

Testing the Effects of Relative Newsworthiness on News Selection

MINCHUL KIM

Chung-Ang University, South Korea

YANQIN LU

Bowling Green State University, USA

This study conducts an experiment to explore news selection on digital news platforms (e.g., Apple News). We found that the likelihood of selecting a certain news headline varied in terms of how newsworthy the headline is relative to other headlines available at the time of selection. This tendency to select news with relatively higher newsworthiness makes partisans more likely to engage in cross-cutting exposure, although the effects of relative newsworthiness were found to be stronger for neutral and proattitudinal news sources. These findings show the importance of examining relative newsworthiness in a high-choice and hyper-partisan context where multiple news choice options from politically polarized news sources are competing for user attention.

Keywords: news selection, news competition, newsworthiness, digital news platforms

News consumption involves a series of decisions on the part of news users. News users decide whether to consume news (e.g., news use versus news avoidance), which media platforms to use (e.g., TV, print news media, online), which media organizations to consume (e.g., the *New York Times*, ABC, CNN, etc.), and which news items to select among available headlines. For this reason, a large body of literature on communication and journalism has unpacked the technological, sociological, and psychological factors that drive news engagement at each stage of these decision processes. Specifically, characteristics of individuals such as political party identification (e.g., Stroud, 2008), preference for entertainment content (e.g., Prior, 2005), political interest (e.g., Strömbäck et al., 2012), and even personality traits (e.g., Mondak, 2010) are found to shape news engagement. News content characteristics such as the presence of entertainment options (e.g., Feldman et al., 2013) and social endorsement (e.g., Messing & Westwood, 2014) influence news selection behaviors. Macrolevel conditions, including changes in the regulation framework (Hmielowski et al., 2016), and an increase in available cable news channels (Kim & Webster, 2012) are also found to shape public news engagement.

Minchul Kim: kimminchul@cau.ac.kr

Yanqin Lu: ylu@bgsu.edu

Date submitted: 2023-03-06

Copyright © 2026 (Minchul Kim and Yanqin Lu). Licensed under the Creative Commons Attribution Non-commercial No Derivatives (by-nc-nd). Available at <https://ijoc.org>.

The current study contributes to this body of literature by examining how news users engage in news selection on emerging news platforms (e.g., Apple News app or Google News app). News media have limited control over what and how their news contents are curated on these platforms (van Dijck et al., 2018). Such digital news platforms make individual news items compete for user attention, as multiple news items from various news outlets are simultaneously presented at a given time. Largely devoid of these news platforms are the many features (e.g., size and position) that indirectly signal the newsworthiness of individual news content in traditional news media. In such a context, the way individual users engage in news selection behaviors may be largely constrained by available news items at the time of news selection. That is, the extent to which individual users choose a certain news content may be dependent not only on whether the news itself is about a highly newsworthy event but also on whether it is presented together with other more (or less) newsworthy content. For this reason, a new framework that considers the effects of the newsworthiness of a news item relative to its alternatives is necessary to examine public news engagement on digital news platforms. Therefore, this study reconceptualizes the newsworthiness of news content as a variable dependent on its context instead of on inherent characteristics of news events. In doing so, it accounts for the competition among news items and aims to test the effects of relative newsworthiness on news selection behaviors.

An online experiment that simulates a popular mobile news platform (i.e., Apple News app) was conducted to test how the competition among available news headlines affects news selection behaviors. The results revealed that news users are more likely to select headlines rated as relatively more newsworthy compared with alternative headline options available at the time of news selection. However, we also found that the partisan leanings of news sources likely lead party identifiers to give different weight to relative newsworthiness as a news selection criterion. Specifically, the effects of relative newsworthiness were much weaker for counterattitudinal news sources compared with neutral and proattitudinal news sources. The findings of this study provide the ground for conceptualizing the newsworthiness of a news item as a variable influenced by its available alternatives, as the effects of competition among available news choice options substantially shape news engagement on digital platforms.

Two Approaches to Studying News Selection

Previous studies on news selection reflect two approaches that respectively place the locus of control either on news content or on news users. First, reflective of how journalists consider the intrinsic value of events when deciding which events to report (Harcup & O'Neill, 2016; Kepplinger & Ehmig, 2006), news stories that cover highly newsworthy events are more likely to be consumed by news users (Lee, 2009; Wendelin et al., 2017). Empirical evidence has shown that various attributes associated with each news event (e.g., reach, unexpectedness, controversy) constitute the newsworthiness of the event and may determine how news users engage with a certain story (Engelmann & Wendelin, 2017). For example, articles about widespread health concerns draw more attention because humans are hardwired to pay greater attention to events that are relevant to their own survival (Kim, 2015). Similarly, stories that cover deviations from social expectations (Lee, 2008) are more likely to attract greater public attention. News content that reports events of social significance also attracts more user attention, as it provides information necessary to make an informed decision (Lee, 2009). From this perspective, news content covering highly newsworthy events is more likely to be selected by news users. Because headlines function as a reference

for news users to decide whether or not to select the news to read (Lee, 2020), those with higher newsworthiness are expected to draw greater attention. The underlying assumption behind this approach is that individual users would respond similarly to a certain news item, stressing the importance of the inherent characteristics of the news content in question.

The second approach to studying news selection behaviors places the locus of control on users. Previous studies have demonstrated that subjective judgments of news users and their psychological and sociological characteristics determine what news content they consume. For example, a long line of research on the use and gratification approach explains that individuals' need to keep up with current events accounts for user engagement with news content (e.g., Katz et al., 1973; Ng & Zhao, 2020; Valenzuela et al., 2019). The concept of the issue public also explains why some people who are interested in a specific issue domain are more likely to select news content that aligns with their interests (Kim, 2009; Mummolo, 2016; Price et al., 2006). People's preexisting attitudes toward news topics (e.g., Knobloch-Westerwick & Meng, 2009) and their preferences for news over entertainment content (e.g., Prior, 2005) are also known to be individual-level factors that shape how users engage in news consumption behaviors. While stressing different loci of control, these findings from previous research suggest individual users may not exhibit identical responses to the same news item, as individual psychological needs and interests substantially shape the patterns of news engagement.

Although these two approaches emphasize different driving mechanisms underlying public news selection behaviors, both of them conceptualize the probability of a certain news item being selected by a certain news user (hereafter "selectability" for short) as a fixed attribute. That is, the selectability of a news item is conceived as the combination of the intrinsic characteristic of that news item (Engelmann & Wendelin, 2017; Kepplinger & Ehmig, 2006) and individual user preference for the news item (Knobloch-Westerwick & Meng, 2009; Mummolo, 2016). However, conceptualizing selectability in this way misses an important component that may influence news selection behaviors—the fact that a news item often competes with other choice alternatives (e.g., another news item or entertainment option) for news user attention.

