How Does Media Choice Affect Hostile Media Perceptions? Evidence from Participant Preference Experiments

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Abstract

We test hypotheses from a motivational model of media choice to investigate how selective exposure to various types of media shapes hostile media perceptions. We use an innovative experimental design that is specifically designed to gauge the influence of viewers' preferences for entertainment, partisan cable news, or mainstream broadcast news on their reactions to media content. This design represents a new modification to the participant preference experiment used elsewhere, expanding a laboratory-based media environment to include partisan and mainstream news options, alongside entertainment programming. We find that people's viewing preferences shape their reactions to news media content.

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1 Introduction

The expansion of news and entertainment choices on television gives Americans more opportunity than ever before to selectively expose themselves to media content. Communication scholars have been particularly concerned with the implications of selective exposure to partisan news (e.g., Stroud, 2011), overlooking the fact that the expansion of entertainment choices reduces the audience for news (Prior, 2007). People who want to watch partisan news tend to be less influenced by it, further limiting news media effects (Arceneaux and Johnson 2013, but see Levendusky 2013). We extend work by Arceneaux, Johnson and Murphy (2012), who consider how selectivity shapes the influence of partisan news shows on hostile media perceptions.

Well before the proliferation of partisan news choices, people were concerned about ideological bias in mainstream news (Ladd, 2012). At the height of broadcast news era, Vallone, Ross, and Lepper (1985) offered a compelling psychological explanation for the persistent perception that the news media are hostile to one's beliefs. People who possess strong beliefs typically see the world as "black" or "white" and "complain about the fairness and objectivity of mediated accounts that suggest that the truth might be at some particular hue of gray" (Vallone, Ross and Lepper, 1985, 584). If broadcast news media fails to paint the world in the hue partisans perceive it to be, they infer news organizations support the other side.

The emergence of partisan news options opens new possibilities for the evaluation of journalism. The availability of likeminded news sources allows people to selectively receive news that validates their viewpoint, burnishing their view of the news media—a *friendly media phenomenon* (Goldman and Mutz, 2011). But exposure to partisan news opposed to one's worldview engenders *oppositional news hostility* (Arceneaux, Johnson and Murphy, 2012; Coe et al., 2008).

While many studies of partian news selectivity consider only preferences for news (e.g., Stroud, 2011; Levendusky, 2013; Feldman, 2011), selective exposure research must consider the fuller context of media choice. With well over 100 channels in more than 90 percent of American homes,

there is a cornucopia of viewing options. This explosion of television channels moved a vast selection of entertainment only a remote control click away from the viewer (Prior, 2007). Twenty-four hour news channels are but a few of the options. Some individuals are *entertainment-seekers* who prefer to avoid news programming (Prior, 2007) and today's media environment gives them many diversions from the news (Bennett and Iyengar, 2008).

The availability of entertainment options alters the reach and influence of partisan news. Arceneaux and Johnson (2013) show that if the hostile media phenomenon is studied in a vacuum that fails to introduce entertainment options, exposure to only proattitudinal news shows can produce a friendly media effect, while exposure to only counterattitudinal news shows can engender oppositional media hostility. However, the introduction of entertainment choices and the ability to change the channel blunts the effects of partisan news shows on hostile media perceptions (Arceneaux, Johnson and Murphy, 2012). Entertainment-seekers remove themselves from the audience for partisan news audiences, and thus its direct influence. Partisan news shows have less dramatic effects on the remaining audience of news-seekers.

However, Arceneaux and Johnson fail to consider sources of news outside of partisan cable. Broadcast news shows, for example, continue to attract the largest audiences for news. They average around 25 million viewers a day, dwarfing the typical partisan news show audience of 1-2 million. While partisan news clearly attracts an audience, many news-seekers only watch broadcast news (Arceneaux and Johnson, 2013). Thus, there are both *partisan* and *mainstream news-seekers*.

