Assessing Selective Exposure in Experiments: The Implications of Different Methodological Choices

Lauren Feldman
American University

Natalie (Talia) Jomini Stroud
University of Texas at Austin

Bruce Bimber
University of California, Santa Barbara

Magdalena Wojcieszak
IE University

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Abstract

Selective exposure has been studied for over a half-century, but little research has systematically analyzed the implications of various methodological choices inherent in these designs. We examine how four choices affect results in studies of selectivity in political contexts: including an entertainment option, including or excluding moderates, post-hoc adjustment of the subjects through a question about likelihood of selecting content in the real world, and assessing selectivity on the basis of issue attitudes or political ideology. Relying on a large experimental survey (N=2,300), we compare the effects of these choices on two results: probability of selective exposure to like-minded political news, and predictors of selective exposure (attitude strength, political interest, knowledge and participation). Our findings show that probability estimates and – to a lesser extent – predictors of selective exposure are sensitive to methodological choices. These findings provide guidance about how methodological choices may affect researchers’ assessments and conclusions.
Assessing Selective Exposure in Experiments:

The Implications of Different Methodological Choices

Selective exposure has been studied using a variety of research designs for over a half-century or so, but little systematic effort has been applied to analyzing the implications of the myriad methodological choices inherent in these designs. Early survey-based studies noted a correlation between the information people selected and their attitudes (see, e.g., Lazarsfeld, Berelson, & Gaudet, 1948; Stempel, 1961). Namely, people reported a higher likelihood of encountering pro-attitudinal information than counter-attitudinal information. This pattern found theoretical grounding in research on cognitive dissonance, motivated reasoning, and other psychological theories (see Festinger, 1957; Fischer, Jonas, Frey, & Schulz-Hardt, 2005; Kunda, 1990; Ziemke, 1980). Questions emerged, however, about whether the correlational research documented a motivational preference for likeminded information (see Freedman & Sears, 1965). Subsequent experimental studies began incorporating choice into their research designs, by letting participants choose between several brochures, for example, to ascertain their information preferences (see, e.g., Lowin, 1967). Recent scholarship on selective exposure in many media contexts has been returning to questions of how best to incorporate choice into controlled research settings (see, e.g., Arceneaux, Johnson, & Murphy, 2012; Gaines & Kuklinski, 2011; Druckman, Fein, & Leeper, 2012).

By giving respondents a choice, controlled experimental settings are intended to resemble the real world where people have many media options. When studying the choices that people make in such a setting, however, it is not possible to provide subjects with all of the possible choices that they routinely have at their disposal in the real world – choices that extend far beyond a few channels on television. Even if it were possible, it would be unwise for researchers
to do so. Studies are designed to answer specific substantive questions, and allowing participants
to do whatever they wanted with media content would often fail to provide insight into
researchers’ goals and theories. For this reason, choice sets must be constrained when studying
selective exposure in experimental settings.

In this context, it is important to keep in mind that traditional experiments that randomly
assign, or force, subjects to read or view media content and those that give individuals some
choice over that content ultimately answer different research questions. The former demonstrate
potential treatment effects, since in the real world individuals may not be exposed to the content
which they were forced to view in the laboratory. Choice-based experiments produce more
realistic treatment effects but introduce a self-selection bias since randomization cannot be
established. Thus, an increase in external validity comes at the expense of internal validity (see
Gaines & Kuklinski, 2011).

Recently, there has been a trend toward more complex designs intended to more closely
approximate real-world media environments. While we support the pursuit of external validity,
we do not endorse the idea that a single best design for selective exposure studies exists, or that
increasingly elaborate designs will produce convergent estimates of the frequency of selective
exposure to like-minded content in the real world. All designs necessarily fail to replicate the
incredibly rich and rapidly changing media environment, and various design decisions have the
potential to affect researchers’ assessment of the probability and predictors of selective exposure.

In this project, we argue that no one approach to studying selective exposure is superior
and that it is not possible to arrive at a single estimate of the extent to which selectivity occurs,
because the behavior is contextual. Certain real-world contexts will inspire more selectivity than
others (see, e.g., Donsbach, 2009; Festinger, 1957; Cotton, 1985; Frey, 1986; Freedman & Sears,
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1965; Knobloch-Westerwick & Kleinman, 2012; Sears & Freedman, 1967). Likewise, certain designs will elicit more selective exposure than others. Thus, the researcher must make methodological decisions \textit{a priori} about the sort of exposure that is of interest.

We explore four such decisions facing researchers undertaking experimental studies of selective exposure to like-minded political content. The first involves whether to provide subjects with the option of viewing entertainment-related content along with the substantive political news that is the potential target of selectivity. Real-world media environments clearly provide people with many alternatives to news. We ask: What are the implications of providing subjects an entertainment option, rather than constraining them to only substantive political news? The second design decision involves the handling of moderates. In the real world, some members of audiences for news and entertainment do not have strong or clear political views. The theories underlying selective exposure do not provide unambiguous guidance about how to conceptualize moderates or how to treat them experimentally. Researchers are thus faced with the methodological question of how to handle moderates in their analyses. We ask: In experiments involving selective exposure, what are the implications of including versus excluding moderates? The third methodological decision of interest involves measuring the likelihood that subjects would have selected the experimental content in the real world. Such post-exposure assessments of validity might be used to exclude subjects unlikely to have encountered material outside the experimental setting. However, the effects of this approach have not been evaluated. We ask about the implications of adjusting for subjects’ reported likelihood of selecting experimental stimuli in the real world. The final decision we consider involves whether to base the measurement of selectivity on individuals’ issue attitudes or general political ideology. For example, the choice of a news article can be categorized as like-minded
because the article agrees with an individual’s position toward the political issue discussed in the article or because it resonates with the individual’s liberal or conservative leanings. We ask: What are the implications of using issue attitudes versus political ideology to categorize media content as like-minded?

