How Does Exposure to Online Partisan Media Affect Political Attitudes and Behavior?

PRE-ANALYSIS PLAN

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This document describes a pre-analysis plan for a large-scale, ecologically valid field experiment that examines how exposure to online partisan media affects political attitudes and behavior, which we measure using a combination of a multi-wave survey study and the unobtrusive observation of behavior with web tracking software. Our main treatment, deployed in Wave 3, asks treatment subjects to modify the homepage of their main web browser to a left-wing or right-wing partisan media outlet. In addition, subjects are asked to follow the corresponding page on Facebook and sign up for related email newsletters. The randomization of this treatment ensures that we can observe the causal effects of an exogenous change in respondents' news media diets. We have hypotheses focusing on (1) effects on media use, (2) effects on political attitudes, perceptions, and behaviors, (3) heterogeneous effects on partisan subgroups. We further group these hypotheses into Study 1 and Study 2, which may be packaged into separate papers, as detailed below.

1 Design

We received a grant from the Volkswagen Foundation to run this experiment as part of a broader study on how media exposure affects public opinion. The experiment is embedded in a panel survey fielded on initially $N \approx 1,550$ respondents recruited for the YouGov U.S. Pulse panel, which enables tracking of people's web usage on desktop and mobile devices. The Pulse panel is a subset of YouGov's traditional survey panels, where respondents opt in to install tracking software on their devices.

Figure 1 provides a conceptual overview of the study data collection process. We will conduct five survey waves: a baseline survey (Wave 1), a survey with pre-treatment covariates (Wave 2), another survey with pre-treatment covariates in which the treatment will be administered (Wave 3), and two post-treatment surveys that will contain our outcome measures (Waves 4 and 5). In addition, we will also be collecting web tracking data (desktop

Figure 1: Panel setup
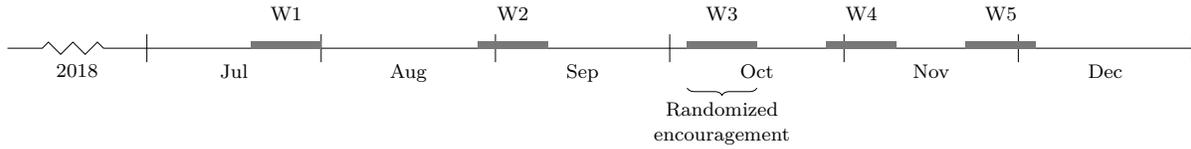
and mobile phone) and Twitter data (for those who share it) throughout this entire period. In the following section we describe each of these steps in greater detail. The main survey launched on July 3, 2018. The encouragement was issued in Wave 3, which was fielded on October 5, or a month before the midterm elections. Outcomes will be collected in Wave 4 before Election Day, and Wave 5 after Election Day.

1.1   Logistics

- In partnership with YouGov, we initially recruited a total of approximately 3,200 panelists that had installed the Pulse web tracking app on their computers and cell phones. They agreed to participate in a "Politics and Media" study with multiple survey waves. Their participation was rewarded using YouGov's proprietary point system and included a bonus if the respondent completed all waves in order to disincentivize attrition. Participation was voluntary and respondents were able to opt out from the web tracking part of the study at any point in time. Respondents were sampled according to YouGov's demographic/political targets, and then reweighted in order to obtain a sample that is representative of the U.S. population using weights computed by YouGov. (More details on the weights will be available in the final paper.)

- Due to a targeting error at this initial stage that resulted in most of our respondents not being in the Pulse panel, we had to begin recruitment again in the beginning of July. Unfortunately, this coincided with the planned transition of the back-end technology

underlying Pulse from Wakoopa to another provider, Reality Mine. While this was designed to be unobtrusive to panelists, they needed to install an update to the Pulse software to continue sending web data after discontinuation of Wakoopa on July 31. This change meant that we were targeting a smaller (but rapidly growing) pool of respondents who were upgraded to Reality Mine. 2,632 additional respondents were targeted during this phase, finally resulting in 1,551 respondents with Reality Mine who took Wave 1.

- Wave 1 included a battery of questions about news media consumption, attitudes about domestic and foreign policy issues, turnout and vote choice, and presidential approval.

- Wave 2 (fielded August 28) contained numerous questions related to our larger project. Questions relevant for the experiment included affective polarization and social distance measures, news reception, policy attitudes, and projected U.S. midterm election outcomes.

- Wave 3 went into the field on October 5. During this wave, we administered the randomized encouragement: one third of the sample was asked to change their browser homepage to a left-leaning news outlet (HuffPost); another third was asked to change it to a right-leaning news outlet (Fox News); and another third received no treatment (control group). The encouragement also asked respondents to follow the corresponding Facebook page and sign up for related email newsletters. Randomization was blocked by browser type (Chrome / Firefox / Safari / IE / Edge / Other). Respondents received clear instructions about how to do this and were compensated for doing so with a points reward equivalent to $8. To incentivize compliance over time, they were also told that they will receive an additional bonus if they pay attention to the website and answer questions about "about what you may have seen on the site," which will be in the next survey wave. Wave 3 also included a few questions related

to other pre-treatment covariates: attitudes about domestic and foreign issues, most important problem, presidential feeling thermometer, Congress control preference after the midterms, and turnout intention.

- Wave 4 was in the field from October 30 to November 5 (the day before the election). Our expected attrition rate, based on our past experience running studies that combine survey and web tracking data collection, is around 20% by the end of Wave 3. This survey was longer than Wave 3 and included a battery of outcome variables, such as attitudes about domestic and foreign issues, most important problem, political knowledge, political perception, affective polarization, presidential approval and vote intention/choice, racial resentment, threat perceptions, beliefs about the effects of trade, social media use, and media trust (including trust specifically in HuffPost and Fox News).

- Wave 5 is expected to be in the field beginning late November or early December. Similar to Wave 4, this survey will include a battery of outcome variables.

1.2 Treatments

Selection of the encouragement to consume news information from either Fox News or HuffPost was not only based on the significance of the two websites in partisan news consumption in the current political environment but also based on empirical web-tracking data during the pre-treatment period. Using data from April and May 2018, Table 1 shows the average number of visits to a page on `foxnews.com` and `huffingtonpost.com` by each respondent. Over the two-month period, respondents saw a Fox News article roughly 13 times and a HuffPost article between 8 and 9 times on average. There is of course a lot of variation: Table 2 shows that between 70-80% of respondents did not visit pages on either site. These results show both that the two sites are roughly equally visited (although Fox News is somewhat

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more common in the data) and that a large share of the sample would not be categorized as "Always-Takers" in an experiment. Finally, Table 3 illustrates that the estimated ideological slant of the two news sources is well to the right and left of center, respectively.

Table 1: Average number of visits per person to a page on ...

Fox News	Huffington Post
13.1	8.5

Table 2: Average share (in %) of respondents who visited at least 1 page on ...

