

**Why Are “Others” So Polarized?****Perceived Political Polarization and Media Use in 10 Countries****Abstract**

This study tests the associations between news media use and perceived political polarization, conceptualized as citizens’ beliefs about partisan divides among major political parties. Relying on representative surveys in Canada, Colombia, Greece, India, Italy, Japan, South Korea, Norway, United Kingdom, and United States, we test whether perceived polarization is related to the use of television news, newspaper, radio news, and online news media. Data show that online news consumption is systematically and consistently related to perceived polarization, but not to attitude polarization, understood as individual attitude extremity. In contrast, the relationships between traditional media use and perceived and attitude polarization is mostly country dependent. An explanation of these findings based on exemplification is proposed and tested in an experimental design.

*Keywords:* Political Polarization, Perceived Polarization, Internet, News, Exemplification

This is the author manuscript accepted for publication and has undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as doi: [10.1111/jcc4.12166](https://doi.org/10.1111/jcc4.12166)

### Why Are “Others” So Polarized?

#### Perceived Political Polarization and Media Use in 10 Countries

The extent and causes of political polarization are recurring subjects of interest for academics and pundits alike. Discussions about levels of political polarization and the factors that may exacerbate this phenomenon abound (Carmines, Ensley, & Wagner, 2012; Fiorina & Abrams, 2008; Prior, 2013). The role of the current media environment, and especially of exposure to biased information, in fostering political polarization has been of particular concern. Typically, two kinds of polarization have been studied in this context: attitude polarization, or the reinforcement of individuals' prior views (e.g., Prior, 2013), and polarization on the aggregate level, such as increased distance in policy preferences between opposing partisans (Hetherington & Roush, 2013) or the dislike that those partisans feel toward each other (Garrett et al., 2014; Lelkes, Sood, & Iyengar, 2015). Yet, researchers have only started to explore how news media shape people's *perception* of polarization in the political system (Levendusky & Malhotra, 2015), and this is the line of research to which we contribute.

We seek to advance this research by considering whether people perceive political parties as drifting apart from each other and also whether different media use is related to such perceived polarization. Furthermore, we examine these relationships in a largely unexplored comparative perspective. More specifically, we consider the role of news media, in both

traditional and online formats, in fostering perceived polarization. Our focus on traditional news media is due to the fact that, for most citizens in general and especially in non-Western countries, it is television, radio, and newspapers that are the main source of information about the political system (Papathanassopoulos et al., 2013). Germane to our focus on perceived polarization, traditional news tends to focus on conflict and disagreement (Fiorina, Abrams, & Pope, 2005) and recent evidence suggests that press coverage showing the American electorate as polarized leads people to perceive partisan polarization in the mass public and also increases their dislike for opposing political parties (Levendusky & Malhotra, 2015).

We are particularly interested in *online* news use and how it is comparable to traditional news media use when it comes to perceived polarization. The Internet offers citizens unprecedented access to nearly unlimited webpages, blogs, and online networks, and allows people to select information that is consonant with their predispositions (Stroud, 2011). Thus, it is plausible that such online information presents the politicians or political parties that one personally dislikes as extreme, biased, or otherwise incompetent, and/or focuses on political conflict to a greater extent than is the case in traditional media. As a result, online information seekers may perceive the political system as especially polarized (Smith, 2011). Furthermore, and germane to our comparative approach, different media systems operate under different journalistic values and norms. It is thus possible that the extent to which exposure to traditional or online news is related to perceived polarization may differ across various cultural and sociopolitical contexts. To shed light on whether this is indeed the case, we rely on representative surveys from 10 countries.

Our study does not explore potential effects of perceived polarization. Yet the growing scholarly focus on this phenomenon is motivated by the recognition that perceptions in general have very real consequences for individual's attitudes, cognitions, and behaviors (e.g., Noelle-Neumann, 1974; Gunther & Storey, 2000; Wojcieszak & Price, 2012). This is also the case for perceived polarization (see Ahler, 2014; Westfall, Van Boven, Chambers, & Judd, 2014). As research on pluralistic ignorance suggests, people's erroneous belief about group opinion can affect one's own attitude (Prentice & Miller, 1993). When people think that the mass electorate and the political parties are polarized, they may adopt more extreme policy preferences (Ahler, 2014) because people adopt perceived social norms of reference groups to affirm their sociopolitical identity that stems from one's group memberships (Katz, 1960).

In the sections that follow, we (1) briefly outline extant conceptualizations of polarization; (2) propose a measure of perceived polarization; (3) examine the factors associated with perceived polarization in 10 countries, paying particular attention to online news vis-à-vis traditional news media; and (4) conclude with a discussion of exemplification as a potential mechanism underlying perceived polarization.

### **Political polarization**

Scholars have studied polarization in various forms. On the one hand, attitude polarization, an individual-level phenomenon, is said to occur when an individual's attitude moves toward a more extreme position (e.g., Lord, Ross, & Lepper, 1979). More often, however, polarization has been examined on a societal level, with scholars using different approaches and measurements to capture polarization (see Wojcieszak, 2015). For instance, some studies measure polarization as

diverging preferences that cluster toward ideological poles, finding that mass polarization in the US has not increased (Fiorina & Abrams, 2008; Abrams & Fiorina, 2012). Yet, research focusing on the growing overlap among issue preferences of supporters of the major political parties has found evidence of polarization especially among the more partisan citizens (see Abramowitz & Saunders, 2008). Other scholars have expanded the focus of polarization from political issue positions toward affect (Iyengar et al., 2012), defining polarization as “the extent to which partisans view each other as a disliked out-group” (Iyengar et al., 2012, p. 1). This work finds that such affective polarization has increased over the past several decades in US, with both Republicans and Democrats disliking their opponents more and imputing negative traits to the out-party members (Iyengar et al., 2012). In sum, polarization has been understood on both individual and societal level and in both cognitive (issue polarization) and an affective (affective polarization) ways.

#### **Perceived polarization**

Complementing these conceptualizations of polarization, scholars have begun paying attention to the concept of *perceived polarization*. Hetherington and Roush (2013) have suggested redefining polarization as the extent to which an individual perceives differences between political opponents' values and goals. In the same vein, Westfall et al. (2014) have conceptualized perceived polarization by measuring the difference between the respondents' estimate of Democrats' attitude and the estimated attitude of Republicans on a range of political issues. Other studies similarly captured the estimated difference between the positions of social groups (Ahler, 2014; Levendusky & Malhotra, 2015; Lupu, 2014).

Here, we build on these ideas and conceptualize perceived polarization as one that can be examined alongside other conceptualizations, such as issue and affective polarization, and that occurs when individuals perceive political or social groups are separated, or far away, in their policy preferences. Thus, a person who thinks that political parties' positions on issues are distant from each other perceives polarization, regardless of the actual level of disagreement or distance between the parties. We also argue that perceived polarization may occur not only when comparing "my" position or "my" group's position to another, as is the case when left-leaning respondents are asked about their own party and the right-leaning party, but also when respondents compare multiple groups to which they may have no allegiance *per se* but that are part of a political context. This, for instance, may be the case when independents perceive the parties to which they do not belong as being far away from each other on various policy stands.