Our goal in exploring these four questions is not to arrive at a recommendation for a single best approach. Instead, we seek to characterize how results may be affected by these choices. We focus on two results. The first involves estimating the probability of selective exposure to like-minded political content, a problem that has received considerable attention in the literature (see, e.g., Mutz & Young, 2011). The second is characterizing the predictors of selectivity, such as political interest and political knowledge, an undertaking which speaks to the convergent validity of the tested approaches. Our objective is to provide guidance about how methodological choices may affect researchers’ assessments of the probability and predictors of selective exposure involving politics. In what follows, we first discuss the four methodological decisions, highlighting the role these have played in the literature. We then employ data from our own large experimental survey (N=2,300) to compare findings across several combinations of methodological choices. Our findings show that probability estimates and – to a lesser extent – predictors of selective exposure are sensitive to these choices.

Four Methodological Decisions

In studies of selective exposure in political contexts, researchers provide subjects with various politics-related media options and observe their choices. For example, Chaffee and McLeod (1973) asked respondents to select from a series of political pamphlets, finding that subjects were more likely to select pamphlets for their preferred candidate than pamphlets for the candidate they opposed. Modern scholarship continues to offer respondents a fixed set of options
and then observe what people select. Scholars have given respondents the option to choose from information about a single political issue (e.g. health politics, see Fischer, Jonas, Frey, & Schulz-Hardt, 2005; gay marriage, social security, or civil liberties, see Garrett, 2009; affirmative action or gun control, see Taber & Lodge, 2006), multiple political issues (Knobloch-Westerwick & Meng, 2009), candidates in a political campaign (Meffert et al., 2006; Redlawsk, 2002), or candidate positions on multiple issues (Iyengar, Hahn, Krosnick, & Walker, 2008; Kim, 2007). Scholars also have asked respondents which news outlet they would prefer to use from a fixed set of options (Levendusky, 2011) or given them a set of news options from different outlets to see what they would select (Iyengar & Hahn, 2009; Stroud, 2011). At present, we see four key methodological decisions that are potentially important to such studies.

Including an Entertainment Choice

Unsurprisingly, when given the choice between political and nonpolitical content, not everyone will choose politics (see, e.g., Baum & Kernell, 1999). In many selective exposure studies, however, the options presented to subjects are strictly political. To more closely resemble the real-world media environment routinely encountered by citizens, scholars have begun to incorporate entertainment options into subjects’ choice sets and then examine how choice affects findings. Druckman, Fein, and Leeper (2012) compare those facing a choice environment consisting solely of nonpolitical, entertainment-oriented options to those facing an environment consisting of both political and nonpolitical options. They find that framing effects differ across these environments. Arceneaux, Johnson, and Murphy (2012) contrast those permitted to choose between news and entertainment to those forced to view either news or entertainment, finding that perceptions of media hostility vary across these conditions. Prior (2007) represents one of the few studies to examine the effect of the availability of entertainment
options on the selections respondents make. He asked some respondents to choose either to turn off the television or to watch ABC, NBC, CBS, or PBS nightly news. Others were given these same options, but also could choose among cable news outlets (Fox, CNN, and MSNBC), as well as a host of entertainment programs. Prior (2007) found that the presence of non-news options pulled substantial audiences from the news. Yet this study did not examine effects on selective exposure to likeminded news, an issue at the heart of most selectivity research.

In general, the literature provides good reasons to suspect that researchers’ decisions about whether to present subjects with entertainment options may affect estimates of the probability of selective exposure to like-minded political content as well as its predictors, but to date no study has systematically analyzed this issue. Exploring the effects of including entertainment options is our first goal in this study.

Dealing with Moderates

A second decision faced by selective exposure researchers is what to do with moderates – those without a clear issue position or a clear preference for a candidate. The theory of selective exposure is concerned with how prior beliefs with a clearly identifiable bias or directionality shape exposure to content. But a non-trivial fraction of people can be expected to express moderate, neutral, or otherwise ambivalent beliefs. For moderates, the selection of content supporting or opposing an issue would not qualify as selective exposure because the message is not like-minded, and it is also not clear that a choice to view balanced or neutral content is attitudinally consistent. A moderate position could indicate a lack of knowledge or belief about the issue. After learning about the issue from balanced or neutral content, a moderate may find that s/he has learned or formed an opinion, neither of which clearly constitutes selectivity. In sum, no selection pattern could easily be categorized as pro-attitudinal for moderates. Without
clear guidance from theory, this becomes a methodological dilemma for researchers who must make decisions about how to handle the presence of moderates among survey respondents or experimental subjects, regardless of whether the researcher is interested in them theoretically.

Previous research has employed various strategies for handling this problem. One approach is to create a design that forces moderates into partisan positions. Knobloch-Westerwick and Meng (2009) give respondents only two options – either supporting or opposing a policy – and by doing so, force those with moderate views to choose a side. Similarly, Meffert et al. (2006) require respondents to choose which candidate they prefer. Druckman, Fein, and Leeper (2012) randomly assign people to frames either favoring or opposing health care, thus experimentally removing moderates. Another approach is to exclude moderates altogether. Studies on the hostile media effect – interested in whether partisans perceive content as biased against them – often focus on participants with known partisan leanings (e.g., Gunther, Edgerly, Akin, & Broesch, 2012; Vallone, Ross, & Lepper, 1985). A final approach is to include moderates, randomly assigning them to view material with a partisan bent, and then control for them in the analyses, as done, for example, by Arceneaux, Johnson, and Murphy (2012).

As is the case with the decision to present subjects with an entertainment option, there is no standard practice for dealing with moderates, and – to our knowledge – no study has systematically assessed the effects of the decision about the methodological treatment of moderates on results. Assessing these effects is the second empirical objective of this study.

