)	(0.009)
Democrat × Gallup					0.047*	0.048*
					(0.017)	(0.018)
Age 17-24					-0.084**	-0.086*
					(0.030)	(0.038)
Age 25-34					-0.042	-0.041
					(0.031)	(0.038)
Age 35-44					0.003	0.007
					(0.034)	(0.042)
Age 45-54					0.028	0.033
					(0.033)	(0.040)
Age 55-64					0.043	0.047
					(0.041)	(0.049)
Age 65-74					0.064	0.062
					(0.050)	(0.056)
Age 75-					0.016	0.024
					(0.048)	(0.057)
Age 17-24 × Gallup					-0.039	-0.034
					(0.092)	(0.109)
Age 25-34 × Gallup					-0.046	-0.037
					(0.101)	(0.117)
Age 35-44 × Gallup					-0.037	-0.028
					(0.101)	(0.116)
Age 45-54 × Gallup					-0.009	-0.001
					(0.112)	(0.126)
Age 55-64 × Gallup					0.003	0.012
					(0.132)	(0.143)
Age 65-74 × Gallup					0.003	0.000
					(0.122)	(0.134)
Age 75- × Gallup					-0.044	-0.028
					(0.088)	(0.104)
Female					-0.043**	-0.041**
					(0.005)	(0.005)
Gender Missing					0.041**	0.054**
					(0.005)	(0.006)
Female × Gallup					-0.012	-0.018
					(0.012)	(0.013)
White					0.049*	0.050*
					(0.019)	(0.021)
Black					0.088**	0.087**
					(0.016)	(0.016)
Race Missing					0.072*	0.080*
					(0.027)	(0.036)
White × Gallup					-0.055	-0.069
					(0.039)	(0.044)
Black × Gallup					-0.059+	-0.075*
					(0.031)	(0.036)
Race Missing × Gallup					-0.157*	-0.218*
					(0.063)	(0.082)
College					0.141**	0.145**

					(0.017)	(0.016)
College Missing					-0.026	-0.010
					(0.044)	(0.038)
College × Gallup					-0.018	-0.012
					(0.029)	(0.025)
College Missing × Gallup					0.171+	0.142+
					(0.084)	(0.083)
Constant	0.647**	0.640**	0.582**	0.572**	0.570**	0.565**
	(0.025)	(0.023)	(0.004)	(0.004)	(0.018)	(0.022)
N	47805	47805	47805	47805	47805	47805
Weights	No	Yes	No	Yes	No	Yes
Year Fixed Effects	No	No	Yes	Yes	Yes	Yes
Individual Controls	No	No	No	No	Yes	Yes

Note: Estimates of Equation 1. Republicans are coded as in-partisans under Republican administrations (e.g., 2008), and Democrats are coded as in-partisans under Democratic administrations (e.g., 2012). All outcome variables are rescaled 0-1 such that 1 indicates being most interested. Presidential performance is measured by approval ratings in Gallup Polls fielded in September of each year. Poll ratings are rescaled to 0-1 where 0 and 1 respectively indicate 33 percent and 76 percent. Presidential performance is subsumed by year fixed effects. Columns 5 and 6 include individual-level pretreatment covariates and their interactions with in-partisanship. Standard errors are adjusted for year clusters. +  $p < 0.1$  \*  $p < 0.05$  \*\*  $p < 0.01$

Table B2: Replicating Table 1 with different indicators of political interest

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Election Interest		Public Affair Interest		Care Who Wins Presidency		Care Who Wins Congress	
In-Partisan	-0.040*	-0.029**	-0.015	-0.029**	-0.037	-0.042**	-0.052	-0.087**
	(0.019)	(0.008)	(0.016)	(0.006)	(0.022)	(0.013)	(0.032)	(0.018)
In-Partisan × Gallup	0.065+	0.046**	0.015	0.027+	0.162**	0.166**	0.026	0.092**
	(0.034)	(0.016)	(0.028)	(0.015)	(0.040)	(0.020)	(0.046)	(0.028)
N	47805	47805	31990	31990	29418	29418	23635	23635
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	No	Yes	No	Yes	No	Yes	No	Yes
Number of Survey Clusters	28	28	22	22	16	16	16	16

Note: Estimates of Equation 1. Republicans are coded as in-partisans under Republican administrations (e.g., 2008), and Democrats are coded as in-partisans under Democratic administrations (e.g., 2012). All outcome variables are rescaled 0-1 such that 1 indicates being most interested. Presidential performance is measured by approval ratings in Gallup Polls fielded in September of each year. Poll ratings are rescaled to 0-1 where 0 and 1 respectively indicate 33 percent and 76 percent. Presidential performance is subsumed by year fixed effects. Columns 2, 4, 6 and 8 include individual-level pretreatment covariates and their interactions with in-partisanship (coefficients omitted). The set of covariates are the same as Table B1. Standard errors are adjusted for year clusters. <sup>+</sup>  $p < 0.1$  \*  $p < 0.05$  \*\*  $p < 0.01$

Comment: This table replicates the results reported in Table 1 using other indicators of political attentiveness. The patterns are generally consistent across different outcome variables, though the estimated interaction between performance and partisanship was smaller for models focusing on people’s interest in public affairs (Columns 3 and 4) but bigger for those focusing on people’s interest in who wins presidency (Columns 5 and 6) than the results reported in the main text (Columns 1 and 2). It is difficult to specify that different outcome variables are responsible for this heterogeneity because the number of ANES surveys including each outcome varies considerably—and some outcomes were measured sparsely. Given this difficulty, in the main text, we opted for focusing on an outcome that was measured most extensively in the ANES time-series data (Columns 1 and 2), instead of attempting to provide substantive explanations for the heterogeneity.

Table B3: Replicating Table 1 with news media exposure as outcome

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	TV		Newspaper		Radio		Magazine		Media Count	
In-Partisan	0.007 (0.017)	-0.004 (0.012)	0.009 (0.027)	-0.013 (0.011)	0.011 (0.023)	0.006 (0.018)	-0.045 (0.044)	-0.055** (0.009)	-0.109 (0.092)	-0.114** (0.025)
In-Partisan × Gallup	-0.008 (0.031)	0.021 (0.021)	-0.004 (0.046)	0.009 (0.025)	-0.030 (0.053)	-0.040 (0.042)	0.098 (0.107)	0.067+ (0.035)	0.234 (0.220)	0.159* (0.059)
<i>N</i>	32363	32363	26663	26663	24305	24305	21087	21087	17995	17995
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls (Not Shown)	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Number of Survey Clusters	21	21	20	20	17	17	15	15	14	14

Note: Estimates of Equation 1. Republicans are coded as in-partisans under Republican administrations (e.g., 2008), and Democrats are coded as in-partisans under Democratic administrations (e.g., 2012). All outcomes are binary variables where 1 indicates using the corresponding medium for news. Presidential performance is measured by approval ratings in Gallup Polls fielded in September of each year. Poll ratings are rescaled to 0-1 where 0 and 1 respectively indicate 33 percent and 76 percent. Presidential performance is subsumed by year fixed effects. Columns 2, 4, 6, 8 and 10 include individual-level pretreatment covariates and their interactions with in-partisanship (coefficients omitted). Standard errors are adjusted for year clusters. +  $p < 0.1$  \*  $p < 0.05$  \*\*  $p < 0.01$

Comment: This table replicates the results reported in Table 1 using several indicators of news media exposure. The findings are not as consistent as those found in Table 1 and Table B1. The interaction between presidential performance and partisanship is mostly insignificant, though we find significant results that support our hypothesis in two models (Columns 8 and 10).

We have several theories about why these results are different from those involving political interest in Study 1, and the results in Study 2 which draw more heavily on news exposure items. One possibility may be that the news media use items were measured less frequently in the ANES surveys than the political interest items—and therefore difference in the survey years covered in each analysis or differential severity in the loss of statistical power, not the outcome variables *per se*, is responsible for the heterogeneity. A second possibility may be that news exposure items contain more measurement errors than political interest items, which might have made it more difficult to find significant patterns when focusing on news exposure. Consistent with this possibility, in Table B4, we report that the conventional news exposure items are very weakly correlated with one another, and in comparison, political interest items are more strongly correlated among themselves and even with news exposure items, than are news exposure items among themselves.

But another account for the null findings may be that even when people become more/less interested in politics given how their party performs, they keep consuming news media to the same extent, nonetheless. This may be especially the case in the low-choice broadcast era when most people watched news because they had no other option (Prior 2007). For example, from year 1986 to 1994, on average, ANES survey respondents reported that they watch TV news approximately 5 days per week. In contrast, the average of the number of days watching TV news falls to around 3.5 days per week in 2000s.

This way, the null results using media exposure measures (e.g., TV news viewing) may be suggestive of the scope condition of temporal selective exposure—i.e., it was not a salient phenomenon in the current low-choice media environment. People get less interested in politics when their party is losing, but in broadcast era, people didn't have other alternatives to "opt out" of politics. They were, indeed, the captive audience. In fact, in Study 2, we find more salient effects on online engagement than on general news exposure or campaign interest. We wrote that this finding is consistent with our expectation that

people switch on and off their news consumption more easily on the internet than on other news media channels—a pattern that could not be captured by the ANES data as much of it covers the low-choice era.

In short, the analyses involving news consumption behaviors in the ANES did not yield clear evidence of temporal selective exposure unlike other analyses, and this discrepancy could be due to a technical issue (e.g., limited availability of the media items or their measurement errors) or a more substantive reason (change in the media environment). While the available data do not allow us to tease out these possibilities, the results from Study 2 reassure that partisans temporally adjust their political attentiveness as well as media consumption behaviors (see also Tyler et al. 2019).



Table B4: Correlation Matrix of Different Measures of Political Interest and News Exposure

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Election Interest	Public Affair Interest	Care Who Wins Presidency	Care Who Wins Congress	TV	Newspaper	Radio	Magazine
Election Interest	1.000	0.508**	0.383**	0.413**	0.306**	0.336**	0.204**	0.282**
Public Affair Interest	0.508**	1.000	0.247**	0.411**	0.272**	0.357**	0.221**	0.314**
Care Who Wins Presidency	0.383**	0.247**	1.000	0.329**	0.161**	0.158**	0.097**	0.126**
Care Who Wins Congress	0.413**	0.411**	0.329**	1.000	0.223**	0.230**	0.179**	0.160**
TV	0.306**	0.272**	0.161**	0.223**	1.000	0.210**	0.088**	0.128**
Newspaper	0.336**	0.357**	0.158**	0.230**	0.210**	1.000	0.172**	0.292**
Radio	0.204**	0.221**	0.097**	0.179**	0.088**	0.172**	1.000	0.154**
Magazine	0.282**	0.314**	0.126**	0.160**	0.128**	0.292**	0.154**	1.000

Note: Pairwise Correlations (Pearson's r). Political interest variables are rescaled 0-1 such that 1 indicates being most interested. Media use variables binary variables where 1 indicates using the corresponding medium for news. + p < 0.1 \* p < 0.05 \*\* p < 0.01

Comment: This table shows the well-known measurement problems of the conventional news exposure items by showing that they are very weakly correlated with one another. In comparison, political interest items are more strongly correlated among themselves and even with news exposure items, than are news exposure items among themselves.

Table B5: Replicating Table 1 with Continuous Measures of News Exposure (Days in Week)

	(1)	(2)	(3)	(4)
	TV		Newspaper	
In-Partisan	0.126 (0.164)	0.160+ (0.092)	-0.004 (0.126)	-0.094 (0.102)
In-Partisan × Gallup	-0.256 (0.266)	-0.226 (0.162)	-0.008 (0.194)	0.084 (0.180)
N	18563	18563	18573	18573
Year Fixed Effects	Yes	Yes	Yes	Yes
Individual Controls (Coefficients Not Shown)	No	Yes	No	Yes
Outcome Range	0–7	0–7	0–7	0–7
Number of Survey Clusters	12	12	12	12

Note: Estimates of Equation 1. Republicans are coded as in-partisans under Republican administrations (e.g., 2008), and Democrats are coded as in-partisans under Democratic administrations (e.g., 2012). Outcome variables are scaled 0-7 (days) where 7 indicates everyday. Presidential performance is measured by approval ratings in Gallup Polls fielded in September of each year. Poll ratings are rescaled to 0-1 where 0 and 1 respectively indicate 33 percent and 76 percent. Presidential performance is subsumed by year fixed effects. Columns 2 and 4 include individual-level pretreatment covariates and their interactions with in-partisanship (coefficients omitted). Standard errors are adjusted for year clusters. <sup>+</sup>  $p < 0.1$  \*  $p < 0.05$  \*\*  $p < 0.01$

Comment: The most comprehensive items of news media use in the ANES—reported in Table B2—were binary. The ANES made those items available in binary because, throughout the ANES time-series surveys, news exposure was recorded on various scales. This feature likely contributed to the measurement errors of news exposure items. This table uses alternative news exposure items measuring “days in the past week” people consumed news. Although the items used in this analysis are more granular, they were available in only 12 ANES surveys—making the small  $N$  problem worse. The results are similar to those in Table B2 in that we do not find significant patterns.