Conceptualizing Relative Newsworthiness

How human beings make choices is substantially dependent on available choice alternatives at the time of decision making (Borovoi et al., 2010; Huber et al., 1982). For example, in the consumer choice context, the chance to not choose any option increases when consumers are asked to make a choice between two equally attractive products as opposed to a choice between a superior product and an inferior product (Dhar, 1997). Fischer et al. (2008) found that the number of choice options may influence decisions by triggering different selection criteria. Participants in their study were more likely to select attitude-consistent information in the 10-option condition (as opposed to the four-option condition) because a larger number of options made each option less distinctive. While found in areas other than news selection, these observations provide a reason to expect that news choice options available at the time of selection likely influence how people engage in news selection behaviors.

Indeed, previous studies have shown that available choice alternatives shape news selection behaviors. For example, Arceneaux et al. (2013) tested the effects of free choice on news selection, where

participants were asked to freely select media content. Feldman et al. (2013) demonstrated that the existence of an entertainment alternative influenced the probabilities of selecting attitude-consistent news content. In another study, participants were less likely to choose news content in a high-choice news environment (30 choice options) compared with a low-choice news environment (six choice options), even though the news-versus-entertainment ratio was constant between the two conditions (Panek, 2016). Although these studies provided important insights into how the presence of choice alternatives influenced news selection, they did not fully investigate the mechanism through which available choice alternatives could shape news selection behaviors.

In this study, we expect that the available choice alternatives at the time of selection likely influence news selection by affecting the perceived newsworthiness of each choice option. In other words, audience perception of the newsworthiness of a news item is largely influenced by how a certain news item is more (or less) attractive relative to the existing choice options. This approach is slightly different from previous conceptualizations of newsworthiness that define it in terms of the relationship between the inherent characteristics of an event and journalists' subjective judgment about them (Staab, 1990). That is, newsworthiness in the existing literature refers to either (1) the inherent characteristics of a certain event that make it more (or less) likely to be covered by journalists (i.e., causal model) or (2) the outcome of journalists' conscious decision to package an event into a news story (i.e., functional model). The former conceives newsworthiness as an inherent property of the news story, whereas the latter conceptualizes it as a product constructed from journalistic practices to create an attractive news story. Both models conceptualize newsworthiness as something that belongs to a news story (either inherent or constructed) or as an attribute largely independent from other contemporaneous news content that a reader would encounter.

The emergence of digital news platforms calls for the reconceptualization of newsworthiness to reflect how digital news platforms present news content. That is, unlike conventional news channels, where all audiences were presented with the same set of news content curated by professional news organizations, recommendation algorithms that are now heavily used by current news platforms aim to personalize the news experience (e.g., Bodó, 2019; van Dijck et al., 2018). This means that on digital news platforms, each individual user likely encounters an entirely different set of news choices based on their personal preferences and past news consumption behaviors. These affordances of digital news platforms render the newsworthiness of a specific item a dynamic attribute that is determined not only by the presence (or absence) of certain inherent characteristics of the news topic but also by the newsworthiness of available alternatives. For example, a news story featuring President Biden's personal life may look more appealing to news users if it competes against a story about legislative action on GMOs; however, when this same story about Biden's personal life is presented together with a news story featuring an upcoming Super Bowl game, then it may be less appealing—that is, less newsworthy—to news users. As these two examples illustrate, the relative newsworthiness of a specific news story may increase or decrease under different circumstances, depending on the newsworthiness of available choice alternatives presented to users at the time of selection.

The research designs employed in previous studies on news selection, however, cannot test how available choice alternatives influence the newsworthiness of each news item. For example, previous studies

often explore news selection using experiments with a typical factorial design that systematically varies a certain factor within a fixed number of news items (e.g., Knobloch-Westerwick & Meng, 2009). Once a fixed set of choices are created (hereafter "choice set" for short), the relative newsworthiness of each news item in that choice set is determined. In this case, if a certain news item is more newsworthy than its alternatives, it will be more selectable than its alternatives within that particular choice set, regardless of how other factors change in the experiment. As a result, asking individuals to select a news item out of the same choice set may simply reflect how news users respond to existing imbalances in the relative newsworthiness of that choice set. Thus, by using the fixed choice set(s), previous studies, including those that tested the effects of available choice options (e.g., Arceneaux et al., 2013; Feldman et al., 2013; Panek, 2016), unwittingly overlook the effects of competition among news items on news selection behaviors.

For this reason, to fully test the impact of the relative newsworthiness on news selection, at least one (or more) options within the choice set should be replaced during the experiment. This is because such replacements recalibrate the relative newsworthiness of each item in the choice set. Specifically, testing the influence of relative newsworthiness of a news item requires an investigation into whether it is more (or less) likely to be selected against another set of news items with different configurations of newsworthiness. The news item would be more likely to be selected if it is perceived to be relatively more newsworthy than other news content. Therefore, the selectability of a certain news item is expected to be higher if available alternatives are less newsworthy. To test this possibility, we propose the following hypothesis:

H1: The relative newsworthiness of a news item is positively associated with predicted probabilities of news selection.

Partisan Cues and Relative Newsworthiness

While relative newsworthiness is expected to predict news selection, other factors, such as the partisan leanings of news sources, can also influence it. In the context of the United States, many news sources (e.g., Fox News Channel and MSNBC) have embraced partisan leanings as part of their core brand identities and signal to potential viewers what to expect from their reports (e.g., Kim & Grabe, 2022). Reflecting on this political landscape of news media, the partisan reputation of news sources informs partisans about which news sources they should or should not trust (Pew Research Center, 2020) and facilitates selective consumption of news sources that are perceived to provide a similar political position (Iyengar & Hahn, 2009; Mummolo, 2016). However, some previous studies have also found that partisans do not completely ignore news sources with politically opposing views (Garrett et al., 2013; Kim & Lu, 2020).

Despite the impact of the partisan leanings of news sources on news selection behaviors, it is unclear whether and how the relative newsworthiness of news items influences people's reliance on partisan cues in news selection. This is partly because the competition among news choice options was rarely taken into consideration in the examination of the effects of partisan cues on news engagement. On the one hand, previous studies also show that individual news users do not blindly rely on partisan cues. For example, personal relevance to news content was found to be a stronger predictor of news selection compared with partisan cues (Iyengar et al., 2008; Mummolo, 2016). The effects of personal relevance were found statistically comparable regardless of the partisan leanings of news sources, suggesting partisans are likely

to select relevant news even if it was attributed to counterattitudinal news sources (Mummolo, 2016). From this perspective, relative newsworthiness of news content is expected to promote selection regardless of the partisan leanings of news sources.