In order to capture perceived polarization, we necessarily deviate from the traditional measures of issue polarization. Instead of focusing on mean group attitudes or bimodal distribution of public opinion, we focus on the absolute distance between political parties that people perceive. Following Hetherington and Roush (2013) and Levendusky and Malhotra (2015), we measure perceived polarization as party placement regarding some ideological or political issue. Yet, because we are dealing with countries that also have multiparty systems, we calculate *the maximum perceived distance between any two parties* as perceived political polarization (for a similar approach see Lupu, 2014). This operationalization has the additional advantage of letting us include people who do not identify with a party, but may nonetheless perceive polarization in their societies.

### **The media environment**

Our primary focus is on the news media as one potential source of perceived polarization. After all, most political events and issues are only remotely experienced or not personally verifiable. It stands to reason, then, that the way in which the news media present these events and issues affects people's perceptions of the political system, polarization included.

In the context of polarization more broadly, scholars have focused on both traditional media, such as television or newspapers, and online media, such as websites or online social networks. When it comes to traditional media, the current media environment, with its channel proliferation and content diversification, allows unprecedented choice. This facilitates it for people's selective exposure to like-minded outlets, such as various cable channels, partisan radio shows, or ideological newspapers or magazines (Prior, 2007; Stroud, 2011), and also allows different subgroups within society to customize their own news environments (Sunstein, 2007). These phenomena could lead to attitude polarization, by reinforcing individual priors (Levendusky, 2009; Prior, 2013) as well as to societal polarization, moving partisan subgroups farther away from each other in their policy preferences (Abramowitz & Saunders, 2008) and also increasing the hostility toward opposing partisans (Garrett et al., 2014).

Our argument points in a slightly different direction. Certainly, media use may crystallize people's attitudes, shape their issue positions, and influence their affect. Furthermore, the media may also influence the judgments that people make about where those with differing views stand. Journalistic reports that are high in news value tend to emphasize conflicts and irreconcilable differences between political actors (Fiorina et al., 2005; Wilson, 2006). Also,

media coverage often conveys complex political stories to the general public in a simplified way and presents policy debates among the elites as largely confrontational (Bennett, 1990). Furthermore, partisan media offer extreme and purposefully exaggerated exemplars of the other side, suggesting to people that their political opponents have radical views and extreme policy positions (Levendusky & Malhotra, 2015). As a result, exposure to news media could lead people to perceive the political system as polarized. In fact, some evidence suggests that this is the case. For example, Fiorina et al. (2005) have noted that the media covering the increased extremist rhetoric by party elites may have resulted in perceptions of polarization. Similarly, Levendusky and Malhotra (2015) have shown that exposure to press coverage of polarization leads people to see the general public as polarized.

This theorizing and evidence mostly comes from the US, but there are reasons to believe that traditional news media are differently related to polarization in different countries. For example, norms of civility likely differ across sociopolitical contexts and different media systems may promote differing reporting standards and journalistic functions under different funding constraints (e.g. public versus private media, Aalberg et al., 2013; Soroka et al., 2013). The oft-criticized contentious rhetoric in U.S. media, the screaming heads, ferocious pundits, and the “in your face” debates where participants are cast as enemies and routinely attack or denigrate each other (Ansolabehere & Iyengar, 1995; Mutz, 2007) may be less (or yet more) prevalent in other media systems, thus leading to different effects on citizens’ perceptions. Thus, in order to offer a stringent test of whether traditional news media are related to perceived polarization it is necessary to adopt a comparative perspective. In this study, we test this

relationship across various sociopolitical contexts. First, we focus on the associations between *traditional media use* and perceived polarization, asking:

*RQ1*: Is traditional news use related to perceived political polarization?

*RQ2*: Do relationships among traditional news use and perceived polarization differ by country?

In addition, the *online* environment may exacerbate perceived polarization yet further (Sunstein, 2001). After all, the plethora of online forums, where different groups of people share different opinions about issues, means that internet users are embedded in numerous local online communities with sometimes divergent opinion climates (Nekmat & Gonzenbach, 2013).

Inasmuch as these online communities make it easier for people to get news from attitudinally congruent sources, people may be exposed to consistent and potentially one-sided opinion climates (Wojcieszak, 2008). As a result, peoples' perception of polarization might be amplified.

In a related vein, the online environment may foster perceived polarization because when messages are discussed in an online network, the discussion is likely to be filtered by their social networks (Singer, 2014). For instance, partisan online users are not likely to e-mail information, circulate a link, or post a Facebook update containing sensible arguments from an opposing political party. Rather, when sharing information about a disliked politician or group, those users may disseminate information that mocks the opposing side, portraying them as absurd, stupid, and extreme. Thus, online news use may amplify perceived polarization by making extreme examples of the other side easily available.

Here, we propose that exemplification may be one of the potential mechanisms that explain why media use may be related to perceived polarization. The exemplification process suggests that exemplars in news stories—such as biased partisan exemplars emphasized in attitudinally congruent sources and circulated by like-minded online social networks—become anchor points for individual opinions about a population of occurrences (Zillmann, 1999). As a result, when forming judgments or making decisions, people tend to rely on those easily available examples (Zillmann, 1999). Moreover, consistent with the availability heuristic (Tversky & Kahneman, 1973), exemplars most frequently presented in the media are more easily accessible to people, particularly when there is little direct experience with the events being considered (Busselle & Shrum, 2003). When it comes to perceived polarization, Fiorina et al. (2005) note:

In all likelihood readers remember vivid contrasts like these—however extreme and unrepresentative—much longer than small differences in nationally representative polls... In sum, rather than draw the conclusion that America has split into two distinct camps from a systematic look at a broad array of data, the media often reverse the process, selecting unusual but colorful examples to fit the prior conclusion that the country is deeply split. (p.24)

Thus, when citizens are asked about their own positions on political issues they might be able to provide a response that reflects what they think. However, when asked about the positions of others, it is the available exemplars that may influence their judgments. Furthermore, people exaggerate the dissimilarity of information that differs from their own attitude and minimize the dissimilarity of information that is close to their own position (Hovland & Sherif, 1952). Therefore, it seems plausible that people exposed to extreme exemplars of politicians

from an opposing political party may conclude that a group from which those exemplars are drawn is more extreme than it really is. This misperception would result in perceived polarization. Furthermore, as aforementioned, considering that the online environment amplifies the potential for exposure to extreme exemplars, and that such exposure is more contingent on social networks and less on formal attributes of a media system, we advance the following hypothesis:

*H1:* Online news use will be positively related to perceived political polarization.