Table B6: Difference in Political Interest by Presidential Performance and In- and Out-Partisanship Before and After Fox

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Election Interest		Public Affair Interest		Care Who Wins Presidency		Care Who Wins Congress	
In-Partisan	-0.038** (0.008)	0.011 (0.017)	-0.027** (0.006)	-0.024 (0.014)	-0.042+ (0.020)	-0.005 (0.003)	-0.088** (0.012)	-0.193 (0.171)
In-Partisan × Gallup	0.047** (0.016)	-0.025 (0.034)	0.019 (0.015)	0.021 (0.022)	0.154** (0.029)	0.091** (0.007)	0.088** (0.033)	0.247 (0.260)
N	32883	14922	26449	5541	19669	9749	16488	7147
Post 1996	No	Yes	No	Yes	No	Yes	No	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls (Not Shown)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of Survey Clusters	21	7	18	5	12	4	11	5

Note: Estimates of Equation 1. Republicans are coded as in-partisans under Republican administrations (e.g., 2008), and Democrats are coded as in-partisans under Democratic administrations (e.g., 2012). Political interest is rescaled 0-1 such that 1 indicates being ‘very much interested’ in the elections. Presidential performance is measured by approval ratings in Gallup Polls fielded in September of each year. Poll ratings are rescaled to 0-1 where 0 and 1 respectively indicate 33 percent and 76 percent. Presidential performance is subsumed by year fixed effects. All models include individual-level pretreatment covariates and their interactions with in-partisanship (coefficients omitted). Standard errors are adjusted for year clusters when cluster standard error for the In-Partisan by Gallup interaction term is larger than conventional standard errors. +  $p < 0.1$  \*  $p < 0.05$  \*\*  $p < 0.01$

Table B7: Difference in News Exposure by Presidential Performance and In- and Out-Partisanship Before and After Fox

	(1)	(2)	(3)	(4)	(5)	(6)
	TV		Newspaper		Radio	
In-Partisan	-0.013 (0.008)	0.049+ (0.027)	-0.009 (0.011)	-0.008 (0.052)	0.004 (0.018)	0.355** (0.132)
In-Partisan × Gallup	0.010 (0.018)	-0.057 (0.057)	0.010 (0.030)	-0.055 (0.111)	-0.036 (0.046)	-0.629** (0.235)
N	23185	9178	23954	2709	22003	2302
Post 1996	No	Yes	No	Yes	No	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls (Not Shown)	Yes	Yes	Yes	Yes	Yes	Yes
Number of Survey Clusters	16	5	17	3	15	2

Note: Estimates of Equation 1. Republicans are coded as in-partisans under Republican administrations (e.g., 2008), and Democrats are coded as in-partisans under Democratic administrations (e.g., 2012). Political interest is rescaled 0-1 such that 1 indicates being ‘very much interested’ in the elections. Presidential performance is measured by approval ratings in Gallup Polls fielded in September of each year. Poll ratings are rescaled to 0-1 where 0 and 1 respectively indicate 33 percent and 76 percent. Presidential performance is subsumed by year fixed effects. All models include individual-level pretreatment covariates and their interactions with in-partisanship (coefficients omitted). Standard errors are adjusted for year clusters when cluster standard error for the In-Partisan by Gallup interaction term is larger than conventional standard errors. +  $p < 0.1$  \*  $p < 0.05$  \*\*  $p < 0.01$

Comment: An interesting question that was not fully examined in the manuscript is how the inception of partisan media—Fox News Channel in particular—affected partisans’ tendency to selectively tune in and out of politics. On the one hand, partisan media may have *decreased* temporal selective exposure to the extent that partisan media can reliably deliver “good news” for one’s own party even when the objective political conditions are bad, making it unnecessary for people to stop following politics. On the other hand, partisan media may have *increased* temporal selective exposure by providing partisans more political contents to consume when their party is “winning.” We explore these possibilities in Tables B6 and B7 by estimating the interaction between in-partisanship and presidential performance separately for before Fox (1996 or earlier; Fox News was founded in October 1996) and after Fox (1998 or later). We want to emphasize limitations of these analyses, though. First, we have only 2 to 7 election year clusters in the post 1996 periods, depending on the outcome variable, which make it very difficult to extract systematic patterns. Second, even if partisan media did affect temporal dynamics of partisans’ political engagement and news consumption, the survey items of the ANES are likely not sensitive enough to detect marginal changes. We do not find a consistent pattern in Tables B6 and B7. The interaction in-partisanship and performance became larger or smaller, depending on the outcome variable, and mostly insignificant. It is worth pointing out that the 2008 NAES data seem to rule out an extreme case of the first possibility—i.e., partisans stopped engaging in temporal selective exposure by being drawn to partisan sources of information.

Table B8: Relationship between Presidential Performance and Political Attentiveness among Pure Independents

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Election Interest	Public Affair Interest	Care Who Wins Presidency	Care Who Wins Congress	TV	Newspaper	Radio	Magazine	Media Count
Gallup	-0.103 (0.061)	-0.096** (0.033)	-0.031 (0.096)	-0.047 (0.055)	0.073 (0.151)	-0.047 (0.084)	-0.100 (0.106)	0.028 (0.100)	0.057 (0.065)
In-Partisan	0.437** (0.031)	0.502** (0.018)	0.448** (0.054)	0.375** (0.017)	0.628** (0.075)	0.560** (0.034)	0.391** (0.046)	0.258** (0.054)	0.489** (0.034)
<i>N</i>	6498	4353	3957	3338	4400	3522	3235	2759	2280

Note: <sup>+</sup> p < 0.1 \* p < 0.05 \*\* p < 0.01

Comment: This table shows the relationship between presidential performance and political interest/news exposure among pure independents. The estimates are mixed and mostly insignificant. This analysis does not produce clear evidence as to whether pure independents behave more like in-partisans or out-partisans.

## B: Study 2 Measurement

In this appendix, we detail the measurement procedure in Study 2. We list the variable names in the NAES datafile. Full questionnaire wordings and more information about the data can be found at: <https://studies.annenbergpublicpolicycenter.org/naes08/Phone/index.html>.

**Treatment.** The *Date\_c* variable in the NAES file contains interview date information. We created dummy variables where 0 indicates the control group and 1 indicates the treatment group following the definitions applicable to each statistical analysis.

**Republican.** We first constructed a 7-point scale of party identification based on three variables provided by the NAES (*MA01\_c*, *MA02\_c* and *MA03\_c*). We then recoded the scale into a dummy variable where 0 indicates identification with the Democratic Party and 1 indicates identification with the Republican Party. Independents leaning toward either party were treated as partisans. Pure independents were excluded.

**News Exposure (Sources).** We constructed an additive index of the number of political television programs, radio shows, newspapers, and online websites, which ranges from 0 to 17. We detail how the number of outlets was coded for each channel.

**News Exposure (Frequency).** Respondents were asked how many days during the previous week they consumed four type of media (television, radio, newspaper and the internet) for information about the campaign. We constructed the news exposure frequency index by taking the average of these items, which range from 0 to 7 days.

**TV News.** Respondents were asked “In the past week, from what television program did you get most of your information about the 2008 presidential campaign?” (EB03) and “In the past week, did you watch any other television programs that contained information about the 2008 presidential campaign? [If yes:] Which ones?” (EB06). The NAES coded the answers to these questions into categorical variables indicating whether respondent watched each of the following programs:

EB03\_c; EB06rAA (ABC (unspecified)); EB06rAB (ABC World News with Charles Gibson); EB06rAC (Anderson Cooper 360); EB06rAD (CBS (unspecified)); EB06rAE (CBS Evening News with Katie Couric); EB06rAF (Christian Broadcasting Network); EB06rAG (CNN (unspecified)); EB06rAH (Countdown with Keith Olbermann); EB06rAJ (Fox News Channel (unspecified)); EB06rAK (Fox Report with Shepard Smith); EB06rAL (Glenn Beck); EB06rAM (Hannity and Colmes); EB06rAN (Hardball with Chris Matthews); EB06rAP (Headline News); EB06rAQ (Larry King Live); EB06rAR (Local news (unspecified)); EB06rAS (Lou Dobbs Tonight); EB06rAT (Meet the Press); EB06rAU (MSNBC (unspecified)); EB06rAV (Nancy Grace); EB06rAW (NBC (unspecified)); EB06rAY (NBC Nightly News with Brian Williams); EB06rBA (NewsHour with Jim Lehrer); EB06rBB (Nightline); EB06rBC (O’Reilly Factor); EB06rBD (On the Record with Greta Van Susteren); EB06rBE (PBS (unspecified)); EB06rBF (700 Club); EB06rBG (Situation Room with Wolf Blitzer); EB06rBH (Special Report with Brit Hume); EB06rBJ (Today); EB06rBK (Tucker (Tucker Carlson)); EB06rBL (Your World with Neil Cavuto); EB06rZZ (Other (verbatim answer in EB06rZZv)).

We counted the number of programs named by each respondent.

**Radio News.** Respondents were asked “Thinking about the past week, how many days did you hear information about the 2008 presidential campaign on radio shows that invite listeners to call in to discuss current events, public issues, or politics? This includes hearing the shows on the radio, or on the Internet, your cell phone, iPod, or PDA.” (EC01) “In the past week, from which talk radio host or radio program did you get most of your information about the 2008 presidential campaign?” (EC02) and “In the past week, did you listen to any other talk radio hosts or radio programs for information about the 2008 presidential campaign? [If yes:] Which ones?” (EC04). The NAES coded the answers to these questions into

categorical variables indicating whether respondent watched each of the following programs: EC04rAA (All Things Considered); EC04rAB (Beck, Glenn); EC04rAC (Bennett, Bill); EC04rAD (Bohannon, Jim); EC04rAE (Boortz, Neal); EC04rAF (Christian radio (unspecified)); EC04rAG (Doyle, Jerry); EC04rAH (Focus on the Family); EC04rAJ (Gallagher, Mike); EC04rAK (Hannity, Sean); EC04rAL (Howard, Clark); EC04rAM (Ingraham, Laura); EC04rAN (Joyner, Tom); EC04rAP (Levin, Mark); EC04rAQ (Limbaugh, Rush); EC04rAR (Local news radio (unspecified)); EC04rAS (Local talk radio (unspecified)); EC04rAT (Morning Edition); EC04rAU (NPR (unspecified)); EC04rAV (O'Reilly, Bill); EC04rAW (Savage, Michael); EC04rAY (Schlessinger, Laura); EC04rZZ (Other (verbatim answer in EC04rZZv)).

We counted the number of programs named by each respondent.

**Newspaper.** Respondents were asked “Thinking about the past week, how many days did you read a newspaper for information about the 2008 presidential campaign? This includes reading a paper copy of the newspaper, an online copy, or a newspaper item downloaded on your cell phone, iPod, or PDA.” (ED01) “In the past week, from what newspaper did you get most of your information about the 2008 presidential campaign?” (ED02) and “In the past week, did you read any other newspapers for information about the 2008 presidential campaign? [If yes:] Which ones?” (ED04). The NAES coded the answers to these questions into categorical variables indicating whether respondent watched each of the following papers:

ED04rAA (Arizona Republic); ED04rAB (Atlanta Journal Constitution); ED04rAC (Baltimore Sun); ED04rAD (Boston Globe); ED04rAE (Chicago Sun-Times) ED04rAF (Chicago Tribune); ED04rAG (Cleveland Plain Dealer); ED04rAH (Concord Monitor); ED04rAJ (Dallas Morning News); ED04rAK (Denver Post); ED04rAL (Des Moines Register); ED04rAM (Detroit Free Press); ED04rAN (Houston Chronicle); ED04rAP (Los Angeles Times); ED04rAQ (Miami Herald); ED04rAR (New Hampshire Union Leader); ED04rAS New York Daily News); ED04rAT (New York Post); ED04rAU (New York Times); ED04rAV (Newsday); ED04rA(WOrange County Register); ED04rAY (Oregonian); ED04rBA (Philadelphia Inquirer );ED04rBB (Rocky Mountain News); ED04rBC (San Diego Union-Tribune); ED04rBD (San Francisco Chronicle); ED04rBE (San Jose Mercury News); ED04rBF (St. Louis Post-Dispatch); ED04rBG (St. Petersburg Times); ED04rBH (Star Tribune (Minneapolis)); ED04rBJ (Star-Ledger (Newark)); ED04rBK (USA Today); ED04rBL (Wall Street Journal); ED04rBM (Washington Post); ED04rZZ Other ((verbatim answer in ED04rZZv));

We counted the number of programs named by each respondent.

