

Polarization and Media Usage: Disentangling Causality

Abstract: This chapter examines the literature concerning media choice and partisan polarization. The past few decades have seen enormous growth in the number of television and internet news sources, giving consumers dramatically increased choices. Previous research has suggested two distinct links between media choice and partisan polarization: partisan media as a *reflection* of polarization, as partisans self-select into media that conforms with their preexisting views, or as a *cause* of polarization, when outlets present one-sided stories that persuade people to adopt more extreme views. This chapter discusses how the literature in these two research traditions has diverged, as well as more recent research attempting to bridge this divide. Using novel methods, these studies have drawn together both self-selection and causal research designs to provide a more complete picture of media choice effects, and expanded the literature to more recent mediums, including the internet and social media.

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In recent years, pundits, politicians, and ordinary citizens have expressed growing concern over political polarization in the United States. A great deal of this outcry has focused on the rise of partisan news media, and how its growth has allowed people to choose the media that they consume. The typical U.S. household now receives about 190 television channels, more than a tenfold increase since 1980 and up by nearly half since 2008.ⁱ The options for different news sources on the internet are even more numerous. This explosion of media outlets has vastly increased the choices available to consumers and allowed for the development of ideological “niche” news programming (Hamilton, 2005) made up of largely partisan media sources (Groeling, 2013). If people can choose to watch or read exclusively ideologically extreme news sources, they may only be exposed to one side of political debates. One consequence of this may be that people only come into contact with a limited set of facts and arguments, rather than the full set of information relevant for the development of attitudes and opinions within these debates.

More worrisome than the proliferation of partisan media choices and people’s subsequent ability to consume only media with which they already agree is that such a pattern could unleash a spiral of rising ideological self-isolation. By consuming only these slanted news sources, individuals might come to believe that the particular one-sided version of issues they consume represents the unvarnished truth. This would represent a clear example of selective exposure (e.g., Lazarsfeld, Berelson, and Gaudet, 1948; Sears and Freedman, 1967) – the tendency to seek out information that reinforces existing views.

A second possibility is that partisan news media widens existing gaps between the political views of liberals and conservatives. The implication is that partisan media *cause*, or at

least exacerbate, polarization of political opinions by persuading people to take more extreme views. This perspective lays the blame at the feet of the media: by presenting one-sided versions of issues, partisan media outlets like Fox News on the right and MSNBC on the left drive Americans apart.

These two very different perspectives on the relationship between the media and the public suggest very different roles for partisan media in the modern political system. Do like-minded individuals simply seek out partisan news sources that support their pre-existing beliefs – resulting in a tendency toward a particular perspective among consumers of ideologically narrow partisan media outlets by virtue of self-selection? Or do consumers of partisan news alter their views to reflect those encountered in such outlets, resulting in increased polarization between consumers of liberal and conservative news? In the former instance, media choice *reflects* polarization; in the latter, media choice *causes* it. We are thus left to ask: to what degree does partisan media cause polarization, and to what degree is it merely a reflection of polarization that exists among the public? Can partisan media ameliorate or exacerbate the polarization of opinion?

Answering these questions is conceptually and methodologically difficult. Many observers conflate the processes of selective exposure and persuasion – and much of the research on polarization and partisan media has similarly investigated one of these phenomena but not the other. The separation of these paths has led to a schism in the findings on the role of such media in public discourse. Without a joint examination of these two processes, any conclusions about how partisan media may operate in the real world are limited. On one side, research on persuasion has largely ignored the potential polarization caused by selective exposure or been unable to account for its effects in estimating the persuasive effect of partisan media. This

approach limits the extent to which findings in research on persuasion can be generalized to the real world. On the other side, research on selective exposure – in accounting for the real-world selection of individuals into the media options they wish to consume – has largely failed to maintain experimental control over exposure, limiting its ability to assess persuasion.

These shortcomings in research on partisan media are partly the result of a more general inference problem confronting social science: the problem of self-selection and causality.

Whenever social scientists observe a difference in opinions or behavior between actors exposed to different stimuli in a real-world context, it is difficult to know what caused this difference.