Fox News	Huffington Post	Fox News and Huffington Post
30.4	19.0	10.2

Table 3: Slant statistics for Fox News and Huffington Post based on Bakshy et al. (2015)

Domain	Alignment Score
foxnews.com	0.775
huffingtonpost.com	-0.618

After answering the pre-treatment questions, subjects in Wave 3 assigned to one of the two treatment groups saw the following message:

> **Research on Usability of News Service**
>
> *We are interested in understanding how people evaluate the quality of popular news and information services. You have been selected to participate in a user test that will allow us to achieve that. As part of this test, a news and information site has been randomly allocated to you. We would like to ask you to consider using this service in return for XXX points to be credited immediately to your YouGov account.*
>
> *To take part, all you have to do is follow a few simple instructions on the next page. We will invite you to consume news stories from this site in different ways. The user test will last 1 month.*
>
> *In the next survey, we will ask some questions about what you may have seen on the site. We will give you another bonus for correct answers.*
>
> *You might be familiar with this site or visit it frequently already. Dont worry thats not a problem! We hope this will become a natural part of your online browsing environment. Youll be free to revert back to normal once the test is over.*
>
> *Do you agree to try out this online news service?*

Respondents could answer yes or no. Those who answered "yes" were presented with instructions. These instructions varied by treatment (Fox News or HuffPost) and browser (Chrome / Firefox / Safari / IE / Edge / Other) and included screen shots where possible.

Example: Homepage setup instructions, Fox News assignment and Chrome usage

Thank you very much! You are providing a very important contribution to research.

It appears that you are using the Google Chrome browser. Please follow these simple steps to temporarily change the contents of your New Tab page.

1. *At the top right of the current Chrome window (to the right of the address bar), click ... > Settings.*

2. *Scroll down until you see the "On startup" header, then select Open a specific page or set of pages.*

3. *Click Add a new page. Enter foxnews.com and click Add.*

Then, for respondents who said in Wave 1 that they have a Facebook account, we asked the following:

Example: Facebook page like instructions, Fox News assignment

In a previous survey you told us that you use Facebook.

We would also like to invite you to follow the official Facebook page of this news and information site by clicking the button "Like Page" below.

We used iframe to embed the Facebook page for Fox News or HuffPost depending on condition.

Finally, for the Fox News condition we asked the following:

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> **Email newsletter subscription instructions, Fox News assignment**
>
> *You're almost done. Thank you!*
>
> *Now there's just one more step. Please click here. In the new tab, select "Subscribe" under "Fox News First" and enter your personal email address. Please also select "Subscribe" under "The Scoop" and enter your personal email address. (This will not be shared with the researchers.)*
>
> *Close the tab or window once you are done to return to this page.*

And for HuffPost:

> **Email newsletter subscription instructions, HuffPost assignment**
>
> *You're almost done. Thank you!*
>
> *Now there's just one more step. Please click here, enter your personal email address, check "The Morning Email" and "Politics," and click on "Subscribe." (This will not be shared with the researchers.)*
>
> *Close the tab or window once you are done to return to this page.*

2 Hypotheses

In our analysis, we will explore two sets of hypotheses, which we will report in two separate studies. The first study (hypotheses on issue opinions, news consumption, polarization, and agenda-setting) will focus on how partisan media affects political polarization. The second study (hypotheses on media trust, political knowledge, election prediction) will focus on partisan media and misinformation.

Study 1

Effects on issue opinions:

- *Issue Opinions H1:* Subjects assigned to the Fox News treatment will provide more conservative responses on average to questions about opinions on domestic and foreign issues, as well as policy trade-offs, than subjects assigned to the control group.

- *Issue Opinions H2:* Subjects assigned to the HuffPost treatment will provide more liberal responses on average to questions about opinions on domestic and foreign issues, as well as policy trade-offs, than subjects assigned to the control group.

- *Issue Opinions H3:* Subjects assigned to the Fox News treatment will report less pro-immigration attitudes than subjects assigned to the control group.

- *Issue Opinions H4:* Subjects assigned to the HuffPost treatment will *not* report less pro-immigration attitudes than subjects assigned to the control group.

- *Issue Opinions RQ1:* We will test for heterogeneous effects in the above hypotheses by self-reported party and ideology (including leaners). We do not generally expect to find "backfire" effects (positive effects for some subgroups but negative for others) but are agnostic about potential differential updating.

Effects on subsequent news browsing behaviors:

- *News Browsing H1:* Subjects assigned to the Fox News treatment will be more likely to visit conservative news sources than subjects assigned to the control group.

- *News Browsing H2:* Subjects assigned to the HuffPost treatment will be more likely to visit liberal news sources than subjects assigned to the control group.

- *News Browsing RQ1:* We will test for heterogeneous effects by self-reported party and ideology (including leaners). We do not expect to find "backfire" effects (positive effects for some subgroups but negative for others) but are agnostic about potential differential magnitudes in effects.

- *News Browsing RQ2:* We will test for heterogeneous effects by pre-treatment news habits ("patient preference"). We might expect smaller effects for those who already used HuffPost or Fox News according to pre-treatment Pulse data.

Effects on subsequent social media behaviors:

- *Social Media H1:* Subjects assigned to the Fox News treatment will be more likely to share URLs from conservative news sources than subjects assigned to the control group.

- *Social Media H2:* Subjects assigned to the HuffPost treatment will be more likely to share URLs from liberal news sources than subjects assigned to the control group.

- *Social Media H3:* Subjects assigned to the Fox News treatment will be more likely to follow conservative news sources on Twitter than subjects assigned to the control group.

- *Social Media H4:* Subjects assigned to the HuffPost treatment will be more likely to follow liberal news sources on Twitter than subjects assigned to the control group.

Effects on affective polarization:

- *Affective Polarization H1:* Subjects in the HuffPost treatment will rate Democrats more highly and Republicans and Trump supporters less highly than those in the control group.

- *Affective Polarization H2:* Subjects in the Fox News treatment will rate Democrats less highly and Republicans and Trump supporters more highly than those in the control group.

- *Affective Polarization RQ1:* We will test for heterogeneous effects by self-reported party and ideology (including leaners). We do not generally expect to find "backfire" effects (positive effects for some subgroups but negative for others) but are agnostic about potential differential magnitudes in effects.

Effects on perceived polarization:

- *Perceived Polarization H1:* Subjects assigned to either treatment condition will perceive more political polarization than those in the control group.

- *Perceived Polarization RQ1:* We will test for heterogeneous effects by self-reported party (including leaners).

Agenda-setting effects:

- *Agenda Setting H1:* Subjects assigned to the Fox News treatment will tend to rate as important those issues that Republican respondents are more likely than Democrats to identify as important, compared to the control group.

- *Agenda Setting H2:* Subjects assigned to the HuffPost treatment will tend to rate as important those issues that Democratic respondents are more likely than Republicans to identify as important, compared to the control group.

- *Agenda Setting RQ1:* We will test for heterogeneous effects by self-reported party and ideology (including leaners).

- *Agenda Setting RQ2:* We will test for heterogeneous effects by pre-treatment news habits ("patient preference"). We might expect smaller effects for those who already used HuffPost or Fox News according to pre-treatment Pulse data.

Effects on approval of President/Congress:

- *Elite Approval H1:* Subjects assigned to the Fox News treatment will be more supportive of President Trump and the Republican Party and less supportive of the Democratic Party than subjects assigned to the control condition.