**Online websites.** Respondents were asked “How many days in the past week did you see or hear information about the 2008 presidential campaign on the Internet? This may include accessing the Internet through your cell phone, iPod, or PDA.” (EE02) “In the past week, where did you get most of your information about the 2008 presidential campaign online?” (EE03) and “In the past week, did you get information about the 2008 presidential campaign from anywhere else online? [If yes:] Where?” (ED05). The NAES coded the answers to these questions into categorical variables indicating whether respondent watched each of the following papers:

EE05rAA ABC News.com EE05rAB AOL EE05rAC CBS News.com EE05rAD CNN.com EE05rAE Comcast EE05rAF Daily Kos EE05rAG Democratic Party website EE05rAH Drudge Report EE05rAJ Emails (unspecified) EE05rAK Fox News.com EE05rAL Google EE05rAM Home page (unspecified) EE05rAN Huffington Post EE05rAP Instapundit EE05rAQ MichelleMalkin.com EE05rAR MSN EE05rAS MSNBC.com EE05rAT National Journal.com EE05rAU NBC News.com EE05rAV New Republic.com EE05rAW New York Times.com EE05rAY Power Line EE05rBA Republican Party website EE05rBB

Slate EE05rBC Talking Points Memo EE05rBD Think Progress EE05rBE Townhall EE05rBF  
Wall Street Journal.com EE05rBG Washington Post.com EE05rBH Yahoo! EE05rBJ  
YouTube EE05rZZ Other (verbatim answer in EE05rZZv)

We counted the number of programs named by each respondent.

**Online Engagement.** We counted the number of online political activities in which they engaged in the previous week. These activities include visiting a campaign website (KG02\_c), watching an online campaign video (KG09\_c), forwarding online campaign information (KG13\_c), discussing politics online (KG19\_c), and contributing to political blogs (KG23\_c). This variable ranges between 0 and 5.

**Campaign Interest** measured how closely respondents were following the campaign (KA01\_c). This variable was coded so that 0 indicates “not closely at all” and 1 “indicates very closely.”

**Pretreatment Covariates.** For balance checks and covariate adjustments, we used turnout in 2004 (RD01\_c), turnout in 2006 (RD02\_c), turnout in the 2008 primaries (RBb02\_c), vote for bush in 2004 (RD01\_c), vote for the Republican party in 2006 (RD03\_c), vote for the Republican Party in the 2008 primaries (RBb02\_c), race (WC03\_c), college degree (WA03\_c), age (WA02\_c), and gender (WA01\_c), urban/suburban residency (WFC02\_c).



	N	Mean	St.Dev	min	max
pid3	57967	1.082	.938	0	2
dem	51341	.546	.498	0	1
rep	51341	.454	.498	0	1
media1	45010	3.404	2.109	0	17
media2	45073	3.329	1.655	0	7
tv	57967	5.398	2.531	0	7
radiod	57967	1.705	2.567	0	7
npd	57967	2.899	3.02	0	7
internetd	45073	2.905	3.03	0	7
interest	57967	.74	.276	0	1
palin	15366	.496	.332	0	1
mccain	55831	.549	.264	0	1
bush	57255	.378	.323	0	1
obama	56066	.565	.311	0	1
bushapproval	54400	.307	.373	0	1
turnout04	57967	.815	.388	0	1
turnout04 n	55898	.845	.362	0	1
econ	57461	.425	.249	0	1
rightdirection	13844	.148	.356	0	1
turnout06 n	56352	.746	.435	0	1
turnoutpr n	41124	.519	.5	0	1
age	56686	53.259	16.002	18	97
female	57967	.572	.495	0	1
white	56191	.855	.352	0	1
black	56191	.081	.272	0	1
college n	56610	.501	.5	0	1
urban	57967	.8	.4	0	1
married n	56699	.608	.488	0	1
employed n	56946	.61	.488	0	1
access	57904	.777	.416	0	1
internet	45010	.682	.816	0	6
np	57967	.746	.772	0	5
radio	57967	.428	.739	0	5
tv	57967	1.372	1.077	0	5
np liberal	57967	.081	.297	0	2
np conserv	57967	.028	.165	0	1
np neutral	57967	.637	.669	0	5
tv percent liberal	45013	.294	.364	0	1
tv percent conserv	45013	.179	.308	0	1
tv percent neutral	45013	.444	.422	0	1
internet liberal	45010	.154	.423	0	5
internet conserv	45010	.049	.231	0	4
internet neutral	45010	.48	.639	0	4
radio percent cons~v	17880	.299	.428	0	1
radio percent neut~l	17880	.509	.474	0	1

## C: Study 2 Placebo Tests

Table C1: Balance Check

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Republican	Turnout Primary	Turnout 2004	Turnout 2006	Age	Female	College	White	Black	Employed	Married	Urban/Suburban
Post-Treat Week 1 (9/16-9/22)	-0.009 (0.018)	-0.009 (0.017)	0.007 (0.012)	-0.012 (0.014)	1.196* (0.524)	0.002 (0.016)	-0.020 (0.017)	-0.015 (0.012)	0.015 (0.009)	-0.017 (0.016)	-0.021 (0.016)	-0.018 (0.013)
Post-Treat Week 2 (9/23-9/29)	-0.000 (0.018)	-0.007 (0.016)	0.005 (0.012)	-0.009 (0.014)	0.471 (0.518)	-0.019 (0.016)	0.001 (0.017)	-0.003 (0.011)	0.002 (0.009)	-0.015 (0.016)	-0.015 (0.016)	0.018 (0.013)
Post-Treat Week 3 (9/30-10/6)	-0.027 (0.018)	-0.025 (0.017)	-0.020 (0.012)	-0.032* (0.015)	0.719 (0.533)	0.004 (0.016)	-0.010 (0.017)	-0.020+ (0.012)	0.007 (0.009)	-0.037* (0.016)	-0.016 (0.016)	-0.016 (0.013)
Post-Treat Week 4 (10/7-10/13)	-0.003 (0.018)	0.007 (0.017)	0.006 (0.013)	-0.007 (0.015)	0.070 (0.550)	-0.001 (0.017)	-0.010 (0.018)	-0.015 (0.012)	0.006 (0.010)	-0.033+ (0.017)	0.017 (0.017)	-0.035* (0.014)
Post-Treat Week 5 (10/14-10/20)	-0.029 (0.018)	-0.007 (0.017)	0.001 (0.012)	-0.008 (0.015)	0.466 (0.529)	0.003 (0.017)	-0.001 (0.017)	-0.016 (0.012)	-0.002 (0.009)	-0.028+ (0.016)	-0.015 (0.016)	0.007 (0.013)
Democrat	0.462** (0.012)	0.514** (0.012)	0.851** (0.008)	0.767** (0.010)	52.888** (0.365)	0.578** (0.011)	0.522** (0.012)	0.873** (0.008)	0.076** (0.006)	0.629** (0.011)	0.637** (0.011)	0.810** (0.009)
N	9069	10268	9907	9921	10035	10268	10014	9916	9916	10074	10031	10268

Note. This table shows that the control group (9/8-9/14) and the post-treatment groups are generally well-balanced in terms of pre-treatment covariates. Among the 60 estimates of difference reported in this table, 7 differences are statistically significant at  $p < 0.1$  and 4 are significant at  $p < 0.05$ —similar to what would have occurred by chance alone.

\*  $p < 0.05$

Table C2: Placebo check on the interaction between treatment and partisanship

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Turnout Primary	Turnout 2004	Turnout 2006	Age	Female	College	White	Black	Employed	Married	Urban/Suburban
Post-Treat Week 1 (9/16-9/22)	0.004 (0.026)	-0.014 (0.015)	0.013 (0.021)	0.903 (0.820)	0.006 (0.026)	-0.040 (0.026)	0.007 (0.012)	0.004 (0.005)	-0.013 (0.025)	-0.014 (0.024)	-0.007 (0.022)
Post-Treat Week 2 (9/23-9/29)	0.002 (0.026)	-0.004 (0.014)	-0.011 (0.021)	0.416 (0.794)	-0.007 (0.026)	-0.031 (0.026)	0.012 (0.012)	0.007 (0.006)	-0.004 (0.025)	-0.026 (0.024)	0.046* (0.021)
Post-Treat Week 3 (9/30-10/6)	-0.025 (0.027)	-0.026+ (0.015)	-0.031 (0.022)	0.026 (0.838)	0.008 (0.027)	-0.022 (0.027)	-0.006 (0.013)	0.006 (0.006)	-0.038 (0.026)	-0.010 (0.024)	-0.003 (0.022)
Post-Treat Week 4 (10/7-10/13)	0.005 (0.027)	-0.023 (0.016)	0.013 (0.021)	0.217 (0.844)	0.024 (0.027)	-0.065* (0.027)	0.004 (0.013)	0.006 (0.006)	-0.049+ (0.027)	0.012 (0.025)	-0.034 (0.024)
Post-Treat Week 5 (10/14-10/20)	0.020 (0.027)	-0.007 (0.015)	0.006 (0.021)	-0.107 (0.834)	0.044+ (0.027)	0.004 (0.027)	0.010 (0.012)	0.003 (0.005)	-0.037 (0.026)	-0.031 (0.025)	0.053* (0.021)
Democrat	0.064** (0.024)	-0.088** (0.016)	-0.054** (0.020)	-1.231 (0.776)	0.101** (0.024)	-0.072** (0.025)	-0.125** (0.016)	0.129** (0.012)	-0.019 (0.024)	-0.156** (0.023)	0.071** (0.019)
Post Week 1 × Dem	-0.037 (0.035)	0.023 (0.023)	-0.039 (0.030)	0.287 (1.117)	-0.011 (0.035)	0.033 (0.036)	-0.033 (0.023)	0.014 (0.018)	-0.002 (0.035)	-0.004 (0.034)	-0.023 (0.029)
Post Week 2 × Dem	-0.014 (0.035)	0.001 (0.023)	0.006 (0.030)	0.577 (1.101)	-0.018 (0.035)	0.055 (0.035)	-0.019 (0.022)	-0.013 (0.018)	-0.019 (0.034)	0.026 (0.034)	-0.044 (0.027)
Post Week 3 × Dem	-0.010 (0.036)	-0.001 (0.024)	-0.020 (0.031)	1.572 (1.142)	-0.012 (0.035)	0.009 (0.036)	-0.022 (0.023)	0.000 (0.018)	-0.007 (0.035)	-0.007 (0.034)	-0.028 (0.029)
Post Week 4 × Dem	-0.011 (0.037)	0.042+ (0.024)	-0.028 (0.031)	-0.656 (1.164)	-0.050 (0.037)	0.099** (0.037)	-0.034 (0.024)	0.002 (0.019)	0.032 (0.037)	0.017 (0.035)	-0.001 (0.030)
Post Week 5 × Dem	-0.051 (0.036)	0.005 (0.023)	-0.025 (0.030)	1.287 (1.132)	-0.072* (0.035)	-0.002 (0.036)	-0.033 (0.023)	-0.012 (0.017)	0.020 (0.035)	0.042 (0.034)	-0.081** (0.028)
Constant	0.516** (0.018)	0.922** (0.010)	0.811** (0.014)	53.626** (0.560)	0.529** (0.018)	0.570** (0.018)	0.941** (0.009)	0.008* (0.003)	0.642** (0.018)	0.721** (0.016)	0.772** (0.015)
N	9069	8836	8775	8887	9069	8865	8804	8804	8914	8877	9069

Note. This table shows that the post-treatment groups are generally well-balanced in terms of pre-treatment covariates for both Republicans and Democrats. Among the 55 estimates of interactions between partisanship and pre-treatment covariates reported in this table, 4 interactions are statistically significant at  $p < 0.1$  and 3 interactions are significant at  $p < 0.05$ —similar to what would have occurred by chance alone.  
\*  $p < 0.05$