Any observed effect could result from the treatment itself, or from pre-existing differences between the actors exposed to different treatments. Incorporating any self-selection that occurs in the real world into experimental estimates of treatment effects can be difficult (Gaines and Kuklinski, 2011). Accurately accounting for the instability in how people report their preferences on surveys, relative to their real-world behavior, is also challenging (de Benedictis-Kessner et al., 2017; Knox et al., 2015). For these reasons, many studies designed to determine the relationship between partisan media and polarization are incomplete. These studies are often ill equipped to disentangle pre-existing differences in opinions from the effects of media treatments on opinions – that is, to estimate the causal effect of partisan media. The observed differences in attitudes among individuals exposed to partisan information could stem from differences in the information itself, or from established variation in the individuals who choose to expose themselves to particular partisan information streams. Research that has been able to sidestep the problem of causal inference has substituted this problem for one of insufficient external validity.

In this chapter we discuss research that addresses both selective exposure *to* partisan media options and persuasion *by* those partisan media. The first strand of research in political

science and communication treats polarization in opinions as primarily, or at least significantly, a cause of fragmentation in media consumption patterns. In other words, individuals with different political opinions decide to selectively expose themselves to different partisan media. This strand of research explores the extent of selective exposure. The second strand of research focuses on the possibility that media fragmentation worsens political polarization because of persuasion by partisan media. We discuss both strands in turn before turning to more recent research that incorporates elements of both persuasion and selective exposure. This recent research has attempted to bridge an intra-disciplinary divide by combining elements of both in innovative research designs, and as a result can better disentangle causality in the study of partisan media and polarization without sacrificing external validity.

Selective Exposure and Partisan Information Silos

Research dating back to the 1940s has theorized that selective exposure to information will result in divergent political opinions. This research – perhaps most famously Lazarsfeld, Berelson, and Gaudet’s (1948) study of the 1940 presidential election and Campbell et al.’s (1960) theory of minimalism – found evidence of such selective exposure to partisan information in media consumption patterns. Numerous other researchers corroborated this evidence, showing that people’s opinions often corresponded with the information to which they chose to expose themselves (e.g., Lipset, Lazarsfeld, Barton, and Linz, 1954; Klapper, 1960). The concern, articulated by some, is that ideologically extreme news sources may result in more extreme public opinion. Some have observed such patterns as “the more Americans use conservative media, the less certain they are that global warming is happening” (Hmielowksi, Feldman, Myers, and Leiserowitz, 2013, p. 13). In other words, people may become less inclined to

believe factual information and instead adopt an extreme (and inaccurate) viewpoint as a result of their one-sided news consumption. More generally, widespread self-selection into partisan media streams could lead to increasingly insular partisan information silos among the public. If individuals only expose themselves to one side of an argument, they may become less inclined to compromise or moderate their views, and develop relatively more negative opinions of the other side (Stroud, 2010). Living in such silos could lead to disproportionate reinforcement of people's pre-existing attitudes and opinions and leave little room for potential common ground in political discourse or compromise in policy decisions.

The idea that individuals might seek to consume media with which they agree is not surprising. Research in psychology has shown that, all else equal, humans try to reduce cognitive dissonance (Festinger, 1957). As a result, people may avoid or reject information that contradicts their partisan identification (Campbell et al., 1960; Lazarsfeld, Berelson, and Gaudet, 1948). Moreover, they may engage in motivated reasoning, whereby they discount the strength of arguments with which they disagree, while giving undue weight to arguments with which they already agree (Kunda, 1990; Redlawsk, 2002; Taber and Lodge, 2006). This may result in not only selective exposure in news consumption, but different reactions to such news, as discussed later in this chapter.

Media consumption patterns reflect this sorting. When looking for political news, people will often seek out media that reduces their cognitive dissonance and agrees with their political beliefs and identification. Much research has shown that Democrats and Republicans prefer to consume news that supports their pre-existing beliefs while avoiding news that challenges those beliefs (Arceneaux et al., 2012; Iyengar and Hahn, 2009; Stroud, 2011). For instance, as in many studies of this type, Iyengar and Hahn (2009) provide research subjects with a choice of news

headlines and allow them to decide which story they would like to read. People were more likely to choose a headline associated with the logo of an ideologically-similar media source even when the substance of the headline was equivalent. Numerous other studies have shown similar tendencies for partisans to selectively consume news that reinforces, rather than challenges, their partisan or ideological preferences.