Arceneaux and Johnson (2013) propose an Active Audience Theory that posits viewers choices for programs are shaped by their motivations to consume information and entertainment, which also shape how media content influences them (see appendix for details). Drawing from their argument, we identify three hypotheses. Partisan news-seekers are ideologically motivated (Stroud, 2008). Among them, we expect to observe a friendly media effect (*Conditional Friendly Media Effect Hypothesis*). If the mainstream news reports on politics in shades of gray, proattitudinal news shows tell partisans the world is their preferred shade. Mainstream news-seekers, on the other hand, may eschew partisan news. We anticipate that mainstream news-seekers find the antics of opinionated hosts on partisan cable news more off-putting than the ideological benefit they may receive from proattitudinal shows. We expect a distaste for counterattitudinal news to unite partisan news-seekers, mainstream news-seekers, and entertainment-seekers (*Oppositional Media* *Effect Hypothesis*). Oppositional shows key into intergroup psychology, activate outgroup threat, and motivate individuals to resist attacks on their ingroup (Arceneaux, Johnson and Cryderman, 2013). Nonetheless, because people who do not expose themselves to the news tend to be more susceptible to its *potential* effects (Zaller, 1992), we expect that entertainment-seekers, relative to partisan and mainstream news-seekers, will evince stronger negative reactions to all news shows (*Entertainment-seeker Susceptibility Hypothesis*).

2 The Participant Preference Experiment

Studying selectivity in an experimental setting is challenging, because it frustrates randomization. How can we maintain the internal validity afforded by random assignment, while also gauging the influence of the choices people make? The *participant preference design* offers a solution. Developed in medical research on therapeutic drugs (Macias et al., 2009; Torgerson and Sibbald, 1998), the participant preference experiment measures participants' preferences over the experimental stimuli *before* administering the treatment.¹ The schematic in Figure 1 shows the basic design.

The key feature of the participant preference design is that the we measure preferences for the partisan news, mainstream news, or entertainment program before administering the treatment so that their expressed preference is not contaminated by idiosyncratic elements of the stimuli (e.g., show topic). With *a priori* measures of viewing preferences, we can estimate the effects of news content separately for partisan news-seekers, mainstream news-seekers, and entertainment-seekers. By controlling actual participant exposure to news media, we avoid much of the measurement error that arises when researchers ask participants to report their exposure to media (e.g., Tewks-bury, Althaus and Hibbing, 2011). Separately measuring preferences for news and entertainment programming allows us to disentangle between predispositions and exposure.

3 Study 1

3.1 Participants

We recruited 124 participants for a study on "information processing" October 25–December 2, 2011. Participants were undergraduate students in a general education social science course at a

¹Since we are studying the behavior of study participants and not patients, we modify the name accordingly.

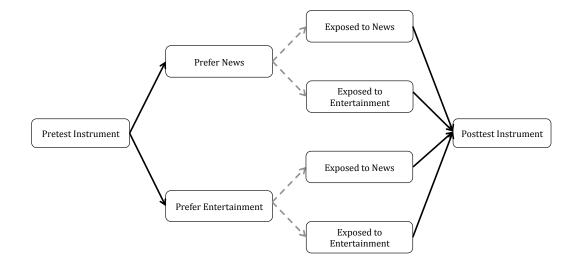


Figure 1: *Basic Design of the Participant Preference Experiment* Notes: Dashed lines indicate random assignment and solid lines indicate nonrandom assignment.

large public university in the western U.S. The study took place at research lab located on campus. The sample reflects a diverse undergraduate population: young ($M_{age} = 19.4$), mostly non-white (36.3 percent Latino, 28.2 percent Asian, 13.7 percent white, 8.9 percent black, and 12.9 percent "other"), 52.4 percent female, and predominately middle class (median family income between \$35,000 and \$50,000).

