

To cite this article:

Brest, A., & Cordonier, L. (2023). Does Exposure to Online News Media Depend on Individuals' Political Attitudes and Trust in These Media? A Comparison Between Declarative and Behavioral Data. *Mass Communication and Society*, Published online: 18 Apr 2023, <https://doi.org/10.1080/15205436.2023.2186246>

Does Exposure to Online News Media Depend on Individuals' Political Attitudes and Trust in These Media? A Comparison Between Declarative and Behavioral Data

Aurélien Brest^{1,2} & **Laurent Cordonier**^{1,3,4}

¹ Fondation Descartes, France

² Bordeaux University, LABSY (EA 4139), France

³ Paris-Diderot University, LIED (CNRS, UMR 8236), France

⁴ Lausanne University, THEMA, Switzerland

Aurélien Brest: <https://orcid.org/0000-0003-1060-2403>; brestaure@gmail.com

Laurent Cordonier: <https://orcid.org/0000-0003-4286-5152>; laurent.cordonier@gmail.com

Does Exposure to Online News Media Depend on Individuals' Political Attitudes and Trust in These Media? A Comparison Between Declarative and Behavioral Data

Abstract

This study analyzes “selective exposure” to online news media (*i.e.*, preferential exposure to congenial and trusted media) by comparing the behavioral and declarative data of 1,536 participants. We recorder their Internet activity over a one-month period and then asked them about their level of trust in several news media outlets, the frequency with which they had been exposed to them, and their political position and orientation along a progressive-conservative axis. Results show that 1) participants' trust in the different news media varies according to their political attitudes; 2) participants' probability of *declaring* exposure to a specific news media is impacted by their trust in this media, as well as by their political attitudes; 3) these effects are much weaker when considering participants' *effective* exposure to news media. Overall, these results indicate that selective exposure to online news media exists, but is exaggerated when studied only by means of declarative data.

Keywords: news media; trust; selective exposure; echo chamber; web tracking; partisanship

Introduction

The fragmentation of the news media landscape caused by the rapid evolution of the Internet has given birth to a large body of work investigating the effect of individuals' trust and political preferences on their selection of online news content. With the decline of trust in news media as an institution (Tsfati & Cappella, 2003; Strömbäck et al., 2020) and the polarization of the political environment in both Europe and the United States, a number of observers have

expressed concerns that citizens could be turning away from traditional media in favor of alternative media that may be less reliable (Karlsson et al., 2017; Steppat et al., 2021). The explanations for this hypothetical shift in media preferences can be structured around two distinct theories. (1) The rational theory hypothesis, described by Tsfaty and Cappella (2003), posits that individuals have an incentive to expose themselves to information sources they trust and believe to be accurate. This incentive is based on the benefit of being exposed to accurate information when optimizing choices in an uncertain environment. (2) The cultural cognition thesis (Kahan et al., 2011) assumes that individuals tend to process information in a biased manner that favors their opinions. As a result, they evaluate congenial media as more trustworthy and accurate than uncongenial media. The loss of trust in traditional media and the polarization of the political environment would consequently lead individuals to adopt a selective exposure to news media – i.e., they would expose themselves to congenial and trustworthy media and avoid uncongenial and untrustworthy media.

Despite the volume of work on this topic, few studies have directly challenged these assumptions concerning online news media (Strömbäck et al., 2020), and even less so by directly collecting web-tracking data. Given the lack of data on this contentious issue, this study aims to test whether trust and political attitudes influence media exposure. This was done by analyzing the effect of trust and political attitudes of a large sample of French participants (N = 1,536) on their declared and effective media exposure to 15 widely used online news media outlets. While the results of this study show a clear effect of trust and political attitudes on declared media exposure, the impact of these attitudes on effective exposure is rather small. As a whole, these results challenge the popular view of selective exposure online. We therefore recommend combining survey and digital trace data to identify factors of media consumption beyond selective exposure.

Evidence for a selective exposure effect

Empirically, several studies suggest that individuals tend to favor information that stems from sources they deem to be trustworthy (Fletcher & Park, 2017; Kioussis, 2001; Schranz et al., 2018; Tsfaty & Cappella, 2003; Williams, 2012). This relationship between trust and exposure to news sources can be understood within the framework of rational choice theory. A key assumption of this theory is that when faced with a diverse set of sources, individuals will seek the most accurate information in order to optimize their choices. Thus, media audiences will try to avoid inaccurate information and will instead selectively expose themselves to reliable news sources. In this context, trust reflects the supposed reliability of the content published by a given media outlet and is therefore crucial, in that it justifies the choice of consulting this media. If media audiences lose trust in traditional media sources, they will lose confidence in the news published by these media and will therefore seek better information to optimize their choices. The asymmetrical relationship between the public and the media makes trust even more essential. The public can rarely verify the accuracy of published information and can thus only accept or reject this information based on the perceived credibility of the source that published it. As such, although there is no academic consensus on what trust in the media actually reflects (Fisher, 2016), a media outlet's perceived ability to publish accurate information is often cited as an important component of that trust (Kohring & Matthes, 2008; Prochazka & Schweiger, 2019).

The process of attributing trust to a given media outlet is also influenced by partisan or ideological expectations, as shown by the many studies that have examined this issue. Indeed, past studies show that individuals tend to place more trust in media outlets that are ideologically close to them than in those they suspect of holding views opposed to their own – this is the case regardless of the objective reliability of the information published (e.g., Bullock et al., 2015; Ditto et al., 2019; Kelly, 2019). This positive predisposition towards media outlets aligned with

one's own views is also reflected in the fact of viewing them as more unbiased than others, which further decreases the trust placed in the latter (Arceneaux et al., 2012).

Aside from its effect on trust, partisan bias also has an impact on the perceived credibility of news. For example, Batailler et al. (2022) report in their study that participants were more likely to categorize news headlines as fake when they conveyed political views opposed to their own. Metzger et al. (2020) found that participants on average rate congenial news as 32% more credible than uncongenial news.

The cultural cognition thesis offers an explanation for this congenial bias. It posits that individuals are motivated to defend and promote their social and cultural worldview, as it is a fundamental part of their social identity (Kahan et al., 2007). Since news media are one of the most important sources for gathering information on social and cultural issues (Shaw & Martin, 1992), they can give rise to situations that may challenge or validate our sense of identity. Therefore, in the process of identity affirmation, media choice would be a fundamental marker of an individual's cultural identity.

It should be noted that this congenial bias does not contradict the rational choice hypothesis. If individuals prefer to seek reliable information from trustworthy media, but the attribution of their trust depends on the perceived ideological orientation of the outlet, it could follow that they will actually prioritize exposure to partisan information on biased outlets. This is an example of bounded rationality (Jones, 1999): individuals try to expose themselves to the most accurate news media possible, but their judgment tends to be biased towards media that confirm their pre-existing opinions and reinforce their cultural identity.

Thus, from the perspective of both the rational choice hypothesis and cultural cognition theory, partisan bias has an impact on selective exposure. In accordance with this prediction, Garrett (2009) has shown that when individuals can select the news information they want to

read, information perceived to support their views is more likely to be selected and is read for longer periods of time.

The limits of using declarative data to study selective exposure

A shortcoming of the literature on selective exposure is that it is mostly based on surveys and declarative data. However, the reliability of declarative data is questionable. With regards to Internet consumption, Scharkow (2016) reports that 42% of a representative panel of German Internet users overestimated the amount of time they spend online each week. The results of this study also show that the less time people spend online, the more they overreport their Internet use. Some individual characteristics of panel members were also linked to misreporting: overall, males and younger individuals overreported their Internet use. When comparing declarative and behavioral data on news exposure, respondents generally tend to significantly overestimate their effective media diet. Prior (2009) found that, overall, television news audiences overreported their consumption by a factor of 3, with the youngest individuals most likely to overreport. Guess (2015) used three different methods for calculating self-reported online news exposure and also found an overall tendency to overreport. His study shows that individuals who are more knowledgeable about politics tend to overreport, though contrary to Prior's study age did not affect this bias. Vraga and Tully (2020) investigated the predictors of misreporting by exposing participants to a news website for 4 minutes. They found that overreporting was correlated with exposure to political topics and political interest. Moreover, they also found a correlation with age, as younger participants were less accurate in their report. Interestingly, Vraga and Tully argue that relying on self-reported data could lead to overestimating the importance of selective exposure. Indeed, while participants with partisan preferences reported being exposed to more news than non-partisan participants, the opposite

pattern was found when looking at behavioral data: non-partisan participants in fact read more news than partisan participants during the experiment.

Contrasting evidence of selective exposure using Internet tracking data

The few studies based on behavioral data collected in ecological conditions on the Internet (browsing behavior, trace data) that analyze selective exposure to news information yield rather mixed results.

For instance, Nelson and Webster (2017) showed that in the United States, Democrats and Republicans predominantly consult political information on the same online media – a result that calls into question the importance of selective media exposure on the Internet. Their data also shows that the US audience's media diet is concentrated around a handful of popular media outlets. Furthermore, using both surveys and web-tracking data, Guess (2021) found that only a small group of active political partisans appeared to be biased in their media diet. Other participants in this study had a more balanced media diet but, more importantly, were overall rarely exposed to political news.

Interestingly, Peterson et al. (2021) used a similar method as Guess (2021) but obtained different results. Their study targeted the period of the 2016 U.S. presidential election in order to analyze the pervasiveness of selective online media exposure. They found that most of the *Fox News* and *Drudge Report* audience was Republican. In contrast, the *Huffington Post*, the *Washington Post*, and the *New York Times* were primarily consulted by Democrats. In comparison with data from 2009 and 2013, audiences in 2016 showed greater selective media exposure, reflecting the increased polarization of the political environment in the United States.

By examining different political indicators, Stier et al. (2020b) observed, in a study conducted in five European countries, that a high level of trust in “mainstream” media indeed

corresponds to greater online exposure to these media, whereas a pro-populist inclination is associated with a lower level of effective exposure to these media. However, the effects observed in this study remain moderate in magnitude.

Thus, while studies on selective online media exposure based on behavioral data in ecological conditions remain scarce, they are nevertheless of primary importance, as their results provide a more nuanced picture of the extent of selective online media exposure. It is therefore valuable to conduct further studies of this type, and to compare their results to those obtained from declarative data.

The main objective of this study is therefore to combine survey and digital trace data to determine whether trust and political attitudes do in fact affect online selective exposure, as is often claimed.

Research overview

As noted by Stier et al. (2020a), only a handful of studies combine both digital trace data and survey research in order to understand online behavior. Indeed, the acquisition of digital trace data is quite expensive and requires data processing that may be difficult for researchers to perform. However, despite these constraints, these hybrid approaches are valuable in that they allow for a direct comparison between participants' reported online information behavior and their actual behavior. In the present study, we assessed the role of political attitudes and trust in media sources on selective online media exposure in France.

We recorded for 30 consecutive days the Internet activity of a panel of individuals representative of the French population ($N = 2,372$). We then analyzed the exposure of participants to 15 of the most consulted online news sources in France (behavioral data). At the end of the 30-day period, we sent participants a questionnaire asking them about their level of

trust in each of the 15 news sources, about the frequency with which they believe they had been exposed to them during the study period (declarative data), and about their political preferences. Note that the French political environment has recently evolved from a system dominated by two central parties (the PS on the left and LR on the right) to a multi-party system. So as to account for this rapid evolution, we applied two measures of political attitude. First, we used a traditional left-right axis to measure political position (Vasilopoulos & Jost, 2020). Second, to measure political orientation, we used a measure proposed by Tiberj (2012) that accounts for cleavages on cultural issues (immigration, death penalty, homosexuality, and religion) that are not necessarily reflected by partisan affiliations, but nevertheless structure political attitudes in France (Stimson et al., 2012).

Due to budget constraints, and in order to compare self-reported and effective online media exposure, we decided to send out a unique survey after data collection. We address this point in more detail in the discussion.

Research questions

From the data collected, we sought to examine the following research questions:

RQ1: Does trust in the 15 news sources vary according to participants' (A) political position and (B) political orientation?

RQ2: Do participants declare consulting news sources they trust?

RQ3: Does declared exposure to the 15 news sources vary according to participants' (A) political position and (B) political orientation?

RQ4: Is *effective* exposure to the 15 news sources affected by participants' level of trust in these news sources?

RQ5: Does *effective* exposure to the 15 news sources vary according to participants' (A) political position and (B) political orientation?

RQ6: Is there a relationship between *declared* exposure and *effective* exposure to the 15 news sources?

Materials and Method

Participants and procedure

The entire Internet activity of a panel of 2,372 adults living in France was recorded for 30 consecutive days, from September 20 to October 19, 2020. This panel, representative of the French population, was assembled by the ISO-certified company Respondi (www.respondi.com). Respondi continuously records, with their consent, the online behavior of the panel members on their various personal connected devices (computers, cell phones, tablets). For this study, we analyze their exposure to 15 French news sources (see *Variables of interest* section below). For a general description of the online information behavior of the members of this panel during the study period, see Cordonier and Brest (2021).

At the end of the 30 days of the study, participants were sent a questionnaire asking them about their political attitudes and their level of trust in each of the 15 selected sources, as well as the frequency with which they believed they had been exposed to them during the study period. Of the 2,372 participants whose online behavior was recorded, 1,614 (68%) agreed to complete and return the questionnaire. 78 of these respondents indicated that they did not know how much trust they placed in each of the 15 news sources selected. They were therefore excluded from the analyses, which ultimately included 1,536 participants. Among these 1,536 participants, 762 are women (49.6%). The average age of these participants is 46.2 years ($SD =$

13.2) and 790 of them are in or have completed higher education (51.4%). Additional descriptive statistics for the panel are available in the Supplementary Material (Tables S1-4).

Variables of interest

Selected news sources

The following method was used to establish the list of online news sources for which the declarative and effective exposure of participants, as well as their level of trust, was measured. We started by selecting the 12 media outlets that the French population as a whole consult the most on the Internet, according to the results of the *Reuters Institute Digital News Report 2020* (Newman et al., 2020). We then used a database provided by Storyzy, a company specializing in web page classification, to extract a list of 5,715 news source domains in French. We cross-referenced this list with the online news sources most consulted by our study participants during the 30-day study period. Three of the news sources most consulted by participants were not included in the initial list of 12 online media. They were therefore added to the list.

The 15 online news sources ultimately selected are those of the following media outlets and news aggregators: *20 Minutes*, *BFMTV*, *BRUT*, *France Info*, the *Huffington Post*, *Le Figaro*, *Le Monde*, *le Parisien*, *M6*, *Mediapart*, *MSN Actu*, *Ouest France*, *TF1*, *Voici* and *Yahoo! News*. The exposure of the 1,536 participants to these 15 information sources, on which the following analyses are based, accounted for approximately 25% of the exposure time to all online media listed by Storyzy during the 30-day study.

Measure of effective exposure to the selected sources

To measure the effective exposure of each participant to these 15 online news sources, we used passive data measures provided by ResponDi. This data allows us to identify each URL accessed

by each participant as well as the exact date and duration of each visit. Data from the mobile applications of these news sources was also recorded and included in our analyses. It should be noted that for the exposure data of the online sources of *TF1*, *M6*, *MSN*, and *Yahoo!*, a filter was applied in order to retain only URLs related to news information, since the websites in question also provide other services, such as access to entertainment programs. Thus, for the websites of *TF1* and *M6*, only the URLs linked with the “*information*” and “*société*” sections were retained. For the websites of *MSN* and *Yahoo!*, only the URLs linked to the “*news*” section were retained.

The analysis of effective exposure to the 15 online news sources reveals that, on average, participants ($n = 1,536$) consulted less than 2 of them ($M = 1.8$, $SD = 2.1$) during the 30 days of the study and that 550 participants did not consult any of them during this period (see Table S7 of Supplementary Material for a breakdown of effective exposure per news source) – the French indeed inform themselves little on the Internet (Stier et al., 2020b; Cordonier & Brest, 2021).

The effective exposure data is thus highly right-skewed, which poses difficulties for statistical analysis. This can lead to a non-convergence of the mixed models used in this research (Allison, 2008; see *Statistical Analyses* section below). To avoid this problem, we coded the effective exposure of each participant to each of the 15 news sources in a binary way: 0 = *no exposure* to a given source during the 30 days of the study, 1 = *at least one exposure* to a given source during the 30 days of the study.

Measure of declared exposure to the selected sources

To measure their exposure to each of the 15 selected news sources, participants were asked to indicate the frequency with which they had been exposed to each source on the Internet “in the last 30 days” – which corresponds to the period during which their effective exposure to these

sources was recorded. The question that participants were asked emphasized that their responses should only include their exposure to these sources “on the Internet”. To further accentuate this point, this question was directly preceded by a similar question asking them about their exposure to the same sources “off the Internet” (the responses to this question are not analyzed in this study).