To examine these questions and our hypothesis, we rely on a comparative design in 10 countries that differ in their political and media systems. This comparative design allows us to capture contextual national differences in the patterns tested. When comparing the relationships between perceived polarization and different news sources, the finding from one country may not generalize to another sociopolitical context. After all, each media system has a unique relationship with the political system and thus the same media platform can play a different role in informing the citizens in different countries (Hallin & Mancini, 2004; Tiffen et al., 2013). For this reason, a comparative approach is advantageous over studies that focus on a single country. If we find a consistent pattern in the relationship between media use and perceived polarization across different countries, it may suggest that we are capturing a robust association rather than a national peculiarity. Specifically, we expect that the relationship between perceived polarization and *online* news use will be stronger and more consistent across countries than the relationships between perceived polarization and traditional media use. This is because, unlike traditional

media, the Internet is less subject to different press-party relationships and more free from traditional social structural pressures (Reese, 2001).

### Methods

#### Data<sup>1</sup>

This study analyzed cross-national survey data from Canada, Colombia, Greece, India, Italy, Japan, Norway, South Korea, the UK, and the US. These countries were selected based on the variation of key attributes of the media and political systems.<sup>2</sup> With regard to the media system, following Hallin and Mancini's (2004) typology, Canada, the UK, and the US are considered as representatives of the "Liberal" model; Greece and Italy of the "Polarized Pluralist" model; and Norway of the "Democratic Corporatist" model. Colombia, India, Japan, and South Korea allow us to go beyond the Hallin and Mancini's (2004) typology, including further cultural and development differences.

The surveys were administered to nationally representative samples in the 10 countries between June and August 2010. In eight countries, the survey was administered online, and in Greece and Colombia the interviews were conducted by telephone and face-to-face, respectively. In the case of online surveys, YouGov-PMX or its local affiliates used a matching procedure to

---

<sup>1</sup> This study was supported by the Australian Research Council (Australia), Social Science and Humanities Council of Canada (Canada), University of Wisconsin-Madison (Colombia), Greek Ministry of Information, National & Kapodistrian University of Athens (Greece), University of Hyderabad/MICORE (India), Sky Italia (Italy), the Japan Society for the Promotion of Science (Japan), Research Council of Norway (Norway), Korean Research Foundation (South Korea), Economic and Social Research Council (UK), and Korean Science Foundation (US).

<sup>2</sup> Specifically, while the participating countries have democratic political structures, they differ in the strength of public service broadcasting; the scope of regulations imposed on commercial news providers, the extent to which news sources are affiliated with political parties or social movements; the party system itself (whether two- or multiparty); the elite political culture, partisan or consensual; and the level of economic development (see Curran et al., 2014; Soroka et al., 2013).

deliver the equivalent of a conventional probability sample on the basis of specified demographic attributes from pre-established panels. In general, the sampling process has two stages. First, YouGov recruits a large panel of Internet users who have agreed to participate in online surveys. Because this panel is itself not representative of the population YouGov draws a subsample from the panel and matches it on a sociodemographic range to a random sample of respondents drawn from the census data. To further ensure representativeness of the sample, we statistically weigh the final data to the national profile of all adults aged over 18. As such, the resulting sample is equivalent to a conventional probability sample. The samples were directly drawn on YouGov panels. In some countries, YouGov applied their sampling techniques to panels maintained by Research Now (Canada, Norway, and Japan), Zaper (Norway), and Nielsen KoreanClick (South Korea). In India, the sample was limited to residents in urban areas and participants were recruited from an online panel maintained by USamp.

In Greece, the survey was conducted by the research company Public Issue, which conducted telephone interviews with respondents at their home using a multistage stratified random sample of the general population aged 18 years or older. The sample is representative of the Greek population, including the Aegean and Ionian Islands. In Colombia, the survey was conducted in 10 cities by a local polling firm, Deployectos Limitada. The survey was administered face-to-face with respondents who were selected using a multistage stratified random sampling based on census data, and the final sample represents Colombia's adult urban population—about 76% of Colombia's 44.5 million inhabitants.

### Measures

*Perceived polarization.* Perceived polarization was operationalized as the absolute distance between the two most distant political parties' positions on specific sociopolitical issues as placed by the respondent. On 7-point Likert-type scales, respondents were asked to locate major political parties on three important issues for each country (see Hetherington & Roush, 2013 for a similar strategy). In each country, researchers selected issues that were politically controversial at the moment. Although the issues were not identical across the countries, all of the selected issues tapped the classic left-right dimensions concerning the provision of social welfare benefits and government regulation of business, as well as emerging issues ranging from immigration, civic rights of cultural minorities, environmental protection to relations with neighboring states (see Table 1 for the complete list of issues).

In short, perceived polarization score is calculated as

$$\text{Perceived polarization} = |X_1 - X_2|$$

where  $X_1$  and  $X_2$  are the two most extreme scores in the scale.<sup>3</sup> The perceived polarization scores are calculated for each issue and then averaged because the scores of the three issues in each country were highly consistent. The perceived polarization score ranges from 0 to 6, where a higher score indicates higher levels of perceived polarization (descriptive statistics in Table 1).

---

<sup>3</sup> Measuring perceived issue positions of two most distant parties of the countries with multiparty system may overestimate the perceived polarization because participants could think of two extreme fringe parties when they gave an answer. However, we did not include those 'fringe' parties in the surveys. Second, we also tested the same relationship using an alternative measure. Instead of simply calculating the distance between two most extreme parties, Lupu (2014) delineated a strategy for measuring individuals' perceptions of polarization by using a weighted sum of the distances between the parties coupled with the relative weight capturing the power that each party exerts in the system. The result using this alternative measure is discussed in Result section.

*News consumption.* Newspaper, radio news, and television news use were measured by asking respondents how often in a typical week they used news on a particular medium (from 1 “every day” to 5 “hardly ever”).<sup>4</sup> Internet news use was measured on the same scale by asking respondents how often they visited an online news website in a typical week. These items were recoded so that a higher value points to a more frequent use.

*Attitude Extremity.* We asked respondents’ own attitudes on three sociopolitical issues for each country using a 7-point Likert-type scale with the opposing ends of the scale representing the opposing views. The issues asked are the same ones we asked for measuring perceived polarization. Then we constructed an attitude extremity variable by computing the absolute deviation from the scale midpoint. We averaged three attitude extremity scores to create a single measure for each country (from 0 “moderate” to 3 “extreme”).

*Demographics.* We measured age, gender, education level, and household income to control for their potential effects on perceived polarization. Age and gender were measured by directly asking the year of birth and biological sex. Education and household income were measured with ordered scales sensitive to local variation.

### Results

We first explored perceived polarization across the 10 countries. Among the 10 countries, Greece, Italy, Norway, and South Korea are the countries with the highest perceived polarization levels; India, the UK, and the US are moderate; and Canada and Colombia are the countries where the public perceives little polarization among political parties (see Table 1).

---

<sup>4</sup> Radio news use in Colombia was assessed on a 6-point scale (0 “frequently” to 5 “never”).

[TABLE 1 ABOUT HERE]

Towards addressing our research questions and hypothesis, we examined the relationships between perceived polarization and a series of news consumption variables: traditional news media use and Internet news use. Our analytical strategy is straightforward. We tested a series of ordinary least squares (OLS) regression models predicting perceived polarization controlling for age, gender, income, and education level. In addition, we controlled for respondents' attitude extremity regarding the issues tested, considered as a way of controlling for the effects of actual, individual-level attitude polarization on perceived polarization.