The expansion of talk radio, cable news, and satellite programming has increased the ability for individuals to sort in this manner. But it has also created opportunities to study this phenomenon. Research on both media self-selection in the real world and experimental studies of selective exposure have corroborated this idea and extended it to show the conditions under which it occurs. Partisan media sorting may happen to the greatest extent among the strongest (Kim, 2009; Iyengar et al., 2008) and most politically engaged (Bennett and Iyengar, 2008) partisans, as well as those most interested in news and politics (Davis and Dunaway, 2016; Prior, 2007, 2013).

Downstream Consequences of Selective Exposure

In addition to creating ideological silos within the public, selective exposure to partisan media may have more worrisome consequences beyond polarization of policy attitudes. People may change their perceptions and feelings towards the media, leading to different political behavior in the future. For instance, when people increasingly select into consuming favorable news sources, they may become even more likely to avoid counter-attitudinal information in the future (Knobloch-Westerwick and Meng, 2009). This tendency can be further exacerbated by the hostile media phenomenon (Vallone, Ross and Lepper, 1985), whereby people tend to alter their opinions of the media itself – assuming it to be hostile to their own beliefs – after viewing

ideologically dissonant news. The implication is that ordinary citizens may begin to see bias in what is actually objective and balanced political reporting because of their negative affect towards its counter-attitudinal content.

Numerous studies have found evidence of this so-called hostile media phenomenon (e.g. Baum and Gussin, 2007; Giner-Sorolla and Chaiken, 1994; Gunther et al., 2017; Gunther and Schmitt, 2004; Stroud, Muddiman, and Lee, 2014; Vallone et al., 1985), whereby typical individuals tend to view the media as biased against their own views. For instance, Coe et al. (2008) show that cable news viewers exhibit significant bias towards content that does not align with their partisan views. Viewers also found pro-attitudinal content more interesting and informative than counter-attitudinal content. Similarly, Feldman (2011b) found that partisans were more likely to perceive bias in the hosts of news media with which they disagreed. Baum and Gussin (2007), in turn, found that partisans rated *identical* news content as more supportive of the other party's presidential candidate when it was identified as emanating from a news source perceived as sympathetic toward the other party than when it was identified as emanating from a source perceived as sympathetic toward their own party. In general, partisan participants perceived the news content – regardless of the attributed source – as more sympathetic to the other party than to their own party. As a result of these divergent perceptions, citizens may increasingly become suspicious of and antagonistic toward the news media more generally (Arceneaux, Johnson, and Murphy, 2012; Arceneaux and Johnson, 2015; Ladd, 2012).

Numerous researchers have found media hostility to be one side effect of exposure to partisan news. This side effect may, in turn, lead to changes in future behavior. For instance, Ladd (2012) finds empirical evidence that rising public distrust in the media has reduced public willingness to accept information from the media as reliable. Instead, partisan predispositions

increasingly drive public beliefs and voting behavior. Feldman, et.al. (2017), in turn, find that hostility towards the media can drive political behavior: among liberals, perceived media hostility leads to increases in climate change activism, while among conservatives, greater media hostility decreases climate change activism. This evidence suggests that perceptions of the media can drive information consumption and the eventual actions people take after consuming this information. That said, not all research finds seemingly problematic effects. For instance, Barnidge and Rojas (2014) find a positive relationship between perceptions of media hostility and propensity to speak in the public sphere and to seek diverse opinions in survey data from individuals in Colombia. These results suggest that the hostile media phenomenon may have a variety of behavioral consequences, many of which are not yet fully understood. More research on the consequences of exposure to counter-attitudinal information for *future* media choices is thus needed.

Selective Exposure in the Modern Age

As online news consumption has grown, researchers have begun to question how the theory of selective exposure holds up in a changing media environment. Conventional wisdom from numerous scholars and political observers suggests that more options from which to choose media may result in a retreat by individuals into increasingly ideological silos – dubbed “me channels” (Sunstein, 2001), “the daily me” (Negroponte, 1995), or “filter bubbles” (Pariser, 2012). However, the diversity of sources producing ideologically diverse media as well as the medium of consumption itself may actually *limit* the degree of selective exposure by partisans (Garrett, 2009). Some recent research indicates that indeed selective exposure may decrease with

the trend towards relatively greater reliance on online news sources and away from reliance on traditional media content.