- *Elite Approval H2:* Subjects assigned to the HuffPost treatment will be less supportive of President Trump and the Republican Party and more supportive of the Democratic Party than subjects assigned to the control condition.

- *Elite Approval RQ1:* We will test for heterogeneous effects by self-reported party and ideology (including leaners).

Effects on voting behavior:

- *Voting Behavior RQ1:* We will test whether subjects assigned to either of the treatment conditions were more likely to exhibit higher turnout than subjects assigned to the control group.

Study 2

Effects on media trust:

- *Media Trust H1a:* Subjects assigned to the Fox News treatment will have more trust in Fox News than those in the control group.

- *Media Trust H1b:* Subjects assigned to the Fox News treatment will not have more trust in HuffPost than those in the control group.

- *Media Trust H2a:* Subjects assigned to the HuffPost treatment will have more trust in HuffPost than those in the control group.

- *Media Trust H2b:* Subjects assigned to the HuffPost treatment will not have more trust in Fox News than those in the control group.

- *Media Trust H3a:* Subjects assigned to the Fox News treatment will be more likely to believe that news organizations tend to favor liberals than subjects assigned to control.

- *Media Trust H3b:* Subjects assigned to the HuffPost treatment will be more likely to believe that news organizations tend to favor conservatives than subjects assigned to control.

- *Media Trust RQ1:* We will test for heterogeneous effects in the above hypotheses by self-reported party and ideology (including leaners). We do not expect to find "backfire" effects (positive effects for some subgroups but negative for others) but are agnostic about potential differential magnitudes in effects.

- *Media Trust H4:* Subjects assigned to both treatments will have less trust in mainstream sources than those in the control group.

- *Media Trust RQ2:* Will the magnitude of the effect in *H3* and *H4* be greater for subjects assigned to Fox News (vs. control) than for those assigned to HuffPost (vs. control)?

Knowledge effects:

- *Factual Knowledge H1:* Subjects assigned to the Fox News condition will be more likely to overestimate the percent of the U.S. population that is foreign-born than

those assigned to HuffPost or to control.

- *Factual Knowledge H2:* Subjects assigned to the HuffPost condition will be more likely to overestimate the unemployment rate than those assigned to Fox News or to control.

- *Event Knowledge RQ1:* Did subjects assigned to Fox News or HuffPost exhibit greater or less belief accuracy on questions about news reception of recent events compared to those assigned to control?

- *Event and Factual Knowledge RQ2:* We will test for heterogeneous effects in the above hypotheses by self-reported party and ideology (including leaners). We do not generally expect to find "backfire" effects (positive effects for some subgroups but negative for others) but are agnostic about potential differential learning.

Election prediction:

- *Election Prediction H1:* Subjects assigned to the Fox News treatment will be more likely to predict the Republican Party as winning the control of the House of Representatives, to predict a higher national two-party vote share for the Republican Party, and to predict the Republican candidate to win the race for the House seat in their Congressional district than subjects assigned to the control group.

- *Election Prediction H2:* Subjects assigned to the HuffPost treatment will be more likely to predict the Democratic Party as as winning the control of the House of Representatives, to predict a higher national two-party vote share for the Democratic Party, and to predict the Democratic candidate to win the race for the House seat in their Congressional district than subjects assigned to the control group.

- *Election Prediction H3:* Pre-treatment Republican partisans in the Fox News treatment group and pre-treatment Democratic partisans in the HuffPost treatment group will

report a higher average certainty in their predictions than subjects assigned to the control group.

- *Election Prediction H4:* Pre-treatment Republican partisans in the HuffPost treatment group and pre-treatment Democratic partisans in the Fox News treatment group will report a lower average certainty in their predictions than subjects assigned to the control group.

Effects on mail-bombing incident:

- *Mail-Bombing H1:* Subjects assigned to the Fox News treatment will be more likely to think the "mail-bombing" incident targeting Democrats was a "false flag" event organized by liberals than those assigned to the control group and to the HuffPost treatment.

- *Mail-Bombing H2:* Subjects assigned to the Fox News treatment will be more likely to think mainstream media's bias was responsible for the "mail-bombing" incident than those assigned to the control group and to the HuffPost treatment.

- *Mail-Bombing H3:* Subjects assigned to the Fox News treatment will be less likely to think Trump's fiery rhetoric was responsible for the "mail-bombing" incident than those assigned to the control group and to the HuffPost treatment.

3   Model and Variable Specifications

"Don't know" responses will be considered missing data for our outcome measures. Missing covariates will be treated as missing, unless inclusion of covariates per our pre-specified models results in dropping 20% or more of observations. In such cases, we will use multiple imputation.

For all experimental analyses, we will report both unadjusted and covariate-adjusted differences in means. Since randomization was blocked by the detected web browser used by respondents as they entered the Wave 3 survey, we need to account for differential probability of assignment across blocks in both sets of analyses. For unadjusted estimates, we will use block-wise differences in means.[1] For adjusted estimates, we will employ Lin's (2013) saturated regression approach, which simultaneously allows us to control for differential probability of assignment and to maximize precision via covariate adjustment. We will use HC2 robust standard errors in all analyses and report p-values from two-tailed t-tests.

Additionally, we will report both Intent-to-Treat (ITT) and Complier Average Causal Effect (CACE) estimates. For the CACE, we will provide separate estimates of the effect of exposure to Fox News vs. control and of the effect of exposure to HuffPost vs. control among compliers.

For adjusted models, we use an IV framework. Depending on the comparison, we define as "treated" any respondent who (1) visited the FoxNews.com homepage at least once during each full 7-day period beginning with completion of Wave 3 through completion of Wave 4 (inclusive), or (2) visited the huffingtonpost.com homepage at least once during each full 7-day period beginning with completion of Wave 3 through completion of Wave 4 (inclusive). Then, we will subset to the relevant treatment/control pair (dropping the other treatment group) and, using an IV setup, instrument receipt of the relevant treatment using this definition with treatment assignment. Depending on the share of compliers that we find in the data, we may choose to relax our definition or to report "bounds" on the CACE constructed with several definitions of compliance. (We may also adopt a stricter definition that additionally incorporates visits to the newsletter pages for that portion of the encouragement.)

For unadjusted estimates, in addition to using the above measures of compliance, we

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[1]See `https://declaredesign.org/blog/biased-fixed-effects.html`.

will divide the estimated coefficient on the treatment effect by the share of compliers in the treatment group as measured by whether respondents in that group agreed to participate in the user test of a news service in the survey (shown above). In general, if the share of compliers is very low, we may relegate all CACE estimates to an appendix.

For covariate-adjusted models (see above), we will select covariates for inclusion using lasso with default options in glmnet. We will run this separately for each analysis specified in this document. Our list of pre-treatment covariates for possible inclusion will be: gender, education, age, age squared, party ID, race/ethnicity, ideology, income, employment status, state of residence, political interest, news consumption from Pulse (log count of URLs from domains in Bakshy et al. list), average media diet slant using Bakshy et al. list (Guess 2018), average frequency of political information consumed from media sources (TV, newspaper, radio, internet, political discussions), pre-treatment version of the DV (if available).