Participants gave their response for each news source on the following 4-point scale: (1) never; (2) at least once during the month; (3) at least once a week; (4) more or less every day. Of all the declarative exposure data collected in this way, 67% corresponds to the answer “never” and 7% to “more or less every day” (see Table S6 of Supplementary Material for a breakdown of declared exposure per news source). To account for this high concentration of responses and to avoid the non-convergence of the mixed models used to analyze them, we recoded the data in a binary way: 0 = *no exposure declared* (corresponds to response (1)), 1 = *at least one exposure declared* (aggregation of responses (2), (3) and (4)).

Trust in the selected sources

Participants’ trust in each of the 15 selected news sources was assessed using the following 4-point scale: (1) completely untrustworthy, (2) somewhat untrustworthy, (3) somewhat trustworthy, (4) completely trustworthy. For each of the 15 news sources, participants were also given the option to indicate that they had no opinion on their level of trust in that source. This option was given to participants so as not to force responses on sources they may not know about, which would have introduced noise into the data (see Supplementary Material Table 5 for descriptive statistics).

The “no opinion” responses (26% of all participant responses) were excluded from the analysis, as were participants ($n = 78$ out of 1,614) who responded “no opinion” about their trust in all 15 selected news sources. To facilitate the convergence of the mixed models used in

the analyses, we followed Allison's (2008) recommendations by recoding participants' declared trust in each of the 15 news sources in a binary way. When trust is treated as the dependent variable, we recoded it as follows: 0 = *no trust* (aggregation of responses (1) and (2)); 1 = *trust* (aggregation of responses (3) and (4)). When it is treated as the independent variable, we centered it using an effect coding: -0.5 = *no trust* (aggregation of responses (1) and (2)); 0.5 = *trust* (aggregation of responses (3) and (4)).

Political position and political orientation of participants

To evaluate the political attitudes of participants, we adopted the following two measurements.

Political position on the left-right axis. The political self-positioning of participants on the left-right axis was recorded using the following 5-point scale: (1) far left, (2) left, (3) center, (4) right, (5) far right (see Supplementary Material Table 4 for descriptive statistics). Since individuals do not always agree on the meaning of the political concepts of "left" and "right" (Bauer et al., 2017) and that there sometimes exists a disconnect among the French population between political self-positioning on this axis and political affiliation (Tiberj, 2012), we indicated as follows an example of a corresponding political party for each proposed position: "*To help you orient yourself, it is generally considered that the party "La France Insoumise" is at far left, that the "Parti Socialiste" is at left [etc. for the other positions].*"

Political orientation on the progressive-conservative cultural axis. We also sought to estimate participants' orientation on a "cultural" axis and an economic axis, following an approach proposed for France by Tiberj (2012). The cultural axis measures the political orientation of individuals on "post-materialist" issues: immigration, multiculturalism, authority. This axis is interpreted as reflecting the orientation of individuals on a progressive-conservative continuum. The economic axis determines the position of participants on an interventionist-liberal continuum. This measure was excluded from the present study because it does not have

sufficient internal consistency: Cronbach $\alpha = 0.31$, 4 items, $n = 1,536$ participants (See Supplementary Material section A).

Statistical analyses

Analyses of all data collected for this study were performed using generalized linear mixed effect models (BLMM, Bolker et al., 2009). This type of model was used to account for the non-independence of the data – trust in news sources, declared exposure, and effective exposure to these sources being grouped by participant. Each model therefore incorporates the participants ($n = 1,536$) as a random intercept. The *lme4* (Bates et al., 2007) and *glmmTMB* (Magnusson et al., 2020) R packages were used to conduct the analyses. All models built in this study, as presented in the Results section of this article, converged. The *emmeans* and *ggeffects* packages (Lüdtke, 2018) were used to interpret the marginal effects. The results are presented as Odd Ratios (OR). The analysis plan that we used is as follows:

Trust

To measure the relationship between participants' trust in the selected news sources and their political position on the left-right axis, we defined trust as a dependent variable (0 = no trust, 1 = trust). The independent variables used are: 1) participants' position on the left-right axis (data centered on the mean of means using a simple contrast), 2) the list of 15 news sources (data centered on the mean of means using a simple contrast), 3) the interaction between these two variables.

The same procedure was applied to measure the relationship between participants' trust in the selected news sources and their orientation on the progressive-conservative axis (mean-centered data).

Declared exposure

To measure the relationship between participants' declared exposure to the 15 selected news sources, their trust in these sources, and their political position on the left-right axis, we defined declared exposure as a dependent variable (0 = no exposure declared, 1 = at least one exposure declared). The independent variables used are: 1) trust in each source (-0.5: no trust, 0.5: trust), 2) participants' position on the left-right axis (data centered on the mean of means using a simple contrast), 3) the list of 15 news sources (data centered on the mean of means using a simple contrast). The interaction between trust and political position was not significant and was therefore not included in the analysis. All other interactions were included.

The same procedure was applied to measure the relationship between declared exposure, trust, and orientation on the progressive-conservative axis (mean-centered data).

Note that these two models yield very similar results with respect to the relationship between trust and declared exposure. Therefore, we will only present in this article the results from the second model to describe this relationship.

Effective exposure

The same procedure as described above (*Declared exposure* section) was used to measure the relationship between participants' effective exposure to the 15 selected news sources, their trust in these sources, and their political position on the left-right axis.

We proceeded in the same way to measure the relationship between effective exposure, trust, and orientation on the progressive-conservative axis.

Here again, these two models yield very similar results with respect to the relationship between trust and effective exposure. Therefore, we will only present in this article the results from the second model to describe this relationship. The interaction between trust and political

position and between trust and orientation on the progressive-conservative axis were not significant and were therefore not included in the analysis. All other interactions were included.

Declared vs. effective exposure

To measure the relationship between participants' declared exposure and effective exposure to the 15 news sources, we conducted two analyses. In both cases, effective exposure to each of the 15 news sources was defined as the dependent variable (0 = no exposure measured, 1 = at least one exposure measured). The independent variable used is declared exposure, recoded differently depending on the analysis. In the first analysis, declared exposure was recoded in a binary manner (0 = no exposure declared, 1 = at least one exposure declared). In the second analysis, the 4-point scale of declared exposure was used (simple contrast with "no exposure declared" as the reference level).

Analyses with covariates

We replicated all analyses by including education level, age, and gender as covariates. Overall, these additional analyses did not change the main results presented below. The analyses are available in Supplementary Material (Figures S1-4, Tables S25-32).

Results

RQ1 - Relationship between trust in the news sources and political position and political orientation

Political position on the left-right axis

Our analyses show that the position of participants on the left-right political axis is related to their level of trust in the 15 selected news sources: $\chi^2(56, N = 1536) = 299.87, p < .001$ (Figure 1, see Supplementary Material Table 12 for further details).

Unsurprisingly, this effect of political position is not linear: participants located to the right of this axis declare placing more trust in certain news sources than participants located more to the left, and vice versa.

For example, participants who identify themselves as right-wing are more likely than participants who identify themselves as far left to declare trusting the online source of *Le Figaro*, a newspaper generally perceived as having a right-wing conservative editorial line. We observe the symmetrically opposite situation with respect to the online source of *Le Monde*, a newspaper generally perceived as having a center-left editorial line.

[FIGURE 1 ABOUT HERE]

Political orientation on the progressive-conservative cultural axis

The orientation of participants on the progressive-conservative cultural axis has no overall effect on their trust in the 15 online news sources selected: $OR = 1.04, p = .69$ (Figure 2, see Supplementary Material Table 13 for further details). This lack of overall effect can be explained by the fact that out of the 15 sources, 5 are considered to be more trustworthy by participants oriented on the “progressive” side of the cultural axis (namely, the online sources of *Médiapart*, *Le Monde*, *Huffington Post*, *France Info*, *Brut*) and 5 are considered to be more trustworthy by participants oriented on the “conservative” side of the cultural axis (namely, the online sources of *M6*, *TF1*, *MSN actu*, *Le Figaro*, *BFMTV*). There is no significant effect of

political orientation on the level of trust in the remaining 5 news sources (namely, the online sources of *20 Minutes*, *Le Parisien*, *Ouest France*, *Voici*, *Yahoo! News*).

[FIGURE 2 ABOUT HERE]

Declared exposure

RQ2 - Relationship between declared exposure and trust in the sources

Our analyses show that participants' declared exposure ($n = 1,536$) to the 15 online news sources selected is influenced by their declared level of trust in these sources: $OR = 6.94$, $SE = 0.48$, $p < .001$ (Figure 3, see Supplementary Material Table 14 for further details). For each source, we observe that the probability of declaring exposure to it at least once over the 30 days of the study is higher among participants who declare trusting it.

[FIGURE 3 ABOUT HERE]

RQ3 - Relationship between declared exposure and political position and political orientation

Political position on the left-right axis. Our analyses show that participants' declared exposure to the 15 online news sources selected is related to their position on the political left-right axis: $\chi^2(56, N = 1536) = 96.55$, $p < .001$ (Figure 4; see Supplementary Material Table 15 for further details). Unsurprisingly, this effect of political position is not linear: participants located to the right of this axis declare more exposure to certain online news sources than participants located more to the left, and vice versa. For example, participants who identify themselves as right-wing are more likely than participants who identify themselves as far left to declare exposure

to the online source of the newspaper *Le Figaro*. We observe the symmetrically opposite situation with respect to the online source of the newspaper *Le Monde* (Figure 4 and Supplementary Material Table S8).

[FIGURE 4 ABOUT HERE]

Political orientation on the progressive-conservative cultural axis. Our analyses show that participants' orientation on the cultural axis has an overall effect on their declared exposure to the selected news sources: $OR = 0.71$, $SE = 0.08$, $p < .001$ (Figure 5; see Supplementary Material Table S16 for further details). Thus, we observe that participants on the "progressive" side of the cultural axis have a significantly higher probability than others of declaring exposure to the following 7 online news sources: *Brut*, *France Info*, *Huffington Post*, *Le Monde*, *Le Parisien*, *Mediapart*, and *Ouest France*. The opposite is true for none of the 15 online news sources selected.

[FIGURE 5 ABOUT HERE]

Effective exposure

RQ4 - Relationship between effective exposure and trust in the sources

Our analyses show that, overall, participants' effective consultation of the selected news sources is influenced by their declared level of trust in these sources: $OR = 1.55$, $p < .001$. However, this is an overall effect, which is only found for 6 sources taken individually (*Huffington Post*, *le Parisien*, *MSN Actu*, *Ouest France*, *Voici*, *Yahoo! News*; see Figure 6 and Supplementary

Material Table S17). We estimated the Average Marginal Effect (*AME*) of trust on declared and effective exposures with the *Margins* package (Leeper, 2018) to allow a more direct comparison of these effects (Norton & Dowd, 2018). The effect of trust on declared exposure (*AME* = 0.24) is larger than for effective exposure (*AME* = 0.03) (see, for comparison, Figure 3).

[FIGURE 6 ABOUT HERE]

RQ5 - Relationship between effective exposure, political position, and political orientation

Political position on the left-right axis. Our analyses of participants' effective exposure to the 15 news sources according to their political position on the left-right axis are made difficult by a data separation problem affecting 4 sources (*Brut*, *Mediapart*, *TF1*, and *M6*). Despite this, the predictive model converges satisfactorily (diagnostic of the model residuals conducted using the DHARMA package, Hartig, 2021). We therefore present the results of the model that includes all 15 news sources (Allison, 2008). Note that we tested this model by excluding the 4 sources with complete or near-complete data separation. This alternative model yields similar results to those obtained with the model that includes all 15 sources (see Supplementary Material, Tables S19-24).

The results of the predictive model showed an overall effect of participants' political position on their effective exposure to the selected online news sources: $\chi^2(4, N = 1536) = 17.69, p = .001$. This effect of political position is not linear and is significant for only three news sources (see Figure 7 and Supplementary Material Table S23).

[FIGURE 7 ABOUT HERE]

Political orientation on the progressive-conservative cultural axis. Our analyses did not reveal an overall effect of participants' political orientation on the cultural axis on their effective exposure to the selected news sources: $OR = -0.05, p = .46$. However, we observed a significant interaction effect between participants' orientation on the cultural axis and the news sources taken individually: $\chi^2(14, N = 1536) = 34.29, p = .002$. This effect concerns the *Huffington Post* ($OR = -0.46, SE = 0.17, p = .005$), *Mediapart* ($OR = -0.60, SE = 0.24, p = .01$) and *Le Monde* ($OR = -0.34, SE = 0.12, p = .006$), which are more likely to have been consulted by more "progressive" participants (Figure 8).

[FIGURE 8 ABOUT HERE]

RQ6 - Relationship between declared exposure and effective exposure

Overall, the fact of declaring exposure to an online news source during the 30 days of the study is generally associated with a higher probability of having effectively been exposed to it during this period: $OR = 3.15, p < .001$. However, it should be noted that, in their declarations, participants tended to significantly overestimate their effective exposure to the selected news sources. Thus, for each of these 15 sources, there is less than a 50% chance that participants who declared exposure to a given source had effectively been exposed to it during this period (see Figure 9).

[FIGURE 9 ABOUT HERE]

To further describe the relationship between declared exposure and effective exposure to the 15 news sources selected, we conducted a similar analysis, this time using the four responses provided to participants to estimate their exposure to each source during the 30 days of the study – i.e., (1) never, (2) at least once during the month, (3) at least once a week, (4) more or less every day. The results show that, overall, the fact of declaring exposure to a news source “more or less every day” rather than “never” is associated with a significant increase in the probability of having effectively been exposed to it during the 30 days of the study: $OR = 6.64$, $SE = 0.717$, $p < .001$ (Figure 10).

Here again, however, we observe that participants generally tended to overestimate their effective exposure to the selected news sources. Overall, only 36% of participants who declared being exposed “more or less every day” to these news sources were effectively exposed to them at least once a day over the 30 days of the study. Conversely, in 85% of the cases where participants said that they were never exposed to the selected sources, they effectively were not exposed to them during the 30 days of the study. Underestimating one’s media diet on the Internet therefore seems much rarer than overestimating it.

[FIGURE 10 ABOUT HERE]

Discussion

To what extent do trust and political attitudes influence exposure to online news media? Had we relied solely on declarative data, we would have concluded that trust and political attitudes are important factors in shaping selective exposure. Indeed, participants who declare trusting a

news media are, on average, seven times more likely to report having consulted it during the study period than those who declare not trusting it. The effect of political attitudes is weaker, particularly because it varies depending on the news media in question. But despite these variations, on average, participants with a conservative worldview reported being exposed to fewer news sources than progressive participants. And, while the effect of political positioning on declared exposure is small, it is consistent with what one would expect from these media's audiences based on public notoriety.

In comparison, it appears that trust, and even more so political attitudes, have very little effect on participants' *effective* exposure to news media (note however that we did not statistically compare the effects between declared and effective exposure; Gelman & Stern, 2006). Trust only predicts effective exposure to 6 news sources, and the overall effects of political orientation observed in the declarative data are not replicated in the behavioral data. Regarding political position, the large disparities found in declared exposure to online news media are not observed in effective exposure. This may be due in part to the low average media exposure recorded in this study. For example, far-left partisanship is not strongly associated with preferential effective exposure to *Mediapart* and *France Info* because very few far-left participants did actually consult these news sources during the study period. Overall, the role of trust and political attitudes on media selection expected by the rational choice and cultural cognition hypotheses appears to be overstated when examining the actual behavior of individuals in the online media environment.

Why, regarding online media, is declared selective exposure much more pronounced than effective selective exposure? One possible explanation is that individuals have a biased representation of their online media exposure. Indeed, our analyses show that, on average, participants tend to greatly overestimate their effective exposure to the online news sources selected. For each of the 15 sources, there is less than a 50% chance that participants who

declared being exposed to them online during the 30 days of the study were effectively exposed to them at least once during this period.

This biased representation of online media exposure could be a consequence of the browsing behavior adopted by Internet users. Unlike reading a newspaper or watching news on TV, which is often part of a daily routine, exposure to news online could be more incidental (Möller et al., 2020). When exposed online to a news article without having actively searched for it, Internet users may not always pay attention to the name of the source and memorize it, as this would require a significant effort without any real interest. This could help to explain why Internet users have a rather blurry representation of their online media diet, and why their effective media exposure does not reflect their own political or ideological position. When we subsequently ask online users to describe their media diet, it is possible that they reconstruct it by emphasizing the news media that they feel closest to and that they trust the most, rather than by trying to recall with precision those that they have effectively been exposed to. Interestingly, Kalogeropoulos and Newman (2017) found that individuals were better able to remember a news media outlet encountered on social media when the outlet in question was their main source of news. In this context, partisanship and trust may function more as an heuristic for recall memory than for selective exposure to online media.