3.2 Procedures

Participants entered the lab, signed in, and were asked to take a survey concerning their media preferences, political attitudes, and demographics. After completing the pretest, participants were randomly assigned to one of four treatments, exposure to: (1) to a proattitudinal partian talk show on a cable news network (Fox News for conservatives and MSNBC for liberals), (2) a counterattitudinal partian talk show (Fox News for liberals and MSNBC for conservatives), (3) a mainstream broadcast news program (CBS), or (4) an entertainment show from a basic cable network. When participants finished watching the assigned program, they were asked to complete a posttest survey that measured their perceptions of the news media.²

Participants viewed one of five stimuli, which included three news programs and two entertainment shows, for just over seven minutes (7:20). The entertainment options included *For Rent* (HGTV network), which features people searching for an apartment, and animal talent show *Pet Star* (Animal Planet). The news shows each originally aired October 19, 2011 and featured coverage of the Western Republican Presidential Debate in Las Vegas, Nevada, the previous evening. The Republican nomination race was prominent in each news program, *The CBS Evening News* with Scott Pelley, *The Rachel Maddow Show* (MSNBC), and Sean Hannity's talk show on Fox Cable News, as was the issue of immigration, the topic of an exchange between former Massachusetts Gov. Mitt Romney and Gov. Rick Perry of Texas during the debate.

The CBS, MSNBC, and Fox News stimuli had similarities and differences reflective of the traits of mainstream and opinionated news programs. All three shows featured a discussion of the exchange between Romney and Perry, U.S. immigration policy, and the Occupy Wall Street movement. The *Hannity* clip from Fox News included an extended segment featuring a Republican pollster interviewing GOP voters about the debate. The MSNBC *Maddow* clip featured the host critiquing Republican presidential candidates. Due to the abbreviated length of news stories on *The CBS Evening News*, this clip's viewers saw coverage of several stories in addition to the debate.

3.3 Measures

We measured media viewing preferences early in the pretest instrument with this item:

Imagine you had a choice among these specific television shows. Please rank them based on how much you would like to watch them, with your most preferred show at the top and your least preferred show at the bottom. If you do not recognize the show, try to

²Participants who self-identified as moderates were assigned to proattitudinal and counterattiudinal treatment groups on the basis of their responses to issues questions. We find substantively similar findings if moderates are removed from the analysis.

make a decision based on its name or network.

Participants were given five options identical to the stimuli: The Rachel Maddow Show (MSNBC News Channel), The Sean Hannity Show (Fox News Channel), The CBS Evening News with Scott Pelley, For Rent (HGTV network), and Pet Star (Animal Planet network), with the options randomized for participants. Those who selected Maddow or Hannity were coded as partisan news-seekers; those who selected CBS News were coded as mainstream news-seekers; and those who selected For Rent or Pet Star were coded as entertainment-seekers. After this question, participants were asked two additional ranking questions that had a similar format with the purpose of minimizing demand effects. Before being exposed to the stimuli, participants answered dozens of additional questions about their political attitudes and demographic characteristics in part to minimize the risk of interaction effects (Campbell and Stanley, 1963).

We measured participants reactions to the media content using a semantic differential task in which they were given word pairs on the opposite ends of a continuum and asked to select which word best described the show they just watched. This exercise generated a 9-point scale where 1 indicates that the word on the left side of the continuum best described the show and a 9 indicates that the word on the right of the continuum best described the show. The word pair that tapped hostile media perceptions was *fair/unfair*. Higher values on the semantic differential scale mean that the participants viewed the show they watched as unfair.