According to this perspective, online news content can increase individuals' exposure to partisan media – whether they want to consume it or not. Use of the Internet to consume information of any sort can therefore increase inadvertent exposure to political differences. Recent research on online news consumption supports this conclusion, and shows very little partisan divide in audiences. Nelson and Webster (2017) use data from the online website tracking firm comScore to demonstrate that most people view popular, well-known news sites, and that these news sites have relatively ideologically diverse audiences. Using similar online tracking data, Guess (2016) also shows large degrees of balance in people's news diets regardless of their partisan affiliation – though external partisan events can temporarily drive people towards more extreme sources of news. Furthermore, contrary to conventional wisdom, Gentzkow and Shapiro (2010) provide evidence that it is the most ideologically extreme people, rather than their moderate counterparts, who may be the most likely to encounter such ideologically opposing online news sites. These studies cannot, however, determine *why* ideologically extreme people visit oppositional news sites. Are they doing it to get a different perspective on political issues, or as a means of “opposition research” aimed at reinforcing their conviction that the other side is wrong (Valentino et al., 2009)? Further research is needed to answer this critical question.

That said, there is evidence that the people who habitually engage with online news media may also subsequently be less prone to exhibiting confirmation bias in interpreting this information (Knobloch-Westerwick and Kleinman, 2012). The greater degree of inadvertent

exposure to counter-attitudinal information by these people may mean they are more accustomed to opposing perspectives, so they are to some degree inoculated against confirmation bias.

Increased exposure to balanced information as a result of online news sources may also have downstream consequences for political discourse. In one empirical examination, Brundidge (2010) shows that online political news consumption and the political discussions that result from this consumption increase the heterogeneity of political discussion networks relative to use of traditional media sources. Furthermore, the social aspect of online news consumption may lead to more potential for specific interests or personal relationships to outweigh traditional selective exposure. Along these lines, Messing and Westwood (2014) find that endorsements from other people in a person's social network can counteract the selectivity of partisans into ideologically consonant news. Mummolo (2016), in turn, finds that the relevance of a topic of news media overwhelms the effect of the source's perceived ideological orientation on people's choices of ideological news.ⁱⁱ This line of research suggests that the continued growth and diversity of online news sources may be reducing the prevalence of selective exposure.

Taken as a whole, research on selective exposure has identified several key insights about political discourse and polarization. First, the proliferation of ideological news sources has allowed people to self-select into consuming media with which they are more likely to agree. Second, this pattern of behavior may be self-reinforcing due to its side effects – namely, that people will perceive the media as more biased and be less likely to engage with political information they encounter. On the other hand, a third insight from this body of research is that such biases may be more modest online than with traditional forms of news, and that the social aspect of news consumption online may attenuate selective exposure. Additional research is needed to resolve this seeming inconsistency between the prevailing findings of selective

exposure research and the seemingly contrary findings from several more recent selective exposure studies focused on online partisan news sources.

Persuasion by Partisan Media

Research on selective exposure has largely sidestepped the question of whether partisan media may *also* persuade people to change their opinions. Given the longstanding scholarly view from the selective exposure strain of research that people's political attitudes are largely immune to persuasion via the media (e.g., Lazarsfeld, et al., 1948; Berelson, Lazarsfeld and McPhee, 1954; Campbell et al., 1960), this omission is unsurprising.

There are, however, several lines of research pertinent to the question of whether partisan media may indeed change the opinions of its consumers. We know from voluminous research on priming, framing, and agenda setting (e.g., Iyengar and Kinder, 1987; Druckman, 2001; Chong and Druckman, 2007) that while media exposure might not necessarily change people's minds via persuasion, it can still influence expressed attitudes and behavior by changing what people think about, or how they think about it. These aspects of media effects are discussed elsewhere in this volume, and largely demonstrate that the media can powerfully change features of discourse and how different people interpret essentially identical information.