*Post-Exposure Assessment of Likelihood of Selection*

Another approach employed by some researchers to improve external validity is to ask experimental subjects who have seen a political stimulus about the likelihood that they would have encountered or selected the material in the real world. This provides a potentially useful
indicator, and several studies suggest this approach. A common procedure for assessing selective exposure in early scholarship was to ask respondents to rate how much they would like to read various articles (e.g., Freedman & Sears, 1963; Mills, 1965). In essence, this served as a proxy for assessing the likelihood of selecting any particular content. Subsequent research examined whether effects differ between those who would encounter content in the real world compared to those encountering the content for the first time in the laboratory. Baumgartner and Morris (2006), for example, tested whether the effects of viewing a clip of The Daily Show would be moderated by participants’ prior experience with the program. They found that those viewing the show more frequently responded differently to the experimental clip than infrequent viewers.

Other projects have analyzed the likelihood of choosing a program as a moderating variable in randomly assigned experiments. Levendusky (2011), for example, provided respondents with a fixed set of news options and asked them which one they would pick if they had to choose. He then analyzed the potential moderating effect of news preferences, finding that the effects of viewing a program differed between those who would have chosen the news option they were forced to view and those who would not have chosen the option.

We view the use of post-exposure likelihood-of-selection measures as informative for selectivity studies, but we note that no studies have reported on the effects of using such measures. It is unclear what the effects are on results if researchers employ such a measure and then drop from the analysis subjects who report that they would not likely have selected the material in the real world. Our third goal is thus to explore the use of such a variable to refine estimates of selective exposure.

Categorizing Like-Minded Exposure on the Basis of Issue Attitudes or Political Ideology
When studying selectivity, a methodological decision must be made regarding how to categorize the selection of particular content as like-minded, or not. This decision is critical to the measurement of selective exposure. In political contexts, one approach taken by researchers is to determine whether there is a “match” between the position expressed in a news item on a particular issue and the participant’s position toward that issue (e.g., Druckman et al., 2012; Garrett, 2009; Kim, 2007; Knobloch-Westerwick & Meng, 2009). Another approach is to assess the congruence between the views expressed in a news program, web site or article and subjects’ political ideology (e.g., Arceneaux et al., 2012; Stroud, 2011). In some cases, the latter approach is used because the research is explicitly concerned with exposure to ideologically oriented outlets such as Fox News or liberal and conservative web sites (e.g., Stroud, 2011) rather than issue content per se. However, categorization by general ideology or partisanship is also used to assess selectivity to issue-focused news. For example, Iyengar and Hahn (2009) examined whether conservatives and Republicans preferred different news outlets for several political and non-political topics than did Democrats and liberals. One methodological reason to use general political ideology to assess selectivity to issue-focused news is that it is more parsimonious than measuring attitudes toward each of the multiple issues that might be included in a study. As such, it is important to understand whether the decision to categorize like-minded exposure on the basis of issue-specific attitudes or global ideology affects the results of selectivity studies.

The question at the heart of this decision is whether issue attitudes or ideology (or something else) govern selectivity. News choice is guided by personally relevant beliefs (Donsbach, 1991); so, whether, one’s issue position or general political ideology drives selective exposure might depend on whether an individual relies chiefly on issue orientations or ideological orientations when making political decisions (Lau, 1989). On one hand, ideology is
an especially powerful heuristic in American politics, used to direct individuals’ information
selection and processing (Lau & Redlawsk, 2001). However, one’s ideological orientation might
be in conflict with his or her issue position (e.g., a conservative who supports gay marriage). In
this case, the decision to rely on ideology instead of issue attitudes to measure selectivity to a
news article supporting gay marriage would be consequential. Although evidence suggests that
both issue attitudes and ideology drive selectivity, to our knowledge, no research compares their
effects. Such a comparison is our fourth and final empirical goal in this paper.

In assessing these four methodological choices, there are several possible outcomes of
interest. In this study, we confine ourselves to two. The first is the probability of selective
exposure to like-minded political content among subjects. Although scholars routinely assess the
proportion of subjects who select like-minded news, the real-world likelihood of selective
exposure has been the subject of some debate (e.g., Mutz & Young, 2011). For example, the Pew
Research Center (2010) found that 40% of Republicans, and only 15% of Democrats, regularly
watch Fox News, and other survey research similarly shows that 34% of people who identify as
either liberal Democrats or conservative Republicans primarily use like-minded news sources
(Stroud, 2011). Yet experiments have produced varying results. For example, Iyengar and Hahn
(2009) found that about 30% of Democrats and 50% of Republicans chose an ideologically like-
minded source for hard news. Assessing issue-specific selectivity, Knobloch-Westerwick and
Meng (2009) showed that subjects prefer articles that feature attitude-consistent views, with 58%
likelihood of selecting a like-minded article versus 43% for counter-attitudinal news. These
estimates may be affected by the methodological choices outlined herein, an issue we aim to test.

The second outcome involves basic predictors of selective exposure. Several variables are
known to relate, both theoretically and empirically, to like-minded news exposure. We focus on
political knowledge, political interest, political participation and attitude strength, and we examine whether these predictors are stable across the four outlined methodological choices. There are several theoretical reasons why these variables should predict selective exposure. For one, following from the theory of motivated reasoning, more engaged and knowledgeable individuals may have greater ability and motivation to select like-minded content (see, e.g., Taber & Lodge, 2006). That is, they are better equipped to recognize the partisan or directional cues in news stories and sources, and are more driven to find information that protects rather than undermines their strong views. At the same time, like-minded information may be perceived as more useful to such individuals. For example, for politically active citizens, like-minded content may contain mobilizing information and opportunities for further engagement (see Stroud, 2011). Similarly, politically interested and knowledgeable citizens may have greater familiarity with arguments on both sides of an issue and thus prefer like-minded content over counter-attitudinal information with which they are already familiar (see Sears & Freedman, 1965). Empirical evidence supports these expectations, demonstrating that selective exposure is higher among those who are more politically knowledgeable (Stroud, 2011; Taber & Lodge, 2006); more interested in news and politics (Knobloch-Westerwick & Meng, 2009); more participatory (Dilliplane, 2011; Stroud, 2011); and have stronger attitudes (e.g., Brannon, Tagler, & Eagly, 2007; Knobloch-Westerwick & Meng, 2009). Given the theoretical and empirical evidence for the relationships between selective exposure and these four variables, we are able to examine whether the basic dynamics of selective exposure are robust across the four methodological approaches we have outlined, thereby offering a test of construct validity.

