

# SELECTIVE EXPOSURE TO NEWS CUES

TOWARDS A GENERIC APPROACH TO SELECTIVE EXPOSURE RESEARCH

ERIK KNUDSEN MIKAEL POUL JOHANNESSON SVEINUNG ARNESEN

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# Selective exposure to news cues: Towards a generic approach to selective exposure research\*

Erik Knudsen<sup>†a</sup>, Mikael Poul Johannesson<sup>b</sup>, and Sveinung Arnesen<sup>b</sup>

<sup>a</sup>Department of Information Science and Media Studies, University of Bergen <sup>b</sup>Department of Comparative Politics, University of Bergen

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#### Abstract

This study argues for a generic approach to selective exposure research. Empirically, we dismantle the relative importance of three different forms of selective exposure to likeminded political news that has dominated the communication literature: message cues, party cues and source cues. In a uniquely designed conjoint experiment, a large probability-based panel of Norwegian citizens was faced with news headline choices, randomly varying several different factors simultaneously. We not only show that the effects are in line with previous research but also, more importantly, that these effects are additive and distinct effects that prevail when three known countervailing forces are accounted for. We conclude that scholars should move towards a more generic and less country specific approach to selective exposure research.

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<sup>&</sup>lt;sup>†</sup>Corresponding author (erik.knudsen@uib.no).

#### 1 Introduction

For quite some time now, communication scholars have gathered considerable evidence showing that people are selective when they read, listen or watch the news. Changes in the availability of media choices, paired with increasing fragmentation of the media landscape, has exacerbated people's tendency to avoid opinion-challenging political information, leading to the creation of echo chambers and further polarization (Levendusky, 2013). Citizens in high choice media environments tend to asymmetrically expose themselves to like-minded over cross-cutting political information (e.g. Arceneaux and Johnson, 2013; Knobloch-Westerwick and Meng, 2009).

First, several scholars have centered on people's preferences for political messages that are in line with their attitudes, known as message cues (i.e. Knobloch-Westerwick and Meng, 2009). Second, scholars have investigated systematic biases in people's selection of news stories that feature a party or candidate that they prefer rather than dislike, known as party cues (i.e Iyengar et al., 2008; Meffert and Gschwend, 2012). Third, a large body of research, particularly in the U.S., has also concentrated on people's selection of likeminded news sources (such as niche partisan media), known as source cues (i.e Iyengar and Hahn, 2009; Mummolo, 2016; Stroud, 2010).

Nevertheless, something is amiss in the study of selective exposure. Surprisingly, previous studies have predominantly focused on only one (or at times two) of these cues. Consequently, research on selective exposure has yet to take into account that readers hardly encounter these news cues in isolation. This disjunction in the literature is especially salient when considering that media environments vary considerably across countries. Research on selective exposure is to a large degree country specific, rather than generic, depending on which news cue scholars examines. In some countries, for instance the U.S., citizens can easily choose to expose themselves to ideologically leaning television channels or newspapers (source cues), while citizens in other countries might not have this opportunity (Skovsgaard, Shehata and Strömbäck, 2016). In order to understand how selective exposure plays a role in this complex setting, we need to develop a common, generic understanding of selective exposure that transcends country-specific characteristics. We argue that a first step toward such an understanding is to explicitly define selective exposure as a concept that involves multiple types of cues that can operate simultaneously. With these types clearly specified, we can then compare and asses the relative influence of these different cues across various conditions.

As this article will demonstrate, we argue that the communication literature is disjoint in (particularly) three distinct understandings of politically motivated selective exposure. We adopt the view of selective exposure as an automatic "de facto" selection decision (Sears and Freedman, 1967) guided by a number of separate "cues" (Meffert and Gschwend, 2012; Winter, Metzger and Flanagin, 2016) and divide the literature into three separate "news cues" that affects selective exposure. In this study, we contribute with an investigation of how this trio – message cues, party cues, and source cues – increases or decreases the probability of selecting a news article for further reading. Theoretically, our contribution to the literature is to understand these effects as three distinct forms, or cues, of selective exposure that "compete" in (potentially) guiding people's news selection. Empirically, we contribute with the first analysis that assess and compares the relative effect of each these three cues. Additionally, we assess the endurance of each of these effects. A large body of work has also shown that citizen's political predisposition is far from the only force guiding people's news selection. Along these lines, Mummolo (2016) argues that concerns regarding alarming consequences of selective exposure are not necessarily warranted. For instance, in order to cause echo chambers, the effect of politically motivated selective exposure must prevail against the pull of other countervailing forces that drive people's news selection. Thus, we pit message, party, and source cues against the pull of three previously identified countervailing forces: headline valence, recommendations in social media, and the opportunity to select non-political news.

This is an important contribution to the existing literature on selective news exposure, because while a large and growing body of prior work has identified the effects of several cues that affects selective exposure, we have yet to study the role of these cues when compared simultaneously. Due to restrictions of traditional experimental designs (See for instance "the curse of dimensionality": Ho et al., 2007, the majority of previous studies have only been able to manipulate a small number of attributes of news, and consequently been unable to test competing hypotheses. To address these limitations, the present article draw on recent advances in causal inference (Acharya, Blackwell and Sen, 2016; Bansak, Hainmueller and Hangartner, 2016; Hainmueller, Hopkins and Yamamoto, 2014) and experimental selective exposure research (Mummolo, 2016). We use a uniquely designed conjoint experiment with a large population-based panel to ask 4689 Norwegian citizens to select news headlines. This conjoint design randomly vary many different attributes at the same time, enabling an analysis of the effects of several attributes of news headlines on the probability of selecting a news headline. The study's

data includes 21100 observations of selection decisions. In other words, the data presented in this study is among the largest and most comprehensive experimental data on news headline selection to date.