Our first research question asked whether traditional news media use is related to perceived polarization. The results suggest that at least one type of traditional news media use predicts perceived polarization in four out of the 10 countries. However, there are substantial variations in the relationships between traditional media use and perceived polarization, in that a specific medium in a specific country can contribute to perceived polarization. This addresses our second research question, as to whether the relationships among traditional news use and perceived polarization differ by country. That is, it is not the case that various sources are consistently associated with perceived polarization in one country, or that the same source is similarly related to perceived polarization across countries. Rather, the detected patterns are both context and medium specific (see Table 2). For example, with regard to newspaper use, we find that only in Norway frequent newspaper readers perceive higher polarization ( $r^2 = .10; p < .05$ ). However, in the other nine countries there is no association between newspaper readership and perceived polarization.

With respect to television news, our results are more complex. In three countries, television news viewing and perceived polarization are significantly related, yet this relationship is positive in two countries and negative in one country. As shown in Table 2, in Greece ( $r^2 = .09$ ;  $p < .05$ ) and Italy ( $r^2 = .09$ ;  $p < .01$ ), those citizens who frequently watch television news also see political parties as polarized; however, in Japan, ( $r^2 = -.16$ ;  $p < .001$ ) those who often tune in to television perceive less polarization.

For radio news, significant relationships are found in two countries, and the pattern is consistent. In Japan ( $r^2 = -.13$ ;  $p < .001$ ) and South Korea ( $r^2 = -.10$ ;  $p < .001$ ), those who often tune to radio news perceive less polarization than infrequent listeners. In the remaining seven countries, radio news use is not related to individual perception as to whether political parties are polarized. All in all, although the results do not reveal a consistent pattern regarding traditional media use, there are several country specific influences, which we discuss in the next section. Now we turn our attention to Internet news.

[TABLE 2 ABOUT HERE]

Parallel analyses tested Hypothesis 1, namely that there is a positive relationship between perceived polarization and online news consumption. The models find a straightforward and consistent pattern. In nine out of the 10 countries considered, there is a positive relationship between online news use and perceived polarization; India was the only exception, with a weak negative relationship. The associations between online news consumption and perceived polarization are not only consistent across countries but also stronger than those of traditional

news consumption. Overall, the results support our expectation that people who acquire their news online tend to perceive a more polarized polity.<sup>5</sup>

We additionally find that attitude extremity (our operationalization of attitude polarization) is positively associated with perceived polarization in all nine countries we tested.<sup>6</sup> This suggests that people who have extreme issue positions also perceive more polarization among the parties (Van Boven, Judd, & Sherman, 2012).

To ensure that attitude polarization and perceived polarization are distinctive concepts, we additionally examined the effects of online news use on attitude extremity after controlling for the same variables that we used in the regression models presented in Table 2. In contrast to the consistent relationship between online news use and perceived polarization, we did not find significant relationships between online news use and attitude polarization except for Canada ( $r^2 = .13, p < .01$ ) and South Korea ( $r^2 = .17, p < .001$ ). This finding bolsters our argument that online news affects perceptions of polarization but not actual attitude polarization.

### Discussion

In this study, we explored perceived polarization in a comparative perspective and tested the associations between media use and perceived polarization. When considering different media outlets, we find no clear pattern between traditional news consumption and seeing the political

<sup>5</sup> Because our perceived polarization measure may exaggerate the perceived distance among parties in multiparty system, we tested the same OLS regression models using a weighted measure of perceived polarization, suggested by Lupu (2014). These additional tests show that the size and the statistical significance of the standardized regression coefficients of Online News Use in the seven countries of multiparty system are very consistent with those of the original analyses: Canada ( $r^2 = .15, p < .01$ ), Colombia ( $r^2 = .10, p < .05$ ), Greece ( $r^2 = .13, p < .001$ ), India ( $r^2 = -.09, p < .05$ ), Italy ( $r^2 = .19, p < .001$ ), Norway ( $r^2 = .09, p < .05$ ), U.K. ( $r^2 = .14, p < .001$ ).

<sup>6</sup> We tested this relationship only in nine countries because Italy did not have the attitude extremity measure.

system as polarized. Using the Hallin and Mancini's (2004; 2012) typology to interpret our results offers important insights. In countries belonging to the "Liberal" model, such as Canada, the UK, and the US, traditional media are mostly unrelated to perceived polarization. It could be the case that neutrality, theoretically characteristic of this model, may shield citizens in those countries from perceiving their political system as polarized. This tentative explanation, however, stands in large contrast to the aforementioned evidence from the US, which suggests that the largely commercial partisan media may exacerbate polarization when it comes to attitudes, issues, and policy preferences, affect as well as perceptions (Levendusky & Malhotra, 2015). On the other hand, in countries such as Greece and Italy, which are part of the "Polarized Pluralist" model in which partisan media alignment is common, traditional media tend to foster perceived polarization. And finally, in the "Democratic Corporatist" system, as in Norway, we find a positive relation only with newspaper use, which might be tied to the historical party press alignment characteristics of this media system. It needs to be kept in mind, however, that Hallin and Mancini typology is continually evolving, as many countries converge on a market-driven journalism, characteristic of the Liberal model, while at the same time some countries shift toward increased political parallelism. When we examine the countries in our sample outside the original typology, the relationships are less clear and can only be described as country-dependent.

In stark contrast to the weak relationships between traditional media use and perceived polarization, we find clear and stronger positive associations between online news use and perceived polarization in a solid majority of the countries analyzed. This indicates that using the Internet for news information is likely to lead an individual to perceive political actors as distant

**Comment [A1]:** I don't understand this part???

**Comment [A2]:** Flag it as a query for the author to check and clarify if necessary.

from one another on some crucial policy stands. This consistent pattern indicating the influences of the online media environment on perceived polarization transcend the specific media systems of the different countries is the central contribution of our study.

Another noteworthy finding regards the rather inconsistent relationship between online news consumption and actual attitude polarization. Although perceived polarization and attitude polarization are related in that people with extreme attitudes are known to perceive more polarization (Van Boven et al., 2012), the fact that online news use only contributes to perceived polarization suggests that perceived and actual attitude polarization are distinct concepts.

Earlier we suggested that exposure to extreme exemplars is one potential mechanism by which online news could contribute to perceived polarization. As the Internet and online social networks increasingly become news sources for many citizens (Milosevic et al., 2014), people are faced with information environment in which examples of extreme positions of the other side abound. One of the consequences may well be that people start to perceive more polarization simply due to the biased examples that they encounter in the media.