Method
Data for this study were taken from a larger pretest-posttest survey-based experiment. The pretest survey was fielded online during a three-week period in November and December 2011. The survey and sampling were administered by YouGov, a survey research organization. YouGov maintains an opt-in survey panel of 1.5 million U.S. residents, recruited via Web advertising campaigns, RDD and mail surveys, and other methods. In exchange for periodic participation in YouGov’s Web surveys, panelists receive incentives through a loyalty program.

YouGov employs “sample matching” to construct representative study samples from its opt-in survey panel (Rivers, n.d., 2007). The sample matching procedure begins with an enumeration of the target population, from which a random sample is drawn. For each member of this target sample, YouGov selects one or more matching members from its pool of opt-in survey respondents, using a large set of variables available from consumer and voter databases for both the target population and the opt-in sample. The result is a sample of respondents who have the same measured characteristics as the target sample.

YouGov interviewed 3,325 respondents for the pre-wave survey. Each respondent who completed the pre-wave survey was invited to take the post-wave survey three weeks later. Of these, 2,848 completed the post-wave survey. YouGov then matched the 2,848 respondents down to a sample of 2,300 to produce the final dataset. The respondents were matched on gender, age, race, education, party identification, ideology, and political interest. The final sample was 54% female, 73% white, with a mean age of 48.4 ($SD = 15.5$). The sample’s median education level was “some college.”

Procedure

The pre-wave survey asked respondents to report their attitudes and what selections they would make from a list of article headlines and leads. Participants were randomly assigned to see
survey questions about one of four policy issues: abortion \((n = 569)\), health care reform \((n = 568)\), teacher funding \((n = 592)\), or gun control \((n = 571)\).\(^1\) Approximately three weeks later, respondents were re-contacted to complete the main study. They were randomly assigned to either a “forced” condition or a “choice” condition. In the forced condition, post-wave respondents were randomly assigned to see a pro-attitudinal, a counter-attitudinal, or a balanced article on the policy issue to which they had been assigned on the pre-wave. The classification of articles as pro-attitudinal and counter-attitudinal was based on respondents’ pre-wave attitudes toward their assigned issue. Participants with neutral attitudes were simply randomly assigned to one of the three article conditions. In the post-wave choice condition, respondents were asked to choose among the three articles. Respondents were randomly assigned to the choice condition versus the forced condition at a rate of 3:1. This was done based on past literature suggesting that few would select counter-attitudinal information when given the option (see, e.g., Knobloch-Westerwick & Meng, 2009) and our desire to obtain reasonable estimates for those choosing to read a counter-attitudinal article. After exposure to the article, respondents’ attitudes and related variables were measured again.

**Stimuli**

Drawing on mainstream news articles and partisan web sites with particular perspectives on each issue, the headlines, leads, and articles presented to study participants were created to convey either a pro, con, or balanced position on the article topic. They were created to be nearly identical in length and to have identical number of arguments. (See the Appendix for the headlines and leads.)\(^2\)

**Measures**
News and Entertainment Selection. To evaluate whether respondents would select like-minded information when faced with political and entertainment news options, pre-wave respondents were asked to choose which article they would most like to read from six different headlines and leads. The options included three entertainment news choices (i.e., sports, celebrity, and travel) and three political news choices. Two of the political headlines and leads advocated for different sides of respondents’ assigned issue (e.g., either pro-life or pro-choice for abortion) and the third offered a balanced perspective. The order of headlines/leads was randomized across respondents.

News Selection. To evaluate whether respondents would select like-minded content when faced with only political news options, pre-wave respondents were asked a subsequent question which confined their choices to only the three headlines and leads on their assigned policy issue. Headlines and leads for the entertainment news stories were excluded. The order of headlines/leads was again randomized. The subset of respondents randomly assigned to the choice condition \((n = 1,692)\) were asked the same question again in the post-wave and then were asked to look at the article they selected; respondents in the forced condition in the post-wave were assigned to see one of the three articles.

Likelihood of Selection. In the post-wave of the study, respondents were asked to reflect on the article that they had seen. They were asked, “What are the chances that you would select this type of information in your everyday life (on TV, online, on radio, in a newspaper, etc.)” from 1 (very unlikely) to 7 (very likely) \((M = 4.52, SD = 1.68)\).

Attitudes. Respondents were asked to report how strongly they favor or oppose (a) allowing a woman to get an abortion no matter what the reason (38% oppose, 14% neutral, 48% favor), (b) the national health care reform legislation that was passed by Congress and signed
into law in 2010 (46% oppose, 15% neutral, 39% favor), (c) an increase in the use of federal tax dollars to support states’ education budgets and fund teachers’ jobs (31% oppose, 18% neutral, 51% favor), and (d) a law that bans assault weapons (36% oppose, 11% neutral, 53% favor). Respondents were only asked about their attitudes toward the issue to which they had been randomly assigned. The original 7-point measures (from 1 “strongly oppose” to 4 “neutral” to 7 “strongly favor”) were trichotomized into oppose / neutral / favor in order to measure pro-attitudinal selection. Across all four issues, three-hundred thirty three respondents reported neutral attitudes. Respondents opposing [favoring] the issue were counted as engaging in selective exposure when they selected an article opposing [favoring] the issue. Selective exposure is thus operationalized here as the choice of a pro-attitudinal article over a counter-attitudinal, balanced, or entertainment article. This binary approach to measuring selective exposure is consistent with past literature (e.g., Knobloch-Westerwick & Meng, 2009; Iyengar & Hahn, 2009). As such, we are able to address whether methodological decisions affect estimates of the probability of making a like-minded news selection. Identifying whether or not people prefer information that is consistent with their prior beliefs reflects the central theoretical issue in selectivity research.3

**Ideology.** Respondents reported their political ideology as very liberal, liberal, moderate, conservative, very conservative, or not sure. For the purpose of analysis, the measure was trichotomized into liberal (24.4%), moderate or not sure (41.1%), and conservative (34.5%).