## 2 Expanding our understanding of selective exposure: the power of message, party, and source cues

A multitude of news articles are published online each day. Even if people wanted, they could not possibly read all of the news that is made available to them. This means that citizens must be selective, and over half a century of research has established that citizens prefer to encounter information that are or consistent, rather than at odds, with their existing political attitudes (Lazarsfeld, Berelson and Gaudet, 1948; Sears and Freedman, 1967; Zillmann and Bryant, 1985). Festinger's (1957) theory of cognitive dissonance is widely applied as an assumed causal mechanism that trigger selective exposure to likeminded content. According to dissonance theory, citizens seek to reduce inconsistencies, and scholars thus postulates, as an extension of this idea, that people seek to avoid or reduce exposure to political information that is at odds with their preferences.

Building on cognitive dissonance theory, research within the mass communication literature has centered on the availability of choices. Such choices span over different levels, from medium level, choosing to watch TV or spend time in a social medium, to the message level, choosing to read one article over another. Theoretically, we understand these choices through the lens of social cognition theory. Hence, we make the assumption that citizens process information heuristically and thus depend on different cues and mental shortcuts when making a choice between different news articles (Chaiken, 1987). Within the mass communication literature, especially three such cues of politically motivated selective exposure have attracted scholarly attention: message cues, party cues, and source cues. In the first form, message cues, one is interested in selective exposure on the message level, measuring selective exposure as whether or not people select headlines or read stories that are in line or at odds with their attitudes (i.e. Knobloch-Westerwick and Meng, 2009). When studying party cues, one is also interested in selective exposure on the message level, measuring whether people select headlines or read stories that feature a party that people vote for, likes or dislikes (i.e Iyengar et al., 2008; Meffert and Gschwend, 2012). The third form of politically motivated selective exposure, source cues, is

not concerned with selectivity on the message level but on the outlet level, measuring people's selection of different news sources (i.e Iyengar and Hahn, 2009; Mummolo, 2016; Stroud, 2010). Although most studies focus on one (or sometimes two) of these forms of selective exposure, the present study investigates the effects of each of these three cues. In the following, we will explain message cues, party cues and source cues in greater detail.

#### 2.1 Message cues: selection of consistent and counterattitudinal news articles

Headlines in online news are often framed in such a way that one side of an issue is more prominent than another. In other words, headlines often contain cues about which side of an issue is given priority. People often use such cues to guide their choice among the multitude of available news content (Knobloch-Westerwick and Meng, 2009; Winter, Metzger and Flanagin, 2016). Yet, although research has shown that people have a tendency to select attitude consistent headlines, prior research also point to these effects as a "confirmation bias;" (Hart et al., 2009) rather than being motivated by a preference towards actively avoid dissonant information (Garrett, 2009b,a; Garrett, Carnahan and Lynch, 2013). Based on the predominant evidence of selective exposure to attitude consistent information, we formulate the following hypothesis:

**Hypothesis 1 (H1)** Readers will select attitude-consistent articles more frequently than attitude-inconsistent articles.

#### 2.2 Party cues: selection of "your" party

Political news usually involve one or more politicians, party leaders or representatives from political parties as sources. A considerable amount of literature (e.g. Bolsen, Druckman and Cook, 2014; Cohen, 2003; Slothuus and De Vreese, 2010) also attest to effects of party cues, meaning that individuals use their partisanship to filter political information. As with the political source affiliation and political message cues, people like to read about "their" party – or a party that they like, rather than an opposing party (Slothuus and De Vreese, 2010). In two-party systems with strong partisan media outlets, such as the US American context, one could expect that partisan outlets or television channels, such as Fox News, and party cues would more or less overlap. Yet, in a non-U.S. context with multiple parties and a different media system, it makes sense to study the effects of political parties as sources in news headlines and different outlets on the probability of selecting a news story. Studies using an experimental setting have provided strong support for partisan selectivity at the message level (Meffert et al.,

2006; Meffert and Gschwend, 2012; Redlawsk, 2002). Following previous studies of party cues, we assume that partisans assign weight to the party that is featured in a headline along the dimension of whether or not people like or dislike the party. Thus, we propose:

Hypothesis 2 (H2) Readers will select articles featuring a political party that they like more frequently than a political party they dislike.

#### 2.3 Source cues: selection of politically agreeable news sources

Before citizens are presented with message or party cues in headlines, they are often faced with a choice between which news sources they prefer to invest their time in. A large body of research conducted in the U.S. context, find evidence for selective exposure on the outlet level, showing that partisans prefer news from likeminded news sources such as Fox News and MSNBC (Iyengar Hahn, 2009; Mummolo, 2016; Prior, 2013; Stroud, 2010, 2011). In the European, or Dutch, context however, studies have indicated that the presence of a strong public broadcaster mitigates widespread selective exposure on the outlet level (Bos, Kruikemeier, de Vreese, 2016). Other have argued that it makes less sense to study selective exposure to partisan news outlets in countries without a prominent partisan television channel or newspaper (Skovsgaard et al., 2016). In the present study, we do not expect large effects of selective exposure to take place on the outlet level. We cannot, however, rule out such effects and therefore include seven prominent news sources from the Norwegian context, ranging from the Public Service Broadcaster (NRK) to a daily newspaper with openly close thighs to the (radical) left-wing parties of Norwegian politics (Klassekampen). Knudsen, Iversen and Vatnøy (2017) also found that voters on the left were clearly less likely to read Klassekampen. Following previous studies from the U.S American and Norwegian context, we assume the following:

**Hypothesis 3 (H3)** Readers will select articles published by sources with an ideological source reputation that matches their party preference more frequently than sources that mismatches their party preference?

#### 2.4 Conjoining message, source, and party cues

Primarily, studies of selective exposure center on one of these cues. Certainly, some previous studies have explored these three forms of selective exposure separately, and party cues and message cues (Meffert and Gschwend, 2012), and message cues and source cues (Feldman et al.,

2012) simultaneously. Yet, message cues, source cues, and party cues has, to our knowledge, never been pitted against one another in such a way that we can study the relative importance of these selection cues when studied simultaneously. Thus, the main contribution of this study is to conjoin these three understandings of selective exposure and compare them, leading us to formulate the following research question:

RQ1: What is the relative effect of message cues, party cues and source cues on headline selection and to what extent does one factor influence or override another?