To test this notion, we conducted a follow-up experiment. For this experiment we asked 78 students from a large Midwestern U.S. university if they thought health insurance plans should cover contraceptives for women free of charge. This question related to a bill in the US that called for mandating coverage of contraceptives as part of the Affordable Care Act. We then randomly assigned the participants to one of two experimental conditions: exposure to an extreme versus a mild exemplar in news content covering the controversy that ensued over the proposed legislation. Subjects viewed a news article on an online website mimicking MSNBC, a

liberal-leaning cable news outlet. The stimulus articles described a controversy around the bill and provisions mandating coverage of contraceptives. Depending on the condition, the article included a different version of a video report embedded in the text. In one condition, subjects watched a moderate conservative political commentator, Joe Scarborough, discussing the issue. In the other condition, subjects saw Rush Limbaugh, a more extreme conservative media figure. After reading and watching the stimulus material, subjects evaluated where the Republican and Democratic parties stood on this issue and indicated their own opinion once again. To assess perceived polarization, we employed the same measurement strategy as outlined above.

The results are telling. The significant main effect of subjects' preexisting attitude ( $F(1, 74) = 6.64, p < .05$ ) indicates that those who were initially favorable toward the bill—that is, those who tend to be more liberal—perceived more political polarization ( $M = 4.49, S.D. = 1.01$ ) than those who had an unfavorable attitude at the beginning ( $M = 3.91, S.D. = 1.04$ ). There was no significant main effect of the news exemplar on perceived polarization. However, and most germane to our argument, we found a significant interaction between the preexisting attitude and the news exemplar provided ( $F(1, 74) = 5.51, p < .05$ ). Perceived polarization among the subjects who were initially favorable toward the bill and watched the extreme exemplar was higher than among the subjects who were initially favorable toward the bill and watched the less extreme exemplar ( $t(74) = -2.01, p < .05$ ), and also higher than among the subjects who had a negative attitude toward the bill (the more conservative position) and were exposed to the more extreme exemplar ( $t(74) = -3.36, p < .01$ ). This consistent pattern shows that partisans, in this case liberal participants who supported the bill, perceived *more* polarization among political

parties when exposed to an extreme exemplar from the other side of the political spectrum. These findings support the notion that biased exemplification can be a mechanism of the perceived polarization.

In this study, we tested our expectations in multiple sociopolitical contexts, offering rich comparative evidence on perceived polarization and its communicative correlates. It needs to be kept in mind that our study relies on cross-sectional data and, as such, we cannot speak to the causal effects from media exposure to individual perceptions. Also, we cannot test the causal relationship between attitude extremity and perceived polarization, nor the effects of perceived polarization. We suspect that people with more extreme attitudes may perceive more polarization over time as a result of their online news consumption. This may lead those people to further use new media to express their views and persuade others (Rojas, 2010). If people with extreme attitudes who perceive more polarization are disproportionately vocal, active, and exert influence on the political process, compromise and consensus may become harder to achieve. Longitudinal studies are needed to examine these notions.

In addition, the variance that our statistical models explained varies across countries and is modest in some countries. We conjecture there might be other factors that contribute to perceived polarization, ranging from macrolevel factors, such as political culture and the nature of political coverage in the media, to individual-level factors, such as political socialization and psychological traits. Future research that considers a wider range of variables might be able to better explain perceived polarization and its antecedents.

Also, although our post hoc experiment suggests that being exposed to extreme exemplars is a driving force behind perceived polarization, we have no evidence that subjects in our main study were in fact exposed to more extreme exemplars. Future research that employs longitudinal designs combined with thorough content analysis would be better suited to speak to the underlying mechanisms implicit in our work.

Another limitation of our study is that we relied on self-reported measures of media use. Such measures are known to overestimate media consumption, with different people overestimating at different rates (Prior, 2009). The reliance on self-reports remains a perennial problem in survey research in communication science, and there is little consensus as to how to best measure media use in questionnaires (see Dilliplane, Goldman, Mutz, 2012; Prior, 2009). Nevertheless, there are no reasons to suspect that overestimation changes across medium, in that respondents differently overestimate their use of, for example, television and newspapers. As such, our results are not likely to be affected by biases that might come from self-reported measures.

Lastly, it needs to be noted that our study did not include measures tapping cable news use more specifically. In the US, many cable news channels are strongly partisan and expose the audiences, who tend to be strongly partisan themselves, to biased and extreme exemplars of the other side (Prior, 2007). This may lead the viewers to perceive polarization in the political system and, as a result, partisan cable news may have similar effects on perceived polarization as the online environment. Unfortunately, due to the lack of pertinent measures, we could not compare online news use, network television news use, and cable news use; and we could not

determine whether their associations with perceived polarization differ. It is an important challenge for future research to disentangle the differential effects from a variety of fragmented news sources in the current media environment, and do so in a comparative perspective.

Despite these limitations our results are compelling and point to several important contributions. The differences found in how traditional media and online media relate to perceived polarization and attitude extremity support our view that it is important to incorporate *perceived polarization* into ongoing discussions about political polarization in its other forms. It is plausible that affective polarization, or interparty hostility, is fostered by selective exposure to like-minded media content (Garrett et al., 2014) that uses extreme exemplars to illustrate the opposition. It is also possible that perceived polarization mediates attitude polarization, in that seeing the political system as polarized may cause people to become more extreme and more polarized themselves (Ahler, 2014) as well as affective polarization, in that exposure to extreme exemplars on the other side makes one think that the political opponents are extreme, which in turn may lead people to dislike them (Levendusky & Malhotra, 2015).

This study also offers some methodological advancement to the polarization literature. Although we recognize that the field has been saturated with various definitions and measurements, *perceived polarization* may be a useful addition to existing measures. Only by capturing the multiple contours of polarization, including issue positions, affect for those who think differently, and perceptions about where the others stand on issues, we will be able to advance the scholarship in this area. In addition, the operationalization for measuring perceived polarization proposed here can be applied to multiple social groups and organizations, above and

beyond partisans or political parties. Although previous operationalizations have relied on party identification to measure issue stances or affective distance toward others, we posit that, for someone to perceive polarization, they do not need to be partisan themselves. On the contrary, independents may perceive polarization that may affect their political attitudes or behaviors.

On a final note, we encourage future research in the area to examine the longer-term societal consequences of individual perceptions that a given party system is polarized. We are convinced that perceived polarization may have important effects on citizens' decisions as to whether or not to express their own opinion or engage in the political system. For example, people who perceive the political system as polarized may dismiss the proposals of the opposing party as extreme and incompatible; thus being less favorable toward engaging in deliberation to find a common ground. It is also plausible that, whereas for the more partisan and the more strongly opinionated citizens a perception that political parties are in strong opposition may spur expression and engagement (Rojas, 2010; Van Boven et al., 2012; Westfall et al., 2014), for those with weaker partisan allegiances the effect may be the opposite: disengagement and dissatisfaction with the political system (e.g., Hibbing & Theiss-Morse, 2002). Thus, although polarization may help mobilize voting and political engagement for some, it might be a demobilizing force for others. This poses an important normative question for future theorizing and research: Is political polarization a "bad thing," or could it be that certain levels of polarization are needed for the functioning of a democratic political system?