**Knowledge.** Following Delli Carpini and Keeter (1996), respondents were asked a series of eight factual political knowledge questions such as “What job or office is now held by John Boehner?” Correct responses were coded a 1 and incorrect responses a 0. The total number of correct answers was computed for each respondent ($Cronbach’s \alpha = .77, M = 4.48, SD = 2.27$).
**News Interest.** Respondents also reported their interest in news and public affairs from “hardly at all” (1) to “most of the time” (4) \( (M = 3.26, SD = .91) \).

**Intended Participation.** Respondents were asked how likely they would be from “very unlikely” (1) to “very likely” (7) to engage in a series of activities related to their assigned issue, including: try to persuade someone else about their position, take part in a protest/rally/demonstration, write, call or email a newspaper, magazine, or television news organization, contact a public official or a political party, write or sign an e-mail or written petition, distribute or share information (e.g., via social media, email, flyers, posters, etc.), and join a political or civic organization. These items were averaged to form a measure of intended participation (\( Cronbach’s \alpha = .92, M = 3.44, SD = 1.60 \)).

**Attitude Strength.** Respondents were asked to report how strong their opinions were about their assigned issue from “not strong at all” (1) to “very strong” (4) \( (M = 3.17, SD = .85) \).

**Results**

**Including an Entertainment Choice**

To explore the effect of the entertainment option, we compared the estimate of the probability of pro-attitudinal exposure when subjects were asked to choose from among both political and entertainment news options with the estimate resulting when subjects were confined to political news stories only. When given the choice of entertainment and political stories, 34.7% of all respondents engaged in selective exposure by choosing a pro-attitudinal story. When confining the options to political news only, and thereby requiring the 33.5% of respondents who initially preferred entertainment to make a political news choice, the overall proportion of respondents selecting a pro-attitudinal article increased to 46.4%. These proportions differed significantly, McNemar’s \( \chi^2 (1) = 142.05, p < .001 \).
Although it is fairly intuitive that increasing the number of available options will decrease the likelihood of selecting one specific option, the size of this change – more than 11 percentage points – is notable. What is also notable is that the decision to include or exclude entertainment affected the predictors of selective exposure. To examine the effect of including the entertainment option on the relationship between selective exposure and knowledge, attitude strength, news interest, and political participation, we included these variables, along with controls for demographics and issue condition, in a pair of logistic regression models. As shown in the first two columns in Table 1, political knowledge and news interest were significant predictors of selective exposure only when entertainment options were included. Moreover, the coefficients for news interest differed significantly across regression models ($\chi^2 (1) = 9.09, p < .01$), and the coefficients for knowledge differed marginally ($\chi^2 (1) = 3.73, p = .05$). Political participation, although positively and significantly related to selective exposure in both models, was a stronger predictor when entertainment options were included than when they were not ($\chi^2 (1) = 9.09, p < .01$). Only attitude strength maintained a consistent relationship with selective exposure, regardless of whether respondents were given entertainment options or not.

Dealing with Moderates

The previous estimates of pro-attitudinal choices included moderates whom we coded as non-selective, since by our definition they are not able to engage in selective exposure. For the reasons discussed earlier, however, it may be useful to exclude moderates. When we did so, 40.5% of (non-moderate) subjects chose pro-attitudinal news in the presence of an entertainment news option (see the third column in Table 1). As might be expected, excluding moderates from the analysis and also confining subjects’ choices to political news stories produced the largest
estimate of the frequency of selective exposure. Using this approach, which is shown in the fourth column of Table 1, 54.3% chose pro-attitudinal news over counter-attitudinal and neutral stories. This is nearly twenty percentage points higher than when moderates were included and entertainment options were offered. The two probability estimates among non-moderates differed significantly, McNemar’s $\chi^2 (1) = 142.05, p < .001$.

Among non-moderates who were able to choose from both entertainment and political news stories (column 3), attitude strength, news interest, and political participation were significant positive predictors of selective exposure. When the choices were confined to political news stories (column 4), only attitude strength and participation were significant predictors. Knowledge was not significant in either model. Further, as was the case when moderates were included, knowledge ($\chi^2 (1) = 5.24, p < .05$), news interest ($\chi^2 (1) = 8.67, p < .01$), and political participation ($\chi^2 (1) = 6.24, p < .05$) were more strongly related to selective exposure when entertainment options were available than when only political options were available. The relationship between attitude strength and selective exposure was again consistent, regardless of whether entertainment options were included.

It is also interesting to note the differences in the predictors of selective exposure among non-moderates (column 3) and the full sample (column 1) when entertainment options were included. Although the overall pattern of significance was the same across models, knowledge ($\chi^2 (1) = 21.40, p < .001$) and attitude strength ($\chi^2 (1) = 68.53, p < .001$) were stronger predictors of selective exposure when moderates were included than when they were excluded. Similarly, when options were confined to political news stories only (columns 2 and 4), knowledge ($\chi^2 (1) = 25.69, p < .001$) and attitude strength ($\chi^2 (1) = 63.69, p < .001$) were again more positive predictors of selective exposure among the full sample than among non-moderates only.
Post-Exposure Assessment of Likelihood of Selection

Our third goal was to assess what error might be introduced to studies by the fact that experimental designs include people who would not likely have selected the content in everyday life. Our measure of likelihood of selection had seven values: very unlikely, unlikely, somewhat likely, neutral, likely, and very likely. Researchers pursuing a strategy of post-hoc exclusion of subjects who are unlikely to have selected content in everyday life face a decision about what threshold to employ. We examined two: including people who are at least “somewhat likely” and people who are at least “likely.”