It is also possible that individuals use news media preferences as a marker of political identity, and therefore tend to under or overestimate their exposure to certain media outlets in order to assert their political orientation. This could explain, for instance, why far-left participants overestimate their exposure to *Mediapart*, a media outlet that they trust and which is commonly associated with this political affiliation, and why they underestimate their exposure to *le Figaro*, a more right-wing newspaper that they tend to distrust. The effect of political identity on the misreporting of media exposure may be even greater if we account for the fact that individuals tend to remember the source of information better when they consult

political news rather than soft news (Kalogeropoulos & Newman, 2017). Consequently, when asked about their news media diet, individuals might focus on political news because it is easier to remember and more socially rewarding than soft news (Bourdieu, 2016), which will in turn increase the likelihood of overreporting exposure to familiar political media outlets.

One major flaw of the literature on selective exposure is its tendency to overestimate the importance of accuracy motivation and political interest in news media consumption. With respect to political interest, as Wojcieszak et al. (2021) note, political information is only a small part of what individuals read online (see also Guess, 2021). Moreover, the majority of citizens rarely read the news (Kümpel, 2020). And when individuals do consult a news source, it is typically one from a small group of highly popular media outlets, as reported in the majority of studies based on web-tracking data (Allen et al., 2020; Fletcher et al., 2020; Guess, 2021; Nelson & Webster, 2017; Stier et al., 2020b). Our study reveals a similar pattern. Participants consulted an average of 2 news sources out of the 15 selected sources. Despite the small number of selected news sources consulted by the participants, their exposure to these sources already represents on average 25% of their total news media exposure. If we consider the full sample of study participants ($n = 2,372$), including those who did not respond to the survey, 50% consulted 8 news sources or less during the study period. Moreover, participants in the full sample spent overall more than 50% of their total time dedicated to online news information – which is less than one hour during the 30-day period – on a single news source. Therefore, the general attention given to the issue of selective exposure online tends to overshadow a more general phenomenon of low information exposure.

Concerning accuracy motivation, the uses and gratifications approach upheld by Ruggiero (2000) suggests that the motivations behind exposure to news media are more numerous and complex than just obtaining accurate or concordant information. For example, besides getting accurate information, consumers of news media also want to be entertained,

even if this means being exposed to inaccurate information (Reilly, 2012). Additionally, individuals with a high need for cognition seem to enjoy being exposed to untrustworthy sources to stimulate their thinking (Tsfati & Cappella, 2005). Further studies could therefore use a combination of digital-trace and survey data to examine the role of different motivations on news media exposure.

Finally, when considering which individual characteristics – besides trust and political attitude – predict media exposure misreporting, our analysis yielded similar results as those found in prior studies: youth, strong interest in the news, and high level of education are all associated with a tendency to overreport exposure to news media (Guess, 2015; Prior, 2009; Vraga & Tully, 2020). Further details can be found in the Supplementary Material (Figures S1-4).

Limitations

A major limitation of this study is that participants were asked about their trust in media sources after data collection¹. Thus, it is possible that certain media outlets may have lost or gained the trust of participants over the course of the study, and that these variations may lead participants to change their media diet in the future. While we do acknowledge that this issue prevents us from drawing a formal causal link between trust and exposure, we nonetheless found a large influence of trust on declared exposure. Participants did report greater exposure to media outlets that they consider to be trustworthy, while the link between trust and effective exposure was not so apparent. Moreover, beyond influencing the national conversation through agenda-setting (King et al., 2017), media exposure appears to have minimal effect on attitudes. Indeed, a particularly noteworthy study by Guess et al. (2021) found no change in attitude after exposing

¹ We are indebted to an anonymous reviewer for raising this important issue.

participants to counter-attitudinal news for several weeks. It is therefore doubtful that a month's exposure without intervention is sufficient to substantially change participants' attitudes toward the media selected for the study.

It should also be noted that while trust and political attitudes seem to influence effective media exposure only marginally, this tells us nothing about how individuals perceive information they consult on news sources that they consider to be untrustworthy or that they believe to have a political bias, or an ideology opposed to their own. It is not impossible that they do not believe some of this information, and that they consult these sources with great caution. More research would be necessary to investigate this issue.

In our analyses, we were not able to account for information stemming from the selected sources that participants may have come across on social media, but on which they did not click to access the corresponding articles on the sources' websites (e.g., article headlines). Furthermore, it is likely that at least some participants consulted online information on connected devices other than those tracked in this study. We could of course not account for these informational behaviors. It is not impossible that this could explain part of the observed discrepancy between participants' declared exposure to the selected sources, on the one hand, and their effective exposure as we have measured it, on the other. However, there is no reason to believe that this invalidates our results regarding participants' selective media exposure, unless we assume that participants' online information behavior varies dramatically depending on whether they are browsing on their personal computer or, for example, on another family member's computer. Finally, it is possible that some participants were exclusively exposed to news sources not selected for this study. This would at most concern one third of the study participants – the part of the total panel that was exposed to none of the selected sources. But even if some participants were exposed to news sources not selected for this study, this would

not affect the discrepancy we observed between declared and effective exposure to the 15 selected news sources.

Acknowledgments

The authors gratefully thank the Editor, the Associate Editor, and three anonymous reviewers for their insightful comments on the manuscript. We also want to thank the Scientific Committee and the experts of the Fondation Descartes for their constructive comments on the preparation of the study.

Funding

This work was funded by the Fondation Descartes (www.fondationdescartes.org).

Disclosure statement

No potential conflict of interest was reported by the authors.

References

- Allen, J., Howland, B., Mobius, M., Rothschild, D., & Watts, D. J. (2020). Evaluating the fake news problem at the scale of the information ecosystem. *Science Advances*, 6(14), eaay3539.
- Allison, P. D. (2008, March). Convergence failures in logistic regression. In *SAS Global Forum* (Vol. 360, pp. 1-11).

- Arceneaux, K., Johnson, M., & Murphy, C. (2012). Polarized political communication, oppositional media hostility, and selective exposure. *The Journal of Politics*, *74*(1), 174-186.
- Batailler, C., Brannon, S. M., Teas, P. E., & Gawronski, B. (2022). A signal detection approach to understanding the identification of fake news. *Perspectives on Psychological Science*, *17*(1), 78-98.
- Bates, D., Sarkar, D., Bates, M. D., & Matrix, L. (2007). The lme4 package. *R package version*, *2*(1), 74.
- Bauer, P. C., Barberá, P., Ackermann, K., & Venetz, A. (2016). Is the Left-Right Scale a Valid Measure of Ideology? *Political Behavior*, *39*(3), 553–583. doi:10.1007/s11109-016-9368-2
- Bolker, B. M., Brooks, M. E., Clark, C. J., Geange, S. W., Poulsen, J. R., Stevens, M. H. H., & White, J. S. S. (2009). Generalized linear mixed models: a practical guide for ecology and evolution. *Trends in ecology & evolution*, *24*(3), 127-135.
- Bourdieu, P. (2016). *La distinction: critique sociale du jugement*. Minuit.
- Bullock, J. G., Gerber, A. S., Hill, S. J., & Huber, G. A. (2013). Partisan bias in factual beliefs about politics (No. w19080). *National Bureau of Economic Research*.
- Cordonier, L., & Brest, A. (2021). *How do the French inform themselves on the Internet? Analysis of online information and disinformation behaviors*. (Research Report). Fondation Descartes. <https://hal.archives-ouvertes.fr/hal-03167734/document>
- Ditto, P. H., Liu, B. S., Clark, C. J., Wojcik, S. P., Chen, E. E., Grady, R. H., ... & Zinger, J. F. (2019). At least bias is bipartisan: A meta-analytic comparison of partisan bias in liberals and conservatives. *Perspectives on Psychological Science*, *14*(2), 273-291.

- Fisher, C. (2016). The trouble with 'trust' in news media. *Communication Research and Practice*, 2(4), 451-465.
- Fletcher, R., & Park, S. (2017). The impact of trust in the news media on online news consumption and participation. *Digital journalism*, 5(10), 1281-1299.
- Fletcher, R., Cornia, A., & Nielsen, R. K. (2020). How polarized are online and offline news audiences? A comparative analysis of twelve countries. *The International Journal of Press/Politics*, 25(2), 169-195.
- Fletcher, R., Kalogeropoulos, A., & Nielsen, R. K. (2021). More diverse, more politically varied: How social media, search engines and aggregators shape news repertoires in the United Kingdom. *new media & society*, 14614448211027393.
- Garrett, R. K. (2009). Echo chambers online?: Politically motivated selective exposure among Internet news users. *Journal of computer-mediated communication*, 14(2), 265-285.
- Gelman, A., & Stern, H. (2006). The difference between "significant" and "not significant" is not itself statistically significant. *The American Statistician*, 60(4), 328-331.
- Guess, A. M. (2015). Measure for measure: An experimental test of online political media exposure. *Political Analysis*, 23(1), 59-75.
- Guess, A. M. (2021). (Almost) Everything in Moderation: New Evidence on Americans' Online Media Diets. *American Journal of Political Science*.
- Guess, A. M., Barberá, P., Munzert, S., & Yang, J. (2021). The consequences of online partisan media. *Proceedings of the National Academy of Sciences*, 118(14), e2013464118.
- Hartig, F. (2021). DHARMA: residual diagnostics for hierarchical (multi-level/mixed) regression models. *R package version 0.4.3*, <http://florianhartig.github.io/DHARMA/>
- Jones, B. D. (1999). Bounded rationality. *Annual review of political science*, 2(1), 297-321.

- Kahan, D. M., Braman, D., Gastil, J., Slovic, P., & Mertz, C. K. (2007). Culture and identity-protective cognition: Explaining the white-male effect in risk perception. *Journal of Empirical Legal Studies*, 4(3), 465-505.
- Kahan, D. M., Jenkins-Smith, H., & Braman, D. (2011). Cultural cognition of scientific consensus. *Journal of risk research*, 14(2), 147-174.
- Kalogeropoulos, A., & Newman, N. (2017). 'I saw the news on Facebook': brand attribution when accessing news from distributed environments. Reuters Institute for the Study of Journalism.
- Karlsson, M., Clerwall, C., & Nord, L. (2017). Do not stand corrected: Transparency and users' attitudes to inaccurate news and corrections in online journalism. *Journalism & Mass Communication Quarterly*, 94(1), 148-167.
- Kelly, D. (2019). Evaluating the news:(Mis) perceptions of objectivity and credibility. *Political Behavior*, 41(2), 445-471.
- King, G., Schneer, B., & White, A. (2017). How the news media activate public expression and influence national agendas. *Science*, 358(6364), 776-780.
- Kiousis, S. (2001). Public trust or mistrust? Perceptions of media credibility in the information age. *Mass communication & society*, 4(4), 381-403.
- Kohring, M., & Matthes, J. (2007). Trust in news media: Development and validation of a multidimensional scale. *Communication research*, 34(2), 231-252.
- Kümpel, A. S. (2020). The Matthew Effect in social media news use: Assessing inequalities in news exposure and news engagement on social network sites (SNS). *Journalism*, 21(8), 1083-1098.
- Leeper, T. J. (2018). Margins: Marginal effects for model objects. *R package version 0.3.23*.

- Lüdtke, D. (2018). ggeffects: Tidy data frames of marginal effects from regression models. *Journal of Open Source Software*, 3(26), 772.
- Magnusson, A., Skaug, H., Nielsen, A., Berg, C., Kristensen, K., Maechler, M., ... & Brooks, M. M. (2020). Package 'glmmTMB'. *R Package Version 1.0.2.1*
- Metzger, M. J., Hartsell, E. H., & Flanagin, A. J. (2020). Cognitive dissonance or credibility? A comparison of two theoretical explanations for selective exposure to partisan news. *Communication Research*, 47(1), 3-28.
- Möller, J., van de Velde, R. N., Merten, L., & Puschmann, C. (2020). Explaining online news engagement based on browsing behavior: Creatures of habit?. *Social Science Computer Review*, 38(5), 616-632.
- Nelson, J. L., & Webster, J. G. (2017). The myth of partisan selective exposure: A portrait of the online political news audience. *Social Media+ Society*, 3(3), 2056305117729314.
- Newman, N., Fletcher, R., Schulz, A., Andi, S., & Nielsen, R. K. (2020). *Reuters Institute Digital News Report 2020*. Reuters Institute for the Study of Journalism.
- Norton, E. C., & Dowd, B. E. (2018). Log odds and the interpretation of logit models. *Health services research*, 53(2), 859-878.
- Peterson, E., Goel, S., & Iyengar, S. (2021). Partisan selective exposure in online news consumption: Evidence from the 2016 presidential campaign. *Political Science Research and Methods*, 9(2), 242-258.
- Prior, M. (2009). The immensely inflated news audience: Assessing bias in self-reported news exposure. *Public Opinion Quarterly*, 73(1), 130-143.
- Prochazka, F., & Schweiger, W. (2019). How to measure generalized trust in news media? An adaptation and test of scales. *Communication Methods and Measures*, 13(1), 26-42.

- Reilly, I. (2012). Satirical fake news and/as American political discourse. *The Journal of American Culture*, 35(3), 258-275.
- Ruggiero, T. E. (2000). Uses and gratifications theory in the 21st century. *Mass communication & society*, 3(1), 3-37.
- Shaw, D. L., & Martin, S. E. (1992). The function of mass media agenda setting. *Journalism quarterly*, 69(4), 902-920.
- Scharkow, M. (2016). The accuracy of self-reported internet use—A validation study using client log data. *Communication Methods and Measures*, 10(1), 13-27.
- Schranz, M., Schneider, J., & Eisenegger, M. (2018). Media trust and media use. In *Trust in Media and Journalism* (pp. 73-91). Springer VS, Wiesbaden.
- Steppat, D., Castro, L., & Esser, F. (2021). What News Users Perceive as ‘Alternative Media’ Varies between Countries: How Media Fragmentation and Polarization Matter. *Digital Journalism*, 1-21.
- Stier, S., Breuer, J., Siegers, P., & Thorson, K. (2020a). Integrating survey data and digital trace data: Key issues in developing an emerging field. *Social Science Computer Review*, 38(5), 503-516.
- Stier, S., Kirkizh, N., Froio, C., & Schroeder, R. (2020b). Populist attitudes and selective exposure to online news: A cross-country analysis combining web tracking and surveys. *The International Journal of Press/Politics*, 25(3), 426-446.
- Stimson, J. A., Thiébaud, C., & Tiberj, V. (2012). The evolution of policy attitudes in France. *European Union Politics*, 13(2), 293-316.
- Strömbäck, J., Tsfati, Y., Boomgaarden, H., Damstra, A., Lindgren, E., Vliegenthart, R., & Lindholm, T. (2020). News media trust and its impact on media use: Toward a framework

- for future research. *Annals of the International Communication Association*, 44(2), 139-156.
- Tiberj, V., 2012. La politique des deux axes. *Revue française de science politique*, 62(1), pp.71-106.
- Tsfati, Y., & Cappella, J. N. (2003). Do people watch what they do not trust? Exploring the association between news media skepticism and exposure. *Communication research*, 30(5), 504-529.
- Tsfati, Y., & Cappella, J. N. (2005). Why do people watch news they do not trust? The need for cognition as a moderator in the association between news media skepticism and exposure. *Media psychology*, 7(3), 251-271.
- Vasilopoulos, P., & Jost, J. T. (2020). Psychological similarities and dissimilarities between left-wing and right-wing populists: Evidence from a nationally representative survey in France. *Journal of research in personality*, 88, 104004.
- Vraga, E. K., & Tully, M. (2020). Who is exposed to news? It depends on how you measure: Examining self-reported versus behavioral news exposure measures. *Social Science Computer Review*, 38(5), 550-566.
- Wojcieszak, M., de Leeuw, S., Menchen-Trevino, E., Lee, S., Huang-Isherwood, K. M., & Weeks, B. (2021). No polarization from partisan news: over-time evidence from trace data. *The International Journal of Press/Politics*, 19401612211047194.
- Williams, A. E. (2012). Trust or bust?: Questioning the relationship between media trust and news attention. *Journal of Broadcasting & Electronic Media*, 56(1), 116-131.