Issue opinions

We will measure the extent to which respondents' issue opinions are conservative or liberal by conducting a principal components analysis (PCA) of their responses to a set of policy issue questions. We will run PCA in the set of responses in Wave 2 to derive a policy opinions index by taking the first principal component, and then predict the policy opinions index in Wave 4 (outcome variable) by using the same set of weights computed in Wave 2.

The set of issues we consider (see questions on "Domestic Issues", "Foreign Issues", and "Policy Trade-offs") include both domestic and foreign issues, as well as questions specifically related to current events:

1. Gun control

2. Attitudes towards war

3. Trade: approval of NAFTA

4. Presidential pardon powers

5. Government regulation of business

6. Isolationism in international relations

7. Social security

8. Business regulation

9. Diplomatic interactions with North Korea

10. Sexual harassment

11. Islam

12. Climate change

13. FBI Russia investigation

14. Immigration: DACA

Several of these items (5, 7, 8) were adapted from Bail, Argyle, Brown, Bumpus, Chen, Hunzaker, Lee, Mann, Merhout and Volfovsky (2018) and the "Ideological Consistency Scale" in Dimock, Doherty, Kiley and Oates (2014).

We will use three items to measure attitudes about immigration: the policy trade-off regarding DACA (Trade-off B), the policy trade-off regarding the migrant caravan (trade-off E), and the threat perception about undocumented immigrants taking jobs away from American citizens. We will apply the same factor analysis scaling method as above, but only on Wave 4 responses.

News browsing behavior

Pre-treatment Pulse measures will be computed using data from the month of September 2018. Post-treatment outcomes will be computed from (1) 1 week, (2) 4 weeks, and (3) 6 weeks (if available) of Pulse data, counting from the date of Wave 3 survey completion for each respondent separately.

News sources will be identified based on the list of top 500 domains shared on Facebook and compiled in Bakshy et al. (2015). We may add additional news sources to the list if there are clear omissions that have emerged since 2015. Visits to news sources will be measured as the (logged) individual-level count of visits to URLs whose domain is included in this list.

We will classify domains as liberal or conservative based on their audience ideology score (negative for liberal, positive for conservative), which was computed by Bakshy et al. (2015) based on the self-reported political identity of Facebook users that shared those URLs on Facebook.

Visits to conservative or liberal news sources will be measured in two ways: (1) logged count of URLs visited from each of the two groups described above, with an additional control for the logged total number of visits, and (2) proportion of URLs visited that correspond to conservative news sources. In analyses by pre-treatment news habits, we will operationalize "HuffPost users" as those who visited any page on HuffPost, and "Fox News users" as those who visited any page on Fox News.

Duplicate visits to webpages will not be counted if they are successive (i.e., a page that was reloaded after first opening it). URLs are cleaned of referrer information and other parameters before de-duplication.

Where possible, we will attempt to duplicate these desktop-based analyses on Pulse mobile visit data, although we acknowledge that the data may have less coverage in our sample. In that case, we may relegate such analyses to an appendix.

Social media behavior

Web links shared by respondents' Twitter accounts will be identified. We will expand shortened URLs and restore the original web URLs.

We will classify domains as liberal or conservative following the same logic described above. If time allows it, we will validate our method use human coding and supervised machine learning to confirm that the ideological leanings of the domains are accurate.

Shared conservative or liberal news sources will be measured in two ways: (1) logged count of URLs shared by each of the two groups described above, with an additional control for the logged total number of shares, and (2) proportion of URLs shared by respondents that correspond to conservative news sources.

To measure whether respondents follow liberal or conservative news sources, we will rely on the method developed by Barberá (2015). Our metric will consist on the count of conservative (or liberal) news accounts followed by each of our respondents, out of a list of 50 prominent news outlets and journalists available here, and whose political ideology was computed by Barberá on July 2018. Estimates are available here.

Affective polarization

We will use two different metrics of affective polarization for each of the three groups (Democrats, Republicans, and Trump supporters), following prior work on this subject (Iyengar, Sood and Lelkes 2012).

The first metric is a feeling thermometer that asks respondents about their feelings toward the group and to rate it on a scale from 0 to 100, where ratings between 0 and 50 mean that "you don't feel favorable toward the group and that you don't care too much for that group." The continuous responses to this question (0 to 100) will be the outcome variable.

The second metric asks respondents to suppose that a son or daughter is getting married to a supporter of the outgroup, and to respond how happy they would feel about it. The

response categories range from "Generally unhappy" to "Generally happy", on a 7-point scale. We will recode this variable so that high values correspond to more positive evaluations of the group.

Perceived polarization

Our measure of perceived polarization will be the average of all three items asked in Wave 4 ("Democrats and Republicans hate each other", "The difference between Democrats and Republicans are too great to be reconciled," and "Polarization in America is greater than ever before"). The response categories range from "Strongly disagree" to "Strongly agree", on a 5-point scale. Don't know responses will be dropped from the analysis.

Agenda-setting effects

To estimate agenda-setting effects, we will first identify which issues are deemed as most important by Republicans but not Democrats, and vice versa, by computing an index of partisan asymmetry in topic importance for each issue. We will build this index for each issue included in the "most important problem" question in Waves 2 and 3 (responses will be aggregated to improve our estimates), and then for each issue subtracting the proportion of self-identified Republicans who selected that problem from the proportion of self-identified Democrats who selected it (including leaners). Issues with high scores will be those that most concern Democrats but not Republicans; and issues with low scores will concern Republicans more than Democrats.

The outcome variable in our analysis measuring agenda-setting effects will be the average partisan asymmetry score of the problems that a given respondent marked as important in Wave 4. By taking the average, we control for the fact that some respondents may be likely to mark more items than others.

Approval of president and parties in Congress

Our measure of presidential approval is a standard survey question asking respondents whether they approve or disapprove of the way Donald Trump is handling his job as president. The response scale has 5 points (from "Strongly approve" to "Strongly disapprove"). We will recode this scale so that higher values correspond to higher approval.

For approval of parties in Congress, we will use the responses to a question regarding subjects' preferences of which party should control Congress. Of the four options available to respondents (see questionnaire), we will use only two (Democrats and Republicans), and create two different dummy variables with value 1 whenever this response is selected and 0 for all three other options.

Voting behaviors

Our main metric of turnout will be subjects' self-reported intention to vote in the 2018 midterm elections, based on their responses in Wave 4. From the available options, we will recode "Yes" and "I already voted" as 1, and all other options as 0.

We will also use validated turnout records, if available.

Media trust

The first set of media trust items asked respondents to report how much they trust Huffington Post and Fox News when it comes to reporting the news about government and politics. The outcome variable will be recoded from the categorical responses ("A great deal", "a fair amount", "not very much", and "not at all") to numeric scores (4 to 1).

We operationalize trust in mainstream sources using the survey item in Wave 4, "How much trust and confidence do you have in the press when it comes to reporting the news about government and politics fully, accurately, and fairly?" The outcome variable will be

recoded from the categorical responses ("A great deal", "a fair amount", "not very much", and "not at all") to numeric scores (4 to 1).

Finally, we measure perceived media slant using the item in Wave 4, "In presenting the news dealing with political and social issues, do you think that news organizations deal fairly with all sides, or do they tend to favor one side?" We subtract 3 from the numerical responses (which range from 1, "Tend to favor the liberal side," to 5, "Tend to favor the conservative side") so that perceptions of liberal slant are negative and perceptions of conservative slant are positive.