3.4 Findings

As a manipulation check, we asked participants to rate the shows on a 9-point scale that ranged from liberal (1) to conservative (9). Subjects placed the MSNBC show on the left (M = 4.26), the Fox News show on the right (M = 5.81), and the CBS program in the middle (M = 5.19).³ The empirical results are shown in Figure 2. The bars represent differences between each of the treatments and the control group (entertainment shows). The full sample results average the effects of news exposure across news- and entertainment-seekers. On average, people were more likely to see all news shows as more "unfair" than entertainment shows (mainstream news, p = 0.013, one-

³We can confidently say that subjects viewed *Hannity* as more conservative than *Maddow* (p = 0.005), but the size of the standard errors do not allow us to say that *Maddow* is reliably to the left of CBS (p = 0.118) or that *Hannity* is to the right of CBS (p = 0.271).

tailed; proattitudinal and counterattitudinal news, p < 0.001). In the full sample, we do not find evidence for the friendly media effect (mainstream < proattitudinal), but we do find evidence for the oppositional hostility effect, at least with relative to mainstream news content (mainstream < counterattitudinal, p = 0.03).

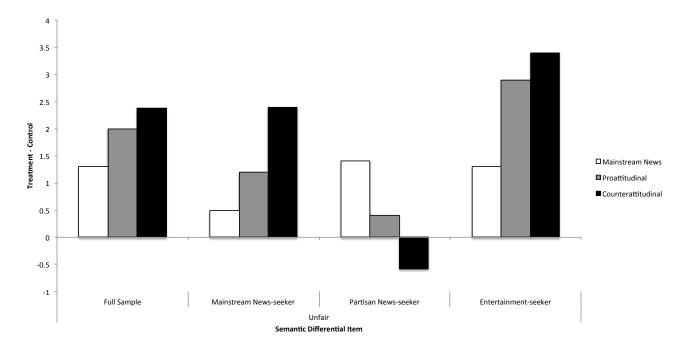


Figure 2: The Effects of News Programs on Reactions to Media Content, Study 1 Notes: Bars represent differences between each of the treatments and the control group (entertainment shows).

Next we recruit the participant preference design to test our hypotheses by decomposing treatment effects by people's *a priori* viewing preferences. The data only show modest support for the *Conditional Friendly Media Effect Hypothesis*. Mainstream news-seekers do not see proattitudinal news as more fair than mainstream news (p = 0.472); while partian news-seekers tend to rate protattitudinal news as more fair than mainstream news shows, this difference is not statistically significant (p = 0.208, one-tailed). We also cannot say with confidence that the partian news-seekers are reliably different from mainstream news-seekers in how they rate proattitudinal vis-a-vis mainstream news (p = 0.133, one-tailed).

We find more evidence for the *Oppositional Media Effect Hypothesis*. Both mainstream newsseekers and entertainment-seekers rated counterattitudinal programming as less fair than mainstream news (p = 0.037 and 0.007, respectively, one-tailed). Mainstream news-seekers reliably rated counter-attitudinal news as more unfair than proattitudinal news (p = 0.097, one-tailed), while entertainment-seekers did not (p = 0.28, one-tailed). However, we do not find an oppositional hostility effect among partian news-seekers. These viewers did not distinguish between counterattitudinal and other forms of news.

Finally, we find evidence consistent with the *Entertainment-seeker Susceptibility Hypothesis*. Relative to partisan and mainstream news-seekers, entertainment-seekers tend to view proattitudinal news as more hostile (p = 0.042 and 0.08, respectively, one-tailed). However, entertainmentseekers do not appear to rate mainstream news differently than partisan and mainstream newsseekers.

These data provide qualified support for the Oppositional Media Effect Hypothesis and Entertainmentseeker Susceptibility Hypothesis and only suggestive support for the Conditional Friendly Media Effect Hypothesis. Before we draw broad conclusions from these findings, it is important to consider the limitations of this study. It is small (n = 124), which increases the size of the standard errors and makes it difficult to detect treatment effects. The fact that we had to assign self-identified moderates to proattitudinal and counterattitudional conditions likely compounds this problem. We relied on a narrow sample of college students, who may react to media content differently than the broader population. Further, the news shows focused on the same news stories, but approached them in different ways with different sound bites and guests. We cannot rule out that these differences in the stimuli may have interacted with viewing preferences. We attempt to address many of these limitations in Study 2.