**References**

- Aalberg, T., Papathanassopoulos, S., Soroka, S., Curran, J., Hayashi, K., Iyengar, S., Mazzoleni, G., Rojas, H., Rowe, D., & Tiffen, R. (2013). International TV news, foreign affairs interest and public knowledge. *Journalism Studies, 14*(3), 387-406.
- Abrams, S. J., & Fiorina, M. P. (2012). "The big sort" that wasn't: A skeptical reexamination. *PS: Political Science & Politics, 45*(02), 203-210. doi: 10.1017/S1049096512000017
- Abramowitz, A. I., & Saunders, K. L. (2008). Is polarization a myth? *Journal of Politics, 70*(2), 542-555. doi: 10.1017/s0022381608080493
- Ahler, D. J. (2014). Self-fulfilling misperceptions of public polarization. *The Journal of Politics, 76*(3), 607-620. doi:10.1017/S0022381614000085
- Ansolabehere, S., & Iyengar, S. (1995). *Going negative: How attack ads shrink and polarize the electorate*. New York, NY: Free Press.
- Bennett, W. L. (1990). Toward a theory of press-state relations in the United States. *Journal of Communication, 40*(2), 103-127. doi: 10.1111/j.1460-2466.1990.tb02265.x
- Bennett, W. L., & Iyengar, S. (2008). A new era of minimal effects? The changing foundations of political communication. *Journal of Communication, 58*(4), 707-731.
- Busselle, R. W., & Shrum, L. J. (2003). Media exposure and exemplar accessibility. *Media Psychology, 5*(3), 255-282. doi: 10.1207/S1532785XMEP0503\_02
- Carmines, E. G., Ensley, M. J., & Wagner, M. W. (2012). Who fits the left-right divide? Partisan polarization in the American electorate. *American Behavioral Scientist, 56*(12), 1631-

1653. doi: 10.1177/0002764212463353

- Converse, P. E. (1964). The nature of belief systems in mass publics. In D. Apter (Ed.), *Ideology and discontent* (pp. 206-261). New York, NY: The Free Press.
- Curran, J., Coen, S., Soroka, S., Aalberg, T., Hayashi, K., Hichy, Z., . . . Tiffen, R. (2014). Reconsidering 'virtuous circle' and 'media malaise' theories of the media: An 11-nation study. *Journalism*. doi:10.1177/1464884913520198
- Dilliplane, S. (2011). All the news you want to hear: The impact of partisan news exposure on political participation. *Public Opinion Quarterly*, 75(2), 287-316.
- Fiorina, M. P., Abrams, S. J., & Pope, J. C. (2005). *Culture war? The myth of a polarized America*. New York, NY: Pearson Longman.
- Fiorina, M. P., & Abrams, S. J. (2008). Political polarization in the American public. *Annual Review of Political Science*, 11, 563-588. doi: 10.1146/annurev.polisci.11.053106.153836
- Garrett, R. K., Gvirsman, S. D., Johnson, B. K., Tsifti, Y., Neo, R., & Dal, A. (2014). Implications of pro- and counterattitudinal information exposure for affective polarization. *Human Communication Research*, 40(3), 309-332. doi:10.1111/hcre.12028
- Green, D. P., Palmquist, B., & Schickler, E. (2004). *Partisan hearts and minds: Political parties and the social identities of voters*. New Haven, CT: Yale University Press.
- Gunther, A. C., & Storey, J. D. (2003). The influence of presumed influence. *Journal of Communication*, 53(2), 199-215. doi: 10.1111/j.1460-2466.2003.tb02586.x
- Hallin, D. C., & Mancini, P. (2004). *Comparing media systems: Three models of media and politics*. New York, NY: Cambridge University Press.

- Hallin, D. C., & Mancini, P. (Eds.). (2012). *Comparing media systems beyond the western world*. Cambridge, England: Cambridge University Press.
- Hetherington, M. J. (2001). Resurgent mass partisanship: The role of elite polarization. *American Political Science Review*, 95(03), 619-631. doi:10.1017/S0003055401003045
- Hetherington, M. J., & Roush, C. E. (2013, April). *Perceiving the other side: Toward a new understanding of mass polarization*. Paper presented at the 61st Annual Conference of the Midwest Political Science Association, Chicago, IL.
- Hibbing, J. R., & Theiss-Morse, E. (2002). *Stealth democracy: Americans' beliefs about how government should work*. New York, NY: Cambridge University Press.
- Hovland, C. I., & Sherif, M. (1952). Judgmental phenomena and scales of attitude measurement: Item displacement in Thurstone scales. *Journal of Abnormal and Social Psychology*, 47, 822-832.
- Iyengar, S., & Hahn, K. S. (2009). Red media, blue media: Evidence of ideological selectivity in media use. *Journal of Communication*, 59(1), 19-39.
- Iyengar, S., Sood, G., & Lelkes, Y. (2012). Affect, not ideology: A social identity perspective on polarization. *Public Opinion Quarterly*, 76(3), 405-431.
- Iyengar, S., & Westwood, S. J. (2015). Fear and loathing across party lines: New evidence on group polarization. *American Journal of Political Science*, 59(3), 690-707.
- Katz, D. (1960). The functional approach to the study of attitude. *Public Opinion Quarterly*, 24, 163-204.
- Keltner, D., & Robinson, R. J. (1996). Extremism, power, and the imagined basis of social

- conflict. *Current Directions in Psychological Science*, 5(4), 101-105.
- Knobloch-Westerwick, S., & Meng, J. (2011). Reinforcement of the political self through selective exposure to political messages. *Journal of Communication*, 61(2), 349-368.
- Kuklinski, J. H., Quirk, P. J., Jerit, J., Schwieder, D., & Rich, R. F. (2000). Misinformation and the currency of democratic citizenship. *Journal of Politics*, 62(3), 790-816.
- Levendusky, M. S. (2009). *The partisan sort: How liberals became Democrats and conservatives became Republicans*. Chicago, IL: University of Chicago Press.
- Levendusky, M., & Malhotra, N. (2015). Does media coverage of partisan polarization affect political attitudes? *Political Communication*, 1-19. doi:10.1080/10584609.2015.1038455
- Lupu, N. (2014). Party polarization and mass partisanship: A comparative Perspective. *Political Behavior*, 1-26.
- Milosevic, M., Chishlom, J., Kilman, L., & Henriksson, T. (2014). *World Press Trends 2014*. Retrieved from Paris, France: <http://www.wan-ifra.org/reports/2014/10/07/world-press-trends-report-2014>
- Mutz, D. C. (2007). Effects of “in-your-face” television discourse on perceptions of a legitimate opposition. *American Political Science Review*, 101(04), 621-635.
- Nekmat, E., & Gonzenbach, W. J. (2013). Multiple opinion climates in online forums: Role of website source reference and within-forum opinion congruency. *Journalism & Mass Communication Quarterly*, 90(4), 736-756. doi: 10.1177/1077699013503162
- Noelle-Neumann, E. (1974). The spiral of silence: A theory of public opinion. *Journal of Communication*, 24(2), 43-51. doi: 10.1111/j.1460-2466.1974.tb00367.x