On the other hand, considering how public perception of news sources substantially influences news selection behaviors (Arendt et al., 2019; Kaye & Johnson, 2016), partisans may completely avoid news from out-group sources even if the newsworthiness of the news content is relatively higher than its available alternatives. In other words, it is possible that partisan leanings of news sources may trump newsworthiness in determining news selection behaviors. These mixed observations make it harder to predict the direction of the effects of relative newsworthiness on news selection in conjunction with the partisan leanings of news sources. For this reason, we propose the following research question:

RQ1: Do partisan leanings of news sources moderate the effects of the relative newsworthiness on news selection?

Method

Procedure and Participants

An online experiment was conducted to test the proposed hypothesis and answer the research question. Because a conventional factorial design may not afford the testing of relative newsworthiness, as doing so requires a random generation of news choice sets,¹ our experiment design was informed instead by the logic of conjoint experiments (see Hainmueller et al., 2014). Conjoint experiments are often used to understand human decision making by asking people to make a choice out of randomly created choice sets generated through predetermined rules. Indeed, a few studies have employed similar experiment designs to test how various factors influence news selection behaviors (e.g., Kim & Lu, 2020; Mukerjee & Yang, 2021; Mummolo, 2016).

The experiment consisted of three stages. First, participants answered the pre-experiment survey that measured demographic information. Next, participants completed the main experiment, where they engaged in a total of four news selection trials. In each trial, participants were asked to choose a news headline for a story they would like to read the most out of four headlines. A total of 16 headlines (four at a time) were randomly selected from a preconstructed pool for each participant's four news selection trials so that no headlines were presented more than once for each participant. Finally, participants were asked to rate the remaining headlines in terms of newsworthiness. This response was used as part of the crowdsourcing technique that estimates the newsworthiness of each headline. It should be noted that for each participant, none of the headlines used in the second stage appeared in the third stage.

¹ To illustrate, a conventional experimental design requires at least 2,380 news choice sets (e.g., experimental conditions) to accommodate the testing of relative newsworthiness.

Participants were recruited from Amazon Mechanical Turk (MTurk), an online crowdsourcing marketplace.² The data for this study were collected as part of a larger project that examines how news coverage of racial minorities promotes altruistic behaviors from the racial majority in the U.S. context. Therefore, all of the study participants were White Americans. A total of 982 participants completed the experiment.³ A small monetary compensation (\$1.80) was rewarded as an incentive. Participants were on average 42.18 years old ($SD = 12.93$). A little more than half of them identified as female ($n = 548, 55.8\%$). About half identified as Democrats/leaners ($n = 518, 52.8\%$). The percentage of self-identified Republicans/leaners was 36.1% ($n = 354$). About 11.2% ($n = 110$) of the participants who identified with neither party were excluded from the analyses, as the party leanings of news sources could not be determined for them.⁴

Experiment Design

For each of four news selection trials, participants were given four headline choice options and asked to choose the headline for a story they would most like to read. This design constitutes a realistic setting since Apple's news app widget on iOS, a popular mobile news platform, presented four news headlines simultaneously at the time we launched the experiment. Each choice option (i.e., a headline assigned to a news source) was randomly generated by the predefined rules described below.

Headlines

To populate the headline options at each news selection trial, four headlines were randomly selected from the preconstructed pool of 17 headlines. These headlines were collected from various news sources two days before the experiment. Every attempt was made to include a diverse set of topics in the headline pool.⁵

Partisan Leanings of News Sources

For each headline option presented at a given news selection trial, a news source was randomly assigned from a pool of 12. The logo of the assigned news source was presented on the left side of the given headline to indicate its source. This pool included three pro-Republican news sources (*Blaze*, *Breitbart*, and Fox News Channel) and three pro-Democrat news sources (*Huffington Post*, *MSNBC*, and *Slate*). A total of

² Admittedly, there are concerns over representativeness and reliability of the data collected from MTurk. However, the results of experimental studies using MTurk samples have been found comparable with those from studies that used a nationally representative sample (Mullinix et al., 2015). For this reason, despite the findings' limited generalizability to a broader population, the results of this experiment might be a reliable description of how news users take into consideration newsworthiness when selecting news content.

³ As the main experiment was conducted a week after the experiment reported here, the experimental manipulations employed in the main experiment did not influence the results reported in this study.

⁴ The analyses with or without self-identified Independents yielded essentially the same results. The analyses only using Independents are reported in Online Appendix C (<https://osf.io/nqmzv>).

⁵ See Online Appendix A (<https://osf.io/nqmzv>) for the entire list of headlines.

six news sources thought to hold neutral stances (ABC, *Associated Press*, BBC, *Bloomberg*, *Reuters*, and *USA Today*) were also included. The partisan leanings of each news source were determined based on previous studies (Kim & Lu, 2020; Song, 2017) and public perception regarding news sources (e.g., Pew Research Center, 2020). Neutral news sources were included in the pool, as a lack of neutral options likely results in overestimating the extent to which participants engage in either selective or cross-cutting exposure. It is of note that no news source appeared more than once in any given news selection trial.

Measures

News Selection

During each of the four selection trials, each participant was asked to choose a headline of a story they most wanted to read. The selected headlines were coded as either one if selected or zero otherwise. In total, 3,488 sets of four-choice trials were constructed for 872 participants. Participants made a total of 3,488 news selections with no missing choices.

Headline Newsworthiness Ratings

A crowdsourcing method similar to those used in previous studies (Kepplinger & Ehmgig, 2006; Kim, 2015) was employed to estimate the newsworthiness of each news headline. Specifically, in the third stage of the study, participants were asked to indicate to what extent each of four adjectives (“interesting,” “timely,” “relevant,” and “important”) describes the headline on a 7-point scale (1 = “extremely poorly” to 7 = “extremely well”). These adjectives were adopted from previous studies (Sundar et al., 2007; Xu, 2013). Each headline was rated by a subset of the participants ($M = 57.76$, $SD = 8.50$). Individual ratings for each headline were averaged to construct an indicator of headline newsworthiness ($M = 4.74$, $SD = 0.59$, range = 3.34~5.36).⁶ This procedure produces a single metric that makes each headline in the pool quantitatively comparable and thus useful in estimating its relative newsworthiness in a given news selection trial. It should be noted that none of the 16 headlines presented to each participant at the second stage was used in this third stage to address the issue of tautology.