4 Study 2

4.1 Participants

We recruited 843 participants for a "general attitudes survey" July 6–29, 2013, from the Amazon.com Mechanical Turk on-line labor market. MTurk is increasingly used in experimental research and is capable of generating broader samples than college subject pools, if still specialized Berinsky, Huber and Lenz (2012). The sample for Study 2 is certainly broader than the sample in Study 1 with respect to age ($M_{age} = 33.7$, range 18 to 84). The racial breakdown is closer to the national distribution, although not as representative as a random sample would be (74.6 percent white, 9.7 percent black, 4.5 percent Latino, 7.7 percent Asian, and 3.5 percent "other"). The sample was balanced in terms of gender (54 percent female) and was predominately middle class (median family income between \$35,000 and \$50,000).

4.2 Procedures

The procedures for Study 2 were similar to Study 1. Subjects who agreed to participate in the study completed a pre-test questionnaire that asked questions about their political ideology, viewing preferences, and other attitudes. Next, subjects were randomly assigned to one of four experimental conditions, exposure to: (1) a proattitudinal partian talk show from a cable news network, (2) a counterattitudinal talk show, (3) mainstream broadcast news, or (4) an entertainment show. In Study 2, subjects were not given a "moderate" option on the self-identified ideology question, forcing them to indicate whether they lean conservative or liberal. This obviated the need to decipher whether to treat moderates as liberals or conservatives when assigning them to pro- or counterattitudinal news. When participants finished watching the assigned program, they were asked to complete a posttest survey that measured their perceptions of the news media.

The news and entertainment clips had a shorter duration than in Study 1 (approximately 2:30 each). The entertainment options were *For Rent* and *Pet Star*. The news shows each originally aired June 4, 2013 and featured coverage of Congressional hearings on the Internal Revenue Service's investigation of applications of Tea Party organizations for tax-exempt status. We included clips from *The Last Word with Lawrence O'Donnell* (MSNBC), *The O'Reilly Factor*, and *The CBS Evening News*. The *O'Reilly* clip from Fox News characterized the investigation of these groups as "something that ought not occur certainly in this country." MSNBC host O'Donnell characterized the Congressional hearings themselves as the *real* scandal, while the CBS News news clip featured no partisan invective other than the allegations of the Tea Party organization leaders' allegations of their mistreatment.

4.3 Measures

We measured participants' viewing preferences using the question wording from Study 1, with a revised list of programs. We measured reactions to media content using the semantic differential protocol used in Study 1, but in addition to fair/unfair, we included friendly/hostile and fact/opinion.

4.4 Findings

In the manipulation check, subjects placed the MSNBC show on the left (M = 4.33), the Fox News show on the right (M = 7.03), and CBS news in the middle (M = 5.31).⁴ The empirical results are shown in Figure 3. On average, people were more likely to see all news shows as more "unfair" than entertainment shows (mainstream news, p = 0.013, one-tailed; proattitudinal and counterattitudinal news, p < 0.001). In the full sample, we now find evidence for the friendly media effect (mainstream < proattitudinal) with respect of subjective judgments of fairness (p =0.037) but not judgments of hostility (p = N.S.) or factualness (p = N.S.). We do find strong evidence for the oppositional hostility effect with respect to mainstream news content (mainstream < counterattitudinal, p < 0.001 for all three items) and proattitudinal news (proattitudinal < counterattitudinal p < 0.001 for all three items).

In the subgroup analyses, we find weak support for the *Conditional Friendly Media Effect Hypothesis.* Consistent with the hypothesis, mainstream news-seekers do not rate proattitudinal news less negatively than mainstream news and actually rate it more negatively. Yet while partisan news-seekers do rate proattitudinal news more positively than they do mainstream news (i.e., view it as more friendly, as predicted by the hypothesis), we cannot rule out chance as a possible explanation for this. We can confidently say that partisan news-seekers and mainstream newsseekers rate partisan and mainstream news differently (i.e., viewing preference interacts with the mainstream and proattitudinal news treatments).