Figures

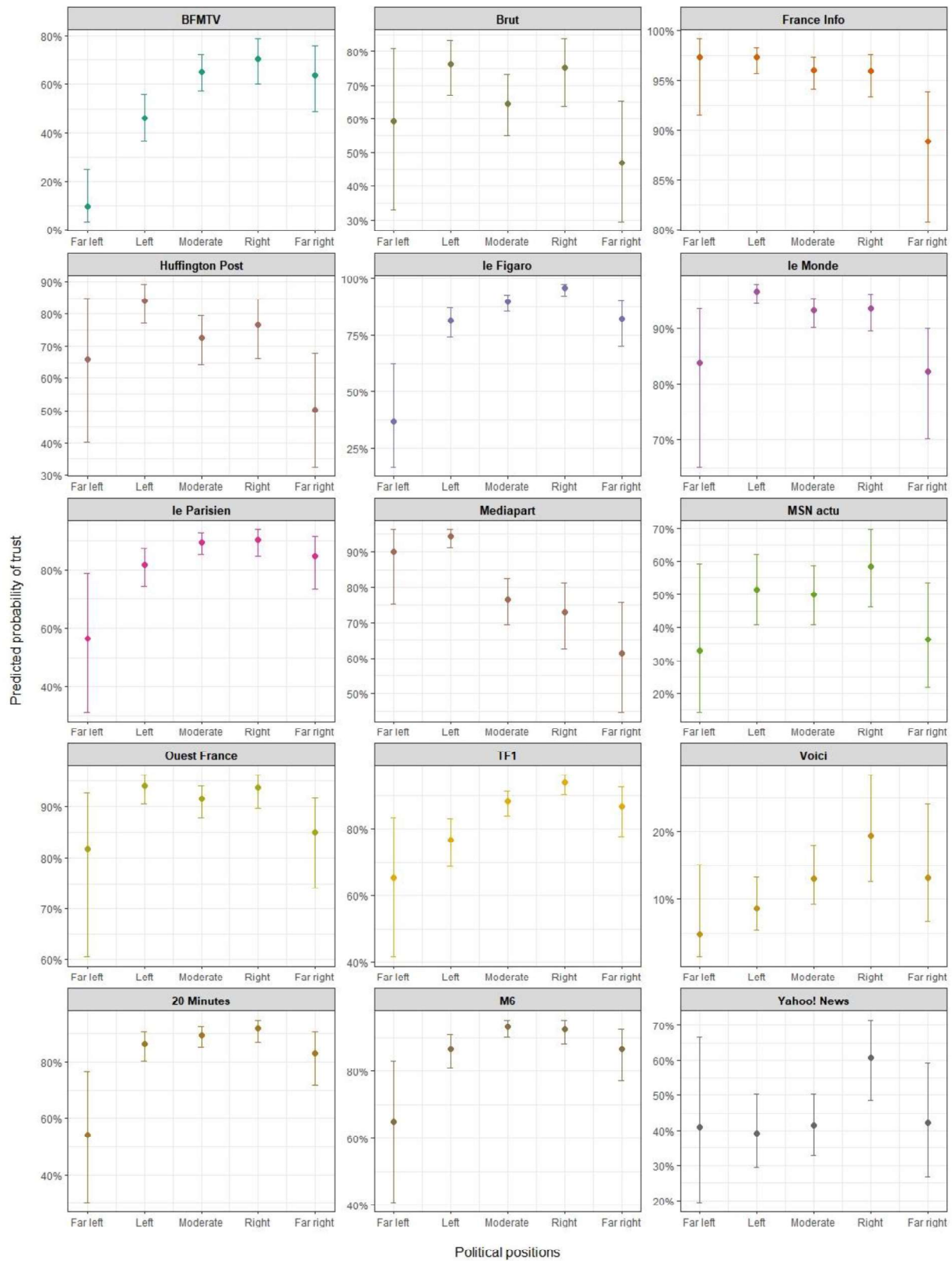


Figure 1. Probability of trusting a news source according to political position on the left-right axis. Significant differences are shown in Supplementary Material (Table S12). The error bars represent 95% CIs. Note: the y-axis interval varies for each source.

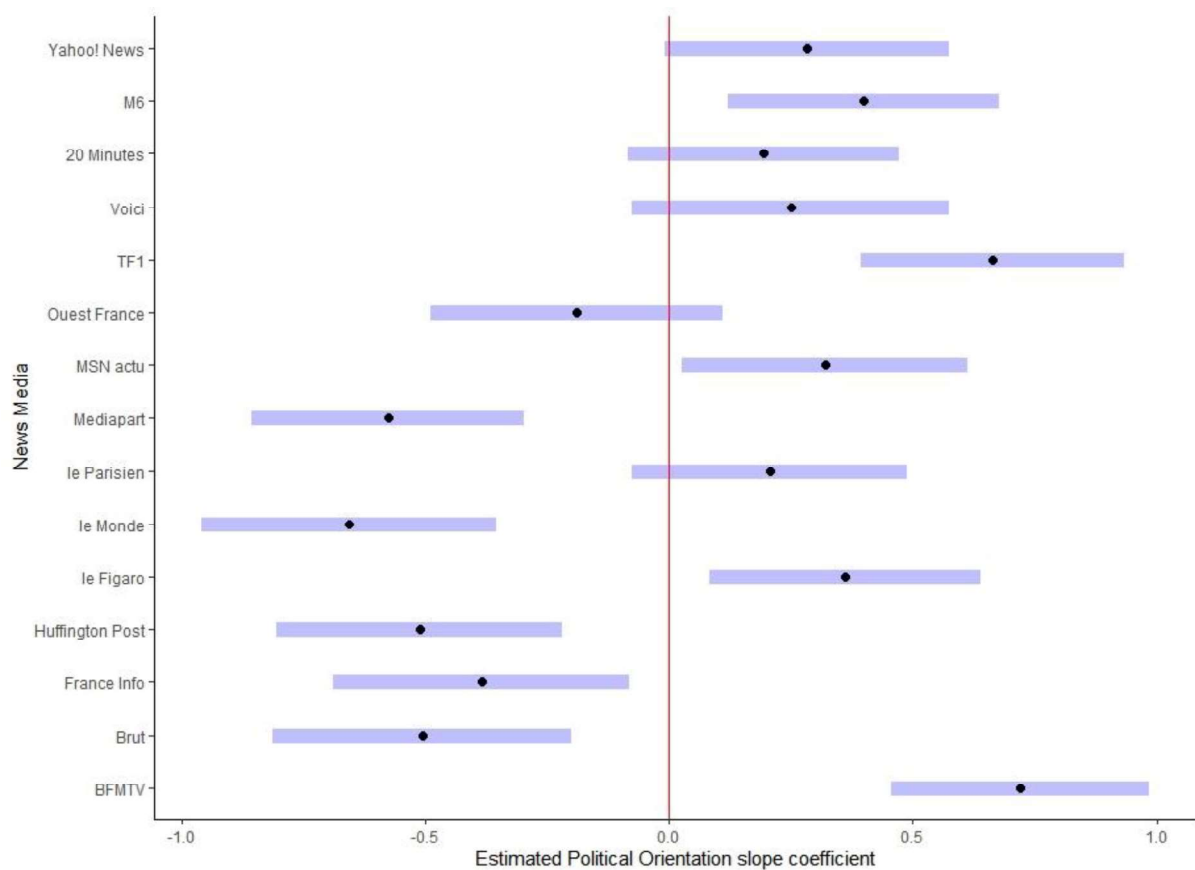


Figure 2. Estimates of the effect of political orientation (progressive-conservative axis) on trust in the news sources. Political orientation is centered at 0 (mean centering). A source located to the right of the red vertical line is more likely to be considered trustworthy by “conservative” participants, and vice versa. Estimates are expressed as log *ORs*. Intervals represent 95% *CI*s.

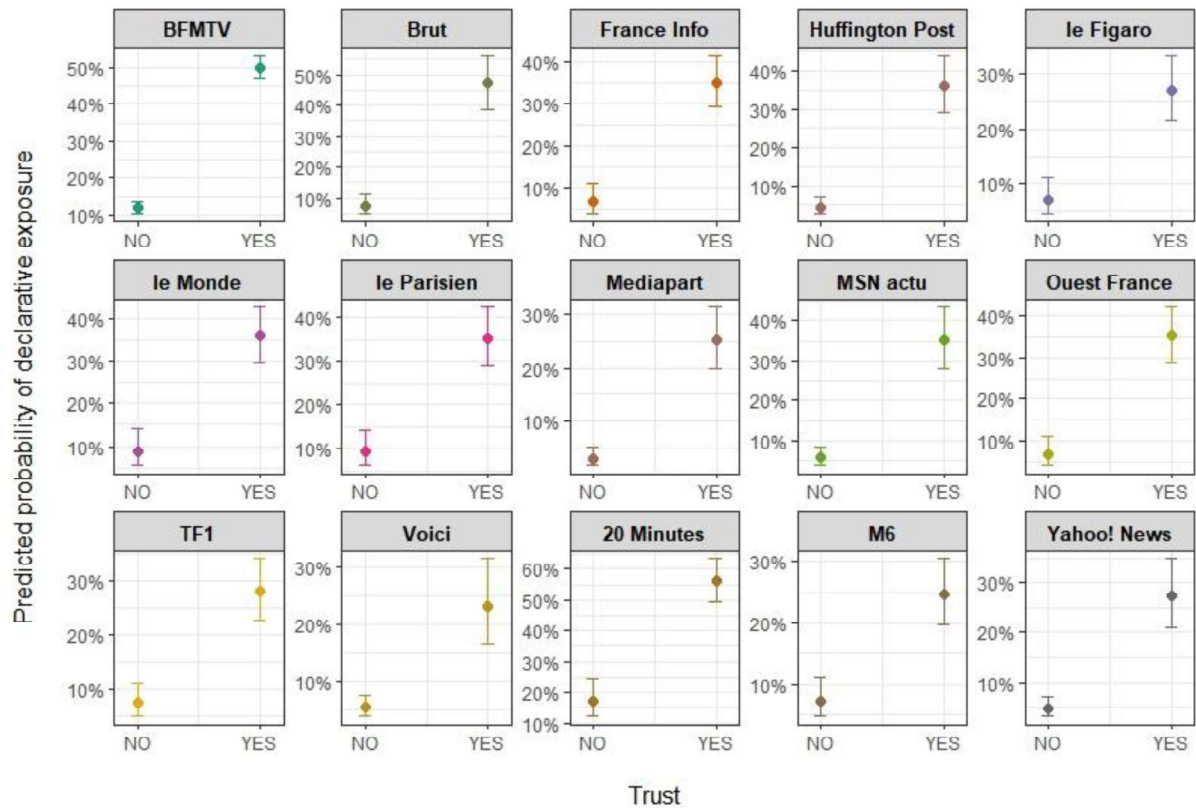


Figure 3. Probability of declaring exposure to a news source according to the level of trust in this source (binary coding: trust No/Yes). Error bars represent 95% CIs. Note: the y-axis interval varies for each source.

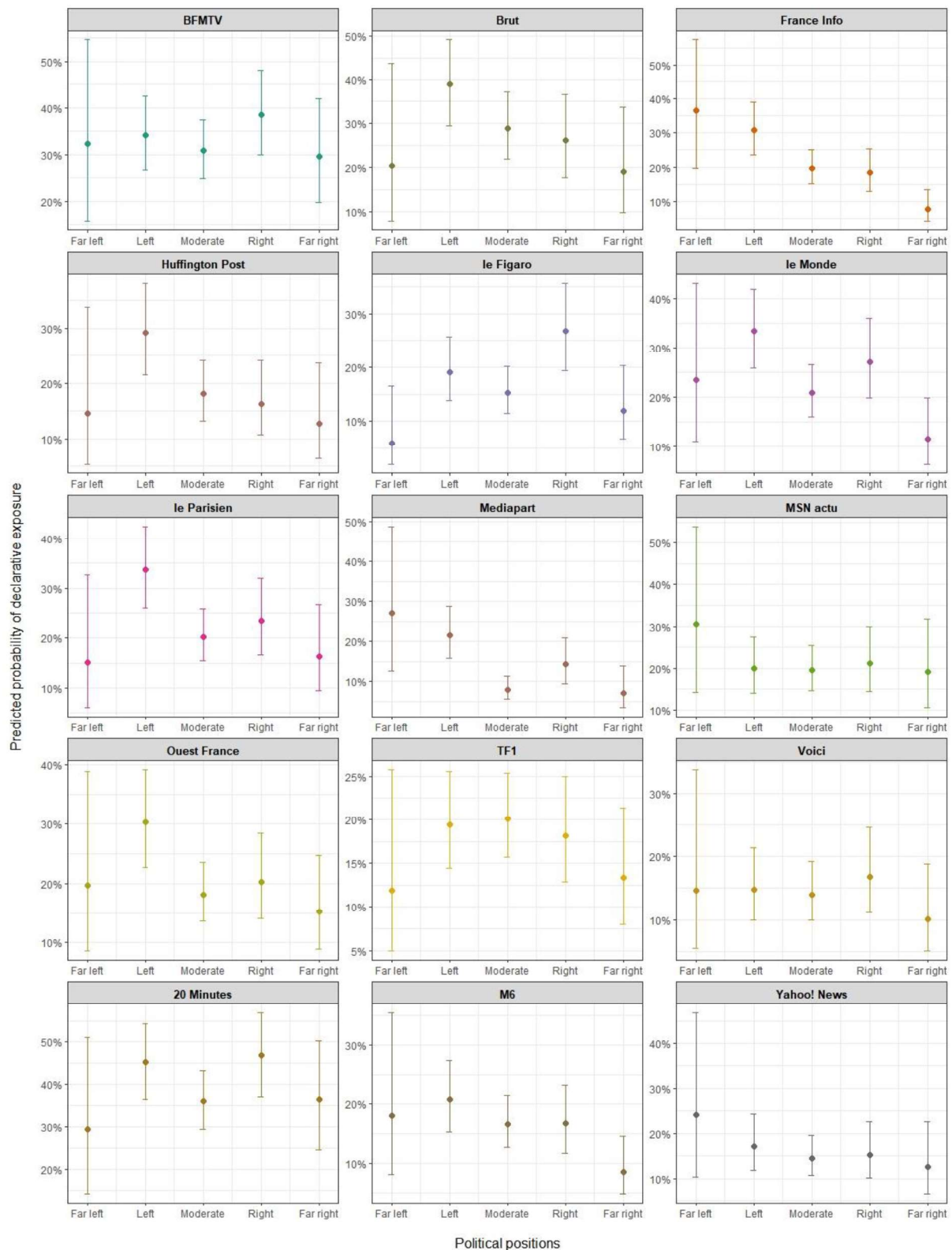


Figure 4. Probability of declaring exposure to a news source according to political position (left-right axis). Significant differences are shown in Supplementary Material (Table S15). Error bars represent 95% CIs. Note: the y-axis interval varies for each source.

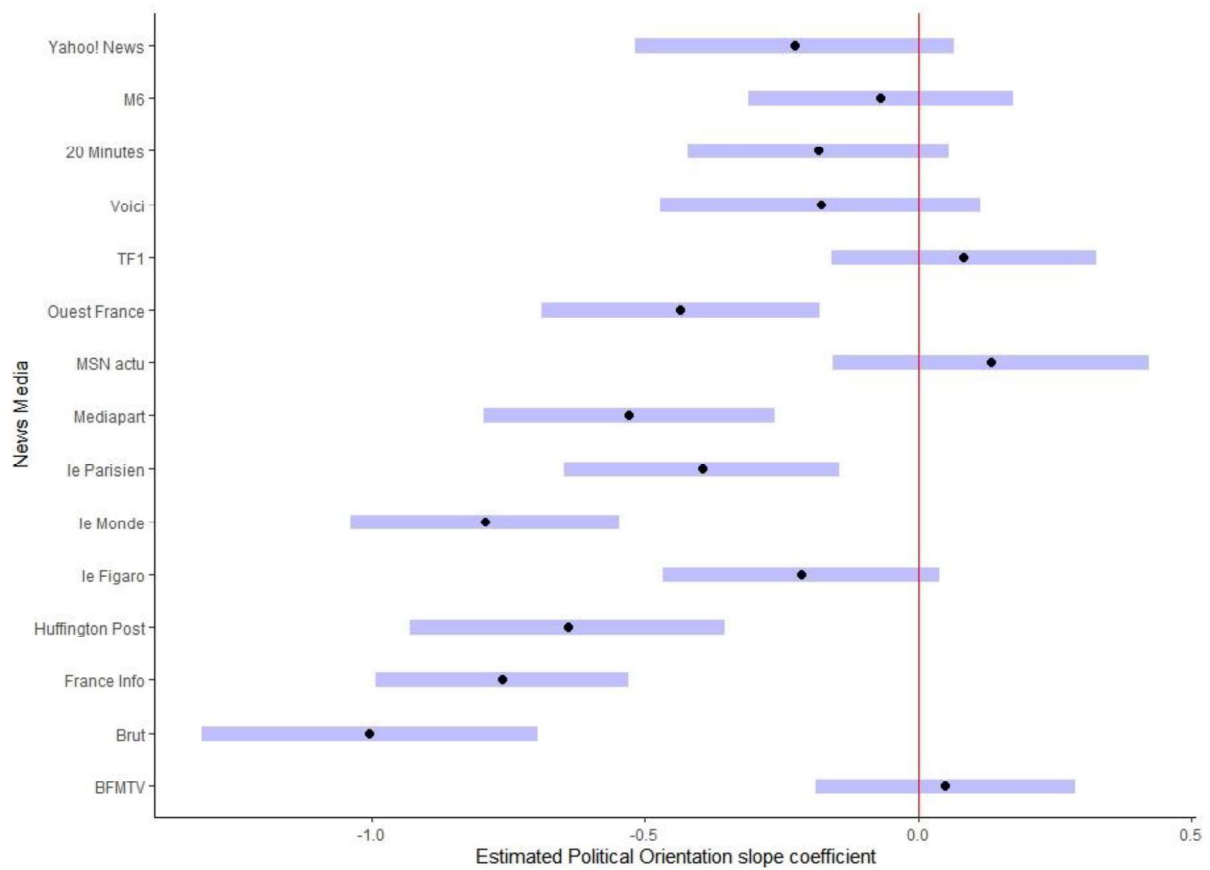


Figure 5. Estimates of the effect of political orientation (progressive-conservative axis) on declared exposure to the news sources. Political orientation is centered at 0 (mean centering). A source located to the right of the red vertical line is more likely to have been declared as consulted by “conservative” participants, and vice versa. Estimates are expressed as log *ORs*. Intervals represent 95% *CIs*.