#### 2.5 Countervailing forces: valence cues, social cues, and topic cues

The present study also posits that message cues, source cues and party cues need to endure the pull of other prominent cues in order to cause polarization and echo chambers (Mummolo, 2016). We focus on three such potentially countervailing forces: negative and positive valance (i.e. Meffert et al., 2006), endorsements in social media (i.e. Messing and Westwood, 2014; Winter, Metzger and Flanagin, 2016), and the opportunity to select non-political headlines (i.e. Feldman et al., 2013).

The first countervailing force, valence cues, entails the selection of negative, positive or neutral headlines. Negativity is at the very core of what constitutes a news value (Galtung and Ruge, 1965). Thus, as maintained by Lengauer, Esser and Berganza (2012), political news repeatedly emphasize negative over positive aspects of a story. For instance, journalist strive to include a conflict between two or more actors (Bartholomé, Lecheler and de Vreese, 2015) and uphold their role as a watchdog, questioning, challenging and criticizing power structures and elites (Strömbäck, 2005). Journalist are not alone in assigning weight to negative over positive information. A large body of research has provided evidence for people – the audience of journalism – preferring negative to positive political information (Lau, 1985; Meffert et al., 2006; Soroka, 2006; Trussler and Soroka, 2014, but see: Knobloch-Westerwick et al., 2005). Although negativity is a concept that can be understood in many ways, we concentrate on negative framing directed towards a specific political actor, or, what Lengauer, Esser and Berganza (2012) labels as actor-related negativity.

The second countervailing force, social cues, concerns the selection of endorsed information. Online news sites often employ features that are designed to increase reader's interaction with the site and to guide people's selection of news. Prior studies of such social cues indicates that recommendations from (known or unknown) others via social media elicits a bandwagon

heuristic (Winter, Metzger and Flanagin, 2016). If other people find the article valuable enough to endorse it, it is likely that readers will select these articles over articles with fewer, or none, recommendations when faced with a choice between articles. Prior studies of the actual effects of such endorsements in regards to selective exposure to consistent or inconsistent information and sources have, however, produced mixed results. On the one hand, Messing and Westwood (2014) found that social media cues has the capacity to override partisan source cues. On the other hand, Winter, Metzger and Flanagin (2016) found that while endorsements mattered for people's selection of news, social cues did not override the effects of message cues.

The third countervailing force, topic cues, centers on the selection of soft versus hard news. Politics is not for everyone. Even if people vote and prefer one party to another, some people might consider politics in the news boring. Because the current online media environment offers a range of different topics and formats to its audience, people can selectively expose themselves to non-political content and more or less avoid political content entirely (Prior, 2007). In the selective exposure literature, communication scholars generally dichotomize this as a choice between political news and entertainment news, or 'hard' versus 'soft' news (Reinemann et al., 2012). Previous research on the role of entertainment news has shown that soft news have the potential of mitigating selective exposure to political news in general, and to likeminded news specifically (Feldman et al., 2013) although people holding strong opinions has been found to choose (likeminded) political news over entertainment news. Skovsgaard, Shehata and Strömbäck (2016) also demonstrate that people's level of interest in politics is important for whether or not one engage in selective exposure to political information.

These three countervailing forces could, potentially, limit or override the three forms of selective exposure. Our research design also allows for a comparison of how each of the different factors presented above increase or decrease the probability of selecting an article. To test the endurance of politically motivated selective exposure, we formulate the following research question:

RQ2: To what degree, if any, does social cues, valence framing, or topic cues increase, decrease, or override message cues, source cues or party cues?

Moreover, for the first time in an selective exposure experiment (to the best of our knowledge), the present study also enables an investigation of the effects of increased freedom of choice – both in relation to how many articles people can choose from (four or six) and how many articles people are forced to choose (one, two or three). These methodological extensions of the

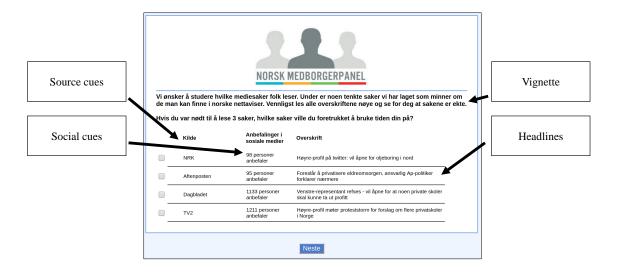


Figure 1: Screenshot example of experimental design

study of selective exposure leads us to formulate the following research questions:

RQ3: What is the effect for each attribute of increasing or decreasing the number of articles respondents can select from, and the number of articles respondents must select?

#### 3 Data, Procedure, Experimental Design, and Measurement

#### 3.1 Data

The data for this study were collected from a probability-based online national survey conducted by the Norwegian Citizen Panel (NCP). The experiment was fielded from November 1st to December 2nd 2016. The NCP's respondents were gathered through the postal recruitment of 25,000 individuals over 18 years. These individuals were randomly selected for recruitment from Norway's National Registry: a list of all individuals who either are or have been a resident in Norway, maintained by the official Tax Administration. For details about response rates or other methodological matters, we refer to the NCP methodology reports (Skjervheim and Høgestøl, 2016). The data is available free of cost for scholars via the Norwegian Social Science Data Archive.

#### 3.2 Procedure

In the experiment, we asked 4689 Norwegian citizens to closely read a selection of news headlines and decide which headline(s) they would most likely choose to spend their time on, as displayed in Figure 1. These headlines were introduced with the following vignette:

"We wish to study what news people read. Below you will find some imaginary headlines, that we have constructed, similar to those you may find in Norwegian online newspapers. Please read all the headlines carefully and imagine that the headlines are real".