Relative Headline Newsworthiness Ratings

Relative headline newsworthiness captures the competitive edge of a certain headline over its available choice alternatives. The relative newsworthiness of each news choice option in a given trial was calculated using the following two steps. First, the average score of headline newsworthiness ratings across four headlines was calculated for each of the 3,488 news selection trials. Second, these average scores were then subtracted from the newsworthiness ratings of each headline presented in the respective trial. Specifically, relative headline newsworthiness ratings for each of the four headlines (j_1 , j_2 , j_3 , and j_4) simultaneously presented in the news selection trial i were calculated using the following formula:

⁶ See Online Appendix A (<https://osf.io/nqmzv>) for more details.

$$\text{Relative Newsworthiness Ratings}_{ij} = \text{Newsworthiness Ratings}_{ij} - \frac{\sum_{k=1}^4 \text{Newsworthiness Ratings}_{ik}}{4}$$

The mean of relative headline newsworthiness ratings was 0.00 ($SD = .51$), ranging from -1.44 to 1.25 . Higher relative newsworthiness scores indicate the particular headline was rated to be more newsworthy than the other three headlines simultaneously presented at the time of selection.⁷

Partisan Leanings of News Sources

Partisan leanings of news sources were coded based on each participant's self-reported party identification. Pro-Republican news sources were categorized as counterattitudinal (0) for self-identified Democrats. The same news sources were coded as proattitudinal (2) for self-identified Republicans. In contrast, pro-Democrat news sources were coded as either counterattitudinal (0) for self-identified Republicans or proattitudinal (2) for self-identified Democrats. Neutral news sources were coded as (1) for both Democrats and Republicans. For the statistical analyses, we created two dummy variables indicating whether the news source of a specific item is categorized as either neutral or proattitudinal.

Data Analysis

Following Hainmueller et al. (2014), a series of OLS regression models were specified to estimate average marginal component effects (AMCEs) of relative newsworthiness and partisan cues on the predicted probability of selecting a specific headline. Standard errors were clustered at the individual level to adjust within-individual correlations.⁸ To ease interpretation, the estimated marginal means were also reported, as AMCEs are sensitive to the reference category (Leeper et al., 2020). The baseline probability for each headline to be selected was 25 percent because four choice options were presented in each selection trial. Using a multilevel modeling approach yielded essentially the same findings reported here.

Results

A baseline model was specified to demonstrate the effects of partisan leanings of news sources and the original measure of newsworthiness (instead of relative newsworthiness) on news selection. The results were consistent with previous studies that show partisan leanings of news sources substantially influence news selection. Specifically, partisans were more likely to select news from proattitudinal news sources (see Baseline Model of Table 1). Predicted probabilities of partisan leanings of news sources were reported in the lower panel of Table 1. As expected, headline newsworthiness ratings were found to be a significant predictor of news selection ($b = 0.046$, $SE = .004$, $p < .001$). To illustrate, if everything else is held constant, the

⁷ See Online Appendix A (<https://osf.io/nqmvz>) for more details about the relative newsworthiness ratings for each headline.

⁸ Individual characteristics (e.g., sex, age, race) of participants themselves cannot be used to distinguish the selected headlines from nonselected headlines, as each participant, without missing choices, made a total of four new selections.

predicted probability of selecting a headline whose newsworthiness rating is one standard deviation above the mean is about 29.5% (95% CI [28.8%, 30.2%]).

Effects of Relative Newsworthiness Ratings

H1 predicted a positive relationship between the relative newsworthiness ratings and the selectability of news headlines. As predicted, relative headline newsworthiness ratings were a significant predictor of news selection ($b = .054$, $SE = .004$, $p < .001$; see Model 1 of Table 1). The predicted probability of selecting a headline whose relative newsworthiness rating is one standard deviation above the mean was about 30.0% (95% CI [29.2%, 30.8%]). It is worth noting that the impact of original headline newsworthiness ratings (observed in the Baseline Model) became insignificant after we accounted for the effect of relative newsworthiness ratings in Model 1.

We also tested whether the model without the original headline newsworthiness ratings (Model 2) performs better than the models with original headline newsworthiness ratings (Baseline Model and Model 1). The two information criteria provided evidence in favor of Model 2 over the other two models (Model 2: Akaike Information Criterion (AIC) = 15,892.84, Bayesian Information Criterion (BIC) = 15,923.02; Model 1: AIC = 15,851.64, BIC = 15,889.35; Baseline Model: AIC = 15,849.68, BIC = 15,879.86), as both AIC and BIC criteria of Model 2 were smaller than those of the Baseline Model and Model 1.⁹ This indicates that only using relative headline newsworthiness was the most efficient way to predict news selection when multiple headlines are competing for audience attention.

To illustrate, the estimated probability of news selection for a headline titled "James O'Keefe Threatens to Release 'Hundreds of Hours' of Leaked Newsroom Footage Soon" (Grim & Calderone, 2017) was about 20.5% (95% CI [19.8%, 21.1%]), as its original newsworthiness rating was 4.19. However, when accounting for available choice alternatives, the predicted probabilities of selecting this same headline varied from 16.5% (95% CI [15.4%, 17.8%]) to 27.5% (95% CI [27.1%, 27.9%]) as a function of its relative newsworthiness ratings, which ranged from -0.82 to 0.25 ($M = -.44$, $SD = .22$). These findings show that the available options at the time of news selection substantially influence the selectability of a certain headline, which supports H1.

⁹ While these information criteria (i.e., AIC and BIC) are not a formal statistical test, they can be used as an informal guideline for the model selection process, with smaller scores indicating a better model fit with the data (Raftery, 1995).

Table 1. Testing the Effects of Relative Newsworthiness Ratings on News Selection Behaviors (Among Party Identifiers and Leaners).

Average Marginal Component Effects	Baseline Model <i>b</i> (<i>SE</i>)	Model 1 <i>b</i> (<i>SE</i>)	Model 2 <i>b</i> (<i>SE</i>)
Neutral News Sources ^a	.108 (.009)**	.108 (.009)**	.108 (.009)**
Proattitudinal News Sources ^a	.106 (.011)**	.106 (.011)**	.106 (.011)**
Newsworthiness (SD)	.046 (.004)**	-.002 (.001)	
Relative Newsworthiness (SD)		.053 (.004)**	.052 (.004)**
AIC	15,892.84	15,851.64	15,849.68
BIC	15,923.02	15,889.35	15,879.86
Estimated Marginal Means	Baseline Model Means [95% CI]	Model 1 Means [95% CI]	Model 2 Means [95% CI]
Counterattitudinal News Sources	.169 [.156, .181]	.168 [.156, .180]	.168 [.156, .180]
Neutral News Sources	.277 [.269, .285]	.277 [.269, .285]	.277 [.269, .285]
Proattitudinal News Sources	.274 [.260, .288]	.274 [.260, .289]	.274 [.260, .289]
Newsworthiness (SD)	.295 [.288, .302]	.247 [.246, .249]	
Relative Newsworthiness (SD)		.300 [.292, .308]	.301 [.293, .308]

Note. Number of observations = 13,952. Number of participants = 872. ** $p < .001$, * $p < .005$. Standard errors were clustered at the respondent level to adjust within-individual correlation. ^aCounterattitudinal news sources were used as the reference group.