- Papathanassopoulos, S., Coen, S., Curran, J., Aalberg, T., Rowe, D., . . . Tiffen, R. (2013). Online threat, but television is still dominant. *Journalism Practice*, 7(6), 690-704.
- Prentice, D. A., & Miller, D. T. (1993). Pluralistic ignorance and alcohol use on campus: Some consequences of misperceiving the social norm. *Journal of personality and social psychology*, 64(2), 243-256. doi:10.1037/0022-3514.64.2.243
- Prior, M. (2007). *Post-broadcast democracy: How media choice increases inequality in political involvement and polarizes elections*. Cambridge University Press.
- Prior, M. (2009). Improving media effects research through better measurement of news exposure. *The Journal of Politics*, 71(3), 893-908. doi:10.1017/S0022381609090781
- Prior, M. (2013). Media and political polarization. *Annual Review of Political Science*, 16, 101-127.
- Pronin, E., Puccio, C., & Ross, L. (2002). Understanding misunderstanding: Social psychological perspectives. In T. Gilovich, D. Griffin, & D. Kahneman (Eds.), *Heuristics and biases: The psychology of intuitive judgment* (pp. 636-665). New York, NY: Cambridge University Press.
- Reese, S. D. (2001). Understanding the global journalist: A hierarchy-of-influences approach. *Journalism Studies*, 2(2), 173-187. doi: 10.1080/14616700120042060
- Rojas, H. (2010). "Corrective" actions in the public sphere: How perceptions of media and media effects shape political behaviors. *International Journal of Public Opinion Research*, 22(3), 343-363. doi: 10.1093/ijpor/edq018
- Singer, J. B. (2014). User-generated visibility: Secondary gatekeeping in a shared media

space. *New Media & Society*, 16(1), 55-73.

Smith, A. (2011). The internet and campaign 2010: Pew Research Center.

Soroka, S., Andrew, B., Aalberg, T., Iyengar, S., Curran, J., Coen, S., . . . Tiffen, R. (2013).

Auntie knows best? Public broadcasters and current affairs knowledge. *British Journal of Political Science*, 43(04), 719-739. doi: 10.1017/S0007123412000555

Stroud, N. J. (2011). *Niche news: The politics of news choice*. New York, NY: Oxford University Press.

Sunstein, C. R. (2002). The law of group polarization. *Journal of Political Philosophy*, 10(2), 175-195. doi: 10.1111/1467-9760.00148

Sunstein, C. R. (2007). *Republic.Com 2.0*. Princeton, NJ: Princeton University Press.

Tiffen, R., Jones, P. K., Rowe, D., Aalberg, T., Coen, S., Curran, J., . . . Soroka, S. (2013).

Sources in the news. *Journalism Studies*, 1-18. doi: 10.1080/1461670X.2013.831239

Tversky, A., & Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. *Cognitive Psychology*, 5(2), 207-232. doi: 10.1016/0010-0285(73)90033-9

Van Boven, L., Judd, C. M., & Sherman, D. K. (2012). Political polarization projection: Social projection of partisan attitude extremity and attitudinal processes. *Journal of Personality and Social Psychology*, 103(1), 84-100.

Westfall, J., Van Boven, L., Chambers, J., & Judd, C. M. (2014). *Perceiving political polarization in America: Party identity strength and attitude extremity exacerbate the perceived partisan divide*. doi:10.2139/ssrn.2186601

Wilson, J. Q. (2006). How divided are we? *Commentary*, 121(2), 15-21.

- Wojcieszak, M. (2008). False consensus goes online: Impact of ideologically homogeneous online groups on false consensus. *Public Opinion Quarterly*, 72(4), 781-791.
- Wojcieszak, M. (2015). Political polarization. In G. Mazzoleni (Ed.), *International encyclopedia of political communication*. London: Wiley-Blackwell.
- Wojcieszak, M. E., & Price, V. (2012). Perceived versus actual disagreement: Which influences deliberative experiences? *Journal of Communication*, 62(3), 418-436.
- Zillmann, D. (1999). Exemplification theory: Judging the whole by some of its parts. *Media Psychology*, 1(1), 69-94.

Author Manuscript

## Tables

Table 1. Descriptive Statistics of Perceived Polarization Variables

Country		Issue			Cronbach's $\alpha$
Canada		Bank regulation	Energy	Public healthcare	.81
	M (SD)	2.13 (1.67)	2.18 (1.83)	2.31 (1.85)	
	N	762	800	764	
Colombia		FTA	Gay marriage	Solutions for guerrilla issue	.51
	M (SD)	2.35 (2.35)	1.37 (1.93)	2.70 (2.35)	
	N	832	721	908	
Greece		Austerity measures	Separation between church and state	Immigration regulation	.61
	M (SD)	4.64 (1.84)	4.57 (1.99)	4.17 (2.01)	
	N	983	945	967	
India		Economic zones	Entry of foreign educational institutions	Formation of small parties	.71
	M (SD)	2.99 (1.68)	2.81 (1.81)	2.55 (1.68)	
	N	964	943	936	
Italy		Spending cuts	Building nuclear plants	Immigration limits	.83
	M (SD)	3.87 (2.06)	4.04 (2.16)	4.14 (1.84)	
	N	973	964	977	
Japan		Revising constitution	-	-	-
	M (SD)	1.49 (1.55)	-	-	
	N	783			
Norway		Bank regulation	Environment	Healthcare	.79
	M (SD)	4.18 (1.74)	3.72 (1.63)	4.44 (1.74)	
	N	787	850	866	
South Korea		Privatizing healthcare	Building relationships with North Korea	Four-river development project	.77
	M (SD)	3.68 (1.93)	3.82 (1.81)	5.09 (1.55)	
	N	1000	1000	1000	
United Kingdom		Bank regulation	Spending cuts	Immigration limits	.75
	M (SD)	2.10 (1.63)	3.54 (1.82)	2.87 (1.71)	
	N	836	928	915	

United States		Bank regulation	Environment	Health care	
	M (SD)	3.33 (1.95)	2.91 (1.83)	3.71 (2.02)	.79
	N	886	898	918	

Author Manuscript

**Table 2. Multiple OLS Regression Analyses Predicting Perceived Polarization**

	Canada		Colombia		Greece		India		Italy	
	B (SE)	<sup>2</sup>	B (SE)	<sup>2</sup>	B (SE)	<sup>2</sup>	B (SE)	<sup>2</sup>	B (SE)	<sup>2</sup>
	18.53 (8.45)		-10.31 (10.82)		23.97 (7.18)		38.02 (9.62)		42.34 (8.55)	
Birth Year	-.01 (.00)	-.09	.01 (.01)	.05	-.01 (.00)	-.11**	-.02 (.00)	-.16**	-.02 (.00)	-.15***
Female	-.37 (.13)	-.12**	-.31 (.15)	-.09*	-.09 (.10)	-.03	-.13 (.10)	-.05	-.30 (.11)	-.08**
Education	—		.05 (.07)	.03	.06 (.02)	.13***	.01 (.07)	.00	.24 (.04)	.18***
Income	-.03 (.02)	-.05	—		.20 (.05)	.13***	.00 (.02)	.00	—	
Attitude Extremity	.23 (.08)	.13**	.17 (.08)	.09*	.16 (.06)	.08*	.34 (.06)	.21***	—	
Newspaper	.00 (.05)	.00	-.01 (.05)	-.01	.02 (.04)	.01	.02 (.05)	.02	.00 (.04)	.00
TV News	-.09 (.05)	-.08	.15 (.08)	.08	.10 (.04)	.09*	.07 (.05)	.05	.15 (.05)	.09**
Radio News	-.08 (.04)	-.08	-.02 (.04)	-.03	.05 (.03)	.05	.01 (.03)	.01	-.06 (.04)	-.06
Online News	.14 (.04)	.15***	.12 (.06)	.09*	.15 (.03)	.17***	-.08 (.04)	-.09*	.22 (.04)	.18***
R <sup>2</sup> (Adj-R <sup>2</sup> )	.07 (.06)		.04 (.03)		.11 (.10)		.07 (.06)		.11 (.10)	