The vignette is followed by the description of our dependent variable: "If you had to read [1 article /2 articles /3 articles], which [article /articles] would you have preferred to spend your time on?"

#### 3.3 Rethinking the conjoint design

The present study employs a conjoint experimental design. Conjoint experiments is quickly gaining ground in social science because they are able to overcome the limit of standard survey experiments and is known to produce remarkably externally valid results even though the stimulus is hypothetical (Hainmueller, Hangartner and Yamamoto, 2015). The benefit of conjoint experiments lies in its capacity to unite several dimensions simultaneously. Instead of displaying only one experimental condition at the same time, conjoint experiments displays multiple conditions to compare simultaneously. Respondents are typically faced with the choice between two profiles. These profiles typically lists a range of attributes in a table and the values for each attribute varies at random. In the present design, the profile tables are kept "under the hood" as the respondents only meets a selection of headlines. Instead of randomly generating choice tasks in a table, we thus use the conjoint technique to randomly generate news headlines. This approach has three main advantages for selective exposure research. First, randomly generated headlines is easier to comprehend than tables when the objective is to compare selection of news headlines. Second, although conjoint designs is often limited to a choice between two profiles, the approach in the present article enables a design that can include three or more headlines (the equivalent to 'profiles' in conjoint designs) in a choice task. Third, constructed headlines are much closer to what citizens actually meet in their day-to-day media exposure, and are in that sense arguably less obtrusive and more externally valid than tables of information.

A total of 1462 automatically constructed headlines randomly vary among eight headlines topics, a pro and con version of the topic, eight different political parties as sources, and a

negative, positive or neutral portrayal of these parties (valence). These headlines are constructed to match (either as consistent or crosscutting to) items measuring the respondents' attitudes towards eight different policy related topics, and closely resemble real newspaper headlines. A constructed headline thus involves five dimensions that varies at random, summarized as follows:

[Party cue] x [valence cue] x [message cue] x [link between wording in headline and topic] x [headline topic]

These dimensions randomly draw from a pool of attributes. For instance, a constructed headline, constructed to match respondents' attitudes towards privatization of public services, can appear as follows:

'Labour Party-politician receives criticism for a new proposal: want to privatize the Norwegian Railroad Service'.

Another example, in this case about attitudes on issues regarding a diverse society (immigration), can appear as follows:

'A local Socialist Left politician is praised – want to receive five thousand new refugees'.

Among these constructed headlines we also included a condition where respondents had the possibility to choose entertainment news. Entertainment news was constructed as follows:

[Soft news headline topic] x [valence cue]

An example of a soft news headline, in this case about weight loss, can appear as follows:

'This is the best thing one should do to lose weight'.

In addition to these constructed headlines, the experiment randomizes how many headlines the respondents can select (from 1 to 3), which news outlets (out of seven) they can select from, and different levels of social media recommendations. Our design also introduces the possibility to separate the moderating effects from the relative effects of multiple known countervailing forces (see: Acharya, Blackwell and Sen, 2016). This means that we can investigate the effects of including or excluding social cues and topic cues as a headline attribute.

#### 3.4 Measures

Prior attitude toward the topics: We measure prior attitudes towards climate change related questions, tax related questions, immigration related questions, privatization of public services,

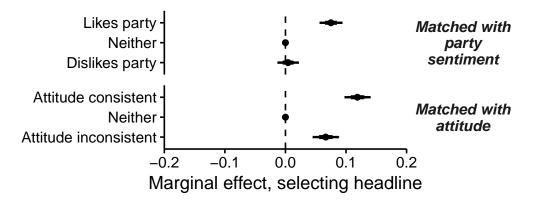


Figure 2: Effects of message and party cues on probability of selecting a news headline

and gay rights. Eight different statements were measured on a scale from 1 (Strongly agree) to 7 (Strongly agree) by, for instance, asking respondents: "How much do you agree or disagree with the following statements... Commercial private schools should be allowed" and "Refugees should have the same rights to social assistance as Norwegians have, even if they are not Norwegian citizens".

Party preference: we measure party preference by asking respondents to what degree they like or dislike eight different Norwegian political parties by asking: "We would like to ask you to consider how much you like or dislike the various political parties in Norway...". The scale ranged from 1 (Intensely dislike) to 7 (Intensely like).

## 4 Effects of message, source, and party cues on headline selection

Figure 2 illustrates the results of message- and party cues for all respondents. Dots indicate point estimates and the lines illustrate 95 percent confidence intervals for the probability of selecting a news headline. In accordance with previous research on message cues (Knobloch-Westerwick and Meng, 2009; Winter, Metzger and Flanagin, 2016), respondents are more likely to read an attitude consistent story than a counter attitudinal story (hypothesis 1), and 12 percentage points more likely than moderates to select a story. Party cues elicit a clear effect on respondents' selection behaviour (hypothesis 2). Respondents are 9 percentage points more likely to select a headline featuring a party that they like than a story about a party they neither like nor dislike, or dislikes.

Turning to source cues, displayed in Figure 3, there are some variations between the different news outlets, and Klassekampen, the only daily Norwegian newspaper with a clear partisan

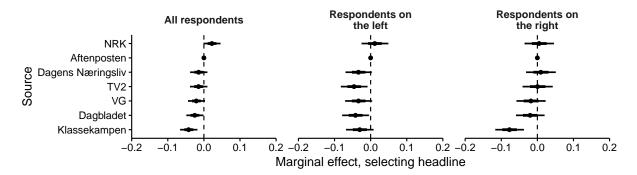


Figure 3: Effects of source cues on probability of selecting a news headline, by all respondents and party preference.

profile towards left-wing politics, stands out as the least preferable. To analyze differences in regards to selection of different sources depending on partisanship, we break these results down by respondents voting for parties on the left and right side of the ideological spectrum. In Figure 3, we observe that left-wing voters do not have a clear preference for the left-leaning newspaper Klassekampen. However, right-wing voters are clearly less likely to select Klassekampen (hypothesis 3). This indicates a tendency for selective avoidance of disagreeing sources among right-wing voters.