Political knowledge

We use two items in the post-treatment condition (Wave 4) to measure factual knowledge on (a) the share of people living in the U.S. who were born in a foreign country and (b) the current unemployment rate. To avoid learning effects, these questions were not asked in the pre-treatment period.

Event knowledge is measured through two different sets of survey items during pre- and post-treatment. We used eight items in the pre-treatment period [W2] and six items in the post-treatment period [W4] to measure knowledge about recent political events. The outcome variable will be calculated by total number of correct answers divided by total number of questions asked. Prior to using these items, we will investigate item-specific response functions and employ Mokken scaling to identify a subset of event items that measures the same underlying concept of event knowledge.

3.0.1 Election prediction

We use three survey items that were asked in Wave 4 to measure respondents' electoral predictions: which party they predict will control the House of Representatives (Democratic Party or Republican Party), the predicted national two-party vote share that the Demo-

cratic Party will obtain, and the predicted winner in the district where the respondent lives (candidate from the Democratic Party, Republican Party or another candidate). For the first and third item, we will create two different binary variables with values 1 for one party and value 0 for the other party or another candidate.

We measure certainty with a question that was asked right after the predictions described above. Respondents were asked to report how certain they felt about their prediction on a 10-point scale. We hypothesized that certainty will increase whenever the individuals' party orientation overlaps with the ideological slant of the news outlet they were assigned to (Fox News being conservative; Huffington Post being liberal). We will measure respondents' party identification through the standard party ID response scale, and including leaners in the partisan group.

3.0.2 Trump's message reception

We will examine the degree to which respondents accept Trump's message by measuring knowledge and reaction to the mail-bombing attempts through a battery of three survey items, which focus on (a) whether the respondents consider the incident a false-flag operation, (b) whether they consider the mainstream media responsible for the attack, or (c) whether they consider Trump to be responsible for fueling animosity. The response scale had 5 items, from 1 ("strongly disagree") to 5 ("strongly agree"). We will estimate treatment effects on each of these three items separately.

4 Questionnaire

In this section, we provide the core questions that were part of different waves of our survey. These include measures of media use, sociodemographics, and pre-post treatment measures of outcomes of interest.

Wave 1-2 were conducted before this pre-analysis plan was written. We will not obtain or analyze data for Wave 3 (experiment) or Waves 4+ (outcomes) until this document is posted. Below, questions labeled W1-W3 are pre-treatment and W4 and beyond are post-treatment.

4.1 Pre-and post-treatment measures of political attitudes and behavior

POLITICAL INTEREST [W1]
How interested in politics are you?

1. Very interested

2. Interested

3. Moderately interested

4. Slightly interested

5. Not interested at all

CONGRESS CONTROL PREFERENCE [W1, W3, W4]
Which party would you prefer to control Congress after the midterm elections?

1. Democrats

2. Republicans

3. Divided between House and Senate

4. None of the above

PRESIDENTIAL APPROVAL [W1, W2, W3, W4]
Do you approve or disapprove of the way Donald Trump is handling his job as president?

1. Strongly approve

2. Somewhat approve

3. Neither approve nor disapprove

4. Somewhat disapprove

5. Strongly disapprove

PRESIDENT FEELING THERMOMETER, [W1, W2, W3, W4]

We'd like to get your feelings toward President Trump using something called the feeling thermometer. Ratings between 50 degrees and 100 degrees mean that you feel favorable and warm toward a person. Ratings between 0 degrees and 50 degrees mean that you don't feel favorable toward the person and that you don't care too much for that person. You would rate the person at the 50 degree mark if you don't feel particularly warm or cold toward the person.

1. 0

2. ...

3. 100

IMPEACHMENT [W1, W3, W4]

As you may know, the first step toward removing a president from office is impeachment. Do you believe Congress should or should not begin impeachment proceedings to remove President Trump from office?

1. Yes

2. No

3. Don't know / not sure

CONGRESS APPROVAL [W1]

Do you approve or disapprove of the way Congress is handling its job?

1. Strongly approve

2. Somewhat approve

3. Neither approve nor disapprove

4. Somewhat disapprove

5. Strongly disapprove

LIKELIHOOD TO VOTE IN MIDTERM [W1]

Many people cast votes on Election Day. Others do not make it to the polls or do not take part in the election for other reasons. On a scale from 1 to 10, how likely is it that you will vote in the midterm elections on November 6, 2018?

1. (1) Very unlikely

2. ...

3. (10) Very likely

TURNOUT INTENTION MIDTERM [W3, W4]
Do you plan to vote in the 2018 midterm elections in November?

1. Yes

2. No

3. Not sure

4. Im not registered to vote

5. I already voted (for example, by mailing a ballot)

MOST IMPORTANT PROBLEM, OPEN [W1]
In your opinion, what is the most important political issue the United States is facing? Please mention only one issue. [Open text box]

SECOND MOST IMPORTANT PROBLEM, OPEN [W1]
And in your opinion, what is the second most important political issue the United States is facing? Please mention only one issue. [Open text box]

MOST IMPORTANT PROBLEM, CLOSED [W2, W3, W4]
There are many issues that concern people. How about you? Which of the following issues and problems do you consider to be particularly important in the United States? (check all that apply)

1. economy/unemployment

2. relationship with North Korea

3. relationship with Western countries (e.g., Canada, France, Germany)

4. international trade imbalances

5. immigration

6. terrorism

7. inequality

8. racism

9. morality and values

10. health care

11. crime

12. Islam

13. fake news

14. political polarization

15. Donald Trump and his administration

16. gun control

17. womens rights

18. identity politics

19. alt-right movement

20. Black Lives Matter movement

21. free speech

22. none of the above

FOREIGN ISSUES [DEPENDING ON ITEM]

Here you can find several statements with which some people agree while others do not. How about you? Please state your view on these issues.

(A) Going to war is unfortunate but sometimes the only solution to international problems. [W1, W2]

(B) The best way to ensure world peace is through American military strength. [W1]

(C) The United States needs to cooperate more with the United Nations. [W1]

(D) It is essential for the United States to work with other nations to solve problems such as overpopulation, hunger, and pollution. [W1]

(E) The U.S. should mind its own business internationally and let other countries get along the best they can on their own. [W1]

(F) We should not think so much in international terms but concentrate more on our own national problems. [W1, W2, W4]

(G) Free trade agreements like the North American Free Trade Agreement (NAFTA) have helped the U.S. economy. [W1, W2, W3, W4]

(H) The United States government should try to encourage international trade with other countries. [W2, W3, W4]

(I) Islam encourages violence more than other faiths. [W1, W2, W4]

(J) The United States will need to use military force to resolve the situation with North Korea. [W3, W4]

1. Strongly disagree

2. Somewhat disagree

3. Neither/nor

4. Somewhat agree

5. Strongly agree

6. Don't know

DOMESTIC ISSUES [DEPENDING ON ITEM]

Here you can find several statements with which some people agree while others do not. How about you? Please state your view on these issues.