We find consistent evidence for the Oppositional Media Effect Hypothesis. Partisan news-seekers rate counterattitudinal news as less fair, more hostile, and less factual than they do either proattitudinal news or mainstream news (p < 0.05). Mainstream news-seekers rate counterattitudinal news as less fair, more hostile, and less friendly than they do mainstream news (p < 0.01). They also see counterattitudinal news as less fair and more hostile than they do proattitudinal news (p < 0.05), but intriguingly, they view both proattitudinal and counterattitudinal news as equally opinionated (p = 0.246). Entertainment-seekers view counterattitudinal news as more negative than both proattitudinal and mainstream news (p < 0.01 for all items except unfair, p < 0.10). Finally,

⁴We can confidently say subjects viewed O'Reilly as more conservative than The Last Word (p < 0.001) and CBS News (p < 0.001) and viewed The Last Word as more liberal than CBS Evening News (p < 0.001).

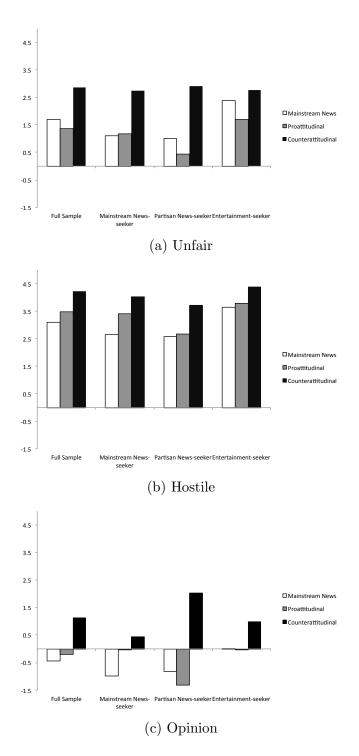


Figure 3: The Effects of News Programs on Reactions to Media Content, Study 2

Notes: Bars represent differences between each of the treatments and the control group (entertainment shows).

we find evidence for the *Entertainment-seeker Susceptibility Hypothesis*. Entertainment-seekers rate news content, partisan or mainstream, more negatively than news-seekers. The exception is that entertainment-seekers view proattitudinal and mainstream news as equally factual.

5 Discussion

This paper builds upon recent work on selective exposure to consider how the expansion of choices on television influences the effects of mainstream and partisan news programming, guided by a new Active Audience Theory. Central to this theory is a motivational model of selective exposure that conceptualizes media preferences as a function of defensive and hedonic motivations. The model predicts that media preferences shape the influence of mainstream and partisan news. In addition, we offer an innovative experimental design—the participant preference design—to circumvent challenges to establishing causal inference in the face of selectivity.

The evidence offers support for a number of insights. We find suggestive evidence for the *Conditional Friendly Media Effect Hypothesis*. Partisan news seekers seem to be more friendly to proattitudinal news than mainstream news and mainstream news-seekers tend to be more hostile to proattitudinal news than they are to mainstream news. We find strong evidence for *Oppositional Media Effect Hypothesis*. Across viewer types, people dislike counterattitudinal news shows. Finally, we demonstrate that entertainment-seekers have stronger negative reactions to news-any news—relative to news-seekers. When the news media give viewers what they seek—journalistic balance for mainstream news-seekers and ideologically tinged discourse for partisan news-seekers—we observe muted hostile media effects.

The hostile media effect, at least in these studies, is largely driven by entertainment-seekers who do not like watching the news. One implication of our findings is that selectivity coupled with a fragmented media market and abundant choice limits the influence of the news media. The current media environment allows most people to get what they want, when they want it. The days of the large inadvertent news audience are gone and perhaps direct, massive media effects with it.

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