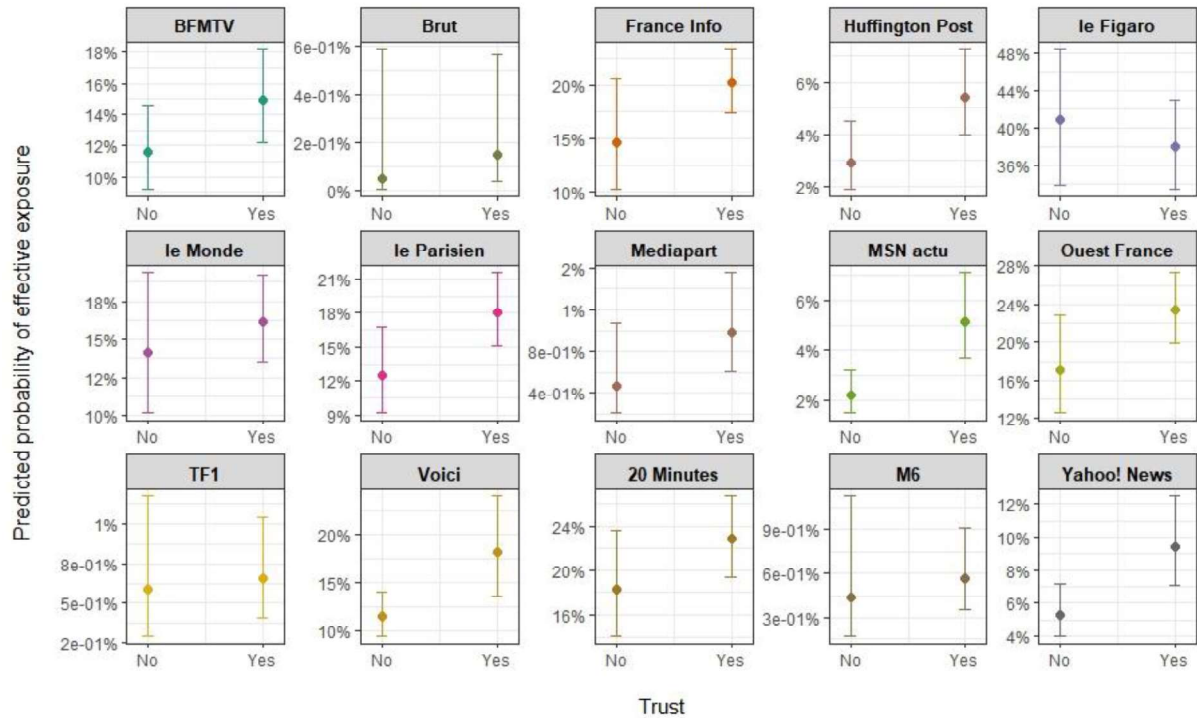


Figure 6. Probability of having effectively been exposed at least once to a news source according to the level of trust in this source (binary coding: trust No/Yes). Significant differences are shown in Supplementary Material (Table S17). Error bars represent 95% CIs. Note: y-axis interval varies for each source.

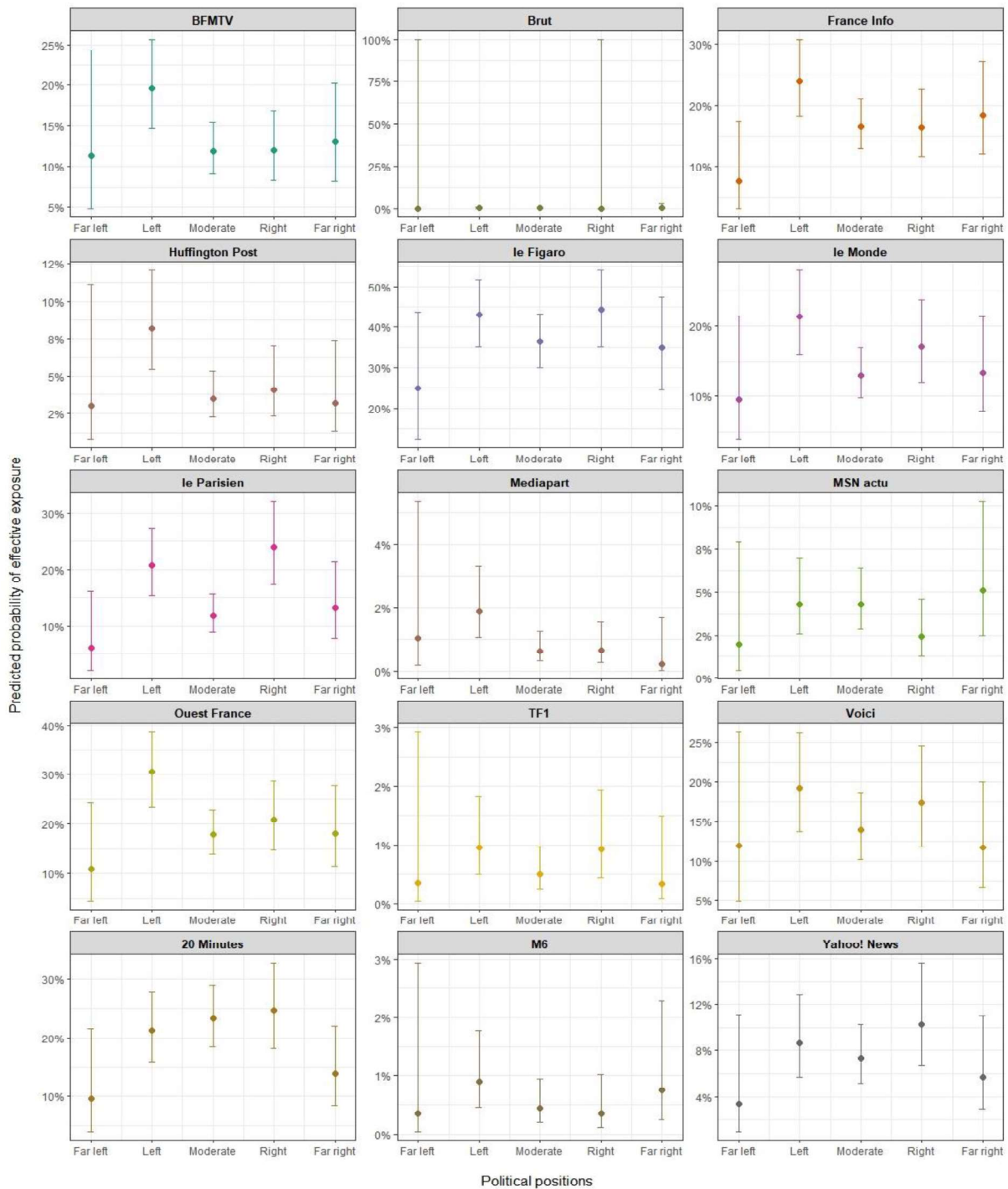


Figure 7. Probability of having effectively been exposed at least once to a news source according to political position (left-right axis). Significant differences are shown in Supplementary Material (Table S18). Error bars represent 95% CIs. Note: the probabilities of effective exposure to *Brut* for participants located far to the left and to the right of this axis, as well as the probability of effective exposure to *Mediapart*, *TF1*, and *M6* for participants located far to the left are not estimable due to the complete separation of data.

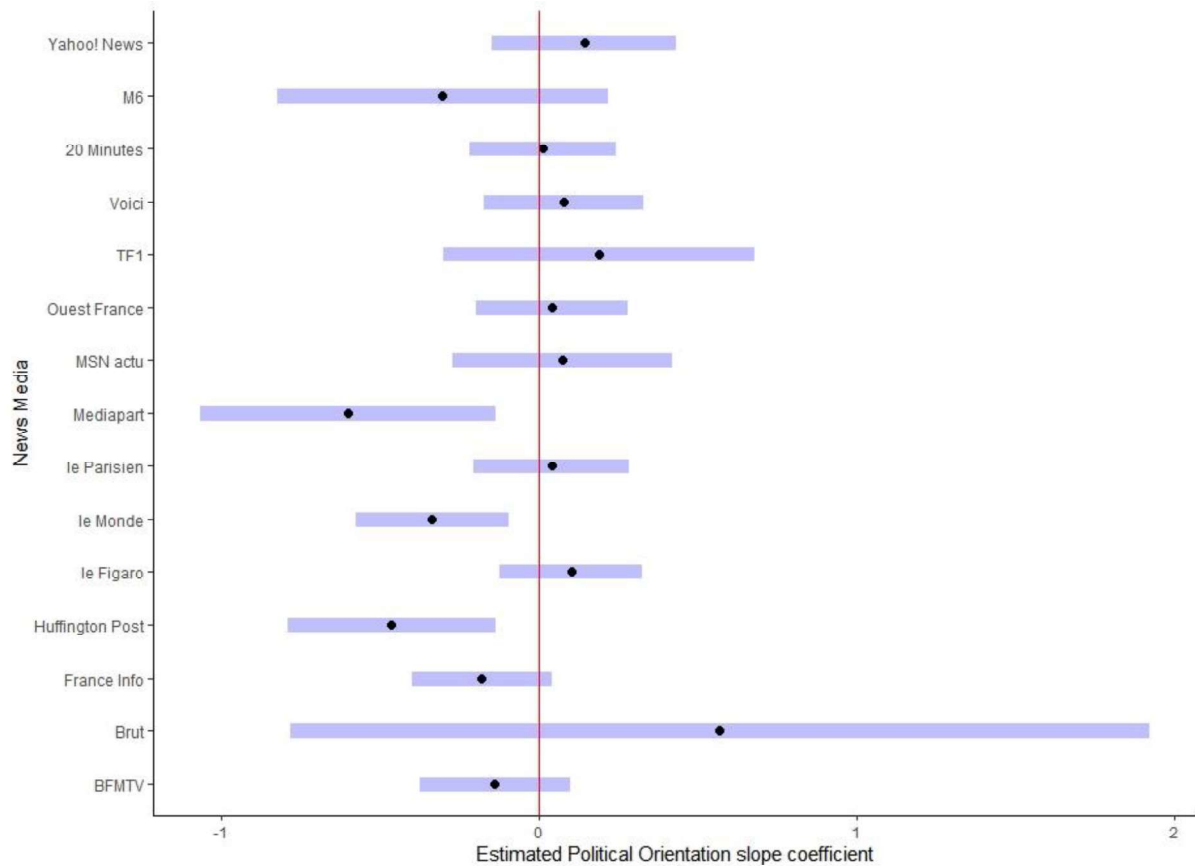


Figure 8. Estimates of the effect of political orientation (progressive-conservative axis) on effective exposure to the news sources. Political orientation is centered at 0 (mean centering). A source located to the right of the red vertical line is more likely to have been effectively consulted by “conservative” participants, and vice versa. Estimates are expressed as log *ORs*. Intervals represent 95% *CI*s.

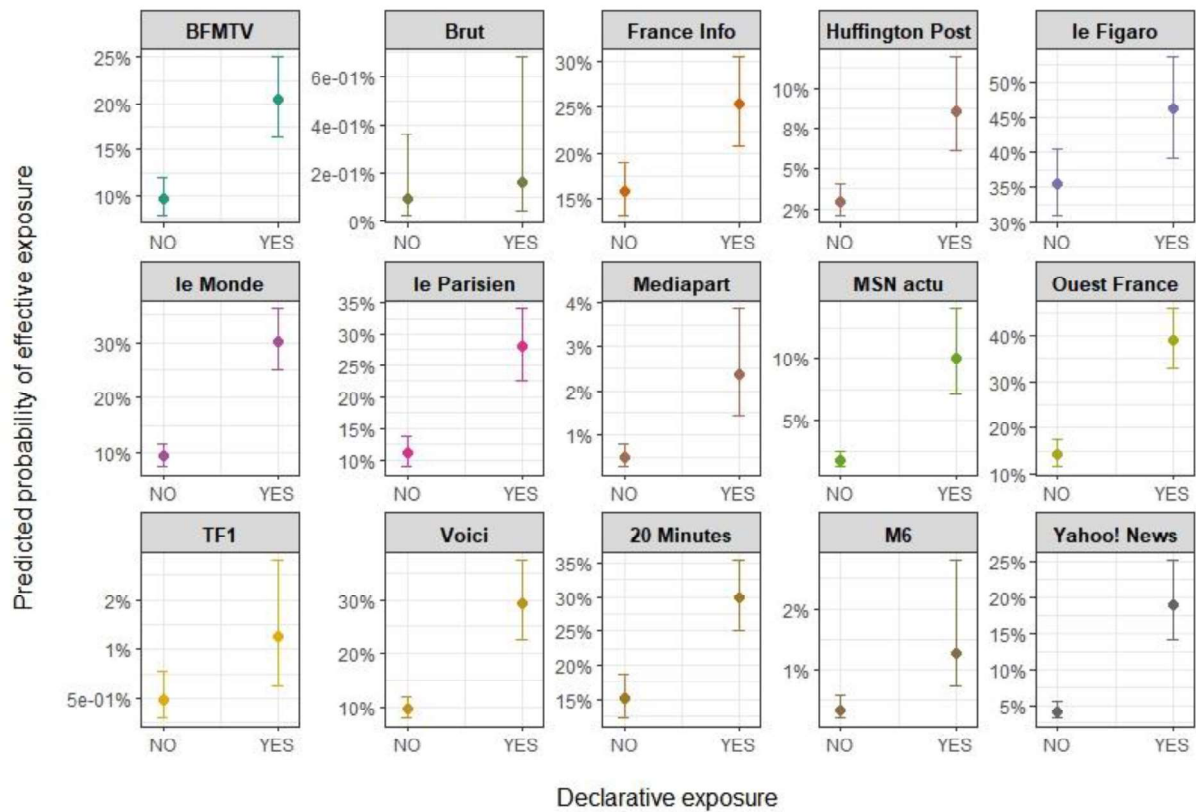


Figure 9. Probability for participants to have been effectively exposed at least once to a news source according to whether they declare exposure to it or not. Error bars represent 95% CIs. Note: the y-axis interval varies for each source.