With moderates included, we predictably found that the more stringent threshold of at least “likely” produced a lower occurrence of pro-attitudinal exposure: As shown in the first two columns of Table 2, 19.3% of subjects in the “choice” condition both selected a pro-attitudinal article and reported that they were likely or very likely to have selected the article in everyday life. In contrast, 32.7% of subjects in the “choice” condition both selected a pro-attitudinal article and reported that they were at least “somewhat likely” to have selected the article. The predictors of selective exposure varied across these two permutations, although they did so inconsistently. Knowledge was a significant predictor only when “somewhat likely” was used as the threshold for inclusion, and the coefficients for knowledge differed marginally across the two models ($\chi^2 (1) = 3.23, p < .10$). Although interest was a significant predictor only in the “likely or very likely” model, there was no significant difference in the magnitude of the coefficients across models ($\chi^2 (1) = .93, p = .33$). Political participation, while a significant positive predictor in both models, was more strongly related to selective exposure in the “likely or very likely” model than in the “somewhat likely” model ($\chi^2 (1) = 9.35, p < .01$).
When we excluded moderates, the estimates increased somewhat, to 22.7% and 38.5% respectively (see the third and fourth columns in Table 2). Here, the predictors of selective exposure were more stable across models. In both models, knowledge was non-significant and attitude strength was significant, and there were no differences in the magnitude of the coefficients across models for either variable. Although interest was significant only in the “likely or very likely” model, the coefficients did not significantly differ across models. Participation was a significant predictor in both models, though here the relationship was significantly stronger in the “likely or very likely” model than in the “somewhat likely” model ($\chi^2 (1) = 8.87, p < .01$).

Of particular interest is whether post-exposure assessment of “likelihood of selection” can be used in lieu of a more complex choice design. For example, rather than offer entertainment and political news choices, would it be methodologically equivalent to offer only political news choices and then make a post-hoc adjustment for reported likelihood of exposure? When we used “somewhat likely” as the threshold for inclusion, the probability of selective exposure (32.7%) was statistically identical to the probability of selective exposure (34.7%) when subjects were given both entertainment and political news choices (McNemar’s $\chi^2 (1) = 1.58, p = .21$). Moreover, there were no statistically significant differences between the magnitude of the coefficients for knowledge, attitude strength, interest, and participation across the two models (Table 1 column 1 vs. Table 2 column 1). On the other hand, when “likely” was used as the threshold for inclusion, the probability of selective exposure (19.3%) was significantly lower than the probability of selective exposure (34.7%) when entertainment and political news options were offered (McNemar’s $\chi^2 (1) = 133.07, p < .001$). In the case of this comparison (Table 1 column 1 vs. Table 2 column 2), participation was a stronger predictor of
selective exposure when using the post-hoc likelihood adjustment than when offering
tertainment and political news options ($\chi^2 (1, 2243) = 4.63, p < .05$). The magnitude of the
coefficients for knowledge, interest, and attitude strength did not vary across models.\textsuperscript{6}

Controlling for the likelihood of selection is also an approach taken by researchers
conducting traditional randomized experiments, in which subjects have no choice regarding the
content to which they are exposed. Thus, we examined the probability of selective exposure
among those in the “forced” condition of our study. Among those non-moderates who were
randomly assigned to read a pro-attitudinal news article ($n = 176$), 33.5% reported that they were
“likely” or “very likely” to have selected this in everyday life, and 58% reported that they were
at least “somewhat likely” to do so (see the last two columns of Table 2). Of note, the latter was
the largest estimate of the frequency of selective exposure computed across all of our various
methodological configurations. This measure, however, was also least likely to produce
significant associations with traditional correlates of selective exposure: None of the four
predictors were significant in the “somewhat likely” model. Participation was a significant
positive predictor of the “likely” measure; knowledge was also significant though negatively
related. Attitude strength and interest were unrelated to likelihood of exposure in this model.
However, with the exception of knowledge, the direction of the coefficients was positive, and we
cannot rule out the possibility that the restricted sample size in this condition reduced the power
to find significant effects.

\textit{Measuring Selectivity on the Basis of Political Ideology Instead of Issue Attitudes}

In the previous analyses, selectivity was assessed according to whether individuals’ issue
attitudes lined up with their news selections. However, because the news headlines and leads
reflected a liberal (i.e., pro-abortion, pro-healthcare reform, pro-teacher funding, pro-gun control), conservative (i.e., anti-abortion, anti-healthcare reform, anti-teacher funding, anti-gun control), or balanced perspective on each issue, individuals’ identification as liberal, conservative, or moderate offers an alternative method for measuring selective exposure.