  

	Japan		Norway		South Korea		United Kingdom		United States	
	B (SE)	<sup>2</sup>	B (SE)	<sup>2</sup>	B (SE)	<sup>2</sup>	B (SE)	<sup>2</sup>	B (SE)	<sup>2</sup>
	27.17 (9.36)		17.48 (8.37)		-6.99 (7.00)		5.89 (7.61)		-6.74 (7.30)	
Birth Year	-.01 (.00)	-.12**	-.01 (.00)	-.08*	.00 (.00)	.04	.00 (.00)	-.02	.00 (.00)	.04
Female	-.10 (.13)	-.04	.14 (.11)	.05	.01 (.08)	.00	-.10 (.10)	-.04	-.34 (.11)	-.11**
Education	.05 (.05)	.03	.21 (.04)	.24***	-.09 (.05)	-.05	.03 (.01)	.10*	.18 (.04)	.16***
Income	-.03 (.02)	-.08	.05 (.02)	.10*	.11 (.02)	.14***	.04 (.02)	.07	.06 (.02)	.14***
Attitude Extremity	.24 (.06)	.16***	.31 (.07)	.17***	.68 (.04)	.40***	.45 (.07)	.25***	.51 (.07)	.25***
Newspaper	.00 (.04)	.01	.11 (.05)	.10*	-.01 (.02)	-.01	-.01 (.03)	-.02	-.02 (.03)	-.02
TV News	-.21 (.06)	-.16***	.01 (.05)	.01	.02 (.03)	.02	.01 (.04)	-.01	.02 (.04)	.02
Radio News	-.14 (.04)	-.13***	.02 (.04)	.02	-.10 (.03)	-.10***	.05 (.03)	.06	.02 (.03)	.02

Online News	.18 (.04)	.19***	.10 (.04)	.09*	.06 (.03)	.06*	.11 (.03)	.14***	.15 (.04)	.15***
$R^2$ ( $Adj-R^2$ )	.10 (.08)		.11 (.10)		.21 (.21)		.10 (.10)		.19 (.18)	

Note 1. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

Yang, J., Rojas, H., Wojcieszak, M., Aalberg, T., Coen, S., Curran, J., Hayashi, K., Iyengar, S., Jones, P. K., Mazzoleni, G., Papathanassopoulos, S., Rhee, J. W., Rowe, D., Soroka, S. & Tiffen, R. (Forthcoming). Why are “others” so polarized? Perceived political polarization and media use in 10 countries. *Journal of Computer-Mediated Communication*.

**JungHwan Yang** is Doctoral Candidate in the School of Journalism and Mass Communication at the University of Wisconsin-Madison. His research focuses on political polarization, measurement of media exposure, and computational methods. E-mail: junghwan.yang@wisc.edu

**Hernando Rojas** is Helen Firstbrook Franklin Professor in the School of Journalism and Mass Communication at the University of Wisconsin-Madison. His research focuses on the role played by media in democratic governance. E-mail: hrojas@wisc.edu

**Magdalena Wojcieszak** is Associate Professor of Political Communication at the University of Amsterdam. Her research interests include media effects, public opinion, and the formation of attitudes and perceptions. E-mail: magdalena.wojcieszak@uva.nl

**Toril Aalberg** is Professor at the Department of Sociology and Political Science at the Norwegian University of Science and Technology, Trondheim, Norway). Her research focus on comparative political communication, election campaigns, media effects and the role of stereotypes. E-mail: toril.aalberg@svt.ntnu.no

**Sharon Coen** is Senior Lecturer in Media Psychology at the University of Salford. Her research interests focus on applying Social Psychology to understanding media communication, with a specific focus on political communication, journalism and representations of minorities and social issues. E-mail: s.coen@salford.ac.uk

**James Curran** is Professor of Communications at Goldsmiths, University of London. He has written or edited 21 books about the media, including most recently *Misunderstanding the Internet* (with N. Fenton and D. Freedman), 2nd edition, Routledge, 2016. E-mail: jacurran@blueyonder.co.uk

**Kaori Hayashi** is Professor of Media and Journalism Studies at the Graduate School of Interdisciplinary Information Studies, the University of Tokyo. She has been writing extensively on Japanese journalism and media industry in both Japanese and international journals. E-mail: hayashik@iii.u-tokyo.ac.jp

**Shanto Iyengar** is Professor of Political Science and Communication at Stanford University. His current research addresses the connections between media use and political polarization. E-mail: siyengar@stanford.edu

**Paul K. Jones** is Associate Professor of Sociology at the Research School of Social Sciences at The Australian National University. He works at the intersection of critical theory, sociology and political communication and is currently writing on demagogic populism. E-mail: paul.jones@anu.edu.au

**Gianpietro Mazzoleni** is Full Professor of Sociology of Communication and of Political Communication, at the University of Milan, Italy. His main research interests are in the areas of mass communication, media policy and political communication. E-mail: gianpietro.mazzoleni@unimi.it

**Stylianos Papathanassopoulos** is Professor at the Department of Communication and Media Studies at the National and Kapodistrian University of Athens. He has written extensively on media developments in Europe and especially on television issues. His research interests are on European communications and new media policies as well as political communication. E-mail: spapath@media.uoa.gr

**June Woong Rhee** is Professor at the Department of Communication at Seoul National University. His research interests include roles of old and new media in public opinion processes. E-mail: jwrhee@snu.ac.kr

**David Rowe** is Professor of Cultural Research, Institute for Culture and Society, Western Sydney University. His principal research interests are in the sociology of media and popular culture, especially in the areas of mediated sport, popular journalism and cultural citizenship. E-mail: d.rowe@westernsydney.edu.au

**Stuart Soroka** is the Michael W. Traugott Collegiate Professor of Communication Studies and Political Science, and Faculty Associate in the Center for Political Studies at the Institute for Social Research, University of Michigan. His research focuses on political communication, the sources and/or structure of public preferences for policy, and the relationships between public policy, public opinion, and mass media. E-mail: ssoroka@umich.edu

**Rodney Tiffen** is Emeritus Professor in Government and International Relations at the University of Sydney. His research interests are primarily in media and politics. E-mail: rod.tiffen@sydney.edu.au