Even though we observe significant indications of outlet level selective exposure, or avoidance, it is quite clear that, at least in a context very different from the U.S., message cues and party cues are by far stronger factors. Message cues yields the largest effect out of the three causes for selective exposure. Possible interaction effects between three cues was also examined and the results did not show any signs of interaction effects. This indicates that the three forms of selective exposure are independent and additive effects.

#### 4.1 Robust to competing forces?

Turning to the three competing forces, we started by testing the overall effects of each of the countervailing forces. As displayed in Figure 3, respondents were more likely to choose negative to positive or neutral information. As hypothesized, positive valence was found to decrease the likelihood of selecting a news headline. However, neither the effect of positive nor the effect of negative valence elicited a large effect. These results indicates that valence is, all else equal, a force that guides news headline selection, but it is far from the most important attribute of selective exposure. To test for possible moderation effects of valence cues, we first investigated the role of valence cues in regards to the effects of message and party cues. Figure 5 displays the effects of message and party cues by negative, neutral and positive valence, and shows that the

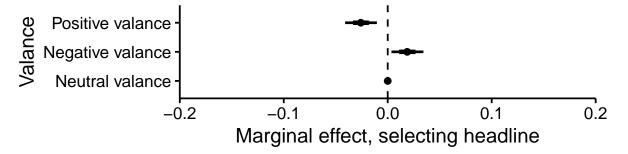


Figure 4: Effects of valence cues on probability of selecting a news headline

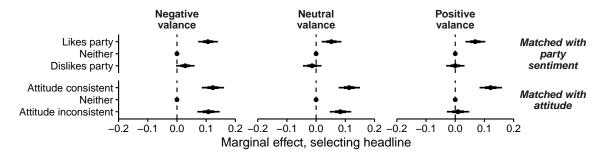


Figure 5: Moderation effects of valence cues on effects of party and message cues

significant effects of message cues only occurs when the headline also features a positive valence. These moderation effects is not observed for neither party cues nor source cues (see Figure 12 in appendix).

Figure 6 displays the overall effects of social and topic cues on probability of selecting a news headline. Overall, respondents are clearly more likely to choose hard news than soft news. We do, however, observe quite large differences in topic selection within the selection of hard news (see Figure 16 in appendix). Overall, respondents are about 20 percentage points more likely to prefer news about immigration than news about gay rights. This indicates that relevance or interest is an important countervailing factor – supporting the findings of Mummolo (2016). Regarding the overall effects of source cues, we find that respondents are more likely to choose headlines with "some" or "many" endorsements. We do not, however observe a significant difference between "some" or "many" recommendations in social media. In Figure 7 we display the moderation effects of excluding or including the opportunity to select soft news and the opportunity to select articles based on social cues. Overall, we do not observe that soft news nor social endorsements yields significant moderation effects on the previously reported effects of message, party and source cues (see Figure 13 in appendix moderation analyses concerning source cues). To test for heterogeneous effects, we conducted an analysis of whether the effects of the different news cues differed based on respondents' differences in gender, education, age and interest in politics.

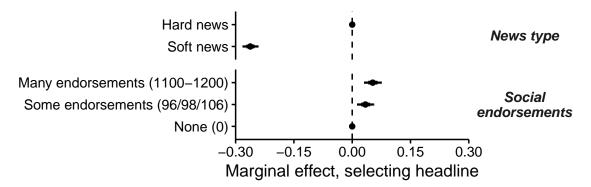


Figure 6: Effects of social and topic cues on probability of selecting a news headline.

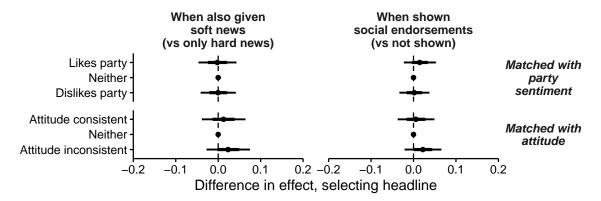


Figure 7: Moderation effects of topic and social cues on party and message cues

We only found a positive relationship between interest in politics and likelihood of selecting soft news, where the politically interested respondents was far more likely to select hard news over soft news than the respondents with little or no political interest (Figure 7). However, we did not find that the interaction between political interest and soft news moderated the effects of previously observed effects of message or party cues (see Figure 12 in appendix).

In order to further test the robustness of these effects, we also analyzed the effects of increased freedom of choice and found no significant effects. This indicates that it did not matter whether the respondents could choose between 4 or 6 articles, or whether respondents had to choose 1, 2, or 3 articles (see Figure 10 in appendix).

#### 5 Discussion

There are numerous reasons for why people choose to read the news they do, and in order to understand how preferences to likeminded information play a role in this complex setting, we argue that we need to develop a more generic understanding of selective exposure and consider the relative effect of several competing attributes at the same time. The present study

contributes to the selective exposure literature in four major ways. First, the study innovates the conjoint experiment by designing a conjoint experiment that resembles most other selective exposure designs, but with the added power and value of the conjoint experiment. Second, this pioneering design enables, for the first time, a comparison of the relative power of three cues that has dominated the selective news exposure literature: partisan source cues, party cues, and message cues, and a comparison of these factors to three factors that has been identified as important countervailing factors by previous research. Third, the design introduces to communication science the possibility to investigate both the relative effects and the moderation effects of several attributes simultaneously. Fourth, the present study introduce the possibility to test the effects of increased and reduced freedom of choice – both in regards to amount of articles one can choose among, and in regards to how many articles one must choose. In summary, these four contributions give us the opportunity to understand how known contributing and countervailing forces limits or enhances politically motivated selective exposure.