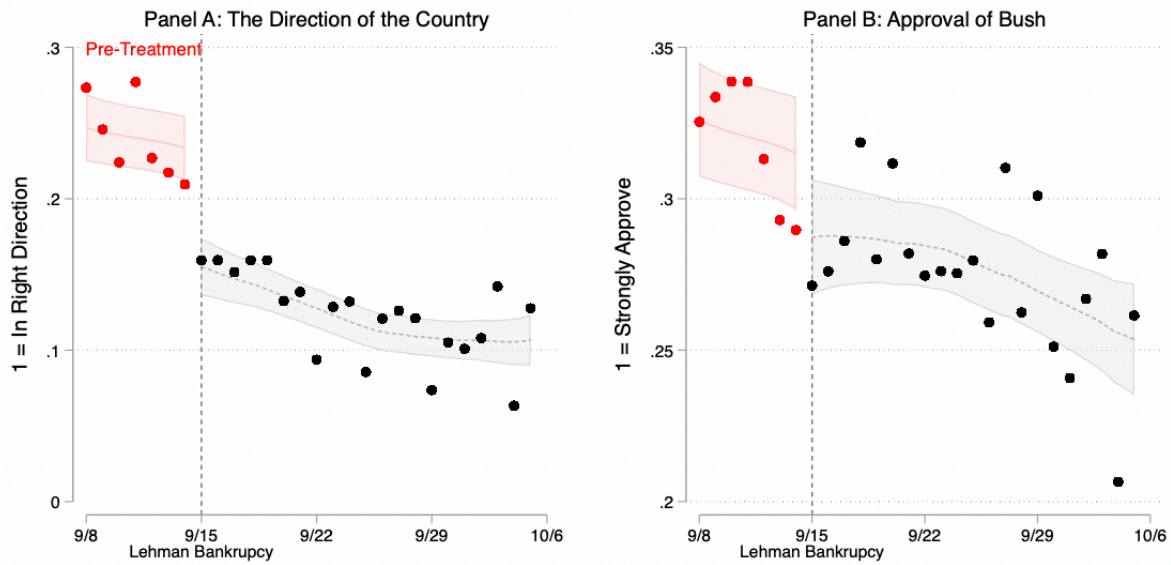
Table C3: Placebo Trends in Political Attentiveness between 8/15 and 9/14

	(1)	(2)	(3)	(4)
	News Exposure (Sources)	News Exposure (Days)	Campaign Interest	Online Engagement
Day	0.026** (0.005)	0.021** (0.004)	0.003** (0.001)	0.017** (0.004)
Democrat	-0.060 (0.111)	-0.084 (0.090)	0.025* (0.013)	0.057 (0.067)
Day X Democrat	-0.003 (0.006)	0.000 (0.005)	-0.002** (0.001)	-0.002 (0.005)
Intercept	3.192** (0.083)	3.156** (0.066)	0.707** (0.009)	0.551** (0.047)
N	5668	5671	7110	2700

Note. This table addresses the concern that Republicans' political attentive news was already in decline—and therefore the results we reported in the main text capture the continuing trend, not a true turning point around the treatment period. Each of the four dependent variables were regressed on day (running from 8/15 to 9/14), partisanship and the interaction between the two in order to the pretreatment trends among Democrats and Republicans in the month reading up to the economic meltdown. The positive and significant coefficients on Day indicate that Republicans were becoming more attentive throughout the month, and the negative coefficients on Day X Democrats indicate the pattern was more salient for Republicans, if anything.

\*  $p < 0.05$

Figure C1: Public Mood around the Collapse of Lehman Brothers in 2008



Note: This figure demonstrates that the public did receive the “treatment” by showing people’s perception that the country is heading “in the right direction” sharply dropped right after the cutoff and continued to go down in the following weeks (Panel A). It also shows that the approval of Bush sunk at the similar point in time, although not as saliently. Solid and dotted lines plot kernel-weighted (Epanechnikov; bandwidth = 3 days) local averages with 95 per cent CIs. Circles plot weekly averages. Lehman Brothers filed for bankruptcy on 9/15.

## D: Study 2 Full Regression Estimates and Robustness Checks

Table D1: Full Regression Estimates of Table 2

	(1) News Exposure (Sources)	(2) News Exposure (Sources)	(3) News Exposure (Days)	(4) News Exposure (Days)	(5) Campaign Interest	(6) Campaign Interest	(7) Online Engage (# of Acts)	(8) Online Engage (# of Acts)
Post-Treat Week 1 (9/16-9/22)	-0.065 (0.130)	-0.037 (0.123)	-0.145 (0.094)	-0.132 (0.088)	-0.008 (0.013)	-0.006 (0.012)	-0.328* (0.131)	-0.299* (0.127)
Post-Treat Week 2 (9/23-9/29)	-0.142 (0.122)	-0.162 (0.117)	-0.052 (0.093)	-0.069 (0.087)	0.002 (0.012)	-0.001 (0.012)	-0.480** (0.123)	-0.483** (0.122)
Post-Treat Week 3 (9/30-10/6)	-0.366** (0.124)	-0.284* (0.118)	-0.103 (0.094)	-0.044 (0.087)	0.014 (0.013)	0.020+ (0.012)	-0.633** (0.121)	-0.632** (0.119)
Post-Treat Week 4 (10/7-10/13)	-0.220+ (0.133)	-0.137 (0.125)	-0.094 (0.097)	-0.034 (0.090)	0.026* (0.013)	0.029* (0.012)	-0.261 (0.241)	-0.248 (0.221)
Post-Treat Week 5 (10/14-10/20)	-0.245+ (0.126)	-0.183 (0.121)	-0.060 (0.093)	-0.027 (0.089)	0.023+ (0.013)	0.022+ (0.012)		
Democrat	-0.228+ (0.119)	-0.199 (0.311)	-0.190* (0.089)	-0.169 (0.232)	-0.024* (0.012)	-0.015 (0.036)	-0.164 (0.133)	-0.748* (0.371)
Post Week 1 × Dem	0.025 (0.174)	0.021 (0.164)	0.086 (0.131)	0.085 (0.123)	0.003 (0.018)	0.003 (0.017)	0.237 (0.184)	0.236 (0.179)
Post Week 2 × Dem	0.104 (0.167)	0.126 (0.159)	0.107 (0.128)	0.124 (0.120)	0.032+ (0.017)	0.033* (0.016)	0.359* (0.174)	0.396* (0.173)
Post Week 3 × Dem	0.523** (0.169)	0.503** (0.159)	0.307* (0.129)	0.298* (0.121)	0.026 (0.018)	0.029+ (0.017)	0.443* (0.172)	0.495** (0.169)
Post Week 4 × Dem	0.306+ (0.179)	0.233 (0.168)	0.337* (0.133)	0.291* (0.124)	0.015 (0.019)	0.009 (0.017)	0.164 (0.323)	0.255 (0.299)
Post Week 5 × Dem	0.370* (0.172)	0.351* (0.164)	0.269* (0.128)	0.261* (0.121)	0.016 (0.018)	0.021 (0.017)		
Primary Turnout		0.397** (0.077)		0.336** (0.056)		0.049** (0.008)		0.260** (0.086)
Primary × Dem		0.026 (0.103)		0.035 (0.078)		0.025* (0.011)		-0.119 (0.131)
Turnout in 2006		0.512** (0.096)		0.370** (0.076)		0.057** (0.011)		0.180 (0.112)
2006 × Dem		-0.153 (0.128)		-0.045 (0.102)		-0.012 (0.015)		-0.233 (0.161)
Turnout in 2004		0.484** (0.126)		0.259* (0.104)		0.095** (0.016)		-0.039 (0.145)
2004 × Dem		-0.201 (0.159)		0.067 (0.131)		-0.004 (0.020)		0.281 (0.189)
Age (36-50)		0.074 (0.115)		0.010 (0.088)		0.025+ (0.013)		-0.333* (0.141)
Age (51-65)		0.096 (0.119)		0.220* (0.090)		0.077** (0.013)		-0.489** (0.140)
Age (66-97)		-0.153 (0.140)		0.330** (0.108)		0.082** (0.015)		-0.554** (0.167)
Age Missing		-0.221 (0.330)		0.147 (0.310)		0.031 (0.038)		-0.250 (0.412)
Age (36-50) × Dem		-0.020 (0.152)		0.036 (0.118)		-0.011 (0.018)		0.123 (0.193)
Age (51-65) × Dem		-0.011 (0.155)		-0.031 (0.121)		-0.026 (0.017)		0.252 (0.193)
Age (66-97) × Dem		0.060 (0.192)		-0.083 (0.148)		-0.031 (0.021)		0.325 (0.240)
Age Missing × Dem		0.169 (0.449)		0.201 (0.383)		0.006 (0.052)		0.820 (0.831)
Female		-0.613** (0.072)		-0.456** (0.054)		-0.026** (0.007)		-0.127 (0.083)
Female × Dem		0.342** (0.098)		0.216** (0.074)		0.012 (0.010)		0.212+ (0.118)
White		-0.050 (0.184)		0.114 (0.112)		0.004 (0.019)		-0.061 (0.214)
Black		0.342 (0.358)		0.539+ (0.296)		0.061 (0.037)		0.596 (0.392)
White × Dem		0.109 (0.221)		-0.041 (0.149)		0.000 (0.024)		0.067 (0.258)
Black × Dem		0.156 (0.385)		-0.137 (0.317)		-0.001 (0.041)		-0.371 (0.432)
College		0.414** (0.073)		0.387** (0.055)		0.033** (0.008)		0.223** (0.081)
College Missing		-0.722* (0.358)		0.194 (0.373)		0.044 (0.054)		0.276 (0.459)
College × Dem		0.486** (0.099)		0.218** (0.076)		0.027* (0.011)		0.122 (0.118)
Coll Missing × Dem		0.528 (0.493)		0.295 (0.484)		-0.002 (0.070)		-0.835 (0.584)

Employed		0.161+		0.276**		0.001		-0.111
		(0.087)		(0.065)		(0.009)		(0.103)
Employed Missing		-0.234		-0.134		-0.051		-1.229+
		(0.434)		(0.411)		(0.054)		(0.725)
Employed × Dem		-0.080		-0.083		0.007		0.265+
		(0.118)		(0.089)		(0.013)		(0.148)
Empl Missing × Dem		-0.171		-0.237		0.049		0.624
		(0.623)		(0.555)		(0.076)		(1.002)
Married		0.243**		0.201**		0.027**		-0.042
		(0.083)		(0.064)		(0.009)		(0.102)
Married Missing		0.608		0.133		-0.004		0.141
		(0.382)		(0.360)		(0.058)		(0.750)
Married × Dem		-0.157		-0.108		-0.024*		0.001
		(0.107)		(0.082)		(0.011)		(0.134)
Marr Missing × Dem		0.023		0.066		-0.020		0.605
		(0.583)		(0.467)		(0.077)		(1.006)
Urban/Suburban		0.525**		0.380**		0.025**		0.389**
		(0.083)		(0.064)		(0.009)		(0.082)
Urban/Sub × Dem		-0.171		-0.126		0.004		-0.129
		(0.119)		(0.095)		(0.013)		(0.136)
Constant	3.838**	2.127**	3.709**	2.098**	0.794**	0.539**	1.189**	1.107**
	(0.086)	(0.245)	(0.065)	(0.174)	(0.009)	(0.028)	(0.097)	(0.286)
N	7226	7226	7235	7235	9069	9069	1675	1675

Note. OLS estimates with robust standard errors. Control group bandwidth is 9/8-9/14 for all models. All outcome variables are continuous. Models in Columns 2, 4, 6 and 8 include pretreatment covariates (turnouts in previous elections and demographics) and their interactions with party ID (coefficients omitted). <sup>+</sup> p < 0.1 \* p < 0.05 \*\* p < 0.01