Moderating Effects of Partisan Leanings of News Sources

RQ1 asks whether the partisan leanings of news sources influence the effects of the relative newsworthiness of a headline. To test this possibility, a model with two-way interaction between relative headline newsworthiness ratings and two dummy indicators of partisan leanings of news sources (i.e., neutral and proattitudinal) was specified. Using a nested model comparison method suggested in Leeper et al. (2020), we found the model that includes the two interaction terms fits better with the data than the model without the terms ($F[3, 13,949] = 3.66, p = .012$).¹⁰ This suggests partisan leanings of news sources moderate the effects of relative newsworthiness ratings on news selection.

Figure 1 illustrates the estimated marginal means of predicted probabilities of headline selection as a function of partisan leanings of news sources and relative newsworthiness ratings. As shown, relative newsworthiness ratings had a positive and statistically significant association with news selection, irrespective of partisan leanings of news sources. These findings indicate that, in general, partisans are more likely to choose headlines with relatively higher newsworthiness ratings compared with other available choice options, yet partisan leanings of news sources likely moderate the impact of relative newsworthiness ratings. Specifically, the effects of a one standard deviation increase in relative newsworthiness ratings were .032 ($SE = .006, p < .001$) for counterattitudinal news sources and .062 ($SE = .005, p < .001$) and .052 ($SE = .007, p < .001$) for neutral and proattitudinal news sources, respectively. The findings imply that if

¹⁰ See Table B1 of Online Appendix B (<https://osf.io/nqmzv>) for the full model.

everything else held constant, the differences in predicted probabilities of headline selection due to partisan leanings of news sources become more prominent as relative newsworthiness ratings increase.

To illustrate, predicted probabilities of selecting headlines with relatively low newsworthiness ratings (a standard deviation below the mean: -0.51) for counterattitudinal, neutral, and proattitudinal news sources were about 13.6% (95% CI [12.2%, 15.1%]), 21.5% (95% CI [20.3%, 22.7%]), and 22.2% (95% CI [20.2%, 24.2%]), respectively. This suggests partisans were about 8% more likely to select headlines with relatively lower newsworthiness ratings if they were attributed to either neutral or proattitudinal news sources compared with counterattitudinal ones. This difference in the predicted probabilities of headline selection due to partisan leanings of news sources increases for headlines with relatively higher newsworthiness ratings. Specifically, for headlines with relatively higher newsworthiness ratings (one standard deviation above the mean: 0.51), predicted probabilities of selecting headlines from counterattitudinal news sources were 20.0% (95% CI [18.1%, 21.9%]). Partisans were about 12.6% more likely to select such relatively more newsworthy headlines from proattitudinal news sources (point estimate = 32.7%, 95% CI [30.6%, 34.8%]) and approximately 13.8% more likely to choose them from neutral news sources (point estimate = 33.8%, 95% CI [32.4%, 35.3%]). These findings imply that partisans do not completely avoid news from counterattitudinal sources, although they are more likely to select news from neutral and proattitudinal sources. In addition, the rates of increase in predicted probabilities of headline selection from counterattitudinal sources due to relative newsworthiness ratings are relatively slower compared with neutral and proattitudinal news sources. These findings suggest that partisan cues moderate the effects of relative newsworthiness ratings on news selection.

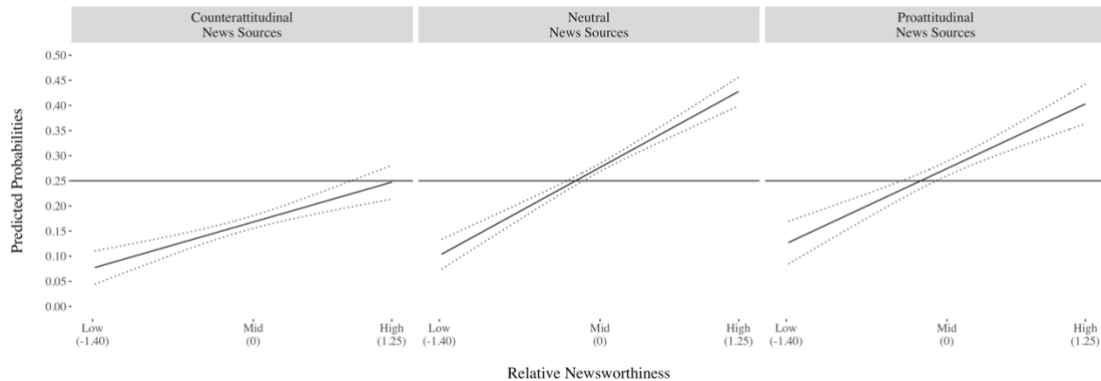


Figure 1. Effects of partisan leanings of news sources on predicted probabilities of news selection at varying levels of relative newsworthiness ratings.

Note. See Online Appendix C (<https://osf.io/nqmzv>) for the estimated effects for Independents.

Discussion

This study explores the effects of relative newsworthiness as a predictor of news selection. The results demonstrate that, on average, news users tend to select headlines with relatively higher newsworthiness ratings compared with available alternative options at the time of news selection. Partisan cues (i.e., partisan leanings associated with news sources) were also found to shape how news users

consider relative newsworthiness in the news selection process, especially for headlines attributed to counterattitudinal news sources.

Our findings extend previous studies (e.g., Arceneaux et al., 2013; Feldman et al., 2013; Panek, 2016) by showing that the way people select news content is strongly shaped not only by the presence (as opposed to absence) of alternative choices (e.g., entertainment options) but also by how newsworthy the choice alternatives are. Specifically, the findings show the importance of examining relative newsworthiness in a news selection context where multiple news choice options are competing for user attention. This is because newsworthiness of a news item is affected not only by its intrinsic value but also by its existing choice alternatives available at the time of news selection. In other words, the newsworthiness of a certain news item could be recalibrated in people's minds based on the newsworthiness of other available choices.

Notably, relative newsworthiness of news content was a strong predictor of news selection even after the effects of partisan leanings of news sources were controlled for. This indicates that partisans, in general, are more likely to select news that covers a more newsworthy event compared with its choice alternatives, regardless of the leanings of news sources. These findings suggest that the partisan tendency to shun counterattitudinal news sources may be overestimated, as many previous studies did not consider the possibility that available choice options could recalibrate the relative newsworthiness of news content—a strong predictor of news selection (e.g., Kim & Lu, 2020; Mukerjee & Yang, 2021; Mummolo, 2016; Song, 2017). From this perspective, our findings suggest that news stories covering a highly newsworthy social event may promote cross-cutting exposure, as it draws user attention to the news itself instead of the political leanings of its source.