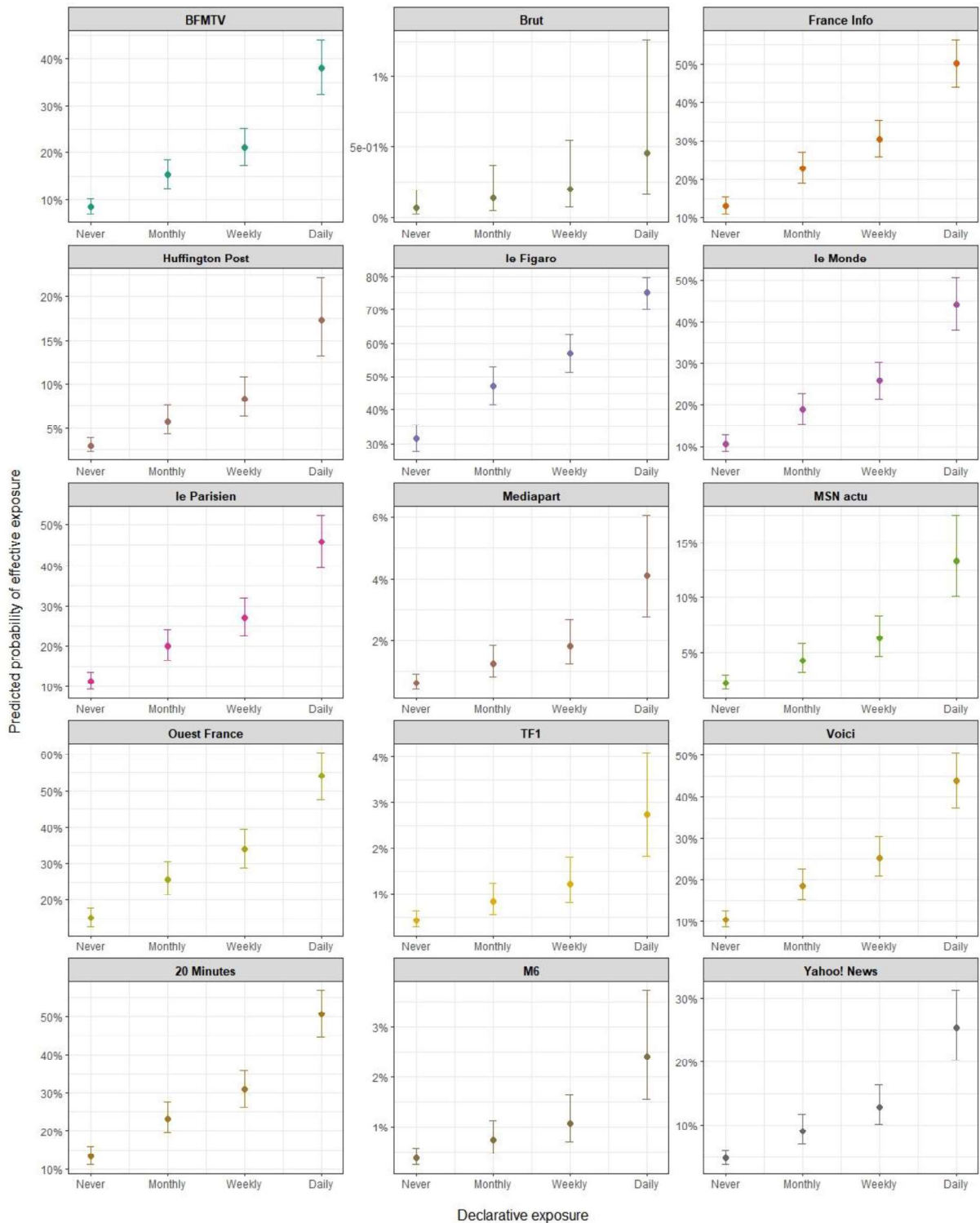


Figure 10. Probability of participants effectively having been exposed at least once to a news source according to whether they declare exposure to it or not: (1) never; (2) at least once during the month; (3) at least once a week; (4) more or less every day. Error bars represent the 95% CIs. Note: the y-axis interval varies for each source.

Supplementary Material

A) Supplementary Methods

Political orientation on the progressive-conservative cultural axis. To construct a measure of participants' orientation on the cultural axis, we started with the post-materialist issues identified in France by Tiberj in 2012 and retained those that remain of primary relevance today, based on the items retained and tested by the study *Fractures Françaises 2020* (Ipsos and Sopra Steria, 2020). The questionnaire that we constructed to measure the orientation of participants on the cultural axis is thus composed of the following 4 items: (1) "There are too many immigrants in France"; (2) "The level of delinquency in France is worrying"; (3) "Islam is compatible with the values of the Republic"; (4) "The death penalty should be reinstated in France". Note that the direction of item 3 is reversed with respect to the others. Participants indicated their response to each item on the following 4-point scale: (1) *strongly disagree*, (2) *somewhat disagree*, (3) *somewhat agree*, (4) *strongly agree*. The position of each participant on the cultural axis is obtained by averaging the value of their responses to the 4 items after reversing the value of item 3. The higher the average value obtained, the more the participant is oriented towards the "conservative" side of the cultural axis. Our measure of participants' orientation on the cultural axis has satisfactory internal consistency: Cronbach $\alpha = 0.77$, 4 items, $N = 1,536$ participants. This measure is also significantly correlated with participants' political position on the left-right axis, with more conservative participants falling more to the right of the political spectrum: $r = 0.49$, $p < .001$, $N = 1,536$ participants. On average, participants were situated more on the conservative side of the cultural axis: $M = 2.85$, $SD = 0.77$, $N = 1,536$ participants. The measure of participants' orientation on an economic axis was constructed in a similar way and comprised of the following 4 items: (1) "The role of the state in the economy should be strengthened"; (2) "The richer people are, the more it benefits society as a whole"; (3) "The French welfare system is too expensive"; (4) "There should be more solidarity in France towards people who need it". However, this measure was excluded from the present

study because it does not have sufficient internal consistency: Cronbach $\alpha = 0.31$, 4 items, $N = 1,536$ participants.

B) Descriptive Statistics

1. Gender

Table 1. Gender of participants ($N = 1,536$).

Gender	Frequency (%)
Women	774 (50.4)
Men	762 (49.6)

2. Age

Table 2. Age of participants ($N = 1,536$).

Age	Frequency (%)
18-24	97 (6.3)
25-34	230 (15.0)
35-44	348 (22.7)
45-54	381 (24.8)
55-64	362 (23.5)
65+	118 (7.7)

3. Education

Table 3. Education of participants ($N = 1,536$).

Education	Frequency (%)
Low	367 (23.9)
High school diploma	379 (24.7)
Intermediate (BAC +2 and + 3)	528 (34.3)
High (BAC +5 or more)	262 (17.7)

4. Political orientation

Table 4. Reported political position of participants ($N = 1,536$)

Political Position	Frequency (n)	Proportion (%)
Far left	65	4.2
Left	395	25.7
Center	591	38.5
Right	305	19.9
Far right	180	11.7

5. Trust

Table 5. Descriptive statistics of the declared level of trust of participants ($N = 1,536$) in each of the 15 online news sources.

News source	Trust		Trust (binary)	
	<i>M</i>	<i>SD</i>	No trust (%)	Trust (%)
BFMTV	2.45	0.97	46.4	53.6
Brut	2.48	1.00	46.2	53.8
France Info	3.06	0.79	15.8	84.2
Huffington Post	2.56	0.97	40.6	59.4
Le Figaro	2.75	0.90	28.4	71.6
Le Monde	2.97	0.89	21.3	78.7
Le Parisien	2.73	0.87	29.5	70.5
Mediapart	2.74	0.96	33.6	66.4
MSN Actu	2.34	0.94	53.3	46.7
Ouest France	2.86	0.87	23.5	76.5
TF1	2.79	0.86	28.0	72.0
Voici	1.90	0.89	75.6	24.4
20 Minutes	2.76	0.84	28.2	71.8
M6	2.84	0.82	24.6	75.4
Yahoo! News	2.28	0.91	56.1	43.9

6. Exposure to news media

Table 6. Frequency of declared exposure per news source. Total frequency of declared exposure varies between the different news sources following the exclusion of the responses indicating *No opinion* to the level of trust in the corresponding news source.

News source	Never	At least once during the month	At least once a week	More or less every day	Total
BFMTV	886	158	203	158	1405
Brut	553	139	130	61	883
France Info	912	193	216	129	1450
Huffington Post	652	148	120	55	975
Le Figaro	826	167	136	70	1199
Le Monde	766	190	183	107	1246
Le Parisien	750	164	178	76	1168
Mediapart	834	167	117	41	1159
MSN Actu	757	114	107	81	1059
Ouest France	736	145	161	110	1152
TF1	978	174	151	106	1419
Voici	946	121	79	36	1182

20 Minutes	646	203	228	152	1229
M6	951	174	149	75	1349
Yahoo! News	807	92	92	75	1066

Table 7. Frequency of effective exposure per news source. Total frequency of effective exposure varies between the different news sources following the exclusion of the responses indicating *No opinion* to the level of trust in the corresponding news source.

News source	Never	Once	Less than five	Five or more	Total
BFMTV	1074	143	119	69	1405
Brut	869	3	7	4	883
France Info	1032	169	135	114	1450
Huffington Post	849	69	39	18	975
Le Figaro	676	163	180	180	1199
Le Monde	927	166	104	49	1246
Le Parisien	852	159	99	58	1168
Mediapart	1119	26	11	3	1159
MSN Actu	963	41	16	39	1059
Ouest France	795	120	136	101	1152
TF1	1372	20	8	9	1409
Voici	912	116	90	64	1182
20 Minutes	846	174	117	92	1229
M6	1319	11	14	5	1349
Yahoo! News	905	73	49	39	1066

Table 8. Frequency of declared exposure per news source and political position. Frequency values are rounded for clarity, and therefore do not always add up to 100%.

News source	Political position	Never	At least once during the month	At least once a week	More or less every day
BFMTV	Far Left	69%	12%	7%	12%
	Left	65%	13%	13%	9%
	Center	63%	12%	14%	11%
	Right	58%	10%	17%	14%
	Far Right	65%	7%	17%	10%
Brut	Far Left	70%	11%	9%	9%
	Left	56%	17%	18%	9%
	Center	64%	17%	14%	5%
	Right	62%	16%	15%	7%
	Far Right	72%	10%	12%	6%
France Info	Far Left	50%	16%	17%	17%
	Left	55%	15%	19%	12%
	Center	64%	12%	16%	8%
	Right	65%	17%	12%	6%
	Far Right	79%	6%	9%	6%

News source	Political position	Never	At least once during the month	At least once a week	More or less every day
Huffington Post	Far Left	74%	20%	4%	2%
	Left	57%	19%	17%	6%
	Center	69%	13%	12%	6%
	Right	68%	17%	10%	5%
	Far Right	77%	7%	10%	6%
Le Figaro	Far Left	85%	6%	8%	2%
	Left	69%	14%	12%	5%
	Center	70%	13%	12%	5%
	Right	60%	18%	14%	9%
	Far Right	75%	12%	7%	6%
Le Monde	Far Left	64%	13%	16%	7%
	Left	53%	18%	19%	10%
	Center	64%	13%	14%	9%
	Right	59%	20%	13%	8%
	Far Right	77%	9%	8%	7%
Le Parisien	Far Left	75%	10%	14%	2%
	Left	58%	18%	17%	8%
	Center	66%	13%	16%	6%
	Right	63%	14%	16%	8%
	Far Right	72%	12%	10%	6%
Mediapart	Far Left	58%	26%	10%	6%
	Left	61%	19%	16%	4%
	Center	78%	11%	9%	2%
	Right	73%	16%	7%	4%
	Far Right	83%	7%	7%	4%
MSN Actu	Far Left	69%	12%	16%	4%
	Left	73%	10%	9%	8%
	Center	72%	11%	10%	8%
	Right	69%	13%	11%	7%
	Far Right	74%	8%	10%	8%
Ouest France	Far Left	65%	14%	16%	6%
	Left	55%	16%	14%	14%
	Center	67%	12%	14%	8%
	Right	64%	12%	15%	8%
	Far Right	71%	8%	11%	10%
TF1	Far Left	77%	7%	10%	7%
	Left	70%	13%	10%	7%
	Center	67%	13%	13%	7%
	Right	68%	13%	9%	10%
	Far Right	74%	9%	10%	8%
Voici	Far Left	81%	13%	4%	2%
	Left	81%	9%	6%	3%
	Center	80%	12%	6%	2%

News source	Political position	Never	At least once during the month	At least once a week	More or less every day
20 Minutes	Right	77%	10%	9%	4%
	Far Right	81%	5%	9%	5%
	Far Left	65%	18%	11%	5%
	Left	50%	17%	22%	12%
	Center	54%	16%	16%	13%
M6	Right	47%	19%	21%	13%
	Far Right	58%	14%	17%	11%
	Far Left	71%	17%	12%	0%
	Left	68%	14%	11%	6%
	Center	70%	13%	13%	5%
Yahoo! News	Right	70%	13%	10%	7%
	Far Right	79%	7%	7%	7%
	Far Left	69%	18%	6%	8%
	Left	77%	8%	9%	7%
	Center	77%	7%	10%	7%
	Right	73%	12%	8%	7%
	Far Right	78%	5%	8%	9%

Table 9. Frequency of declared exposure per news source and political orientation. Political orientation (4-point scale) is recoded as follows: Center corresponds to a value between 2 and 3; Conservative corresponds to a value greater than 3; Progressive corresponds to a value below 2. Frequency values are rounded for clarity, and therefore do not always add up to 100%.

News source	Political orientation	Never	At least once during the month	At least once a week	More or less every day
BFMTV	Center	61%	14%	14%	12%
	Conservative	63%	9%	15%	13%
	Progressive	74%	9%	12%	5%
Brut	Center	58%	17%	18%	6%
	Conservative	75%	10%	9%	7%
	Progressive	45%	27%	18%	9%
France Info	Center	58%	16%	16%	9%
	Conservative	73%	10%	11%	6%
	Progressive	49%	12%	21%	18%
Huffington Post	Center	62%	18%	13%	6%
	Conservative	77%	9%	10%	4%
	Progressive	57%	21%	16%	7%
Le Figaro	Center	66%	15%	13%	6%
	Conservative	73%	12%	9%	6%
	Progressive	68%	16%	13%	3%
Le Monde	Center	58%	17%	15%	10%
	Conservative	72%	13%	11%	5%

News source	Political orientation	Never	At least once during the month	At least once a week	More or less every day
Le Parisien	Progressive	45%	15%	25%	15%
	Center	60%	17%	17%	7%
	Conservative	70%	10%	13%	7%
Mediapart	Progressive	63%	16%	17%	4%
	Center	69%	16%	12%	3%
	Conservative	79%	12%	6%	3%
MSN Actu	Progressive	62%	16%	15%	7%
	Center	70%	11%	12%	8%
	Conservative	71%	12%	10%	7%
Ouest France	Progressive	78%	8%	5%	8%
	Center	60%	14%	16%	10%
	Conservative	71%	9%	11%	9%
TF1	Progressive	57%	18%	17%	8%
	Center	68%	13%	11%	9%
	Conservative	70%	12%	11%	7%
Voici	Progressive	76%	13%	8%	4%
	Center	76%	13%	7%	4%
	Conservative	83%	7%	7%	3%
20 Minutes	Progressive	85%	10%	3%	1%
	Center	50%	19%	18%	13%
	Conservative	55%	14%	19%	12%
M6	Progressive	54%	17%	18%	11%
	Center	67%	14%	13%	6%
	Conservative	73%	12%	10%	5%
Yahoo! News	Progressive	75%	14%	8%	3%
	Center	71%	12%	11%	6%
	Conservative	80%	6%	7%	7%
	Progressive	81%	5%	5%	8%

Table 10. Frequency of effective exposure per news source (in number of visits) and political position. Frequency values are rounded for clarity, and therefore do not always add up to 100%.

News source	Political Position	Never	Once	Less than five	Five or more
BFMTV	Far Left	80%	10%	8%	2%
	Left	73%	14%	10%	3%
	Center	81%	10%	7%	2%
	Right	80%	8%	9%	3%
	Far Right	78%	7%	13%	2%
Brut	Far Left	100%	0%	0%	0%
	Left	98%	0%	1%	0%
	Center	98%	0%	1%	0%
	Right	98%	1%	1%	1%

News source	Political Position	Never	Once	Less than five	Five or more
France Info	Far Right	99%	0%	0%	1%
	Far Left	87%	3%	7%	3%
	Left	69%	13%	13%	5%
	Center	76%	12%	9%	3%
	Right	74%	13%	9%	4%
Huffington Post	Far Right	73%	14%	6%	6%
	Far Left	91%	7%	2%	0%
	Left	83%	10%	6%	1%
	Center	91%	6%	2%	1%
Le Figaro	Right	86%	7%	6%	1%
	Far Right	92%	3%	4%	1%
	Far Left	68%	13%	13%	6%
	Left	58%	16%	17%	9%
Le Monde	Center	62%	12%	16%	11%
	Right	56%	17%	17%	11%
	Far Right	61%	15%	14%	10%
	Far Left	82%	13%	2%	4%
Le Parisien	Left	71%	13%	12%	4%
	Center	79%	14%	6%	1%
	Right	74%	14%	11%	1%
	Far Right	79%	13%	7%	2%
Mediapart	Far Left	86%	8%	6%	0%
	Left	70%	13%	13%	4%
	Center	78%	13%	7%	2%
	Right	67%	19%	8%	6%
MSN Actu	Far Right	79%	10%	9%	2%
	Far Left	96%	0%	2%	2%
	Left	94%	4%	2%	0%
	Center	98%	2%	1%	0%
Ouest France	Right	97%	2%	0%	0%
	Far Right	99%	1%	0%	0%
	Far Left	98%	0%	2%	0%
	Left	94%	4%	1%	1%
TF1	Center	92%	5%	2%	1%
	Right	95%	2%	1%	1%
	Far Right	91%	6%	2%	2%
	Far Left	82%	6%	12%	0%
TF1	Left	67%	14%	14%	6%
	Center	75%	10%	12%	3%
	Right	72%	10%	13%	5%
	Far Right	75%	13%	10%	2%
TF1	Far Left	98%	2%	0%	0%

News source	Political Position	Never	Once	Less than five	Five or more
Voici	Left	97%	2%	1%	0%
	Center	98%	1%	1%	0%
	Right	97%	2%	0%	1%
	Far Right	99%	1%	0%	0%
	Far Left	80%	7%	11%	2%
	Left	76%	12%	8%	4%
20 Minutes	Center	81%	10%	7%	2%
	Right	77%	9%	11%	3%
	Far Right	84%	9%	3%	4%
	Far Left	83%	9%	8%	0%
	Left	72%	17%	9%	2%
	Center	70%	16%	11%	3%
M6	Right	69%	12%	13%	6%
	Far Right	80%	12%	4%	4%
	Far Left	98%	0%	2%	0%
	Left	97%	1%	2%	1%
	Center	98%	1%	1%	0%
	Right	99%	1%	1%	0%
Yahoo! News	Far Right	98%	1%	1%	0%
	Far Left	94%	4%	2%	0%
	Left	85%	7%	7%	1%
	Center	87%	8%	3%	2%
	Right	82%	8%	6%	5%
	Far Right	90%	4%	5%	1%

Table 11. Frequency of effective exposure per news source and political orientation. Frequency values are rounded for clarity, and therefore do not always add up to 100%.