(A) Gun control laws in the United States should be stricter. [W1, W2, W3, W4]

(B) A zero-tolerance policy for sexual harassment is essential to bringing about change in our society. [W1, W2, W3, W4]

(C) The use of marijuana should be made legal. [W1]

(D) Global warming will pose a serious threat to me or my way of life in my lifetime. [W1, W2, W4]

(E) Black Lives Matter (BLM) is playing a positive role in bringing attention to the issue of police misconduct. [W1]

(F) President Trump should have the ability to use his constitutional pardon power to pardon himself. [W2, W3, W4]

(G) Government regulation of business is necessary to protect the public interest. [W2, W4]

(H) Poor people today have it easy because they can get government benefits without doing anything in return. [W2, W4]

(I) Business corporations make too much profit. [W2, W4]

1. Strongly disagree

2. Somewhat disagree

3. Neither/nor

4. Somewhat agree

5. Strongly agree

6. Don't know

POLICY TRADE-OFFS [DEPENDING ON ITEM]

Here you can find different arguments people make on current issues. Which side do you agree with more? Please locate your position on these issues. [Slider 1-11]

(A) The FBI should thoroughly investigate potential collusion between Russia and the Trump campaign – The FBI's investigation only harms the U.S. [W1, W2, W4]

(B) DREAMers, or people who were children when they came to the U.S. with their parents as undocumented immigrants, should be allowed to stay and earn a path to citizenship – DREAMers should be forced to leave the country and apply for citizenship like everyone else [W1, W2, W4]

(C) Search and social media platforms should be regulated to ensure that they serve the public interest – Regulation of technology firms threatens free speech online [W1]

(D) The United States will be able to resolve the situation with North Korea diplomatically The United States will need to use military force to resolve the situation with North Korea [W1, W2, W4]

(E) The United States should allow travelers in a Central American migrant caravan to enter and seek refugee status – The United States should turn away migrants in the caravan and actively deter them from seeking entry [W4]

(F) The federal government should forbid insurance companies from charging higher rates to those with preexisting conditions – Insurance companies should be allowed to take preexisting conditions into account when determining coverage [W4]

COUNTRY FEELING THERMOMETERS [DEPENDING ON ITEM]

Please rate your feelings towards the following countries, with 100 meaning a very warm, favorable feeling, 0 meaning a very cold, unfavorable feeling, and 50 meaning not particularly warm or cold.

(A) China [W1, W2, W4]

(B) Russia [W1, W2, W4]

(C) Mexico [W1, W2, W4]

(D) Iran [W1, W2, W4]

(E) Canada [W1, W2, W4]

(F) North Korea [W2, W4]

(G) Saudi Arabia [W4]

1. 0

2. ...

3. 100

VISUAL KNOWLEDGE [W1]

To which party does each of the following politicians belong? If you are not sure, please guess.

(A) Democrat

(B) Republican

1. Paul Ryan

2. Oprah Winfrey

3. Nancy Pelosi

4. Mike Pence

5. Elizabeth Warren

6. Chuck Schumer

KNOWLEDGE ABOUT RECENT EVENTS [DEPENDING ON ITEM]

Below are some events that may or may not have taken place in the past few weeks. Please select the events that you believe have indeed happened.

1. Donald Trump and Kim Jong Un met in Singapore [TRUE] [W2]

2. The U.S. government decided to permanently drop out of the G7 meetings [FALSE] [W2]

3. Thousands of immigrant families were separated at the border with Mexico after a change in border control policies [TRUE] [W2]

4. Kim Kardashian met with President Trump in the Oval Office [TRUE] [W2]

5. The economy grew at a 0.5% rate in the third quarter of 2018 [FALSE] [W2]

6. Justice Ruth Bader Ginsburg announced she was stepping down from the Supreme Court [FALSE] [W2]

7. The trial against former Trump campaign chairman Paul Manafort began [TRUE] [W2]

8. The Spanish national soccer team won the World Cup [FALSE] [W2]

9. A caravan of Central American migrants crossed into Mexico with the eventual goal of reaching the United States. [TRUE] [W4]

10. A Russian national was charged with attempting to interfere in the 2018 U.S. midterm elections. [TRUE] [W4]

11. Former Microsoft chairman Bill Gates died of cancer. [FALSE] [W4]

12. Macys declared bankruptcy. [FALSE] [W4]

13. Donald Trump paid a million dollars to Elizabeth Warren after she proved her Native American ancestry with a DNA test. [FALSE] [W4]

14. Kanye West met in the Oval Office with President Donald Trump. [TRUE] [W4]

FACTUAL KNOWLEDGE IMMIGRANTS [W4]

Out of every 100 people living in our country, how many do you think were born outside the United States? [Slider 0-100]

FACTUAL KNOWLEDGE UNEMPLOYMENT [W4]

What is the current unemployment rate in the U.S., as reported by the Bureau of Labor Statistics? [Slider 0-100]

FACTUAL KNOWLEDGE AFRICAN-AMERICANS IN PRISON [W4]

What proportion of the U.S. adult population currently in prison do you think are African-American? [Slider 0-100]

FACTUAL KNOWLEDGE MASS SHOOTERS [W4]

What percentage of mass shooters do you think are nonwhite? [Slider 0-100]

TRUMP MESSAGE RECEPTION [W4]

Recently, prominent Democrats and critics of President Trump, including Barack Obama, Hillary Clinton, George Soros, and Robert De Niro, were the apparent targets of a mail-bombing spree. Below are several explanations for the mail bombs with which some people agree while others do not. How about you? Please select the responses that come closest to your views.

(A) Liberals or Democrats sent the packages as a "false flag" operation intended to paint conservatives as violent extremists before the Nov. 6 midterm elections.

(B) The mainstream media's unfair coverage, hostility, and negative attacks were responsible for the attempted bombings.

(C) President Trump was responsible for fueling animosity among members of the public.

1. Strongly disagree

2. Somewhat disagree

3. Neither agree nor disagree

4. Somewhat agree

5. Strongly agree

AFFECTIVE POLARIZATION DEMOCRATS FEELING THERMOMETER [W2, W4]

We would like to get your feelings toward Democrats using something we call the feeling thermometer. Ratings between 50 degrees and 100 degrees mean that you feel favorable and warm toward the group. Ratings between 0 degrees and 50 degrees mean that you don't feel favorable toward the group and that you don't care too much for that group. You would rate the group at the 50 degree mark if you don't feel particularly warm or cold toward the group.

1. 0

2. ...

3. 100

AFFECTIVE POLARIZATION REPUBLICANS FEELING THERMOMETER [W2, W4]

We now would like to get your feelings toward Republicans using the same feeling thermometer.

1. 0

2. ...

3. 100

AFFECTIVE POLARIZATION TRUMP SUPPORTERS FEELING THERMOME-TER [W2]

We now would like to get your feelings toward Trump supporters using the same feeling thermome-ter.

1. 0

2. ...

3. 100

AFFECTIVE POLARIZATION SOCIAL DISTANCE, DEMOCRATS [W2, W4]

Suppose a son or daughter of yours was getting married. How would you feel if he or she married a supporter of the Democratic Party? Would you be pleased, would you be displeased, or would it make no difference?

1. Generally happy (1)

2. ...