The findings also reveal that partisan cues (i.e., logos of news sources), which signal the partisan tone of news content, also condition the effects of relative newsworthiness on news selection behaviors. While partisans were generally more likely to select news with relatively higher newsworthiness, the effects of relative newsworthiness were less pronounced for counterattitudinal news sources. Specifically, partisans were less likely to consider the merits of a headline (i.e., relative newsworthiness) if it was attributed to counterattitudinal news sources. For example, the predicted probabilities of selecting highly newsworthy headlines (2 SD above the mean: 1.02) from counterattitudinal news sources were estimated to be 23.3% (95% CI [20.4%, 26.1%]). This means even if counterattitudinal news sources present news about highly newsworthy events, partisans opt for relatively unattractive headlines from proattitudinal or neutral news sources roughly three out of four times. To put this in perspective, the extent to which partisans select highly newsworthy headlines from counterattitudinal news sources was comparable with headlines with relatively low newsworthiness ($-.30$) from neutral and proattitudinal news sources. These findings suggest partisans use heuristic cues and give less weight to the relative newsworthiness of headlines when selecting news content from counterattitudinal sources.

The existing hyperpartisan media environment may account for this observed tendency to rely on partisan cues as opposed to content cues (i.e., newsworthiness) among party identifiers who hold strong hostilities toward news sources with challenging views (Pew Research Center, 2020). A continuous stream of attacks on news sources with opposing views from political elites has exacerbated such polarized views on news media (e.g., Bump, 2018). Given that such accusations and attacks on news media could cultivate

public hostility toward news sources (e.g., Smith, 2010) and that public perceptions of news sources play a significant role in news selection (e.g., Arendt et al., 2019; Kaye & Johnson, 2016), it is no surprise that partisans take into account partisan heuristic cues when engaging in news selection.

Overall, the results stress the necessity of examining the concept of relative newsworthiness to explain the more nuanced mechanisms behind news selection behaviors on digital news platforms. Specifically, the findings provide a partially optimistic outlook as journalists' effort to cover highly newsworthy events are likely to draw news users' attention. Indeed, such an effort may result in *de facto* cross-cutting exposure, as it draws their attention regardless of partisan leanings of news sources. That is, in general, partisans are far more likely to select news from counterattitudinal sources if the content from these sources is more newsworthy than the available alternatives, yet partisan leanings of news sources still substantially influence how partisans engage in news selection.¹¹ These findings imply that increasing hostility toward news sources may interfere with partisans' ability to objectively assess the quality of news content. This is worrisome because the healthy functioning of democratic societies requires their citizens to be exposed to diverse viewpoints (Sunstein, 2019). Given that selective exposure to political information driven by political orientation is found to be a main cause of political polarization (Jacobson, 2015; Levendusky, 2013), rising hostility toward news media partially accounts for the increasing polarization observed in the U.S. political environment.

Furthermore, it should be noted that the changing media environment, which influences how news content is curated and consumed, could also condition how relative newsworthiness functions as a news selection criterion. That is, the nature of news selection contexts, such as the number of available choice options, could influence the effects of relative newsworthiness on news selection.¹² To be clear, we believe the underlying mechanisms behind news engagement, where news users consider choice alternatives to assess the relative attractiveness of each choice item, can explain how news users engage in news selection. However, the ways that the relative newsworthiness of each news item is calibrated may vary from one platform to another, as various platforms curate news content differently, and such distinctions likely lead to different news selection contexts. For example, the strength of the relative newsworthiness of a news item as a selection criterion may be weaker on a platform that simultaneously presents 10 or more news choice options instead of four. This is because a larger number of options may make each news item less distinctive from one another (Fischer et al., 2008). As another example, the relative newsworthiness of each choice option may be constantly updated and recalibrated on a platform that presents additional content whenever users scroll down to refresh (e.g., Facebook, Instagram). Such a dynamic feature likely changes how individual users assess the respective newsworthiness of each choice option. For these reasons, future

¹¹ Considering the fact that partisans give less weight to relative newsworthiness ratings, it is possible that partisan heuristic cues may change how partisans evaluate the merits of a certain news choice over its alternatives (i.e., relative newsworthiness). This possibility cannot be tested, as our experimental design does not allow us to examine how partisan heuristic cues influence the perception of newsworthiness ratings of an individual headline.

¹² The authors would like to thank the anonymous reviewer for encouraging us to consider how the contexts of news selection (e.g., number of choice alternatives) can influence the effects of relative newsworthiness on news selection.

studies should consider platform specificities (e.g., content curation algorithms) to better understand how individual news users engage in news selection on different digital platforms.

Nonetheless, several study limitations warrant close attention. First, the nonrepresentativeness of the sample makes it difficult to generalize the findings to a broader context. Although we have no reason to believe that non-White participants would use relative newsworthiness ratings differently, future studies that use a representative sample could offer more generalizable and convincing evidence for the impact of relative newsworthiness. Second, our measurement of headline newsworthiness is an indirect indicator of newsworthiness. Although the crowdsourcing technique used in this study might have addressed the issue of tautology, a direct measurement of newsworthiness would have been more useful to accurately assess the dynamic due to the competition among available choice options. For this reason, future studies could consider using a more direct measure of newsworthiness to predict the influence of relative newsworthiness of headlines on news selection behaviors.

Third, the fact that this study forced participants to make a choice among alternatives may have changed how they behaved during the experiment. Although this design allows the study to examine the conditional effects of relative newsworthiness, it does not perfectly reflect real-world news selection behaviors. For example, people may opt out of choosing all available options if none interest them. Furthermore, our findings should not be interpreted as supporting evidence for the importance of writing an "attractive" headline. Although this study uses headlines in the experiment, the main objective is to test whether users select news that covers a relatively more newsworthy event compared with other alternative options. Testing whether clickbaiting or sensational headlines draw more attention from news users may require a different experimental setting. For example, a future study could test whether headlines in question format may attract more (or less) engagement from news users.

Finally, our experiment design is not exhaustive, as other factors known to influence news selection were not included, such as social endorsement (e.g., Messing & Westwood, 2014) and issue relevance (Feldman et al., 2018; Mummolo, 2016). Future studies could test how the conditional effects of relative newsworthiness influence news selection in a more realistic setting.

Despite these limitations, the findings indicate the necessity of considering the effects of competition among news choice options to understand selection behaviors in the digital news environment. Such competition substantially shapes how people select news content. Digital news platforms such as Google News and Apple News, where individual news organizations have little to no control over how their content is curated, have now become a major channel for individuals to consume news content (Reuters Institute, 2020). News selection on such platforms is likely bound by available choice alternatives. Given that individuals often choose news content with high relative newsworthiness, gaining steady web traffic from news users through those platforms may be dependent on how a news organization has a competitive edge over its competitors by providing news about highly newsworthy events to its audience. From this perspective, the findings stress the importance of maintaining high-standard journalism in the current digital media environment to compete for news user attention.