To assess the consequences of this alternative measurement approach – an approach which would have the advantage of greater parsimony in studies assessing selective exposure in the context of multiple issues – we repeated the analyses reported in Table 1, now examining estimates of the probability of selective exposure and its predictors when using ideological consistency as an indicator of selectivity. These results are presented in Table 3. Among the full sample, when given political and entertainment news options, 23.1% of participants selected an ideologically consistent article. When the choices were confined to political news only, 29.9% selected an ideologically consistent article. Both of these estimates were significantly lower than the parallel estimates using the attitudes-based selectivity measure (see Table 1; political and entertainment McNemar’s $\chi^2 (1) = 188.27, p < .001$; political news only McNemar’s $\chi^2 (1) = 246.42, p < .001$), and the difference in the estimated probability of selective exposure as a result of including entertainment options was only about half as large, though still significant (McNemar’s $\chi^2 (1, 2300) = 75.65, p < .001$). This is likely because the ideology measure produced nearly three times as many moderates ($n = 945$) than did the issue attitudes measure ($n = 333$), and moderates theoretically cannot engage in selective exposure. On the other hand, when moderates were excluded from the analysis, the estimates of the frequency of selectivity using ideology are within just a few percentage points of the estimates using issue attitudes (39.3% vs. 40.5% for political and entertainment news options; 50.8% vs. 54.3% for political news options only).
We turn now to the predictors of ideology-driven selective exposure. Although the patterns of relationships reported in Table 3 were highly similar to the results using the attitudes-based measure in Table 1, there were some notable exceptions. First, knowledge was a significant predictor in three of the four models in Table 3, relative to just one in Table 1, suggesting that it was a better predictor of selective exposure when using an ideology-based measure than when using an attitudes-based measure. In fact, when comparing the models in Table 3 to their counterparts in Table 1 (i.e., Table 1, column 1 vs. Table 3, column 1; etc.), the coefficients for knowledge were significantly larger in three out of four cases (column 1 $\chi^2 (1) = 10.66, p < .01$; column 2 $\chi^2 (1) = 5.41, p < .05$; column 3 $\chi^2 (1) = 7.46, p < .01$). There were also other differences in the magnitude of coefficients across parallel models in Tables 1 and 3. Among the full sample (columns 1 and 2), news interest was more strongly related to ideologically consistent selective exposure than it was to attitudinally consistent exposure (column 1 $\chi^2 (1, 2243) = 6.64, p < .05$; column 2 $\chi^2 (1, 2243) = 7.91, p < .01$). On the other hand, and perhaps unsurprisingly, attitude strength was a stronger predictor of attitude-based selective exposure than ideology-based exposure (column 1 $\chi^2 (1, 2243) = 5.88, p < .05$; column 2 $\chi^2 (1, 2243) = 10.82, p < .01$). Finally, when the sample was restricted to non-moderates (columns 3 and 4), participation was a stronger predictor in the ideology-based model than in the attitudes-based model (column 3 $\chi^2 (1, 1936) = 4.11, p < .05$; column 4 $\chi^2 (1, 1936) = 4.29, p < .05$).

Discussion

Our objective in this study was to examine how four methodological choices affect results in studies of selective exposure in political contexts: including an entertainment option, including or excluding moderates, post-hoc adjustment of subjects through a question about
likelihood of selecting content in the real world, and assessing selectivity on the basis of issue attitudes or political ideology. We were concerned with the effects of these choices on two results: probability of selective exposure and predictors of selective exposure.

Our estimates of the probability of pro-attitudinal news exposure ranged from 19.3% to 58% across methodological choices. This is a substantial variation. In particular, our estimate of the probability of selective exposure was inflated by nearly 12 percentage points by requiring subjects who prefer entertainment to choose among news stories. Including an entertainment option discourages selective exposure, but it also discourages political news exposure, period. We can make no general recommendation about whether it is advisable to include or exclude entertainment options, since some research designs may aim to understand selective exposure within the context of a political news environment, while others may wish to examine it more broadly within the context of a general media environment in which entertainment is important. We find, however, that estimates of the probability of collective exposure are affected by this decision.

Treatment of moderates also affected our estimate of probability of selective exposure. Removing moderates from the analysis increased the probability of selective exposure by six percentage points when offering political and entertainment news options and by eight percentage points when offering political news options only. Excluding moderates provides a conceptually clear estimate of how many opinionated subjects prefer like-minded news. However this does not provide a useful estimate of the likelihood with which selective exposure occurs among all citizens, since many people are moderates. If the goal of a study is to understand the implications of selectivity for the citizenry at large, it is necessary to include moderates in the design. Again, we do not argue that either of these approaches is superior to the
other; rather, we hope that the effects of these methodological decisions illuminate the need for scholars to consider the scope of their particular research questions when designing studies.

We also demonstrated that giving individuals an opportunity to select a political news article from a limited number of choices and then adjusting for their self-reported likelihood of selecting that article in “everyday life” may offer a useful method for balancing concerns of internal and external validity in selective exposure designs. Specifically, when subjects were offered only political news choices but indicated that they were at least “somewhat likely” to select that content in real life, the probability estimates and pattern among predictors of selective exposure closely approximated those when subjects were given both entertainment and political news choices. This suggests that a complex choice design may not be necessary as long as researchers include a post-exposure measure of likelihood of selection. In fact, using a more stringent criterion for assessing likelihood of pro-attitudinal exposure – that is, including only those who reported that they were “likely” or “very likely” to select the content in the real world – produced the lowest probability estimates of selective exposure and some of the strongest relationships between selective exposure and attitude strength, news interest, and participation. This reinforces the idea that in a laboratory setting, where choices are necessarily constrained by the researcher, people have a greater tendency to choose pro-attitudinal content than they would in everyday life, where they face a much larger range of options. Thus, a post-hoc adjustment for likelihood of selection can help maximize the internal validity of experimental designs, while maintaining generalizability to high-choice media environments in the real world. On the other hand, our results raise some questions about the use of a likelihood of selection question as a post-hoc adjustment when studying the effects of a randomly assigned, or “forced,” treatment. This approach produced relatively inflated estimates of the probability of selective exposure and
these estimates were least reliable in their associations with political knowledge, attitude strength, interest, and participation. Researchers thus may want to proceed cautiously when using such a measure as a post-hoc adjustment in randomly assigned experiments, although some adjustment is arguably better than none.

Finally, we showed that the primary difference between using ideology instead of issue attitudes to assess selectivity is in the number of moderates each measure yields. Respondents were much more likely to identify as moderate when they were asked about their political ideology than when they were asked about their issue attitudes, and this reduced estimates of the frequency of selective exposure when moderates were included. However, when moderates were excluded from the analysis, the two measurement approaches produced nearly identical estimates of the frequency of selective exposure, suggesting that the choice between these two approaches is of minimal consequence when assessing selective exposure among non-moderates.