3. It wouldn't matter at all (4)

4. ...

5. Generally unhappy (7)

AFFECTIVE POLARIZATION SOCIAL DISTANCE, REPUBLICANS [W2, W4]

Suppose a son or daughter of yours was getting married. How would you feel if he or she married a supporter of the Republican Party? Would you be pleased, would you be displeased, or would it make no difference?

1. Generally happy (1)

2. ...

3. It wouldn't matter at all (4)

4. ...

5. Generally unhappy (7)

AFFECTIVE POLARIZATION SOCIAL DISTANCE, TRUMP SUPPORTERS [W2, W4]

Suppose a son or daughter of yours was getting married. How would you feel if he or she married a Trump supporter? Would you be pleased, would you be displeased, or would it make no difference?

1. Generally happy (1)

2. ...

3. It wouldn't matter at all (4)

4. ...

5. Generally unhappy (7)

PERCEIVED POLARIZATION [W4] How much do you agree or disagree with the following statements?

(A) Democrats and Republicans hate each other.

(B) The difference between Democrats and Republicans are too great to be reconciled.

(C) Polarization in America is greater than ever before.

1. Strongly disagree

2. Somewhat disagree

3. Neither/nor

4. Somewhat agree

5. Strongly agree

6. Don't know

RACIAL RESENTMENT [W4]

Here you can find several statements with which some people agree while others do not. How about you? Please state your view on these issues.

(A) Irish, Italians, Jewish and many other minorities overcame prejudice and worked their way up. Blacks should do the same without any special favors.

(B) Generations of slavery and discrimination have created conditions that make it difficult for blacks to work their way out of the lower class

(C) Over the past few years, blacks have gotten less than they deserve.

(D) It's really a matter of some people not trying hard enough; if blacks would only try harder they could be just as well off as whites.

1. Strongly disagree

2. Somewhat disagree

3. Neither/nor

4. Somewhat agree

5. Strongly agree

6. Don't know

THREAT PERCEPTIONS [W4]

How concerned are you about the prospect of:

(A) A terrorist attack in the United States in the near future

(B) Russia interfering in the American midterm elections

(C) North Korea using a long-range nuclear missile to attack the United States

(D) Iran developing nuclear weapons

(E) Undocumented immigrants taking jobs away from American citizens

(F) The loss of American jobs to China

1. Extremely concerned

2. Very concerned

3. Somewhat concerned

4. Not at all concerned

4.2 Political forecasting

PREDICTED HOUSE WINNER [W2, W4]

Regardless of which party you support, and trying to be as objective as possible, who do you think will win control of the House of Representatives in November – the Democrats or the Republicans (who currently have the majority)?

1. The Democratic Party

2. The Republican Party

PREDICTED VOTE SHARE [W2, W4]

Regardless of which party you support, and trying to be as objective as possible, what do you think the national vote share of the Democratic Party will be in the midterm elections this November? *[Note we specified "two-party" vote share in W4.]*

1. 0

2. ...

3. 100

PREDICTED CONGRESSIONAL DISTRICT WINNER [W4]

Regardless of which party you support, and trying to be as objective as possible, who do you think will win the race for the House seat in your Congressional district?

1. The Democratic candidate

2. The Republican candidate

3. Another candidate

PREDICTION UNCERTAINTY [W4]

How certain are you of this outcome on a scale from 1 (extremely uncertain) to 10 (extremely certain)?

1. Extremely uncertain (1)

2. ...

3. Extremely certain (10)

4.3 Experiment factual questions

POST EXPERIMENT FOX [W4]

Last time, you may have been enlisted in research about a news website. Now we want to follow up and ask about your impressions of the coverage you saw. Please answer to the best of your ability, even if you dont recall having visited a given website.

Among the following options, which do you remember reading about the most on Fox News?

- Climate change

- Mollie Tibbetts

- Federal leak investigation

- Mitch McConnell

- President Trump's taxes

POST EXPERIMENT HUFFPOST [W4]

Among the following options, which do you remember reading about the most on HuffPost?

- Climate change

- Mollie Tibbetts

- Federal leak investigation

- Mitch McConnell

- President Trump's taxes

4.4 Media use and attitudes

MEDIA SOURCES, POLITICAL INFORMATION [W1]
How often do you get political information from the following sources:

(A) TV

(B) Newspapers or print magazines

(C) Radio

(D) Internet

(E) Personal discussions

1. Several times a day

2. About once a day

3. 3 to 6 days a week

4. 1 to 2 days a week

5. Every few weeks

6. Less often

7. Never

8. Don't know

TV NEWSCASTS USAGE [W1]
How many days of the week do you usually watch the following newscasts?

(A) ABC World News Tonight

(B) CBS Evening News

(C) NBC Nightly News

(D) PBS NewsHour

1. I usually don't watch any newscasts on TV

2. 0 days

3. 1 day

4. 2 days

5. 3 days

6. 4 days

7. 5 days

8. 6 days

9. 7 days

TV CABLE NEWS USAGE [W1]
How many days of the week do you usually watch the following cable news programs?

(A) Hannity

(B) Tucker Carlson Tonight

(C) The Rachel Maddow Show

(D) Special Report With Bret Baier

(E) The Five

(F) The Story With Martha MacCallum

(G) Fox News Tonight

(H) Last Word With Lawrence O'Donnell

(I) Anderson Cooper 360

(J) Lou Dobbs

1. I usually don't watch any newscasts on TV

2. 0 days

3. 1 day

4. 2 days

5. 3 days

6. 4 days

7. 5 days

8. 6 days

9. 7 days

PRINT MEDIA USAGE, POLITICAL INFORMATION [W1]
How many days of the week do you usually watch the following newscasts?

(A) The New York Times

(B) The Washington Post

(C) The Wall Street Journal

(D) USA Today

(E) The Los Angeles Times

1. I usually dont read any articles on politics in the newspapers

2. 0 days

3. 1 day

4. 2 days

5. 3 days

6. 4 days

7. 5 days

8. 6 days

9. 7 days

SOCIAL MEDIA USE [W1]
Do you have accounts on any of the following social media services? (check all that apply):

(A) Twitter

(B) Facebook

(C) Instagram

(D) LinkedIn

(E) Snapchat

(F) WhatsApp

(G) Reddit

POLITICAL INFORMATION EXPOSURE, TWITTER [W1]

How often do you see political information from the following sources on Twitter:

(A) Friends, relatives or acquaintances

(B) Other people you follow but you are not acquainted with

(C) News organizations and journalists

(D) Politicians or political campaigns

(E) Companies

 1. Frequently

 2. Sometimes

 3. Rarely

 4. Never

 5. Don't know

POLITICAL INFORMATION EXPOSURE, FACEBOOK [W1]

How often do you see political information from the following sources on Facebook:

(A) Friends, relatives or acquaintances

(B) Other people you are friends with on Facebook but you are not acquainted with

(C) News organizations and journalists

(D) Politicians or political campaigns

(E) Companies

 1. Frequently

 2. Sometimes

 3. Rarely

 4. Never

 5. Don't know

VARIETY OF POLITICAL VIEWS, TWITTER [W1]

Earlier you told us that you are on Twitter. What proportion of the accounts you follow hold political opinions similar to yours (e.g., if you lean left, how many lean left, too)? [Slider]

1. (1) All hold political views different from yours

2. ...