References

- Arceneaux, K., Johnson, M., & Cryderman, J. (2013). Communication, persuasion, and the conditioning value of selective exposure: Like minds may unite and divide but they mostly tune out. *Political Communication, 30*(2), 213–231. <https://doi.org/10.1080/10584609.2012.737424>
- Arendt, F., Northup, T., & Camaj, L. (2019). Selective exposure and news media brands: Implicit and explicit attitudes as predictors of news choice. *Media Psychology, 22*(3), 526–543. <https://doi.org/10.1080/15213269.2017.1338963>
- Bodó, B. (2019). Selling news to audiences—A qualitative inquiry into the emerging logics of algorithmic news personalization in European quality news media. *Digital Journalism, 8*(7), 1054–1075. <https://doi.org/10.1080/21670811.2019.1624185>
- Borovoi, L., Liberman, N., & Trope, Y. (2010). The effects of attractive but unattainable alternatives on the attractiveness of near and distant future menus. *Judgment & Decision Making, 5*(2), 102–109. <https://doi.org/10.1017/S1930297500000954>
- Bump, P. (2018, May 5). Trump makes it explicit: Negative coverage of him is fake coverage. *The Washington Post*. <https://www.washingtonpost.com/news/politics/wp/2018/05/09/trump-makes-it-explicit-negative-coverage-of-him-is-fake-coverage/>
- Dhar, R. (1997). Consumer preference for a no-choice option. *Journal of Consumer Research, 24*(2), 215–231. <https://doi.org/10.1086/209506>
- Engelmann, I., & Wendelin, M. (2017). Comment counts or news factors or both? Influences on news website users' news selectioners' news selection. *International Journal of Communication, 11*, 2501–2519.
- Feldman, L., Stroud, N. J., Bimber, B., & Wojcieszak, M. (2013). Assessing selective exposure in experiments: The implications of different methodological choices. *Communication Methods and Measures, 7*(3/4), 172–194. <https://doi.org/10.1080/19312458.2013.813923>
- Feldman, L., Wojcieszak, M., Stroud, N. J., & Bimber, B. (2018). Explaining media choice: The role of issue-specific engagement in predicting interest-based and partisan selectivity. *Journal of Broadcasting & Electronic Media, 62*(1), 109–130. <https://doi.org/10.1080/08838151.2017.1375502>
- Fischer, P., Schulz-Hardt, S., & Frey, D. (2008). Selective exposure and information quantity: How different information quantities moderate decision makers' preference for consistent and inconsistent information. *Journal of Personality and Social Psychology, 94*(2), 231–244. <https://doi.org/10.1037/0022-3514.94.2.94.2.231>

- Garrett, R. K., Carnahan, D., & Lynch, E. K. (2013). A turn toward avoidance? Selective exposure to online political information, 2004–2008. *Political Behavior*, 35(1), 113–134. <https://doi.org/10.1007/s11109-011-9185-6>
- Grim, R., & Calderone, M. (2017, February 17). James O’Keefe threatens to release “hundreds of hours” of leaked newsroom footage soon. *HuffPost*. https://www.huffpost.com/entry/james-okeefe-leaks-newsroom-footage_n_58acb6e9e4b04a0b274ddd2
- Hainmueller, J., Hopkins, D. J., & Yamamoto, T. (2014). Causal inference in conjoint analysis: Understanding multidimensional choices via stated preference experiments. *Political Analysis*, 22(1), 1–30. <https://doi.org/10.1093/pan/mpt024>
- Harcup, T., & O’Neill, D. (2016). What is news? News values revisited (again). *Journalism Studies*, 18(12), 1470–1478. <https://doi.org/10.1080/1461670X.2016.1150193>
- Hmielowski, J. D., Beam, M. A., & Hutchens, M. J. (2016). Structural changes in media and attitude polarization: Examining the contributions of TV news before and after the Telecommunications Act of 1996. *International Journal of Public Opinion Research*, 28(2), 152–172. <https://doi.org/10.1093/ijpor/edv012>
- Huber, J., Payne, J. W., & Puto, C. (1982). Adding asymmetrically dominated alternatives: Violations of regularity and the similarity hypothesis. *Journal of Consumer Research*, 9(2), 90–98. <https://doi.org/10.1086/208899>
- Iyengar, S., & Hahn, K. S. (2009). Red media, blue media: Evidence of ideological selectivity in media use. *Journal of Communication*, 59(1), 19–39. <https://doi.org/10.1111/j.1460-2466.2008.01402.x>
- Iyengar, S., Hahn, K. S., Krosnick, J. A., & Walker, J. (2008). Selective exposure to campaign communication: The role of anticipated agreement and issue public membership. *The Journal of Politics*, 70(1), 186–200. <https://doi.org/10.1017/S0022381607080139>
- Jacobson, G. C. (2015). Partisan media and electoral polarization in 2012: Evidence from the American national election study. In J. A. Thurber & A. Yoshinaka (Eds.), *American gridlock* (pp. 259–286). New York, NY: Cambridge University Press.
- Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and gratifications research. *Public Opinion Quarterly*, 37(4), 509–523. <https://doi.org/10.1086/268109>
- Kaye, B. K., & Johnson, T. J. (2016). Across the great divide: How partisanship and perceptions of media bias influence changes in time spent with media. *Journal of Broadcasting & Electronic Media*, 60(4), 604–623. <https://doi.org/10.1080/08838151.2016.1234477>