Summing up the results of the present study, we find that people, overall, are more likely to choose a news article if it is consistent with their attitude and if the story features a political party they like. This is in line with prior studies on selective exposure to political messages. In addition, these results extend the literature on selective exposure, as we find clear indications of selective exposure to likeminded information when the effects of entertainment news, social media recommendations and valence, three known countervailing forces, are accounted for. We also find that right-wing voters are less likely to choose an article from a source with a left-wing reputation, supporting previous findings of the role of source cues for selective exposure (i.e. Mummolo, 2016). However selective exposure on the outlet level does not seem to be an indication of preference for likeminded sources, but rather a disfavoring of cross-cutting sources. More importantly, our study finds that the three forms of selective exposure to likeminded news are distinct effects that does not meaningfully interact with each other.

Regarding the three countervailing forces, we find, in line with previous research, that people select more negative than positive (and neutral) news. Importantly, message valence seems to play a key role in regards to the effects of message cues. Valence, in this context, is operationalized as a negative or positive evaluation of a party politician. We only observe that people prefer likeminded to cross-cutting information if the information is presented by a politician that receives positive feedback (i.e. is praised). This is perhaps not surprising. If a headline communicates that a politician receives criticism for doing something one agrees with, the head-

line does not contain like-minded information. However, our results shows that party cues is an exception, as one is more likely to prefer articles about a political party one likes – regardless of whether or not the party is framed in a positive, neutral or negative manner. This supports previous research on the role of valence concerning selective exposure to candidate information during elections (Meffert et al., 2006).

In sum, this study thus shows that the effects of message, party and source cues prevail when social media endorsement and the opportunity to select soft news are introduced as countervailing forces. Certainly, while we find that people are far more likely to choose a hard news article than a soft news article, we also find that these preferences vary among politically interested and uninterested. Yet, these differences does not matter for people's preference for likeminded information and sources. In regards to social cues, our results indicate that social recommendations brought forth effects on people's headline selections. Nevertheless, in line with Winter, Metzger and Flanagin (2016), we did not observe that social media cues had the capacity to override or mitigate partisan source cues. At odds with Messing and Westwood (2014) study, we did not find that social cues moderated the effects of source cues either. A possible limitation to that end could be related to the amount of recommendations we employed, as we adjusted the number of recommendation to a context with a far smaller population than America and varied between "none" (0), "some" (around 100) or "many" (around 1100) recommendations. Winter, Metzger and Flanagin (2016), however, manipulated a "small" (around 100) or "large" (around 9000) amount of recommendations.

It is also important to note that, while the design of the current study enabled analyses of the relative importance of several news cues in regards to selective exposure, it is not without limitations. We measured selective exposure by examining people's selection of hypothetical news headlines across several topics. Certainly, the conjoint design also allows for increased variation and experimental dimensions, and can capture more diversity than traditional survey experiments. Yet, our design did not enable respondents to actually read the stories, and did not facilitate the full diversity of features that can be found on online news sites or social media networks. Moreover, due to the design and the ethical no-deception policy of the Norwegian Citizen Panel, the headlines where hypothetical and stated as such. Although hypothetical profiles in conjoint experiments have proved to actually be more externally valid than traditional survey experiments (Hainmueller, Hangartner and Yamamoto, 2015), we cannot rule out that the hypothetical stimulus influenced the treatments in our study. Thus, conjoint experiments

are a valuable supplement to the traditional approaches of studying selective exposure, but not a replacement.

#### 6 Conclusion

The results discussed above have provided insights into the dynamics of selective exposure, understood as the different components that are crucial for guiding people's choice of news. Not only do we observe clear indications of message level selective exposure in a multiparty setting, we also find these effects to be highly robust. As an extension of this argument, our study does indeed provide cause for pessimism concerning that the electorate systematically seeks out likeminded political information, and, as a possible consequence form echo chambers, and polarize (Levendusky, 2013). That said, we need more studies of this kind to provide evidence for the endurance of message level selective exposure against the pull of other countervailing forces that remains unaccounted for in this paper. Mummolo (2016) made an important first contribution to that end, but several competing factors remains unstudied. We thus hope to encourage future research on the relative importance and moderating role of other factors that are pertinent for people's news selection, such as the salience of the articles (following agenda setting theory).

Another important contribution of our study is the byproduct of the setting in which the experiment was conducted, as the present study demonstrate that selective exposure to agreeable news is indeed a relevant and important phenomenon in the European context and, thus, stretches far beyond Fox News and the US American context. To be sure, as argued by Bos, Kruikemeier and de Vreese (2016), outlet level selective exposure in the European context is not necessarily comparable with the US American context, as the presence of a strong Public Service Broadcaster can mitigate outlet level selective exposure. Our study, nonetheless, shows that selective exposure on the message level is indeed comparable with prior studies in the US American context. We would thus encourage more comparative research within different contexts, the US American context included, that investigates the relative importance of source, message and party cues simultaneously, to test whether the effects identified in this paper holds through in a comparative perspective. Following in the same vein, we hope to encourage future research on politically selective exposure to take a more generic form that is not tied to a specific media system, like Fox News in the US American media system, but rather concentrates

on comparability.