News source	Political Orientation	Never	Once	Less than five	Five or more
BFMTV	Center	80%	10%	8%	3%
	Conservative	78%	9%	10%	3%
	Progressive	73%	18%	8%	1%
Brut	Center	98%	0%	1%	0%
	Conservative	99%	0%	0%	0%
	Progressive	97%	0%	2%	1%
France Info	Center	74%	12%	11%	3%
	Conservative	74%	13%	7%	6%
	Progressive	72%	10%	13%	6%
Huffington Post	Center	89%	8%	3%	0%
	Conservative	90%	6%	4%	1%
	Progressive	81%	7%	8%	4%
Le Figaro	Center	59%	13%	18%	9%

News source	Political Orientation	Never	Once	Less than five	Five or more
Le Monde	Conservative	58%	16%	15%	11%
	Progressive	66%	12%	12%	10%
	Center	76%	15%	8%	1%
Le Parisien	Conservative	78%	12%	8%	2%
	Progressive	69%	14%	11%	6%
	Center	74%	14%	8%	4%
Mediapart	Conservative	74%	15%	7%	4%
	Progressive	75%	10%	14%	2%
	Center	97%	2%	1%	0%
MSN Actu	Conservative	98%	2%	0%	0%
	Progressive	92%	4%	3%	1%
	Center	92%	5%	2%	1%
Ouest France	Conservative	95%	3%	1%	1%
	Progressive	95%	3%	2%	1%
	Center	74%	10%	11%	5%
TF1	Conservative	70%	13%	14%	3%
	Progressive	74%	10%	14%	2%
	Center	98%	2%	1%	0%
Voici	Conservative	98%	1%	0%	0%
	Progressive	98%	1%	1%	0%
	Center	80%	10%	8%	2%
20 Minutes	Conservative	78%	10%	8%	4%
	Progressive	81%	10%	5%	4%
	Center	71%	16%	10%	3%
M6	Conservative	72%	14%	10%	4%
	Progressive	73%	16%	7%	4%
	Center	97%	1%	1%	0%
Yahoo! News	Conservative	99%	1%	1%	0%
	Progressive	98%	1%	1%	0%
	Center	85%	7%	5%	2%
	Conservative	86%	7%	4%	3%
	Progressive	89%	7%	4%	1%

C) Additional analyses

1. Trust in news sources

Table 12. Comparisons of the estimated marginal *ORs* of trusting a news source according to political position. Estimated *ORs* are calculated from the political position located to the left in the Contrast column. Only significant contrasts ($p < .05$) are shown. *P* values corrected by the Tukey method.

News source	Contrast	Estimate <i>OR</i>	<i>SE</i>	<i>t</i>	<i>p</i>
BFMTV	Far left – left	0.13	0.08	-3.42	.006
	Far left – center	0.06	0.03	-4.78	<.001
	Far left – right	0.05	0.03	-5.03	<.001
	Left – center	0.46	0.12	-2.97	.025
	Left – right	0.36	0.11	-3.38	.007
Brut	Left – far right	3.61	1.61	2.88	.033
France Info	Left – far right	4.59	1.91	3.67	.002
	Center – far right	3.02	1.16	2.86	.034
Huffington Post	Left – far right	5.29	2.32	3.79	.001
Le Figaro	Far left – left	0.13	0.08	-3.50	.004
	Far left – center	0.07	0.04	-4.73	<.001
	Far left – right	0.03	0.02	-5.96	<.001
	Far left – far right	0.13	0.08	-3.26	.010
	Left – right	0.21	0.07	-4.50	<.001
	Right – far right	4.64	2.04	3.50	.004
Le Monde	Far left – left	0.18	0.11	-2.93	.028
	Left – far right	6.09	2.57	4.27	<.001
	Center – far right	2.96	1.17	2.75	.048
Le Parisien	Far left – center	0.15	0.09	-3.30	.009
	Far left – right	0.14	0.08	-3.31	.008
Mediapart	Left – center	5.13	1.54	5.45	<.001
	Left – right	6.20	2.09	5.40	<.001
	Left – far right	10.52	4.39	5.64	<.001
TF1	Far left – right	0.12	0.07	-3.78	.001
	Left – center	0.44	0.12	-3.02	.021
	Left – right	0.21	0.07	-4.78	<.001
20 Minutes	Far left – left	0.19	0.11	-2.98	.024
	Far left – center	0.14	0.08	-3.54	.004
	Far left – right	0.11	0.06	-3.88	.001
M6	Far left – center	0.14	0.07	-3.71	.002
	Far left – right	0.15	0.08	-3.38	.007

Table 13. Frequency distribution (in %) of the level of trust in the news sources according to the political orientation of participants on the progressive-conservative axis (divided into quartiles; Q1 = most “progressive” participants, Q4 = most “conservative” participants).

News source	Orientation on the progressive-conservative axis							
	Quartile 1		Quartile 2		Quartile 3		Quartile 4	
	No trust (%)	Trust (%)	No trust (%)	Trust (%)	No trust (%)	Trust (%)	No trust (%)	Trust (%)
BFMTV	63.1	36.9	47.5	52.5	40.8	59.2	41.6	58.4
Brut	45.3	54.7	41.3	58.7	37.5	62.5	61.4	38.6
France Info	15.0	85.0	12.7	87.3	13.8	86.2	20.6	79.4
Huffington Post	37.1	62.9	33.8	66.2	34.8	65.2	55.3	44.7
Le Figaro	40.5	59.5	25.1	74.9	21.4	78.6	30.3	69.7
Le Monde	16.2	83.8	18.5	81.5	17.2	82.8	31.5	68.5
Le Parisien	38.5	61.5	23.4	76.6	23.6	76.4	34.2	65.8
Mediapart	26.5	73.5	29.8	70.2	31.6	68.4	43.9	56.1
MSN Actu	67.0	33.0	48.6	51.4	44.8	55.2	57.4	42.6
Ouest France	25.2	74.8	19.2	80.8	20.4	79.6	29.0	71.0
TF1	44.6	55.4	27.6	72.4	20.9	79.1	25.9	74.1
Voici	87.2	12.8	73.1	26.9	66.2	33.8	80.2	19.8
20 Minutes	38.1	61.9	22.3	77.7	23.4	76.6	31.0	69.0
M6	37.0	63.0	20.3	79.7	20.4	79.6	24.7	75.3
Yahoo! News	66.3	33.7	53.4	46.6	48.5	51.5	59.4	40.6

Table 14. Average level of trust in each news source according to whether participants declare exposure to it or not.

News source	Level of trust			
	Declare no exposure		Declare exposure	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
BFMTV	2.19	0.96	2.92	0.80
Brut	2.11	0.94	3.09	0.79
France Info	2.89	0.83	3.33	0.61
Huffington Post	2.27	0.96	3.13	0.68
Le Figaro	2.58	0.92	3.13	0.71
Le Monde	2.75	0.94	3.32	0.66
Le Parisien	2.54	0.91	3.05	0.66
Mediapart	2.52	0.96	3.30	0.71
MSN Actu	2.08	0.88	2.96	0.76
Ouest France	2.65	0.91	3.24	0.66
TF1	2.64	0.89	3.13	0.70
Voici	1.73	0.82	2.58	0.83
20 Minutes	2.48	0.89	3.07	0.67
M6	2.72	0.84	3.14	0.70
Yahoo! News	2.08	0.87	2.89	0.73

2. Declared exposure to news sources

Table 15. Comparisons of the estimated marginal *ORs* of declaring exposure to a news source according to political position. Estimated *ORs* are calculated from the political position located to the left in the Contrast column. Only significant contrasts ($p < .05$) are shown. *P* values corrected by the Tukey method.

News source	Contrast	Estimate <i>OR</i>	<i>SE</i>	<i>t</i>	<i>p</i>
France Info	Far left – Far right	6.84	3.61	3.64	.002
	Left – Right	5.30	1.87	4.71	< .001
	Center – Far right	2.91	1.00	3.12	.016
Le Figaro	Far left – Right	0.18	0.11	-2.84	.037
Le Monde	Left - Center	1.92	0.45	2.75	.047
	Left – Far right	3.89	1.46	3.60	.003
Le Parisien	Left – Center	2.02	0.50	2.84	.037
Mediapart	Far left – Center	4.27	2.19	2.83	.038
	Left - Center	3.17	0.83	4.42	< .001
	Left – Far right	3.63	1.55	3.01	.022
M6	Left – Far right	2.81	1.01	2.86	.034

Table 16. Average position of participants on the progressive-conservative axis for each news source according to whether they declare exposure to it or not.

News source	Progressive-conservative axis			
	Declares no exposure		Declares exposure	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
BFMTV	2.92	0.72	2.85	0.79
Brut	2.57	0.73	2.95	0.76
France Info	2.68	0.76	2.97	0.75
Huffington Post	2.62	0.74	2.90	0.78
Le Figaro	2.80	0.74	2.87	0.80
Le Monde	2.63	0.77	2.95	0.76
Le Parisien	2.75	0.73	2.88	0.79
Mediapart	2.63	0.78	2.90	0.77

MSN Actu	2.89	0.71	2.84	0.80
Ouest France	2.75	0.73	2.92	0.78
TF1	2.93	0.71	2.86	0.79
Voici	2.81	0.68	2.86	0.79
20 Minutes	2.81	0.75	2.88	0.79
M6	2.86	0.72	2.88	0.79
Yahoo! News	2.80	0.71	2.87	0.80

3. Effective exposure to news sources

Table 17. Average level of trust in the news sources according to whether participants have been effectively exposed to it at least once or not; test for significance of the difference in the probabilities of participants having been effectively exposed to a source according to whether or not they trust it. Significant contrasts ($p < .05$) are show in bold. P values corrected by the Tukey method.

News source	Level of trust				Difference in effective exposure by level of trust (binary)	
	No exposure		At least one exposure		z	p
	M	SD	M	SD		
BFMTV	2.43	0.98	2.53	0.97	-1.75	.08
Brut	2.48	1.00	2.75	1.26	-0.90	.37
France Info	3.02	0.80	3.13	0.75	-1.66	.10
Huffington Post	2.52	0.97	2.84	0.89	-2.43	.015
Le Figaro	2.74	0.88	2.76	0.92	0.64	.52
Le Monde	2.94	0.89	3.04	0.86	-0.67	.50
Le Parisien	2.69	0.87	2.81	0.83	-2.21	.027
Mediapart	2.72	0.96	3.18	0.90	-1.71	.09
MSN Actu	2.31	0.84	2.58	0.93	-3.46	< .001
Ouest France	2.82	0.86	2.96	0.90	-1.97	.048
TF1	2.79	0.86	2.77	0.94	-0.29	.77
Voici	1.87	0.89	2.00	0.88	-2.67	.008
20 minutes	2.73	0.85	2.82	0.84	-1.51	.13
M6	2.84	0.82	2.85	0.97	-0.21	.84
Yahoo! News	2.24	0.91	2.47	0.84	-2.98	.003

Table 18. Comparisons of the estimated marginal ORs of the probability of having effectively been exposed at least once to a news source according to political position. Estimated ORs are calculated from the political position located to the left in the Contrast column. Only significant contrasts ($p < .05$) are shown. P values corrected by the Tukey method.

News source	Contrast	Estimate OR	SE	t	p
Huffington Post	Left – Center	2.44	0.76	2.85	.03
Le Parisien	Left – Center	1.96	0.48	2.75	.05
	Center – Right	0.42	0.11	-3.27	.009
Ouest France	Left – Center	2.01	0.48	2.95	.03

4. Comparative results of GLMM models predicting effective exposure to 15 or 11 news sources.

Table 19. ANOVA (type III) results for a GLMM model with 15 news sources and effective exposure to news source as dependent variable.

Variables	χ^2	Df	p
Political position	17.69	4	.001
News sources	1345.35	10	< .001
Trust	25.41	1	< .001
Political position * News sources	57.82	56	.41
Trust * News sources	19.26	14	.16

Table 20. ANOVA (type III) results for a GLMM model with 11 news sources and effective exposure as dependent variable.

Variables	χ^2	Df	p
Political position	17.02	4	.002
News sources	591.58	10	< .001
Trust	21.77	1	< .001
Political position * News sources	48.00	40	.18
Trust * News sources	18.39	10	.048

Table 21. Pairwise comparisons of the effect of trust (binary) on effective exposure for 15 news sources. Estimate log ORs are calculated with *No trust* as reference level for comparisons.

News source	Estimate log OR	SE	Df	t	p
BFMTV	-0.32	0.17	17840	-1.93	.054
Brut	-1.15	1.18	17840	-0.97	.33
France Info	-0.42	0.22	17840	-1.92	.055
Huffington Post	-0.68	0.27	17840	-2.56	.01
Le Figaro	0.13	0.18	17840	0.73	.46
Le Monde	-0.20	0.21	17840	-0.95	.34
Le Parisien	-0.40	0.20	17840	-2.04	.04

News source	Estimate log <i>OR</i>	<i>SE</i>	<i>Df</i>	<i>t</i>	<i>p</i>
Mediapart	-0.69	0.46	17840	-1.48	.14
MSN Actu	-0.93	0.26	17840	-3.62	.001
Ouest France	-0.37	0.20	17840	-1.83	.07
TF1	-0.15	0.42	17840	-0.35	.72
Voici	-0.54	0.20	17840	-2.71	.01
20 Minutes	-0.24	0.18	17840	-1.31	.19
M6	-0.11	0.48	17840	-0.24	.81
Yahoo! News	-0.61	0.21	17840	-2.89	.004

Table 22. Pairwise comparisons of the effect of trust (binary) on effective exposure for 11 news sources. Estimate log *ORs* are calculated with *No trust* as reference level for comparisons.

News source	Estimate log <i>OR</i>	<i>SE</i>	<i>Df</i>	<i>t</i>	<i>p</i>
BFMTV	-0.29	0.17	13064	-1.72	.08
France Info	-0.39	0.22	13064	-1.75	.08
Huffington Post	-0.67	0.27	13064	-2.50	.01
Le Figaro	0.15	0.18	13064	0.81	.42
Le Monde	-0.18	0.21	13064	-0.85	.40
Le Parisien	-0.37	0.20	13064	-1.87	.06
MSN Actu	-0.94	0.26	13064	-3.61	.001
Ouest France	-0.35	0.21	13064	-1.71	.09
Voici	-0.56	0.20	13064	-2.75	.01
20 Minutes	-0.23	0.19	13064	-1.23	.22
Yahoo! News	-0.61	0.21	13064	-2.86	.004

Table 23. Pairwise comparisons of the effect of political position on effective exposure for 15 news sources. Estimate log *ORs* are calculated with the first term in Contrast as reference level for comparisons. Only significant pairwise comparisons are shown ($p < .05$).

News source	Contrast	Estimate log <i>OR</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Huffington Post	Left – Center	2.44	0.76	2.85	.03
Le Parisien	Left – Center	1.96	0.48	2.75	.05
	Center – Right	0.42	0.11	-3.27	.009
Ouest France	Left – Center	2.01	0.48	2.95	.03

Table 24. Pairwise comparisons of the effect of political position on effective exposure for 11 news sources. Estimate log *ORs* are calculated with the first term in Contrast as reference level for comparisons. Only significant pairwise comparisons are shown ($p < .05$).