- Kepplinger, H. M., & Ehmig, S. C. (2006). Predicting news decisions. An empirical test of the two-component theory of news selection. *Communications, 31*(1), 25–43.
<https://doi.org/10.1515/COMMUN.2006.003>
- Kim, H. S. (2015). Attracting views and going viral: How message features and news-sharing channels affect health news diffusion. *Journal of Communication, 65*(3), 512–534.
<https://doi.org/10.1111/jcom.12160>
- Kim, M., & Grabe, M. E. (2022). The influence of news brand cues and story content on citizen perceptions of news bias. *The International Journal of Press/Politics, 27*(1), 76–95.
<https://doi.org/10.1177/1940161220963580>
- Kim, M., & Lu, Y. (2020). Testing partisan selective exposure in a multidimensional choice context: Evidence from a conjoint experiment. *Mass Communication & Society, 23*(1), 107–127.
<https://doi.org/10.1080/15205436.2019.1636283>
- Kim, S. J., & Webster, J. G. (2012). The impact of a multichannel environment on television news viewing: A longitudinal study of news audience polarization in South Korea. *International Journal of Communication, 6*, 838–856.
- Kim, Y. M. (2009). Issue publics in the new information environment: Selectivity, domain specificity, and extremity. *Communication Research, 36*(2), 254–284.
<https://doi.org/10.1177/0093650208330253>
- Knobloch-Westerwick, S., & Meng, J. (2009). Looking the other way: Selective exposure to attitude-consistent and counterattitudinal political information. *Communication Research, 36*(3), 426–448.
<https://doi.org/10.1177/0093650209333030>
- Lee, J. H. (2008). Effects of news deviance and personal involvement on audience story selection: A web-tracking analysis. *Journalism & Mass Communication Quarterly, 85*(1), 41–60.
<https://doi.org/10.1177/107769900808500104>
- Lee, J. H. (2009). News values, media coverage, and audience attention: An analysis of direct and mediated causal relationships. *Journalism & Mass Communication Quarterly, 86*(1), 175–190.
<https://doi.org/10.1177/107769900908600111>
- Lee, N. Y. (2020). Headlines for summarizing news or attracting readers' attention? Comparing news headlines in South Korean newspapers with the *New York Times*. *Journalism, 23*(4), 892–909.
<https://doi.org/10.1177/1464884920929202>
- Leeper T. J., Hobolt, S. B., & Tilley, J. (2020). Measuring subgroup preferences in conjoint experiments. *Political Analysis, 28*(2), 207–221. <https://doi.org/10.1017/pan.2019.30>

- Levendusky, M. S. (2013). Partisan media exposure and attitudes toward the opposition. *Political Communication, 30*(4), 565–581. <https://doi.org/10.1080/10584609.2012.737435>
- Messing, S., & Westwood, S. J. (2014). Selective exposure in the age of social media: Endorsements trump partisan source affiliation when selecting news online. *Communication Research, 41*(8), 1042–1063. <https://doi.org/10.1177/0093650212466406>
- Mondak, J. J. (2010). *Personality and the foundations of political behavior*. New York, NY: Cambridge University Press.
- Mukerjee, S., & Yang, T. (2021). Choosing to avoid? A conjoint experimental study to understand selective exposure and avoidance on social media. *Political Communication, 38*(3), 222–240. <https://doi.org/10.1080/10584609.2020.1763531>
- Mullinix, K. J., Leeper, T. J., Druckman, J. N., & Freese, J. (2015). The generalizability of survey experiments. *Journal of Experimental Political Science, 2*(2), 109–138. <https://doi.org/10.1017/XPS.2015.19>
- Mummolo, J. (2016). News from the other side: How topic relevance limits the prevalence of partisan selective exposure. *The Journal of Politics, 78*(3), 763–773. <https://doi.org/10.1086/685584>
- Ng, Y.-L., & Zhao, X. (2020). The human alarm system for sensational news, online news headlines, and associated generic digital footprints: A uses and gratifications approach. *Communication Research, 47*(2), 251–275. <https://doi.org/10.1177/0093650218793739>
- Panek, E. (2016). High-choice revisited: An experimental analysis of the dynamics of news selection behavior in high-choice media environments. *Journalism & Mass Communication Quarterly, 93*(4), 836–856. <https://doi.org/10.1177/1077699016630251>
- Pew Research Center. (2020, January 14). U.S. media polarization and the 2020 election: A nation divided. <https://www.pewresearch.org/journalism/2020/01/24/u-s-media-polarization-and-the-2020-election-a-nation-divided/>
- Price, V., David, C., Goldthorpe, B., Roth, M. M. C., & Cappella, J. N. (2006). Locating the issue public: The multi-dimensional nature of engagement with health care reform. *Political Behavior, 28*(1), 33–63. <https://doi.org/10.1007/s11109-005-9001-2>
- Prior, M. (2005). News vs. entertainment: How increasing media choice widens gaps in political knowledge and turnout. *American Journal of Political Science, 49*(3), 577–592. <https://doi.org/10.1111/j.1540-5907.2005.00143.x>
- Raftery, A. E. (1995). Bayesian model selection in social research. *Sociological Methodology, 25*, 111–163. <https://doi.org/10.2307/271063>

- Reuters Institute. (2020). Digital news report 2020.
https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2020-06/DNR_2020_FINAL.pdf
- Smith, G. R. (2010). Politicians and the news media: How elite attacks influence perceptions of media bias. *The International Journal of Press/Politics*, 15(3), 319–343.
<https://doi.org/10.1177/1940161210367430>
- Song, H. (2017). Why do people (sometimes) become selective about news? The role of emotions and partisan differences in selective approach and avoidance. *Mass Communication & Society*, 20(1), 47–67. <https://doi.org/10.1080/15205436.2016.1187755>
- Staab, J. F. (1990). The role of news factors in news selection: A theoretical reconsideration. *European Journal of Communication*, 5(4), 423–443. <https://doi.org/10.1177/0267323190005004003>
- Strömbäck, J., Djerf-Pierre, M., & Shehata, A. (2012). The dynamics of political interest and news media consumption: A longitudinal perspective. *International Journal of Public Opinion Research*, 25(4), 414–435. <https://doi.org/10.1093/ijpor/eds018>
- Stroud, N. J. (2008). Media use and political predispositions: Revisiting the concept of selective exposure. *Political Behavior*, 30(3), 341–366. <https://doi.org/10.1007/s11109-007-9050-9>
- Sundar, S. S., Knobloch-Westerwick, S., & Hastall, M. R. (2007). News cues: Information scent and cognitive heuristics. *Journal of the American Society for Information Science and Technology*, 58(3), 366–378. <https://doi.org/10.1002/asi.20511>
- Sunstein, C. R. (2019). *#Republic: Divided democracy in the age of social media*. Princeton, NJ: Princeton University Press.
- Valenzuela, S., Bachmann, I., & Aguilar, M. (2019). Socialized for news media use: How family communication, information-processing needs, and gratifications determine adolescents' exposure to news. *Communication Research*, 46(8), 1095–1118.
<https://doi.org/10.1177/0093650215623833>
- van Dijck, J., Poell, T., & de Wall, M. (2018). *The platform society: Public values in a connective world*. New York, NY: Oxford University Press.
- Wendelin, M., Engelmann, I., & Neubarth, J. (2017). User rankings and journalistic news selection: Comparing news values and topics. *Journalism Studies*, 18(2), 135–153.
<https://doi.org/10.1080/1461670X.2015.1040892>
- Xu, Q. (2013). Social recommendation, source credibility, and recency: Effects of news cues in a social bookmarking website. *Journalism & Mass Communication Quarterly*, 90(4), 757–775.
<https://doi.org/10.1177/1077699013503158>