Table D2: Full Regression Estimates of Table 3

	(1) Online News (Sources)	(2) Online News (Sources)	(3) Online News (Days)	(4) Online News (Days)	(5) Offline News (Outlets)	(6) Offline News (Outlets)	(7) Offline News (Days)	(8) Offline News (Days)
Post-Treat Week 1 (9/16-9/22)	-0.081 (0.051)	-0.077 (0.048)	-0.231 (0.180)	-0.203 (0.172)	-0.020 (0.097)	0.006 (0.092)	-0.082 (0.090)	-0.084 (0.084)
Post-Treat Week 2 (9/23-9/29)	-0.102* (0.049)	-0.106* (0.047)	-0.267 (0.176)	-0.273 (0.168)	-0.049 (0.094)	-0.057 (0.091)	0.000 (0.090)	-0.020 (0.084)
Post-Treat Week 3 (9/30-10/6)	-0.181** (0.049)	-0.163** (0.047)	-0.452* (0.180)	-0.377* (0.172)	-0.145 (0.095)	-0.100 (0.091)	0.053 (0.093)	0.090 (0.085)
Post-Treat Week 4 (10/7-10/13)	-0.093+ (0.051)	-0.064 (0.049)	-0.238 (0.186)	-0.130 (0.178)	-0.140 (0.101)	-0.095 (0.096)	-0.015 (0.093)	0.017 (0.087)
Post-Treat Week 5 (10/14-10/20)	-0.140** (0.049)	-0.119* (0.047)	-0.270 (0.181)	-0.195 (0.176)	-0.090 (0.098)	-0.078 (0.095)	0.025 (0.092)	0.019 (0.087)
Democrat	-0.087+ (0.049)	-0.049 (0.128)	-0.305+ (0.169)	-0.519 (0.455)	-0.226** (0.087)	-0.258 (0.223)	-0.221* (0.086)	-0.123 (0.216)
Post Week 1 × Dem	0.124+ (0.071)	0.130+ (0.068)	0.263 (0.247)	0.266 (0.237)	-0.049 (0.126)	-0.050 (0.119)	-0.002 (0.124)	0.018 (0.116)
Post Week 2 × Dem	0.102 (0.069)	0.112+ (0.066)	0.383 (0.243)	0.413+ (0.232)	0.058 (0.124)	0.056 (0.119)	0.043 (0.122)	0.056 (0.114)
Post Week 3 × Dem	0.230** (0.069)	0.233** (0.066)	0.708** (0.247)	0.715** (0.236)	0.250* (0.125)	0.271* (0.118)	0.090 (0.125)	0.117 (0.115)
Post Week 4 × Dem	0.134+ (0.072)	0.101 (0.068)	0.553* (0.255)	0.430+ (0.245)	0.234+ (0.132)	0.171 (0.125)	0.246+ (0.128)	0.216+ (0.119)
Post Week 5 × Dem	0.154* (0.069)	0.152* (0.066)	0.524* (0.248)	0.504* (0.239)	0.161 (0.129)	0.187 (0.122)	0.127 (0.124)	0.162 (0.117)
Primary Turnout		0.085** (0.029)		0.283** (0.110)		0.293** (0.059)		0.339** (0.054)
Primary × Dem		-0.004 (0.042)		0.193 (0.153)		0.089 (0.077)		0.029 (0.074)
Turnout in 2006		0.089* (0.038)		0.320* (0.146)		0.421** (0.074)		0.427** (0.072)
2006 × Dem		-0.026 (0.052)		-0.098 (0.197)		-0.149 (0.094)		-0.037 (0.096)
Turnout in 2004		0.051 (0.055)		0.509* (0.202)		0.401** (0.090)		0.291** (0.097)
2004 × Dem		0.035 (0.069)		-0.079 (0.255)		-0.073 (0.110)		0.111 (0.121)
Age (36-50)		-0.014 (0.045)		-0.391* (0.164)		0.048 (0.094)		0.076 (0.088)
Age (51-65)		-0.217** (0.045)		-0.810** (0.169)		0.281** (0.098)		0.520** (0.090)
Age (66-97)		-0.425** (0.052)		-1.629** (0.206)		0.217* (0.109)		0.888** (0.103)
Age Missing		-0.173 (0.139)		-0.815 (0.517)		-0.289 (0.237)		0.386 (0.282)
Age (36-50) × Dem		-0.111+ (0.063)		-0.083 (0.222)		0.069 (0.120)		0.044 (0.116)
Age (51-65) × Dem		-0.039 (0.062)		0.076 (0.227)		-0.045 (0.123)		-0.150 (0.119)
Age (66-97) × Dem		-0.106 (0.075)		-0.066 (0.285)		-0.043 (0.140)		-0.310* (0.138)
Age Missing × Dem		-0.086 (0.188)		0.274 (0.692)		0.434 (0.330)		0.170 (0.371)
Female		-0.169** (0.028)		-0.665** (0.105)		-0.412** (0.056)		-0.330** (0.052)
Female × Dem		0.125** (0.039)		0.446** (0.144)		0.193** (0.073)		0.074 (0.070)
White		-0.000 (0.074)		-0.107 (0.237)		-0.033 (0.134)		0.181 (0.113)
Black		0.164 (0.150)		0.769 (0.523)		0.129 (0.272)		0.371 (0.254)
White × Dem		-0.019 (0.090)		-0.087 (0.296)		0.119 (0.160)		0.063 (0.147)
Black × Dem		-0.189 (0.162)		-1.087+ (0.564)		0.258 (0.290)		0.211 (0.277)
College		0.183** (0.028)		0.684** (0.110)		0.307** (0.058)		0.328** (0.054)
College Missing		-0.200+ (0.118)		0.078 (0.636)		-0.051 (0.340)		0.600* (0.306)
College × Dem		0.160** (0.040)		0.555** (0.151)		0.328** (0.075)		0.143+ (0.073)
Coll Missing × Dem		0.277 (0.201)		0.326 (0.880)		-0.423 (0.401)		-0.456 (0.402)
Employed		0.096** (0.033)		0.283* (0.134)		0.113+ (0.067)		0.260** (0.064)
Employed Missing		-0.158		-1.487*		-0.235		-0.091



		(0.184)		(0.616)		(0.366)		(0.362)
Employed × Dem		-0.062		-0.038		-0.003		-0.062
		(0.047)		(0.182)		(0.088)		(0.085)
Empl Missing × Dem		0.282		1.573+		0.210		0.016
		(0.244)		(0.942)		(0.488)		(0.478)
Married		0.004		-0.032		0.293**		0.308**
		(0.032)		(0.126)		(0.062)		(0.059)
Married Missing		0.138		0.819		0.384		-0.028
		(0.219)		(0.676)		(0.340)		(0.312)
Married × Dem		-0.056		-0.103		-0.134+		-0.135+
		(0.043)		(0.161)		(0.078)		(0.076)
Marr Missing × Dem		-0.242		-1.004		0.071		0.387
		(0.271)		(0.907)		(0.474)		(0.416)
Urban/Suburban		0.156**		0.446**		0.326**		0.329**
		(0.033)		(0.131)		(0.062)		(0.061)
Urban/Sub × Dem		-0.054		-0.123		-0.098		-0.082
		(0.048)		(0.187)		(0.084)		(0.086)
Constant	0.859**	0.630**	3.618**	2.919**	2.858**	1.409**	3.661**	1.673**
	(0.036)	(0.101)	(0.122)	(0.355)	(0.066)	(0.179)	(0.062)	(0.164)
N	7226	7226	7235	7235	9069	9069	9069	9069

Note. OLS estimates with robust standard errors. Control group bandwidth is 9/8-9/14 for all models. All outcome variables are continuous. Models in Columns 2, 4, 6 and 8 include pretreatment covariates (turnouts in previous elections and demographics) and their interactions with party ID (coefficients omitted). +  $p < 0.1$  \*  $p < 0.05$  \*\*  $p < 0.01$

Table D3: Robustness Check for Table 2 (Control Group Bandwidth = 3 Days)

	(1) News Exposure (Sources)	(2) News Exposure (Sources)	(3) News Exposure (Days)	(4) News Exposure (Days)	(5) Campaign Interest	(6) Campaign Interest	(7) Online Engage (# of Acts)	(8) Online Engage (# of Acts)
Post-Treat Week 1 (9/16-9/22)	-0.099 (0.174)	-0.078 (0.164)	-0.210+ (0.125)	-0.198+ (0.116)	-0.010 (0.017)	-0.008 (0.016)	-0.240 (0.184)	-0.207 (0.176)
Post-Treat Week 2 (9/23-9/29)	-0.176 (0.168)	-0.204 (0.159)	-0.116 (0.125)	-0.134 (0.116)	-0.001 (0.016)	-0.003 (0.015)	-0.392* (0.177)	-0.391* (0.173)
Post-Treat Week 3 (9/30-10/6)	-0.400* (0.170)	-0.327* (0.159)	-0.167 (0.125)	-0.112 (0.116)	0.012 (0.017)	0.018 (0.015)	-0.545** (0.176)	-0.549** (0.172)
Post-Treat Week 4 (10/7-10/13)	-0.254 (0.176)	-0.180 (0.165)	-0.159 (0.128)	-0.103 (0.118)	0.023 (0.017)	0.027+ (0.016)	-0.173 (0.273)	-0.159 (0.252)
Post-Treat Week 5 (10/14-10/20)	-0.279 (0.171)	-0.224 (0.161)	-0.125 (0.124)	-0.090 (0.117)	0.020 (0.017)	0.021 (0.016)		
Democrat	-0.214 (0.189)	-0.273 (0.348)	-0.307* (0.139)	-0.350 (0.264)	-0.021 (0.019)	-0.017 (0.040)	-0.092 (0.209)	-0.818* (0.402)
Post Week 1 × Dem	0.011 (0.228)	0.069 (0.214)	0.203 (0.169)	0.244 (0.158)	-0.001 (0.024)	0.005 (0.022)	0.165 (0.245)	0.196 (0.233)
Post Week 2 × Dem	0.090 (0.223)	0.175 (0.211)	0.224 (0.167)	0.285+ (0.155)	0.028 (0.023)	0.034 (0.021)	0.287 (0.237)	0.354 (0.231)
Post Week 3 × Dem	0.509* (0.224)	0.552** (0.210)	0.424* (0.167)	0.461** (0.156)	0.022 (0.023)	0.030 (0.021)	0.371 (0.235)	0.462* (0.229)
Post Week 4 × Dem	0.292 (0.232)	0.282 (0.217)	0.454** (0.171)	0.453** (0.159)	0.011 (0.024)	0.011 (0.022)	0.092 (0.361)	0.221 (0.333)
Post Week 5 × Dem	0.356 (0.227)	0.399+ (0.214)	0.386* (0.166)	0.418** (0.156)	0.012 (0.023)	0.023 (0.022)		
Constant	3.871** (0.144)	2.165** (0.271)	3.774** (0.105)	2.187** (0.200)	0.796** (0.014)	0.533** (0.031)	1.101** (0.161)	1.004** (0.319)
N	6440	6440	6448	6448	8084	8084	1426	1426
Outcome Range	0-17	0-17	0-7	0-7	0-1	0-1	0-5	0-5
Covariates	No	Yes	No	Yes	No	Yes	No	Yes

Note. Control group bandwidth is 9/12-9/14 for all models. All dependent variables are continuous. Models in Columns 2, 4, 6 and 8 include pretreatment covariates (turnouts in previous elections and demographics) and their interactions with party ID (coefficients omitted). Full results are reported in Online Appendix D. Standard errors are adjusted for states. + p < 0.1 \* p < 0.05 \*\* p < 0.01

Table D4: Robustness Check for Table 2 (Control Group Bandwidth = 1 Day)

	(1) News Exposure (Sources)	(2) News Exposure (Sources)	(3) News Exposure (Days)	(4) News Exposure (Days)	(5) Campaign Interest	(6) Campaign Interest	(7) Online Engage (# of Acts)	(8) Online Engage (# of Acts)
Post-Treat Week 1 (9/16-9/22)	-0.090 (0.272)	-0.020 (0.258)	-0.206 (0.194)	-0.164 (0.175)	-0.003 (0.026)	0.006 (0.024)	-0.263 (0.306)	-0.121 (0.307)
Post-Treat Week 2 (9/23-9/29)	-0.167 (0.268)	-0.149 (0.255)	-0.112 (0.194)	-0.103 (0.175)	0.007 (0.026)	0.011 (0.024)	-0.415 (0.302)	-0.299 (0.305)
Post-Treat Week 3 (9/30-10/6)	-0.390 (0.269)	-0.270 (0.255)	-0.163 (0.195)	-0.077 (0.175)	0.019 (0.026)	0.032 (0.024)	-0.569+ (0.301)	-0.459 (0.304)
Post-Treat Week 4 (10/7-10/13)	-0.244 (0.273)	-0.122 (0.259)	-0.155 (0.196)	-0.069 (0.176)	0.031 (0.026)	0.041+ (0.024)	-0.196 (0.366)	-0.061 (0.355)
Post-Treat Week 5 (10/14-10/20)	-0.270 (0.270)	-0.173 (0.257)	-0.121 (0.194)	-0.060 (0.176)	0.028 (0.026)	0.034 (0.024)		
Democrat	-0.211 (0.332)	-0.127 (0.434)	-0.481* (0.232)	-0.464 (0.321)	-0.006 (0.032)	0.016 (0.047)	-0.146 (0.363)	-0.795 (0.492)
Post Week 1 × Dem	0.008 (0.356)	0.037 (0.333)	0.377 (0.250)	0.407+ (0.229)	-0.016 (0.035)	-0.014 (0.032)	0.220 (0.385)	0.289 (0.371)
Post Week 2 × Dem	0.087 (0.353)	0.148 (0.331)	0.399 (0.249)	0.448* (0.227)	0.013 (0.034)	0.016 (0.032)	0.341 (0.380)	0.446 (0.370)
Post Week 3 × Dem	0.506 (0.354)	0.520 (0.330)	0.598* (0.250)	0.620** (0.228)	0.007 (0.035)	0.012 (0.032)	0.425 (0.379)	0.559 (0.367)
Post Week 4 × Dem	0.289 (0.358)	0.251 (0.335)	0.628* (0.252)	0.616** (0.230)	-0.004 (0.035)	-0.007 (0.032)	0.146 (0.468)	0.294 (0.442)
Post Week 5 × Dem	0.354 (0.355)	0.372 (0.334)	0.561* (0.249)	0.582* (0.228)	-0.003 (0.034)	0.004 (0.032)		
Constant	3.862** (0.254)	2.036** (0.334)	3.770** (0.182)	2.109** (0.244)	0.789** (0.024)	0.509** (0.036)	1.125** (0.293)	0.898* (0.393)
N	6080	6080	6088	6088	7649	7649	1314	1314
Outcome Range	0-17	0-17	0-7	0-7	0-1	0-1	0-5	0-5
Covariates	No	Yes	No	Yes	No	Yes	No	Yes