Another line of research in the last several decades more directly challenges the view that the media does not change, or has minimal effects on, opinions. This work, harnessing both observational and experimental evidence, has delineated circumstances under which persuasion might occur and the characteristics of individuals who might be most susceptible to it.

Most notably, Zaller (1992), in his seminal study of public opinion, found that media exposure has limited effect on the attitudes of the least- and most-politically aware individuals,

albeit for different reasons.ⁱⁱⁱ The least politically aware individuals tended not to receive political messages from the media, while the most highly aware individuals possessed sufficient considerations regarding most issues that they were able to successfully counter-argue any dissonant messages to which they were exposed. This left the moderately politically aware most amenable to persuasion: they pay enough attention to be exposed to political messages but lack sufficient “ammunition” (in the form of considerations about issues) to beat back information they encountered that challenged their pre-existing beliefs. This RAS (receive-accept-sample) model of information processing has become highly influential, and subsequent research has empirically supported this model of opinion change via the media, as well as its characterization of the role of individuals’ pre-existing beliefs.

Along these lines, Zaller (1996) explores the persuasive power of the media. He argues that some of the minimal effects observed by past researchers were due to a poor specification of media exposure and the natural tendency of media to cover both (ideological) sides on most issues. Both of these factors, he argues, may have led researchers to observe a lack of media effects when, in fact, large polarizing effects of opposing content may simply have canceled each other out. The true real-world effects of the media may often depend on the net balance of arguments contained within people’s total exposure to media.

Many researchers have since set out to experimentally investigate the question of media persuasion. Some have found support for the theory that partisan media can force public opinion apart by polarizing its already ideological consumers. For instance, Levendusky (2013) finds that news attributed to right-leaning Fox News is more likely than news attributed to left-leaning MSNBC to persuade conservatives (for comparable findings, see also, e.g., Bullock, 2011; Jerit and Barabas, 2012). Likewise, Druckman, Levendusky, and McClain (2018) find that people

exposed to partisan media – whether pro- or counter-attitudinal – become more extreme in their policy opinions. They further show that these effects can spread to people not exposed to partisan media themselves, but who were only involved in discussions with people who consumed partisan media. Thus the effects of partisan media may perpetuate even without direct exposure.

In a similar vein using observational data, others have demonstrated how the prevalence of partisan news has resulted in polarization. Hopkins and Ladd (2014) show that expanded access to an ideologically distinctive media source (Fox News) reinforces the loyalties of co-partisans but does not influence out-partisans. So while partisan news may affect political opinions, its persuasive power may be limited to those who already agree with its point of view. Likewise, Martin and Yurukoglu (2016) exploit variation in the channel position of Fox News and MSNBC to demonstrate the effect of additional time spent watching these sources on voting behavior. They show that an additional 2.5 minutes spent watching Fox News translates into a small but significant effect on Republican presidential vote share measured at the precinct level, but that viewing MSNBC does not have such an effect. The evidence on the conditionality of these persuasive effects is thus mixed.

Others have focused not on the match between individuals' predispositions and the media's ideological position but instead on the credibility of the media source. Research in this area has demonstrated that people react differently to identical content depending on whether or not they consider the source trustworthy and credible (Baum and Groeling, 2010; Baum and Gussin, 2007; Druckman, Fein, and Leeper, 2012; Levendusky, 2013b). In particular, partisan reputation interacts with perceptions of credibility to mediate the persuasiveness of information appearing on partisan outlets. In one such study, Baum and Groeling (2008) conducted an experiment in which they exposed participants to a news report about a congressional hearing on

national security in which one or the other party praised or criticized the Bush Administration's policies. They modified the report to appear alternately on CNN or Fox News. They found that participants who saw criticism of the Republican president's policies on Fox, but not those who saw the identical criticism on CNN, downgraded their assessments of the president's performance on national security. In other words, the source and reputation of a media outlet – in this case, a reputation of bias *in favor of* the Republican president – can shape how consumers interpret the information it communicates. This effect of a media source's reputation on its persuasive power may be because of the trust people put in the unbiasedness of the source. Levendusky (2013b) similarly shows that people will lower their opinions of out-party national politicians when exposed to like-minded media criticizing them, but only when they perceived the news source as credible. Other research has demonstrated that partisan media may persuade its consumers, conditional on the transparency of its partisan bent. Conroy-Krutz and Moehler (2015) show that people will be more easily persuaded by opposing media when political cleavages are less clear in less polarized media environments. Taken together, this research indicates that the conditions under which persuasion can actually occur are limited.