#### References

- Acharya, Avidit, Matthew Blackwell and Maya Sen. 2016. Analyzing Causal Mechanisms in Survey Experiments. Technical report Working Paper. http://scholar. harvard.edu/files/msen/files/directeffects-experiments.pdf.
- Arceneaux, Kevin and Martin Johnson. 2013. Changing minds or changing channels?: Partisan news in an age of choice. University of Chicago Press.
- Bansak, Kirk, Jens Hainmueller and Dominik Hangartner. 2016. "How economic, humanitarian, and religious concerns shape European attitudes toward asylum seekers." *Science* 354(6309):217–222.
- Bartholomé, Guus, Sophie Lecheler and Claes de Vreese. 2015. "Manufacturing conflict? How journalists intervene in the conflict frame building process." The International Journal of Press/Politics 20(4):438–457.
- Bolsen, Toby, James N Druckman and Fay Lomax Cook. 2014. "The influence of partisan motivated reasoning on public opinion." *Political Behavior* 36(2):235–262.
- Bos, Linda, Sanne Kruikemeier and Claes de Vreese. 2016. "Nation Binding: How Public Service Broadcasting Mitigates Political Selective Exposure." *PloS one* 11(5):e0155112.
- Chaiken, Shelly. 1987. The heuristic model of persuasion. In *Social influence: the ontario symposium*. Vol. 5 Hillsdale, NJ: Lawrence Erlbaum pp. 3–39.
- Cohen, Geoffrey L. 2003. "Party over policy: The dominating impact of group influence on political beliefs." Journal of personality and social psychology 85(5):808.
- Feldman, Lauren, Edward W Maibach, Connie Roser-Renouf and Anthony Leiserowitz. 2012. "Climate on cable: The nature and impact of global warming coverage on Fox News, CNN, and MSNBC." *The International Journal of Press/Politics* 17(1):3–31.
- Feldman, Lauren, Natalie Jomini Stroud, Bruce Bimber and Magdalena Wojcieszak. 2013. "Assessing selective exposure in experiments: The implications of different methodological choices." Communication Methods and Measures 7(3-4):172–194.
- Festinger, L. 1957. "1957 A Theory of Cognitive Dissonance. Stanford, Calif.: Stanford University Press.".
- Galtung, Johan and Mari Holmboe Ruge. 1965. "The structure of foreign news: The presentation of the Congo, Cuba and Cyprus crises in four Norwegian newspapers." *Journal of peace research* 2(1):64–90.
- Garrett, R Kelly. 2009a. "Echo chambers online?: Politically motivated selective exposure among Internet news users." Journal of Computer-Mediated Communication 14(2):265–285.
- Garrett, R Kelly. 2009b. "Politically motivated reinforcement seeking: Reframing the selective exposure debate." *Journal of Communication* 59(4):676–699.
- Garrett, R Kelly, Dustin Carnahan and Emily K Lynch. 2013. "A turn toward avoidance? Selective exposure to online political information, 2004–2008." *Political Behavior* 35(1):113–134.
- Hainmueller, Jens, Daniel J Hopkins and Teppei Yamamoto. 2014. "Causal inference in conjoint analysis: Understanding multidimensional choices via stated preference experiments." *Political Analysis* 22(01):1–30.

- Hainmueller, Jens, Dominik Hangartner and Teppei Yamamoto. 2015. "Validating vignette and conjoint survey experiments against real-world behavior." *Proceedings of the National Academy of Sciences* 112(8):2395–2400.
- Hart, William, Dolores Albarracín, Alice H Eagly, Inge Brechan, Matthew J Lindberg and Lisa Merrill. 2009. "Feeling validated versus being correct: a meta-analysis of selective exposure to information.".
- Ho, Daniel E, Kosuke Imai, Gary King and Elizabeth A Stuart. 2007. "Matching as nonparametric preprocessing for reducing model dependence in parametric causal inference." *Political analysis* 15(3):199–236.
- Iyengar, Shanto and Kyu S Hahn. 2009. "Red media, blue media: Evidence of ideological selectivity in media use." *Journal of Communication* 59(1):19–39.
- Iyengar, Shanto, Kyu S Hahn, Jon A Krosnick and John Walker. 2008. "Selective exposure to campaign communication: The role of anticipated agreement and issue public membership." *The Journal of Politics* 70(1):186–200.
- Knobloch-Westerwick, Silvia, Francesca Dilltnan Carpentier, Andree Blumhoff and Nico Nickel. 2005. "Selective exposure effects for positive and negative news: Testing the robustness of the informational utility model." *Journalism & Mass Communication Quarterly* 82(1):181–195.
- Knobloch-Westerwick, Silvia and Jingbo Meng. 2009. "Looking the other way: Selective exposure to attitude-consistent and counterattitudinal political information." Communication Research 36(3):426–448.
- Knudsen, Erik, Magnus H Iversen and Eirik Vatnøy. 2017. "Distrust in the other side: Political polarization and trust in Norwegian news media." *In review*.
- Lau, Richard R. 1985. "Two explanations for negativity effects in political behavior." American Journal of Political Science pp. 119–138.
- Lazarsfeld, Paul Felix, Bernard Berelson and Hazel Gaudet. 1948. "The peoples choice: how the voter makes up his mind in a presidential campaign.".
- Lengauer, Günther, Frank Esser and Rosa Berganza. 2012. "Negativity in political news: A review of concepts, operationalizations and key findings." *Journalism* 13(2):179–202.
- Levendusky, Matthew. 2013. How partisan media polarize America. University of Chicago Press.
- Meffert, Michael F, Sungeun Chung, Amber J Joiner, Leah Waks and Jennifer Garst. 2006. "The effects of negativity and motivated information processing during a political campaign." Journal of Communication 56(1):27–51.
- Meffert, Michael F and Thomas Gschwend. 2012. When party and issue preferences clash: Selective exposure and attitudinal depolarization. In *Annual conference of the International Communication Association*, *Phoenix*.
- Messing, Solomon and Sean J Westwood. 2014. "Selective exposure in the age of social media: Endorsements trump partisan source affiliation when selecting news online." Communication Research 41(8):1042–1063.
- Mummolo, Jonathan. 2016. "News from the other side: How topic relevance limits the prevalence of partisan selective exposure." *The Journal of Politics* 78(3):763–773.
- Prior, Markus. 2007. Post-broadcast democracy: How media choice increases inequality in political involvement and polarizes elections. Cambridge University Press.