Note. Control group bandwidth is 9/14 for all models. All dependent variables are continuous. Models in Columns 2, 4, 6 and 8 include pretreatment covariates (turnouts in previous elections and demographics) and their interactions with party ID (coefficients omitted). Full results are reported in Online Appendix D. Standard errors are adjusted for states. +  $p < 0.1$  \*  $p < 0.05$  \*\*  $p < 0.01$

Table D5: Robustness Check for Table 3 (Control Group Bandwidth = 3 Days)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Online News (Sources)	Online News (Sources)	Online News (Days)	Online News (Days)	Offline News (Outlets)	Offline News (Outlets)	Offline News (Days)	Offline News (Days)
Post-Treat Week 1 (9/16-9/22)	-0.069 (0.068)	-0.072 (0.064)	-0.315 (0.238)	-0.322 (0.225)	-0.025 (0.132)	-0.005 (0.124)	-0.041 (0.124)	-0.048 (0.114)
Post-Treat Week 2 (9/23-9/29)	-0.090 (0.067)	-0.103 (0.063)	-0.352 (0.235)	-0.396+ (0.222)	-0.055 (0.130)	-0.068 (0.123)	0.041 (0.123)	0.016 (0.114)
Post-Treat Week 3 (9/30-10/6)	-0.169* (0.067)	-0.160* (0.063)	-0.536* (0.238)	-0.502* (0.225)	-0.151 (0.131)	-0.112 (0.123)	0.094 (0.125)	0.126 (0.114)
Post-Treat Week 4 (10/7-10/13)	-0.081 (0.068)	-0.060 (0.065)	-0.322 (0.242)	-0.256 (0.230)	-0.146 (0.135)	-0.108 (0.127)	0.026 (0.126)	0.051 (0.116)
Post-Treat Week 5 (10/14-10/20)	-0.128+ (0.067)	-0.114+ (0.063)	-0.354 (0.239)	-0.309 (0.228)	-0.096 (0.133)	-0.088 (0.126)	0.066 (0.125)	0.058 (0.116)
Democrat	-0.066 (0.077)	0.006 (0.140)	-0.410 (0.265)	-0.564 (0.513)	-0.169 (0.142)	-0.368 (0.254)	-0.229+ (0.138)	-0.258 (0.246)
Post Week 1 × Dem	0.103 (0.092)	0.125 (0.088)	0.367 (0.320)	0.447 (0.306)	-0.106 (0.169)	-0.057 (0.158)	0.007 (0.165)	0.071 (0.153)
Post Week 2 × Dem	0.081 (0.091)	0.110 (0.087)	0.487 (0.317)	0.602* (0.303)	0.000 (0.168)	0.049 (0.159)	0.052 (0.163)	0.110 (0.152)
Post Week 3 × Dem	0.209* (0.091)	0.231** (0.086)	0.813* (0.320)	0.907** (0.305)	0.192 (0.169)	0.264+ (0.158)	0.098 (0.165)	0.169 (0.153)
Post Week 4 × Dem	0.113 (0.093)	0.096 (0.088)	0.658* (0.326)	0.614* (0.313)	0.176 (0.174)	0.168 (0.163)	0.255 (0.168)	0.273+ (0.155)
Post Week 5 × Dem	0.133 (0.091)	0.146+ (0.087)	0.629* (0.321)	0.677* (0.308)	0.103 (0.171)	0.179 (0.161)	0.135 (0.165)	0.213 (0.153)
Constant	0.847** (0.057)	0.578** (0.108)	3.703** (0.198)	2.988** (0.398)	2.863** (0.111)	1.477** (0.203)	3.620** (0.105)	1.664** (0.188)
N	6440	6440	6448	6448	8084	8084	8084	8084
Outcome Range	0-6	0-6	0-7	0-7	0-13	0-13	0-7	0-7
Covariates	No	Yes	No	Yes	No	Yes	No	Yes

Note. OLS estimates with robust standard errors. Control group bandwidth is 9/8-9/14 for all models. All outcome variables are continuous. Models in Columns 2, 4, 6 and 8 include pretreatment covariates (turnouts in previous elections and demographics) and their interactions with party ID (coefficients omitted). +  $p < 0.1$  \*  $p < 0.05$  \*\*  $p < 0.01$

Table D6: Robustness Check for Table 3 (Control Group Bandwidth = 1 Day)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Online News (Sources)	Online News (Sources)	Online News (Days)	Online News (Days)	Offline News (Outlets)	Offline News (Outlets)	Offline News (Days)	Offline News (Days)
Post-Treat Week 1 (9/16-9/22)	-0.096 (0.104)	-0.086 (0.099)	-0.532 (0.356)	-0.491 (0.332)	-0.083 (0.201)	0.002 (0.193)	-0.072 (0.185)	-0.033 (0.168)
Post-Treat Week 2 (9/23-9/29)	-0.116 (0.103)	-0.117 (0.098)	-0.568 (0.354)	-0.566+ (0.331)	-0.113 (0.199)	-0.064 (0.193)	0.011 (0.185)	0.031 (0.169)
Post-Treat Week 3 (9/30-10/6)	-0.195+ (0.103)	-0.173+ (0.098)	-0.753* (0.356)	-0.669* (0.332)	-0.209 (0.200)	-0.107 (0.192)	0.064 (0.187)	0.142 (0.169)
Post-Treat Week 4 (10/7-10/13)	-0.107 (0.104)	-0.074 (0.099)	-0.539 (0.359)	-0.425 (0.336)	-0.204 (0.203)	-0.101 (0.195)	-0.004 (0.187)	0.067 (0.170)
Post-Treat Week 5 (10/14-10/20)	-0.154 (0.103)	-0.130 (0.098)	-0.571 (0.357)	-0.486 (0.335)	-0.154 (0.201)	-0.084 (0.194)	0.036 (0.186)	0.073 (0.170)
Democrat	-0.057 (0.133)	0.080 (0.177)	-0.864* (0.439)	-0.923 (0.623)	-0.209 (0.238)	-0.278 (0.316)	-0.327 (0.219)	-0.255 (0.297)
Post Week 1 × Dem	0.095 (0.143)	0.104 (0.135)	0.822+ (0.475)	0.870+ (0.453)	-0.066 (0.255)	-0.070 (0.244)	0.104 (0.236)	0.126 (0.220)
Post Week 2 × Dem	0.072 (0.142)	0.090 (0.134)	0.942* (0.473)	1.027* (0.451)	0.040 (0.254)	0.040 (0.245)	0.149 (0.236)	0.165 (0.220)
Post Week 3 × Dem	0.200 (0.142)	0.209 (0.134)	1.268** (0.474)	1.326** (0.453)	0.233 (0.255)	0.252 (0.244)	0.196 (0.237)	0.221 (0.220)
Post Week 4 × Dem	0.105 (0.143)	0.074 (0.136)	1.113* (0.479)	1.036* (0.457)	0.216 (0.258)	0.158 (0.247)	0.352 (0.239)	0.328 (0.222)
Post Week 5 × Dem	0.125 (0.142)	0.126 (0.134)	1.084* (0.475)	1.105* (0.455)	0.144 (0.256)	0.169 (0.246)	0.233 (0.237)	0.267 (0.221)
Constant	0.874** (0.097)	0.561** (0.133)	3.920** (0.330)	3.054** (0.477)	2.922** (0.188)	1.424** (0.248)	3.650** (0.173)	1.615** (0.227)
N	6080	6080	6088	6088	7649	7649	7649	7649
Outcome Range	0-6	0-6	0-7	0-7	0-13	0-13	0-7	0-7
Covariates	No	Yes	No	Yes	No	Yes	No	Yes

Note. OLS estimates with robust standard errors. Control group bandwidth is 9/14 for all models. All outcome variables are continuous. Models in Columns 2, 4, 6 and 8 include pretreatment covariates (turnouts in previous elections and demographics) and their interactions with party ID (coefficients omitted). +  $p < 0.1$  \*  $p < 0.05$  \*\*  $p < 0.01$

Table D7: Changes in News Consumption after the Financial Crisis among Pure Independents

	(1) News Exposure (Sources)	(2) News Exposure (Sources)	(3) News Exposure (Days)	(4) News Exposure (Days)	(5) Campaign Interest	(6) Campaign Interest	(7) Online Engage (# of Acts)	(8) Online Engage (# of Acts)
Post-Treat Week 1	-0.230 (0.239)	-0.294 (0.225)	0.009 (0.195)	0.008 (0.182)	0.035 (0.032)	0.031 (0.029)	0.430+ (0.232)	0.230 (0.241)
Post-Treat Week 2	0.064 (0.239)	0.009 (0.214)	0.215 (0.195)	0.223 (0.172)	0.040 (0.033)	0.032 (0.028)	0.221 (0.188)	0.028 (0.183)
Post-Treat Week 3	0.041 (0.229)	-0.042 (0.213)	0.222 (0.184)	0.195 (0.166)	0.092** (0.032)	0.073* (0.028)	0.273 (0.200)	0.187 (0.183)
Post-Treat Week 4	-0.013 (0.255)	0.030 (0.233)	0.146 (0.204)	0.222 (0.185)	0.090** (0.034)	0.090** (0.029)	-0.144 (0.327)	-0.363 (0.379)
Post-Treat Week 5	-0.062 (0.250)	-0.049 (0.229)	0.131 (0.198)	0.179 (0.182)	0.093** (0.033)	0.083** (0.030)		
Constant	2.966** (0.176)	1.240** (0.315)	3.145** (0.133)	1.671** (0.280)	0.614** (0.023)	0.365** (0.049)	0.477** (0.110)	0.702* (0.354)
N	923	923	924	924	1199	1199	219	219

Note. This table shows changes in news consumption and political interest among pure independents. The estimates are generally positive, although few are statistically significant. Pure independents may have become more attentive following the economic crisis like as did Democrats, though the evidence is not clear.

OLS estimates with robust standard errors. Control group bandwidth is 9/8-9/14 for all models. All outcome variables are continuous. Models in Columns 2, 4, 6 and 8 include pretreatment covariates (coefficients omitted). + p < 0.1 \* p < 0.05 \*\* p < 0.01

## E: Analyses Using Program-Level Partisan Media Consumption Data (2008 NAES)

In this appendix, we explore the possibility that temporal selective exposure enhances ‘partisan’ selective exposure in the traditional sense (i.e., partisan media diets), such that Republicans’ decrease in news consumption comes largely from non-conservative sources, and Democrats’ increase comes from liberal sources.

### Coding Procedures

As described in Appendix B, 2008 National Annenberg Election Studies (NAES) has an extensive battery of program-level media exposure questions across four different types of medium: television, radio, newspaper, and online sites. To investigate whether people pay less attention to politics when their own partisan team is “losing,”—or in the context of September 2008, whether the outbreak of bad economic news induced by the collapse of the Lehman Brothers prompted Democrats to consume more news compared to Republicans, we coded partisan slant of each news programs asked in NAES. With full caveat that determining partisan slant is a subjective task, we followed Dilliplane’s program coding procedure (Dilliplane 2014)<sup>1</sup> to determine partisan slant of TV News Programs. For radio, newspaper, and online sites, we used descriptions in Wikipedia to determine partisan slant. If the Wikipedia entry explicitly writes about partisan affiliation of the media or its host, we coded it to be partisan (see Tables E1 to E4). We constructed three measures that tap into exposure to liberal, conservative, and neutral news regardless of the media type (Liberal News Exposure, Conservative Exposure, Neutral /Unclassified News Exposure). We also constructed three different measures that tap into exposure to liberal, conservative, and neutral news, this time for each type of media type.

### Results

We estimate the changes in news consumption by source types separately for Republicans (Table E5-1) and Democrats (Table E5-2) using the same control/treatment classification used in the main text. As the table shows, we fail to find that Republicans’ decrease in news consumption was driven only by their avoidance of the liberal media. Instead, their decrease is consistently observed across the partisan leanings of news sources (Table E5-1). Likewise, we fail to find that the treatment effect of Democrats was particularly salient for liberal sources (Table E5-2).

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<sup>1</sup>Her coding procedure is available in Appendix A of her online appendix (<http://onlinelibrary.wiley.com/doi/10.1111/ajps.12046/supinfo>).