Polarization or Moderation from Persuasion?

If the persuasive effects of partisan media are limited, what does this tell us about the potential for mass opinion change as a result of exposure to these media? The primary reason for worry about the effects of partisan media is that it may lead to polarization without moderation due to unbalanced effects on different segments of the population. The theory underlying this assertion is that encountering counter-attitudinal information might produce a backlash, forcing groups further apart, while pro-attitudinal information may be persuasive. Such an argument

relies on the aforementioned theories of motivated reasoning (e.g. Kunda, 1990; Taber and Lodge, 2006) that would lead us to expect that people may reject information with which they do not agree. In line with this, some research has demonstrated the polarizing power of partisan media. Strong ideologues who consume partisan news sources may become *more* ideologically extreme (Bullock, 2011; Druckman, Levendusky, and McClain, 2018; Jerit and Barabas, 2012). This type of “backfire effect” may extend beyond political attitudes to beliefs about facts (Nyhan and Reifler, 2010; Nyhan, Reifler, and Ubel, 2013; though see Wood and Porter, 2018). Exposure to partisan information streams may increase polarization via persuasion, even among already-somewhat-polarized partisans.

Many of these studies give us reason to expect that a partisan media leads to more polarization, rather than less. On the other hand, some evidence from research on the subject suggests that persuasion across the partisan aisle might nonetheless occur. That is, partisan media may potentially lead to ideological moderation, rather than only increasing polarization.

For instance, Dilliplane (2013) reports evidence that information from counter-attitudinal media may be persuasive to typical individuals. She finds that even strong partisans and highly politically aware individuals are susceptible to counter-attitudinal persuasion that moderates their opinions. Likewise, Feldman (2011a) finds that both pro- and counter-attitudinal media can influence political ideologues. In an experiment, the author exposed participants to one of three news clips related to health care reform from left-leaning (Countdown with Keith Olbermann), right-leaning (Glenn Beck), and centrist (NewsHour with Jim Lehrer) outlets. She then assessed attitude change among participants, depending on their partisan orientation, and found that media sources did persuade people, even when the information contained in these media reports ran

counter to their pre-existing attitudes.^{iv} The findings from these studies suggest that persuasion by partisan media has the potential to moderate opinions.

In sum, scholars have found some evidence that partisan media persuade individuals to change their opinions. When they have found evidence for persuasion, it has often been conditional on features of the media source or the individuals themselves, and under the strictly controlled circumstances of experiments. While the control afforded by research in this tradition makes it possible to draw inferences regarding causality, it cannot definitively determine how persuasive partisan media might be in the real world.

Disentangling Causality in Selective Exposure and Persuasion Research

Much of the research in the two strands of research discussed here – selective exposure research and persuasion research – is ill-equipped to study the combined effects of both causal processes. While experiments with strict control over assignment to media sources can estimate the effects of a given news source on short-term political attitudes and behavior, they have little ability to extrapolate these effects to the world where people can choose the media that they consume. On the other hand, research that allows for observation of people’s self-selection into different camps of media consumption often cannot estimate the subsequent effects of that media on their attitudes and behavior because of a lack of experimental control. Thus, examining the causal effect of media on people’s beliefs while accounting for their preferences for media in the real world has presented a problem for research design.

Some studies, however, have successfully bridged these two strands of research to show how, in reality, partisan self-selection may limit (or exacerbate) the effects of partisan media on polarization. Using innovative research designs, scholars have attempted to account for (and

measure) aspects of selective exposure while simultaneously using experimental control to allow for causal inferences about persuasion. The conclusions from this work demonstrate a nuanced picture of the conditions under which persuasion by the media can occur and which segments of the population are susceptible to such persuasion.