- Redlawsk, David P. 2002. "Hot cognition or cool consideration? Testing the effects of motivated reasoning on political decision making." *Journal of Politics* 64(4):1021–1044.
- Reinemann, Carsten, James Stanyer, Sebastian Scherr and Guido Legnante. 2012. "Hard and soft news: A review of concepts, operationalizations and key findings." *Journalism* 13(2):221–239.
- Sears, David O and Jonathan L Freedman. 1967. "Selective exposure to information: A critical review." *Public Opinion Quarterly* 31(2):194–213.
- Skjervheim, Øivind and Asle Høgestøl. 2016. Norwegian Citzen Panel Methodology Report wave 7. Technical report Ideas 2 Evidence.
- Skovsgaard, Morten, Adam Shehata and Jesper Strömbäck. 2016. "Opportunity structures for selective exposure: Investigating selective exposure and learning in Swedish election campaigns using panel survey data." The International Journal of Press/Politics 21(4):527–546.
- Slothuus, Rune and Claes H De Vreese. 2010. "Political parties, motivated reasoning, and issue framing effects." *The Journal of Politics* 72(3):630–645.
- Soroka, Stuart N. 2006. "Good news and bad news: Asymmetric responses to economic information." *Journal of Politics* 68(2):372–385.
- Strömbäck, Jesper. 2005. "In search of a standard: Four models of democracy and their normative implications for journalism." *Journalism studies* 6(3):331–345.
- Stroud, Natalie Jomini. 2010. "Polarization and partisan selective exposure." *Journal of communication* 60(3):556–576.
- Trussler, Marc and Stuart Soroka. 2014. "Consumer demand for cynical and negative news frames." The International Journal of Press/Politics 19(3):360–379.
- Winter, Stephan, Miriam J Metzger and Andrew J Flanagin. 2016. "Selective Use of News Cues: A Multiple-Motive Perspective on Information Selection in Social Media Environments." *Journal of Communication* 66(4):669–693.
- Zillmann, Dolf and Jennings Bryant. 1985. "Selective-exposure phenomena." Selective exposure to communication pp. 1–10.

#### 7 Appendices

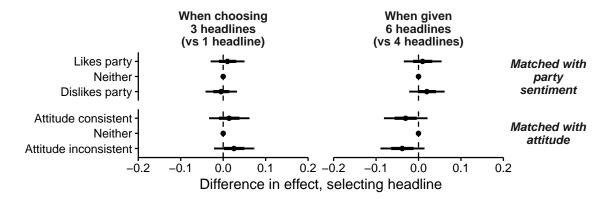


Figure 8

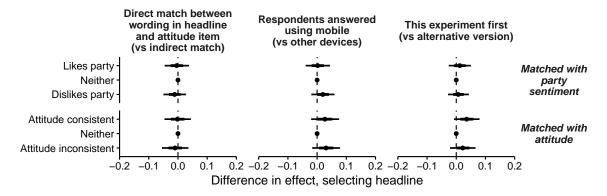


Figure 9

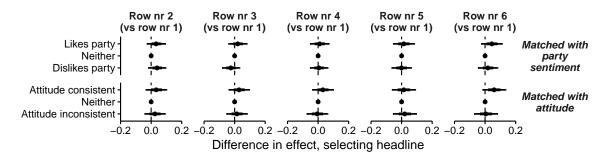


Figure 10

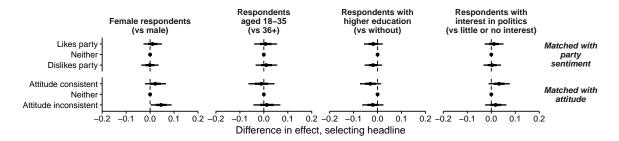


Figure 11

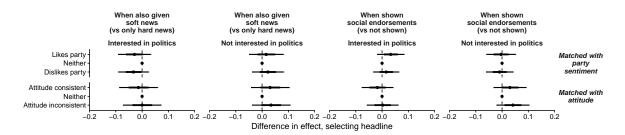


Figure 12

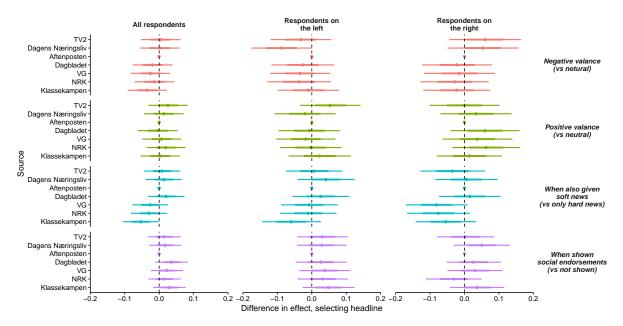


Figure 13

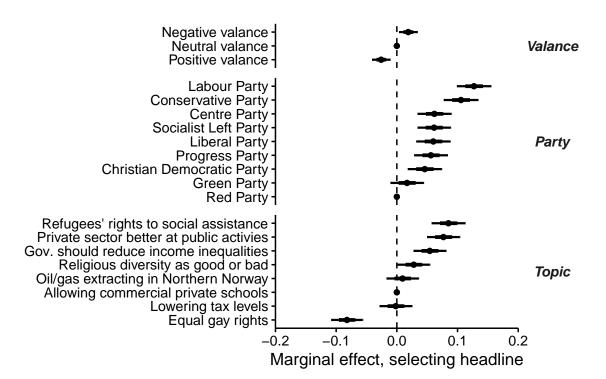


Figure 14

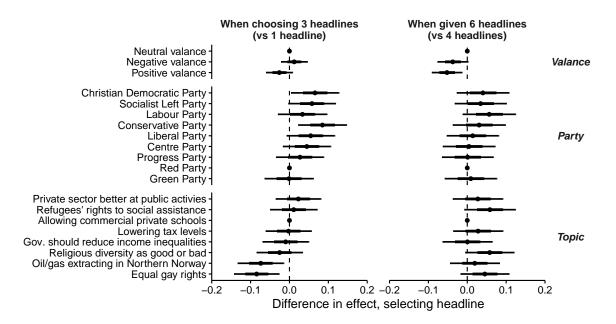


Figure 15