Table E1: Partisan Bias of TV Programs

Program Name	Partisan Bias
ABC	Neutral
ABC World News with Charles Gibson	Neutral
Anderson Cooper 360	Liberal
CBS	Neutral
CBS Evening News with Katie Couric	Neutral
Christian Broadcasting Network	Neutral
CNN	Liberal
Countdown with Keith Olbermann	Liberal
Fox News Channel	Conservative
Fox Report with Shepard Smith	Conservative
Glenn Beck	Conservative
Hannity and Colmes	Conservative
Hardball with Chris Matthews	Liberal
Headline News	Liberal
Larry King Live	Neutral
Local news (unspecified)	Neutral
Lou Dobbs Tonight	Neutral
Meet the Press	Neutral
MSNBC	Liberal
NBC	Neutral
NBC Nightly News with Brian Williams	Neutral
NewsHour with Jim Lehrer	Neutral
Nightline	Liberal
O'Reilly Factor	Conservative
PBS	Neutral
Situation Room with Wolf Blitzer	Liberal
Today	Neutral
Other	Neutral



Table E2: Partisan Bias of Radio Programs

Program Name	Partisan Bias
All things considered (NPR)	Neutral
Glenn Beck	Conservative
Bill Bennett	Conservative
Jim Bohannon	Neutral
Neal Boortz	Conservative
Christian radio	Conservative
Jerry Doyle	Conservative
Focus on the Family	Conservative
Mike Gallagher	Conservative
Sean Hannity	Conservative
Clark Howard	Neutral
Laura Ingraham	Conservative
Tom Joyner	Neutral
Mark Levin	Conservative
Rush Limbaugh	Conservative
Morning Edition	Neutral
NPR	Neutral
Bill O'Reilly	Conservative
Michael Savage	Conservative
Laura Schlessinger	Conservative
Other	Neutral

Table E3: Partisan Bias of Newspapers

Program Name	Partisan Bias
Arizona Republic	Neutral
Atlanta Journal Constitution	Neutral
Baltimore Sun	Neutral
Chicago Sun-Times	Neutral
Chicago Tribune	Neutral
Cleveland Plain Dealer	Neutral
Concord Monitor	Neutral
Dallas Morning News	Neutral
Denver Post	Neutral
Des Moines Register	Neutral
Detroit Free Press	Neutral
Houston Chronicle	Neutral
Los Angeles Times	Neutral
Miami Herald	Neutral
New Hampshire Union Leader	Neutral
New York Daily News	Neutral
New York Post	Neutral
New York Times	Liberal
Newsday	Neutral
Orange County Register	Neutral
Oregonian	Neutral
Philadelphia Inquirer	Neutral
Rocky Mountain News	Neutral
San Diego Union-Tribune	Neutral
San Francisco Chronicle	Neutral
San Jose Mercury News	Neutral
St. Louis Post-Dispatch	Neutral
St. Petersburg Times	Neutral
Star Tribune (Minneapolis)	Neutral
Star-Ledger (Newark)	Neutral
USA Today	Neutral
Wall Street Journal	Conservative
Washington Post	Liberal
Other	Neutral

Table E4: Partisan Bias of Online Sites

Program Name	Partisan Bias
ABC News.com	Neutral
AOL	Neutral
CBS News.com	Neutral
CNN.com	Liberal
Comcast	Neutral
Daily Kos	Liberal
Democratic Party website	Liberal
Drudge Report	Conservative
Emails	Neutral
Fox News.com	Conservative
Google	Neutral
Home page	Neutral
Huffington Post	Liberal
Instapundit	Conservative
Michelle Malkin.com	Conservative
MSN	Neutral
MSNBC.com	Liberal
National Journal.com	Neutral
NBC News.com	Neutral
New Republic.com	Liberal
New York Times.com	Liberal
Power Line	Conservative
Republican Party website	Conservative
Slate	Liberal
Talking Points Memo	Liberal
Think Progress	Liberal
Townhall	Conservative
Wall Street Journal.com	Conservative
Washington Post.com	Liberal
Yahoo!	Neutral
YouTube	Neutral
Other	Neutral

Table E5-1: Changes in News Consumption after the Financial Crisis by Source Types among Republicans

	(1) Left-leaning All	(2) Neutral/ Other All	(3) Right-leaning All	(4) Left-leaning Internet	(5) Neutral/ Other Internet	(6) Right-leaning Internet	(7) Left-leaning TV	(8) Neutral/ Other TV	(9) Right-leaning TV	(10) Left-leaning NP	(11) Neutral/ Other NP	(12) Right-leaning NP	(13) Neutral/ Other Radio	(14) Right-leaning Radio
Interim Week (9/16-9/22)	0.064 (0.039)	-0.048 (0.075)	-0.082 (0.074)	-0.008 (0.022)	-0.026 (0.040)	-0.048* (0.018)	0.044 (0.032)	-0.041 (0.033)	-0.013 (0.023)	0.006 (0.008)	0.033 (0.034)	-0.015 (0.010)	0.033 (0.034)	-0.006 (0.038)
Post-Treat Week 1 (9/23-9/29)	0.051 (0.046)	-0.086 (0.073)	-0.109 (0.081)	0.009 (0.022)	-0.097** (0.031)	-0.014 (0.023)	0.007 (0.028)	-0.003 (0.040)	-0.054* (0.023)	0.022+ (0.012)	0.025 (0.036)	0.004 (0.023)	0.025 (0.036)	-0.040 (0.050)
Post-Treat Week 2 (9/30-10/6)	-0.094* (0.043)	-0.164* (0.076)	-0.107 (0.074)	-0.056** (0.020)	-0.103** (0.030)	-0.022 (0.017)	-0.045 (0.031)	-0.007 (0.042)	-0.021 (0.029)	0.013 (0.011)	-0.037 (0.035)	-0.010 (0.011)	-0.037 (0.035)	-0.017 (0.046)
Post-Treat Week 3 (10/7-10/13)	-0.042 (0.041)	-0.136 (0.082)	-0.043 (0.079)	-0.061** (0.020)	-0.014 (0.039)	-0.018 (0.020)	0.008 (0.034)	-0.029 (0.042)	0.010 (0.025)	0.006 (0.008)	-0.064 (0.039)	-0.007 (0.010)	-0.064 (0.039)	-0.042 (0.046)
Post-Treat Week 4 (10/14-10/20)	-0.057+ (0.030)	-0.125 (0.077)	-0.063 (0.072)	-0.031 (0.018)	-0.078* (0.037)	-0.031 (0.019)	-0.013 (0.019)	-0.035 (0.043)	-0.013 (0.028)	0.001 (0.008)	0.003 (0.035)	0.004 (0.011)	0.003 (0.035)	0.002 (0.040)
Constant	0.563** (0.027)	2.185** (0.060)	1.093** (0.055)	0.138** (0.015)	0.597** (0.025)	0.125** (0.015)	0.367** (0.019)	0.633** (0.027)	0.474** (0.020)	0.031** (0.007)	0.658** (0.026)	0.047** (0.008)	0.658** (0.026)	0.380** (0.030)
N	3379	3379	3379	3379	3379	3379	4092	4092	4092	4092	4092	4092	4092	4092
Outcome Range	0-8	0-11	0-5	0-5	0-4	0-2	0-5	0-5	0-4	0-2	0-4	0-1	0-5	0-4

Table E5-2: Changes in News Consumption after the Financial Crisis by Source Types among Democrats

	(1) Left-leaning All	(2) Neutral/ Other All	(3) Right-leaning All	(4) Left-leaning Internet	(5) Neutral/ Other Internet	(6) Right-leaning Internet	(7) Left-leaning TV	(8) Neutral/ Other TV	(9) Right-leaning TV	(10) Left-leaning NP	(11) Neutral/ Other NP	(12) Right-leaning NP	(13) Neutral/ Other Radio	(14) Right-leaning Radio
Interim Week (9/16-9/22)	0.086 (0.071)	-0.150* (0.073)	0.027 (0.025)	0.033 (0.028)	0.007 (0.031)	0.003 (0.010)	0.042 (0.025)	-0.093* (0.041)	0.030+ (0.015)	0.000 (0.020)	-0.030 (0.032)	-0.010 (0.007)	-0.008 (0.022)	0.004 (0.010)
Post-Treat Week 1 (9/23-9/29)	0.042 (0.051)	-0.034 (0.079)	-0.031 (0.030)	0.006 (0.024)	0.004 (0.042)	-0.011 (0.007)	0.046 (0.031)	-0.057 (0.036)	0.004 (0.016)	-0.014 (0.014)	0.030 (0.034)	0.005 (0.011)	0.017 (0.024)	-0.008 (0.013)
Post-Treat Week 2 (9/30-10/6)	0.024 (0.071)	0.202* (0.088)	-0.062+ (0.032)	0.010 (0.030)	0.050 (0.034)	-0.010 (0.008)	0.011 (0.026)	0.099* (0.048)	-0.032+ (0.018)	-0.018 (0.015)	0.031 (0.034)	-0.009 (0.008)	0.023 (0.026)	0.005 (0.010)
Post-Treat Week 3 (10/7-10/13)	0.052 (0.044)	0.085 (0.083)	0.037 (0.046)	0.027 (0.013)	0.033 (0.035)	-0.006 (0.008)	0.043 (0.027)	-0.042 (0.040)	0.036* (0.018)	0.003 (0.012)	0.012 (0.036)	0.002 (0.008)	0.035 (0.027)	0.008 (0.015)
Post-Treat Week 4 (10/14-10/20)	0.051 (0.061)	0.074 (0.083)	0.014 (0.034)	0.025 (0.029)	-0.009 (0.039)	-0.001 (0.009)	0.006 (0.029)	0.020 (0.039)	0.015 (0.020)	-0.003 (0.017)	0.036 (0.030)	-0.004 (0.009)	0.016 (0.027)	-0.004 (0.008)
Constant	0.942** (0.046)	2.409** (0.072)	0.265** (0.023)	0.219** (0.021)	0.527** (0.025)	0.027** (0.006)	0.517** (0.019)	0.789** (0.033)	0.148** (0.012)	0.137** (0.020)	0.664** (0.025)	0.029** (0.005)	0.311** (0.025)	0.040** (0.008)
3847	3847	3847	3847	4977	4977	4977	4977	4977	4977	4977	4977	4977	3847	3847
Outcome Range	0-6	0-11	0-10	0-3	0-4	0-4	0-4	0-5	0-5	0-2	0-5	0-1	0-3	0-5

Note. Control group bandwidth is 9/8-9/14 for all models. All dependent variables are continuous. Standard errors are adjusted for states.

+ p < 0.1 \* p < 0.05 \*\* p < 0.01.

## Appendix F: NAES Panel Data Full Results

Table 14

	<i>Dependent variable:</i>					
	Change in TV All		Change in Economic Perceptions			
	(1)	(2)	Dem Only (3)	(4)	Rep Only (5)	(6)
Dem (vs Rep)	0.028 (0.040)	0.008 (0.040)				
Change in TV		0.028*** (0.002)		0.002*** (0.001)		-0.004*** (0.001)
male_w1		0.196*** (0.074)		0.016 (0.021)		0.012 (0.028)
white_w1		-0.473*** (0.085)		0.025 (0.022)		-0.012 (0.039)
PPEDUCAT_1		0.041 (0.039)		-0.004 (0.011)		-0.077*** (0.015)
PPINCIMP_1		0.014 (0.010)		-0.009*** (0.003)		0.002 (0.004)
PPNET_1		-0.177** (0.087)		-0.027 (0.024)		-0.134*** (0.034)
tvcount_diff_w5_w2			-0.005** (0.002)	-0.007*** (0.002)	-0.004 (0.004)	-0.003 (0.004)
dem1rep0_w1						
Constant	0.658*** (0.048)	-0.533*** (0.193)	-0.240*** (0.010)	-0.265*** (0.050)	-0.675*** (0.014)	-0.207*** (0.078)
Weighted?	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
Covariates Included?	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>
Observations	11,933	11,933	5,901	5,901	5,408	5,408
R <sup>2</sup>	0.00004	0.018	0.001	0.008	0.0002	0.012

Note: \* p<0.05; \*\* p<0.01; \*\*\* p<0.001

Table 15

	<i>Dependent variable:</i>			
	Change in TV All		Change in Economic Perceptions Independents Only	
	(1)	(2)	(3)	(4)
ind	-0.227 (0.187)	-0.250 (0.187)		
PPAGE_1		0.028*** (0.002)		0.004 (0.002)
male_w1		0.188** (0.074)		0.092 (0.084)
white_w1		-0.482*** (0.085)		-0.080 (0.097)
PPEDUCAT_1		0.045 (0.039)		0.014 (0.046)
PPINCIMP_1		0.012 (0.010)		-0.001 (0.011)
PPNET_1		-0.168* (0.087)		-0.017 (0.091)
tvcount_diff_w5_w2			-0.019* (0.010)	-0.023** (0.011)
Constant	0.689*** (0.038)	-0.526*** (0.187)	-0.335*** (0.042)	-0.510*** (0.186)
Weighted?	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
Covariates Included?	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>
Observations	11,828	11,828	333	333
R <sup>2</sup>	0.0001	0.019	0.010	0.023

Note: \* p<0.05; \*\* p<0.01; \*\*\* p<0.001

## Appendix G: Simulation Results - Implications for Polarization of Political Beliefs

Our results from Studies 1 and 2 carry important implications for partisan polarization because they raise the possibility that the flow of information that partisans consume can become skewed even if they do not have skewed media diets. When partisans' political attentiveness is conditional on how congenial the flow of information is, they will generally over-weight congenial information to their party and under-weight uncongenial information; this, in turn, may cause them to polarize. Here, we use a simulation approach to show how the temporal dynamics of selective exposure can lead partisans to polarize over time even if Democrats and Republicans share the same media diet and interpret new information in the exact same way (i.e., no motivated reasoning)

We express the way voters learn about presidential performance as a probability distribution (See Bullock 2009). Let  $\gamma$  be the newly-elected president's true competence level, and  $\hat{\gamma}_0$  be a voter's belief about  $\gamma$  at the time of inauguration. Similar to prior work (e.g., Bartels 2002; Bullock 2009), we assume  $\hat{\gamma}_0$  is normally distributed  $N(\hat{\gamma}_0, \hat{\sigma}_0)$ , where the variance  $\hat{\sigma}_0$  captures the uncertainty of the prior belief.