Research design constitutes a principal point in the debate about how to account for selection in estimates of experimental treatment effects. A goal of research on these types of persuasion effects would be to maximize external validity outside a strictly controlled experimental context. As Gaines and Kuklinski (2011) point out, however, a gold-standard experiment with random assignment does not inherently offer sufficient external validity. Especially in the case of real-world phenomena that involve self-selection, controlled experiments often limit the conclusions that can be made about human attitudes and behavior. They propose a research design that estimates the degree to which self-selection may limit experimental treatment effects in the population. This research design incorporates the preferences of the research subject, or patient, in what is commonly called a patient-preference research design (or patient preference trial, PPT) by social and medical researchers (e.g. Howard and Thornicroft, 2006; King et al., 2005; Torgerson and Sibbald, 1998).

An increasing number of political scientists have adopted this approach in studying the effects of the media on political beliefs and actions. In one such study, Levendusky (2013) measures individuals' desire to watch certain news programs and then tests how exposure to these news programs does in fact change their opinions in an experiment. He finds generally that people are persuaded to become more extreme in their attitudes after consuming like-minded media, and that there is some degree of persuasion from counter-attitudinal media. Because he measures people's preferences, however, he is also able to stratify his results by people's pre-

existing media preferences. He shows that individuals who express a willingness to watch counter-attitudinal media are most likely to be persuaded by it. Perhaps because of their inclination toward media involving counter-attitudinal arguments, they are more open-minded regarding such information. Thus the incorporation of people's preferences into the research design allows for conclusions concerning the conditional effects of media persuasion that would not otherwise be possible.

In a related version of this PPT, Kevin Arceneaux and colleagues (Arceneaux and Johnson, 2013; Arceneaux, Johnson, and Murphy, 2012) conducted a series of experiments that similarly incorporated participants' preferences into the research design. In one set of studies, the methodology approximates the forced exposure design typical of experiments examining persuasion. That is, the experimenters presented a liberal, conservative, or entertainment news story to a respondent, and then observed its attitudinal effects. However, they also conducted a parallel experiment in which they allowed participants to choose from a menu of options – typical for experiments investigating selective exposure – including partisan news from the left and right and several entertainment programs. They then compared the observed attitudinal effects across the two studies to estimate the extent to which observed treatment effects resulted from either selective exposure (attitudes driving exposure) or persuasion (exposure driving attitudes). Their primary conclusion was that partisan attitudes drive media exposure much more than exposure drives attitudes.

Similarly, Knox et al. (2015) measure preferences and calculate persuasion effects for subgroups based on respondents' stated preferences. In addition, they conduct sensitivity analyses that allow them to use information about the preferences of people who self-select into consuming media to assess the degree to which their estimates of persuasion depend on

respondents' stated preferences. Incorporation of a preference-measurement element allowed these researchers to compare treatment effects observed in an experimental context with existing separation of attitudes amongst people with different preferences.

Other variants of the patient preference design have examined a variety of the possible effects of the media on politics. Stroud, Feldman, Wojcieszak, and Bimber (2014) assess how the procedure of exposing people to media that they would not naturally choose to watch changed their subsequent attitudes about the media. They argue that those who are forced to watch media will have more angry reactions than those who choose the same media. Using a two-wave panel survey experiment, the authors conduct a patient-preference design that measured media preferences in the first wave of their survey, and then had people read media stories in the second wave of the survey. They find that people were angrier and better understood the issue presented in the articles after forced exposure than after selective exposure. They conclude that not only do people who prefer different media exhibit different treatment effects from media exposure, but that the experimental procedure itself (i.e. forcing people to consume certain media) may have an effect on respondents' reactions to media. As with the previous studies, including an element of preference measurement demonstrates how crucial it is that researchers conducting such experiments keep in mind the heterogeneity of potential treatment effects.

Several recent studies modify these patient preference designs to study the effects of partisan media. In additional research (de Benedictis-Kessner et al., 2017), we demonstrate that partisan media polarize people's political attitudes, and this effect is especially strong among those people who would not ordinarily choose to consume such partisan news but would rather consume entertainment media. Taking a slightly different tack, Guess et al. (2018) assess how fact-checking articles increase the accuracy of people's beliefs about candidates, and Leeper

(2016) applies a similar research design to study the media's effect on political knowledge. Guess et al. (2018) find that the efficacy of fact-checking articles for increasing accuracy of beliefs differs by the respondents' preferences for reading these type of articles, while in contrast Leeper (2016) finds that media's effects on political knowledge are not conditioned by their preferences for media consumption.^v Thus, by incorporating preferences into the design and measurement of media effects, scholars have been able to draw conclusions about the conditionality of these effects that might not otherwise have been possible.