3. (5) All hold political views similar to yours

VARIETY OF POLITICAL VIEWS, FACEBOOK [W1]

Earlier you told us that you are on Facebook. What proportion of the accounts you follow hold political opinions similar to yours (e.g., if you lean left, how many lean left, too)? [Slider]

1. (1) All hold political views different from yours

2. ...

3. (5) All hold political views similar to yours

TWITTER USAGE FREQUENCY [W4]

In the last survey you told us that you have a Twitter account. Today we want to learn more about your Twitter use. How frequently do you:

(A) Check Twitter

(B) Post messages on Twitter

1. Almost constantly

2. Several times a day

3. About once a day

4. 3 to 6 days a week

5. 1 to 2 days a week

6. Every few weeks

7. Less often

8. Never

9. Don't know

FACEBOOK USAGE FREQUENCY [W4]

In the last survey you told us that you have a Facebook account. Today we want to learn more about your Facebook use. How frequently do you:

(A) Check Facebook

(B) Post messages on Facebook

1. Almost constantly

2. Several times a day

3. About once a day

4. 3 to 6 days a week

5. 1 to 2 days a week

6. Every few weeks

7. Less often

8. Never

9. Don't know

TWITTER POLITICAL USE [W4]

We want to understand how exactly you use Twitter. On Twitter, how frequently do you:

(A) Tweet your views on current issues?

(B) Share news stories with your contacts?

(C) Read news articles posted by your contacts?

(D) Read messages or information from a politician or political party?

(E) Read the opinions of your contacts about political issues.

(F) Click Like on political information or opinion?

(G) Engage in political conversation with other people on Twitter?

1. Never

2. Rarely

3. Sometimes

4. Frequently

5. Don't know

FACEBOOK POLITICAL USE [W4]

We want to understand how exactly you use Facebook. On Facebook, how frequently do you:

(A) Post your views on current issues on your timeline?

(B) Share news stories with your contacts?

(C) Read news articles posted by your contacts?

(D) Read messages or information from a politician or political party?

(E) Read the opinions of your contacts about political issues?

(F) Click Like on political information or opinion?

(G) Talk about politics with other people by commenting or responding?

1. Never

2. Rarely

3. Sometimes

4. Frequently

5. Don't know

ONLINE MEDIA SOURCES, AWARENESS [W1, W4]

Please click on all of the sources that you have heard of, regardless of whether you use them or not. If you are unsure, please DO NOT click it. You can click anywhere in each of the boxes.

1. The New York Times

2. The Washington Post

3. USA Today

4. CNN

5. MSNBC

6. Fox News

7. Breitbart

8. BuzzFeed

9. HuffPost

10. InfoWars

ONLINE MEDIA SOURCES, TRUST [W1, W4]

Of the sources you have heard of, click on all that you generally TRUST for news about government and politics. [only those shown that were selected in question ONLINE MEDIA SOURCES, AWARENESS]

1. The New York Times

2. The Washington Post

3. USA Today

4. CNN

5. MSNBC

6. Fox News

7. Breitbart

8. BuzzFeed

9. HuffPost

10. InfoWars

ONLINE MEDIA SOURCES, DISTRUST [W1, W4]

Of the sources you have heard of, click on all that you generally DISTRUST for news about government and politics. [only those shown that were selected in question ONLINE MEDIA SOURCES, AWARENESS and also not selected in previous question]

1. The New York Times

2. The Washington Post

3. USA Today

4. CNN

5. MSNBC

6. Fox News

7. Breitbart

8. BuzzFeed

9. HuffPost

10. InfoWars

TRUST IN MEDIA [W4]
How much trust and confidence do you have in the press when it comes to reporting the news about government and politics fully, accurately, and fairly?

1. A great deal

2. A fair amount

3. Not very much

4. None at all

HUFFPOST TRUST [W4] How much do you trust The Huffington Post when it comes to reporting the news about government and politics fully, accurately, and fairly?

1. A great deal

2. A fair amount

3. Not very much

4. Not at all

FOX NEWS TRUST [W4] How much do you trust Fox News when it comes to reporting the news about government and politics fully, accurately, and fairly?

1. A great deal

2. A fair amount

3. Not very much

4. Not at all

NEWS ACCOUNTABILITY [W1, W4]
Some people think that by criticizing leaders, news organizations keep political leaders from doing their job. Others think that such criticism is worth it because it keeps political leaders from doing things that should not be done. Which position is closer to your opinion?

1. (1) Keep political leaders from doing their job

2. ...

3. (5) Keep political leaders from doing things that shouldn't be done

MEDIA BIAS [W1]

In presenting the news dealing with political and social issues, do you think that news organizations deal fairly with all sides, or do they tend to favor one side?

1. (1) Deal fairly with all sides

2. ...

3. (5) Tend to favor one side

MEDIA SLANT [W4]

In presenting the news dealing with political and social issues, do you think that news organizations deal fairly with all sides, or do they tend to favor one side?

1. Tend to favor the liberal side (1)

2. ...

3. Tend to favor neither side (3)

4. ...

5. Tend to favor the conservative side (5)

4.5 Socio-demographic measures

PERSON CHARACTERISTICS [W1]

Please check all items that apply to you

1. Have a gun in your home?

2. Speak a second language?

3. Have ever travelled outside the U.S.?

4. Have someone in your immediate family (parents, partner, children) who has served in the military?

5. Attended a political rally in the last year?

References

Bail, Christopher A, Lisa Argyle, Taylor Brown, John Bumpus, Haohan Chen, MB Fallin Hunzaker, Jaemin Lee, Marcus Mann, Friedolin Merhout and Alexander Volfovsky. 2018. "Exposure to Opposing Views can Increase Political Polarization: Evidence from a Large-Scale Field Experiment on Social Media.".

Bakshy, Eytan, Solomon Messing and Lada A. Adamic. 2015. "Exposure to ideologically diverse news and opinion on Facebook." *Science* 348(6239):1130–1132.
URL: *http://science.sciencemag.org/content/348/6239/1130*

Barberá, Pablo. 2015. "Birds of the same feather tweet together: Bayesian ideal point estimation using Twitter data." *Political Analysis* 23(1):76–91.

Dimock, Michael, Carroll Doherty, Jocelyn Kiley and Russ Oates. 2014. "Political polarization in the American public: How increasing ideological uniformity and partisan antipathy affect politics, compromise and everyday life." *Pew Research Center* 12.

Guess, Andrew M. 2018. "(Almost) Everything in Moderation: New Evidence on Americans' Online Media Diets." Unpublished manuscript. Downloaded September 10, 2018 from `https://webspace.princeton.edu/users/aguess/Guess_OnlineMediaDiets.pdf`.

Iyengar, Shanto, Gaurav Sood and Yphtach Lelkes. 2012. "Affect, not ideology: A social identity perspective on polarization." *Public Opinion Quarterly* 76(3):405–431.

Lin, Winston. 2013. "Agnostic Notes on Regression Adjustments to Experimental Data: Reexamining Freedman's Critique." *Annals of Applied Statistics* 7(1):295–318.