Throughout the first presidential term, the voter updates her belief in light of new information received. Suppose that the voter revises her belief about the president's competence level twice a year. Let  $x_1$  be the summary of all information about the president's competence produced in the first six months of the term.  $x_1$  is drawn from  $N(\gamma, \sigma_1^2)$ , where  $\sigma_1^2$  captures the uncertainty of the new information. If the voter is exposed to the full spectrum of new information, her belief about the president's competence at the end of the first term will be the precision-weighted average of the prior and new information,  $\hat{\gamma}_8 = \frac{\hat{\gamma}_0\tau_0 + x_1\tau_1 + \dots + x_8\tau_8}{\tau_0 + \tau_1 + \dots + \tau_8}$ , where  $\tau_0 = \frac{1}{\sigma_0^2}$  and  $\tau_t = \frac{1}{\sigma_t^2}$  respectively capture the precision of the prior and new information at time  $t$ .

However, most people do not stay fully informed about politics. Hence, a more realistic representation of her posterior belief can be written as:

$$\hat{\gamma}_8^* = \frac{\hat{\gamma}_0\tau_0 + x_1a_1\tau_1 + \dots + x_8a_8\tau_8}{\tau_0 + a_1\tau_1 + \dots + a_8\tau_8} \quad (\text{Equation 3})$$

where  $a_t$  is the amount of attention the voter applies to new information about the president's competence at time  $t$ .<sup>26</sup> If the voter completely tunes out the news (i.e.,  $a_1 = a_2 = \dots = a_8 = 0$ ), for example, new information will be weighted by 0 and thus her posterior belief will be equivalent to her prior belief at time 0.

We must take into account that the rate of attention may vary as a function of the value of information,  $a_t = f(x_t)$ . For the theory of temporal selective exposure, the key question is whether and how the attention function differs by partisanship. The null hypothesis is that the attention function is the same for in- and out-partisans—i.e.,  $H_0 : f_{IN} = f_{OUT}(x_t)$ . Under this condition, partisans with the same media diet will have a common knowledge base, and thus their beliefs about the president's competence level would not be polarized.

The results of Study 1 and 2 confirm the alternative hypothesis (the temporal selective exposure hypothesis) that partisans engage in temporal selective exposure, such that in- and out-partisans choose when to pay attention to the news depending on the value of new information:  $f_{IN}(x_t) \neq f_{OUT}(x_t)$ . For example, a flow of headlines signaling a very low value of  $x_t$  (e.g., 'Economy in crisis') may cause in-partisans to pay less attention than usual and out-partisans to pay more attention than usual. When in- and out-partisans attach different weights to the incoming flows of new information ( $x_1, x_2, \dots, x_8$ ), their perceptions of  $\gamma$  may polarize over time even if they have the same media diet. To formalize this possibility, we assume that the relationship between the value of new information flows and attention can

<sup>26</sup>It ranges from 0 to 1 such that new information at time  $t$  is given less weight as the voter pays less attention to politics in time  $t$ .

be represented by logistic functions:

$$f_{IN}(x_t) = \frac{L}{1 + e^{-Kx_t}} \quad (\text{Equation 4a})$$

$$f_{OUT}(x_t) = \frac{L}{1 + e^{Kx_t}} \quad (\text{Equation 4b})$$

where  $L$  is a parameter that determines overall attention rate and  $K$  is a parameter that determines the relationship between  $x_t$  and  $a_t$ . For any  $K > 0$ , the relationship between  $x_t$  and  $a_t$  will be positive for in-partisans and negative for out-partisans.

We first plot the attention functions in the upper row of Figure 2. Panels A and B respectively depict  $f_{IN}(x_t)$  and  $f_{OUT}(x_t)$  for a range of values of  $L$  and  $K$ .<sup>27</sup> In the leftmost column ( $L = 0.1$ ), people pay little attention to politics in general. In the rightmost column ( $L = 1$ ), people are generally attentive, learning 50 per cent of new information on average and up to 100 per cent under certain circumstances. In the facets in the top row ( $K = 0$ ), attention levels do not vary across the values of  $x_t$  for in-partisans nor out-partisans. In the facets in the successive rows ( $K > 0$ ), however, in-partisans pay more attention when the news flows are favorable to the president ( $x_t > 0$ ) and out-partisans pay more attention when the opposite is the case ( $x_t < 0$ ). The temporal ups and downs of selective exposure become more pronounced with higher values of  $K$ . The facets in the bottom row ( $K = 5$ ), for example, indicate that partisans pay almost no attention to politics when faced with uncongenial information flows ( $x_t < 0$  for in-partisans and  $x_t > 0$  for out-partisans).

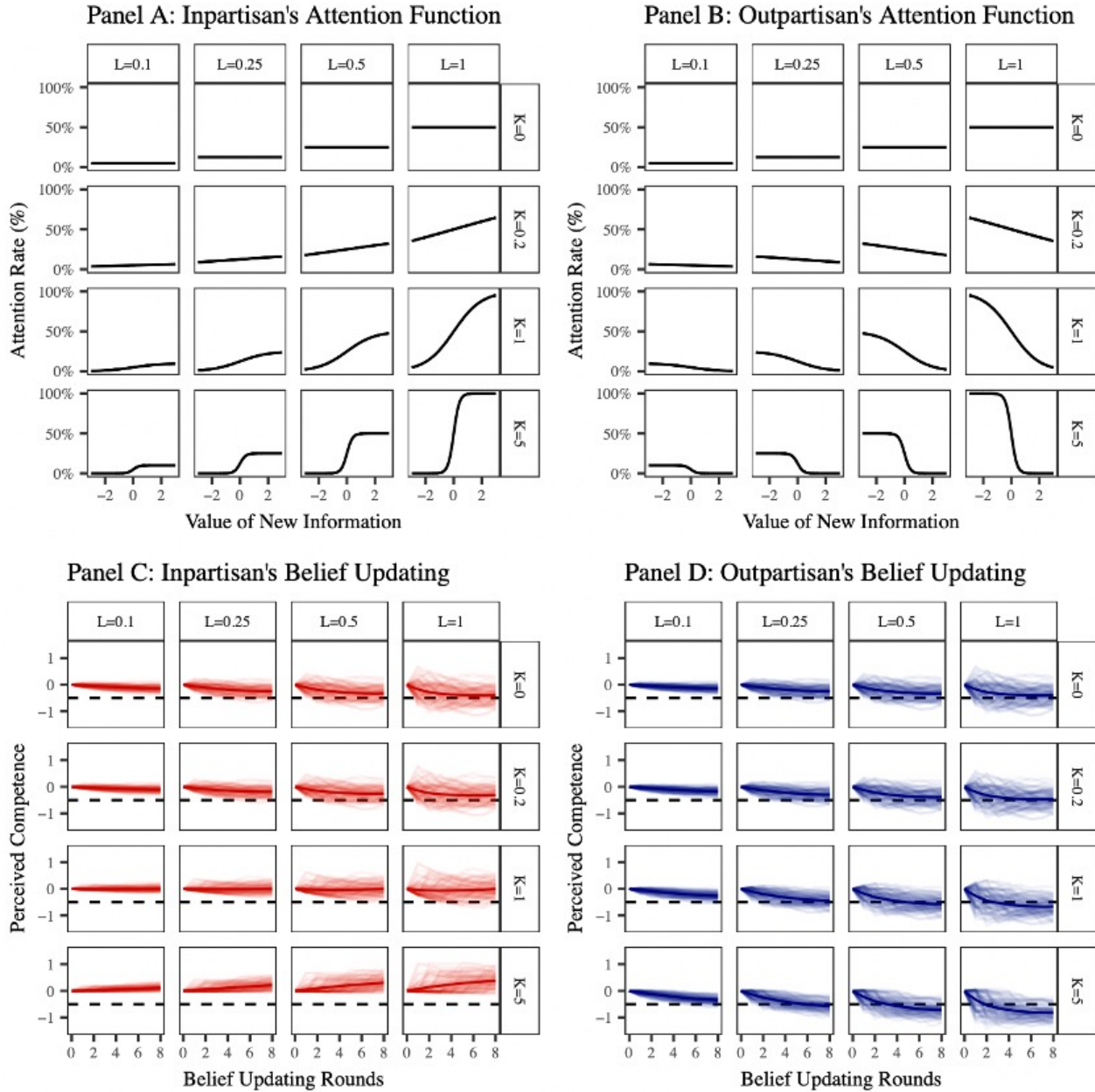
In the lower row of Figure 2, we illustrate hypothetical patterns of belief updating about presidential competence using the attention functions described above. In each facet, we plot 100 simulations in which an unbiased voter updates his belief eight times in light of new information flows ( $x_t$ ), where  $t \in \{1, 2, 3, 4, 5, 6, 7, 8\}$ . Suppose that in- and out- partisans start with the same prior belief,  $\hat{\gamma}_0 \sim N(0, 1)$  and that new information is drawn from  $x_t \sim N(-0.5, 1)$ , where a majority of that new information (69 per cent) suggests that the president is performing poorly. Under the null hypothesis, both in- and out-partisans should be expected to adjust their beliefs about presidential competence downward and converge toward -0.5.

The top rows of all panels show that in- and out- partisans' beliefs both tend toward -0.5 in exactly the same way when  $K = 0$ : that is, their attention rate is independent of whether new information is favorable to the president. This is a special case of the null hypothesis  $f_{IN}(x_t) = f_{OUT}(x_t)$ , under which belief polarization does not occur. The successive rows, when  $K > 0$ , show that voters may polarize. However, the extent of polarization hinges on their sensitivities to uncongenial information ( $K$ ) and their average attention levels ( $L$ ). Partisans' beliefs would further polarize if they were quicker to adjust their attention rates based on the value of new information (i.e., high values of  $K$ ) or if their overall news consumption were high (i.e., high values of  $L$ ). When the degree of attention adjustment is high ( $K = 5$ ), in-partisans almost always think the president is competent even though most new information indicates that the president is incompetent.

<sup>27</sup>We consider a range of possible values of  $L$  and  $K$  to specify the hypothetical conditions under which sharp and frequent polarization could occur.



Figure 3: Attention Rate by Partisanship and Logistic Function Parameters



Note: Panel A plots  $f_{IN}(x_t) = \frac{L}{1 + e^{-Kx_t}}$  and Panel B plots  $f_{OUT}(x_t) = \frac{L}{1 + e^{Kx_t}}$  where  $x_t$  denotes the value of new information. Higher values of the L parameter indicate larger amounts of overall learning. Higher values of the K parameter indicate more sensitive changes in attention rates in response to the value of new information. In Panels C and D, the thin line in each facet plots 100 simulations of belief change. The thick line in each facet plots the average of the 100 simulations. The dashed line represents the benchmark the partisans' beliefs are predicted to approach when equal amounts of attention are paid to every value of  $x_t$ . The new information is drawn from  $x_t \sim N(-0.5, 1)$ , where about 69 per cent of new information would suggest that the president is incompetent. Panel C depicts belief change of an in-partisan voter who revises his belief according to Equation 3 and Equation 4a. Panel D depicts belief change of an out-partisan voter who revises his belief according to Equation 3 and Equation 4b.