Conclusion

Today's media environment clearly offers competing perspectives and an increasing degree of choice for consumers of news. The bulk of the research over the last century would suggest that this proliferation of biased news might have worrisome consequences: with the greater ability to select partisan media, people might become insulated from information that goes against their pre-existing beliefs. This could, in turn, hinder potential compromise in politics due to the lack of common ground.

Yet recent research gives us reason to question this dark prognosis. In the world of online news consumption and social media, studies have indicated less self-selection into one-sided information bubbles, rather than more. As people are more and more able to personalize their news streams via online sources – in many instances based primarily on dimensions orthogonal to politics – even strong ideologues may encounter opposing perspectives. This tendency may temper the conclusions reached by prior research about the extent to which polarization may lead to partisan news silos. More research is clearly needed on the tradeoff between traditional news

consumption and consumption via more recently developed modes, and what this tradeoff implies for the extent of self-selection into partisan information channels.

Unanswered questions also include the motivation behind people's tendency to seek out partisan media that is counter to their attitudes. The conditions under which media consumers may choose a balanced media diet are unclear, and the segments of the population who are most apt to do so remains an open question. Moreover, what are the long-term consequences of self-selection into pro-attitudinal partisan news for politically important behaviors? If people select to consume partisan news from both sides, this might on the surface appear to be a less polarizing result. Yet if exposure to such counter-attitudinal partisan news only leads to more hostility towards the media more generally, or toward the counter-attitudinal news source, this balanced news diet might result in disengagement from the media as a whole, or at least further polarization. Such an outcome – and the accompanying absence of information sources trusted by the public – does not bode well for the health of democracy.

Studies of media persuasion have also taught us a great deal about the effects of partisan media on the polarization of political attitudes, and which segments of the population are most susceptible to these effects. Persuasion from across the aisle as well as persuasion reinforcing people's pre-existing views does occur, especially when the news sources are trusted or less clearly biased. Yet the implications of these kind of studies for behavior outside of the strict control of experiments remain uncertain. For instance, for how long do the persuasive effects of partisan media persist? Will the polarizing – or mediating – effects of partisan media endure under a barrage of media exposure voicing competing perspectives?

Recent studies incorporating both elements of self-selection and causal research designs have begun to shed more light on partisan media's effects on polarization in today's political

environment. This methodologically creative work has shown promise in disentangling people's preferences from the measurement of causal effects. The inherent tradeoff, of course, has been that these research designs have often required strict control over experimental conditions. This calls into question the ability to extrapolate from these studies to the external world of media consumption. Promising areas of ongoing research have involved using unobtrusive observation to better measure self-selection, as well as combinations of this observational measurement with the control of experiments. More of such work is needed if we are to develop a holistic picture of the persuasive effects of partisan media within a world where consumption is driven by preferences.

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ⁱ This does not include countless offerings on radio, in print, and online. That said, while the gap between TV and online news sources is narrowing, television remains the predominant source of news for typical Americans (Pew 2017).

ⁱⁱ Though see Meraz (2015) for an opposing view that the tendency for individuals to engage in participatory media consumption – sharing news content with others in their social spheres – rather than more traditional passive consumption of media may cause selective exposure to increase beyond that enabled by more passive consumption.

ⁱⁱⁱ On heterogenous effects on attitudes of media exposure, see also Iyengar (1990).

^{iv} This may also be true even for partisan media outside the United States. Conroy-Krutz & Moehler (2015) conduct a field experiment in Ghana in which commuter minibuses were randomly assigned to live talk-radio from a progovernment, pro-opposition, or neutral station, or were in a no-radio control. They find no effect of like-minded media on polarization, but evidence that cross-cutting broadcasts may help moderate opinion. Partisan media, then, may moderate public opinion by exposing people to alternate perspectives in other countries as well.

^v Other researchers have even extended this patient preference trial framework outside the U.S. to show how selective exposure and persuasion interact, such as Huang and Yeh (2017) in China.