News source	Contrast	Estimate log <i>OR</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Huffington Post	Left – Center	2.51	0.79	2.91	.03
Le Parisien	Far left – Right	0.19	0.12	-2.75	.05
	Left – Center	1.96	0.49	2.73	.05
	Center – Right	0.42	0.11	-3.30	.009
Ouest France	Left – Center	2.03	0.48	2.96	.03

5. Analyses with covariates

In this section, we included Education, Age, and Gender as covariates to control for all the effects presented in the main text. Education was divided into 4 categories (“Low” = no high school diploma; “High school diploma”; “Intermediate” = 2 or 3 years of university studies; “High” = 5 years or more of university studies). Age was divided into 6 categories (“18-24”, “25-34”, “35-44”, “45-54”, “55-64”, “65+”). Gender was binary coded.

After adjusting for the covariates, we only found a reduction of the effect of both political attitudes on effective exposure (see below, tables 29 and 30).

We also used these covariates to predict media diet misreport. To perform this analysis, we created a misreport variable by subtracting the declared exposure (binary coding) from the effective exposure (binary coding) for each item. The misreport variable has therefore 3 levels: -1 = *overreport*; 0 = *accurate report*; 1 = *underreport*. We also added an “interest in news” variable to test its effect on misreport.

We report below the graphical results of media diet misreport for each variable.

Figure 1. Probabilities of misreport by Education level

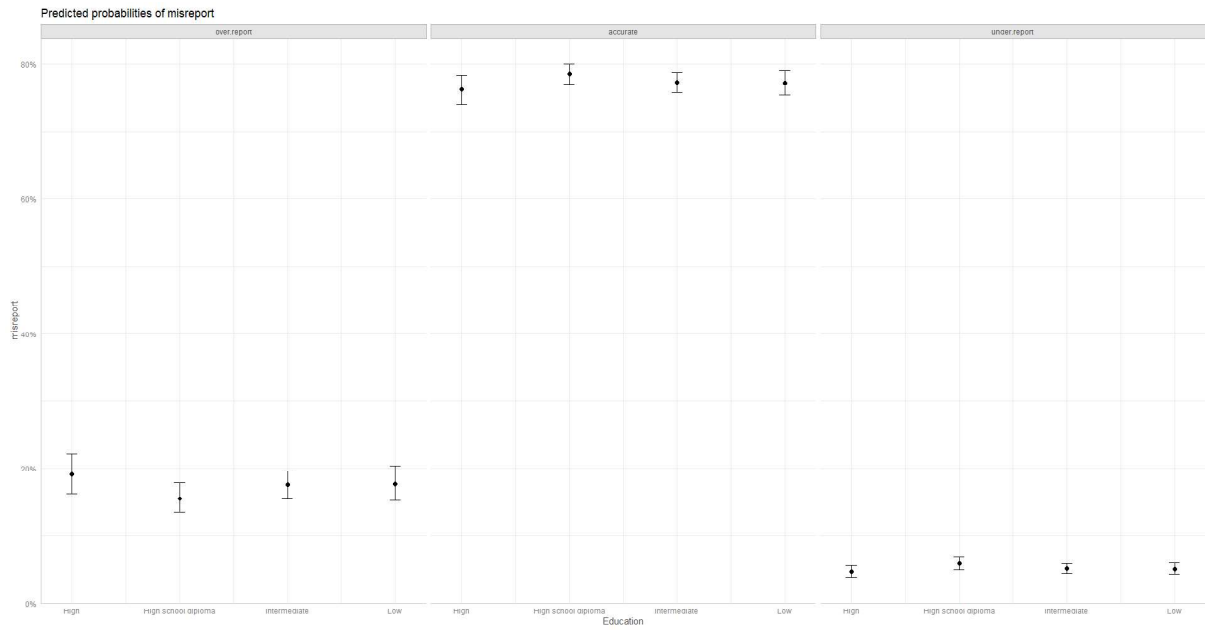


Figure 2. Probabilities of misreport by Age

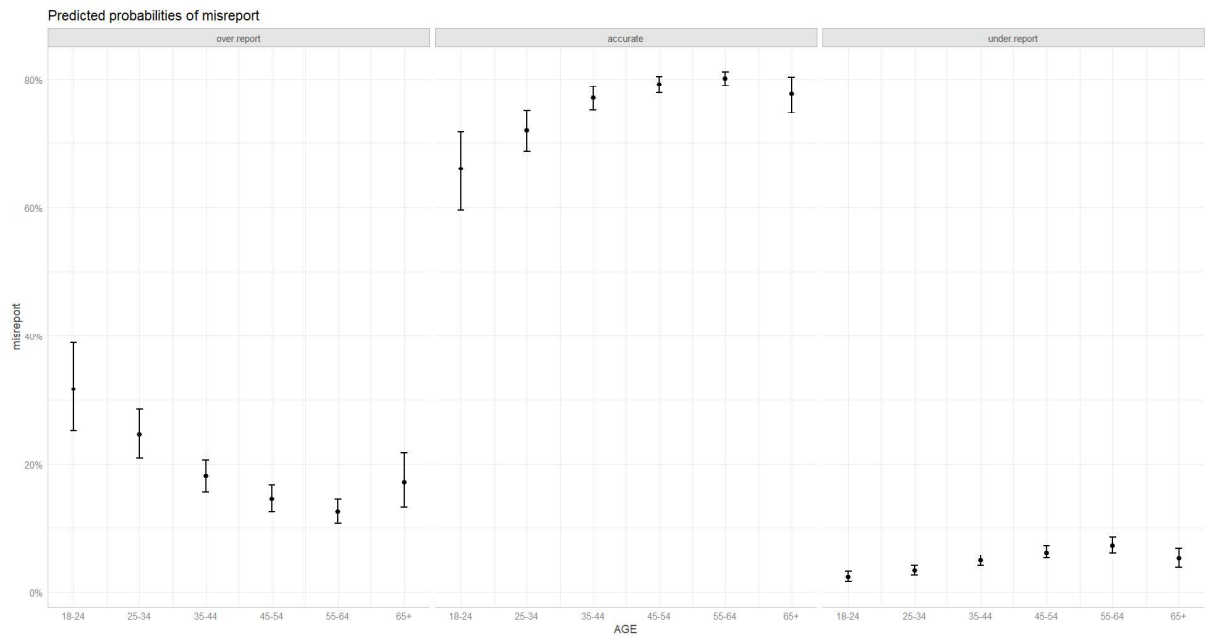


Figure 3. Probabilities of misreport by Gender

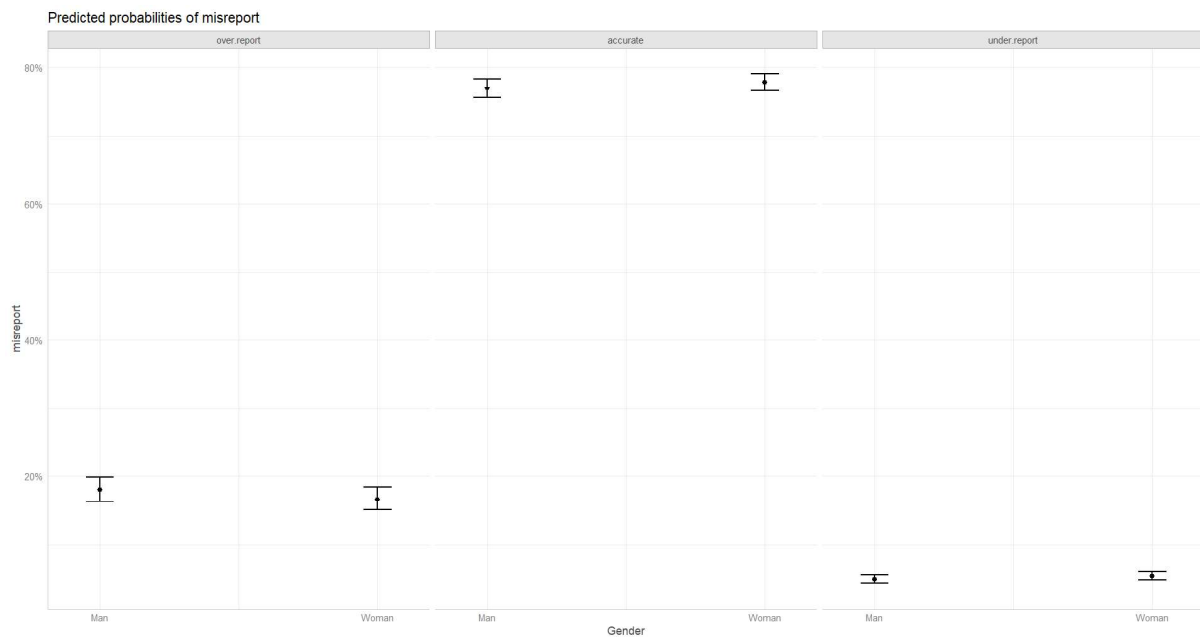


Figure 4. Probabilities of misreport by Interest in news level

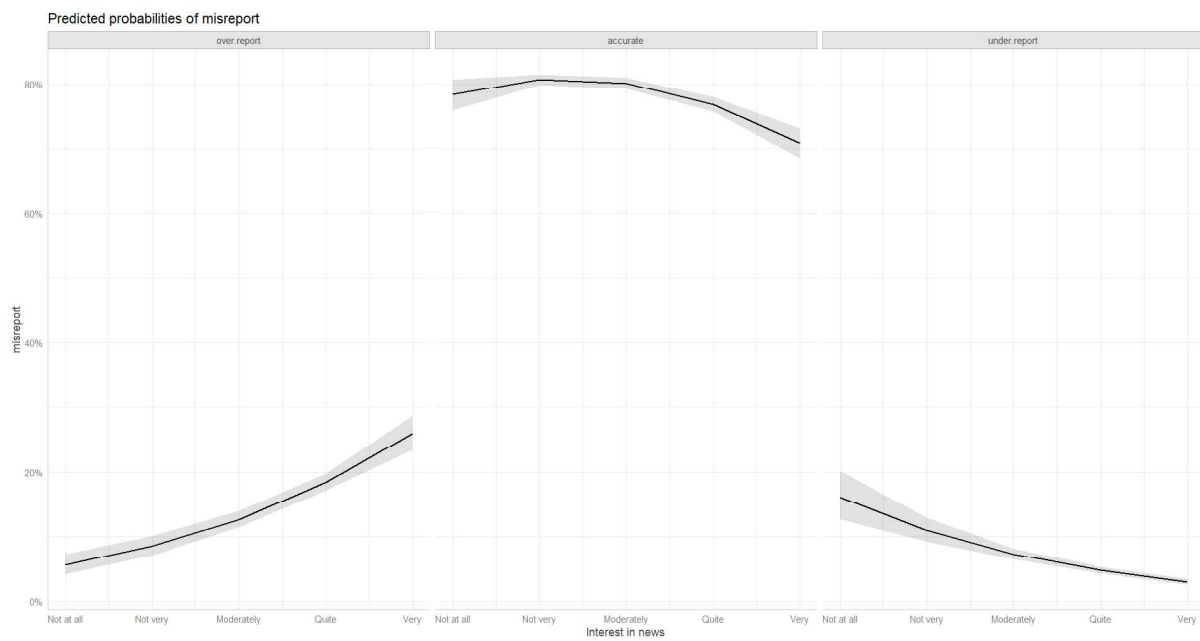


Table 25. ANOVA (type III) results for the probability of trusting a news source according to political position on the left-right axis and controlling for gender, age, and education.

Variables	χ^2	<i>Df</i>	<i>p</i>
Political position	19.22	4	< .001
News sources	121.90	14	< .001
Education	4.48	3	.21
Age	5.98	5	.31
Gender	2.07	1	.15
Political position * News sources	274.14	56	< .001
Education * News sources	96.74	42	< .001
Age * News sources	151.91	70	< .001
Gender * News sources	33.13	14	.003

Table 26. ANOVA (type III) results for the probability of trusting a news source according to political orientation on the progressive-conservative axis and controlling for gender, age, and education.

Variables	χ^2	<i>Df</i>	<i>p</i>
Political orientation	0.001	1	.11
News sources	119.57	14	< .001
Education	2.98	3	.39
Age	5.59	5	.35
Gender	2.53	1	.11
Political orientation * News sources	195.80	14	< .001
Education * News sources	71.93	42	.003
Age * News sources	169.23	70	< .001
Gender * News sources	35.30	14	.001

Table 27. ANOVA (type III) results for the probability of declaring having visited a news source according to political position on the left-right axis and trust, and controlling for gender, age, and education.

Variables	χ^2	<i>Df</i>	<i>p</i>
Political position	14.47	4	.006
News sources	89.68	14	< .001
Trust	741.54	1	< .001
Education	27.40	3	< .001
Age	34.19	5	< .001
Gender	5.57	1	.02
Political position * News sources	85.70	56	.006
Trust * News sources	36.50	14	< .001
Education * News sources	150.90	42	< .001
Age * News sources	145.35	70	< .001
Gender * News sources	53.28	14	< .001

Table 28. ANOVA (type III) results for the probability of declaring having visited a news source according to political orientation on the progressive-conservative axis and trust, and controlling for gender, age, and education. Note: to avoid a convergence problem, the news source *Brut* has been excluded for this analysis.

Variables	χ^2	<i>Df</i>	<i>p</i>
Political orientation	7.17	1	.007
News sources	90.41	14	< .001
Trust	744.03	1	< .001
Education	24.41	3	< .001
Age	30.53	5	< .001
Gender	5.53	1	.02
Political orientation * News sources	85.59	14	< .001
Trust * News sources	32.78	14	.003
Education * News sources	119.96	42	< .001
Age * News sources	148.23	70	< .001
Gender * News sources	54.53	14	< .001

Table 29. ANOVA (type III) results for the probability of having effectively visited a news source according to political position on the left-right axis and trust, and controlling for gender, age, and education. Note: to avoid a convergence problem, the news source *Brut* has been excluded for this analysis.

Variables	χ^2	<i>Df</i>	<i>p</i>
Political position	7.30	4	.12
News sources	66.31	13	< .001
Trust	4.56	1	.03
Education	11.76	3	.008
Age	13.54	5	.02
Gender	10.85	1	< .001
Political position * News sources	56.14	52	.32
Trust * News sources	19.92	13	.1
Education * News sources	80.45	39	< .001
Age * News sources	98.06	65	.005
Gender * News sources	21.57	13	.06

Table 30. ANOVA (type III) results for the probability of having effectively visited a news source according to political orientation on the progressive-conservative axis and trust, and controlling for gender, age, and education. Note: to avoid a convergence problem, the news source *Brut* has been excluded for this analysis.

Variables	χ^2	<i>Df</i>	<i>p</i>
Political orientation	0.51	4	.12
News sources	67.24	13	< .001
Trust	3.60	1	.03
Education	11.36	3	.008
Age	13.27	5	.02
Gender	11.13	1	< .001
Political orientation * News sources	21.68	52	.32
Trust * News sources	19.87	13	.1
Education * News sources	71.75	39	< .001
Age * News sources	94.96	65	.005
Gender * News sources	22.05	13	.06

Table 31. ANOVA (type III) results for the probability of having effectively visited a news source according to declared exposure (binary coded), and controlling for gender, age, and education. Note: to avoid a convergence problem, the news source *Brut* has been excluded for this analysis.

Variables	χ^2	<i>Df</i>	<i>p</i>
News sources	68.13	13	< .001
Declaration	24.43	1	< .001
Education	13.0	3	.005
Age	14.23	5	.01
Gender	8.68	1	.003
Declaration * News sources	54.96	13	< .001
Education * News sources	70.21	39	.001
Age * News sources	90.04	65	.02
Gender * News sources	17.40	13	.18

Table 32. ANOVA (type III) results for the probability of having effectively visited a news source according to declared exposure (4 levels), and controlling for gender, age, and education. Note: to avoid a convergence problem, the news source *Brut* has been excluded for this analysis.

Variables	χ^2	<i>Df</i>	<i>p</i>
News sources	63.79	13	< .001
Declaration	31.08	1	< .001
Education	13.29	3	.004
Age	14.36	5	.01
Gender	8.70	1	.003
Declaration * News sources	84.21	13	< .001
Education * News sources	63.47	39	.008
Age * News sources	88.61	65	.03
Gender * News sources	18.44	13	.14

D) References

- IPSOS et Sopra Steria pour Le Monde, la Fondation Jean Jaurès et l'Institut Montaigne. (2020).
FRACTURES FRANCAISES 2020 Vague 8, Septembre 2020.
- Tiberj, V., 2012. La politique des deux axes. *Revue française de science politique*, 62(1), pp.71-106.