In contrast to the wide variability in estimates of the probability of selective exposure, the results of our regression analyses suggest that the basic predictors of selective exposure – particularly attitude strength and political participation – are relatively robust across design choices. Still, some variation was detected across models, mostly involving knowledge and news interest, indicating that the predictive power of these variables is somewhat more dependent on how selective exposure is measured. In general, the methodological approaches that produced the lowest estimates of selective exposure (i.e., including entertainment, adjusting for likelihood of selection) also yielded the strongest relationships with knowledge, attitude strength, news interest, and participation. Thus, it appears that the predictors of selective exposure adhere most closely to theoretical expectations when measurement is more reflective of the choices available
in the real world, either by including entertainment options or using a post-hoc adjustment for likelihood of selection.

There are, of course, limitations to the present study that should be kept in mind. First, we consider just a subset of the many methodological decisions that must be made when designing selective exposure studies; other issues, such as restrictions on the amount of information that people can select, have been taken up in prior research (see, e.g., Fisher et al., 2005), and we encourage researchers to continue to systematically evaluate the implications of different selectivity designs. Secondly, we measured subjects’ choice of news content in an online format that most closely approximates the selection of stories from a news web site; thus, our findings may not generalize to other news media environments, such as television. Moreover, our entertainment options were still “news;” future research should consider the effects of including non-news entertainment options, such as fictional comedy or drama. Additionally, our focus in this paper was limited to the impact of methodological choices on the estimates and predictors of selective exposure; however, it is quite possible that these choices also influence the effects of selective exposure. This is a fruitful avenue for future research. Finally, by using a binary indicator of selective exposure, we may have failed to fully capture the behavioral complexity inherent in information selectivity. In particular, we recognize the importance of studying not only selective exposure, but also selective avoidance. For example, Garrett (2009) has found that although people demonstrate a preference for attitudinally consistent information, they do not necessarily do so by avoiding information that challenges their opinions. The tendency to selectively avoid counter-attitudinal information also could be sensitive to the methodological choices we consider here. However, given that respondents in our study were only asked to make a single article selection, rather than to select multiple articles, it is difficult to distinguish
between a preference for pro-attitudinal information and an aversion to counter-attitudinal information. We thus leave this question to future research. For now, however, our results, while awaiting further generalization, are compelling and point to several important conclusions.

Overall, the findings endorse our view that no one research design is generally superior to another at estimating the probability of selective exposure to political information, and such estimates will be quite sensitive to design choices. We interpret this as a sign that the extent to which people engage in selective exposure to like-minded content is highly contingent on context. On the one hand, this context is determined by the number and the diversity of media options available to citizens in the “real world” (see Mutz & Martin, 2001; Prior, 2007). On the other hand, the context that influences the occurrence – or rather the estimates – of selective exposure to like-minded political information is affected by the research designs and the methodological decisions made by researchers.

At the same time, it is important for researchers to recognize how design choices might affect models of selective exposure. Individual differences in political knowledge and interest may be less predictive of selective exposure when media choices are relatively constrained or when the sample is confined to non-moderates who are less variable in their political engagement. Still, the inconsistencies across models are few and often subtle. We see this as an endorsement of the theory of selective exposure itself, in that the expected predictors of selective exposure – particularly attitude strength and participation – tend to bear out regardless of how selectivity is estimated, offering a stable profile of the selective news user.

All in all, we hope that our analyses will offer guidance for experimental researchers in communications, political science, and social psychology about how the four examined methodological choices may affect research conclusions regarding selective exposure to political
information. We recognize the fluidity between the methodological and theoretical underpinnings of the choices we examine here and thus view our results as way to fuel theoretical clarity in selective exposure research. To that end, we hope that the presented results will contribute to establishing a more “consolidated” body of selectivity research, one in which scholars will \textit{a priori} discuss how their design and analytical decisions affect the assessments of the probability and predictors of selective exposure. After all, it is time – after over half of a century of explorations – to establish a coherent body of knowledge about variability in the extent to which citizens tune in to political news that reinforce their views, and about the factors driving such like-minded news consumption. Inasmuch as selective exposure leads to a polarized, less tolerant and more closed-minded electorate, these issues have important implications for the effects of the media on democracy, implications that go beyond methods and measurement considerations.
References


Notes

1 The theoretical rationale for studying various issues and their effects was not our concern in this methods piece. We did, however, control for issue condition throughout our analyses. In another study (Wojcieszak, Feldman, Stroud, & Bimber, 2013), we more thoroughly explore issue differences in selectivity.

2 The articles and headlines/leads were pretested on an undergraduate sample ($n = 267$) where each respondent was asked about three randomly chosen headline/leads and three randomly chosen articles. The pretest was programmed so that respondents could not see more than one headline/lead or more than one article about the same issue. Respondents indicated the direction of bias they perceived in each headline/lead and article that they saw. Pro, con, and balanced means were significantly different from each other in the expected direction for each issue’s corresponding headlines/leads and for each issue’s articles ($p < .01$), thereby confirming the categorization.

3 In order to combine attitudes and article selections into a single variable capturing like-minded selection, we trichotomized the attitude variables according to whether respondents support (“somewhat” to “strongly”), oppose (“somewhat” to “strongly”), or are neutral toward an issue. Some previous literature has signaled important concerns about dichotomizing and trichotomizing variables due to the arbitrariness of this decision (e.g., Cohen, 1983; Irwin & McClelland, 2003; MacCallum, Zhang, Preacher, & Rucker, 2002). However, our trichotomization approach is based on differences in sign, or direction of attitude, which is non-arbitrary and which captures the most important empirical and theoretical aspect of choice. Another option would be to treat article selection as the dependent variable and attitudes as a continuous independent variable, and then use moderated regression to examine how the
theoretical predictors relate to selection. An empirical advantage of this approach is the preservation of more information. We opted against this method for both theoretical and logistical reasons, however. Theoretically, we were interested in the frequency or probability of selective exposure – a numerical outcome that demands a single number. Logistically, treating attitudes as an independent variable requires both a shift to multinomial logit regression and an extended analysis of dozens of columns of interactions. We did, however, replicate our analyses using an alternative threshold for the attitude trichotomization, where respondents who indicated that they “somewhat” favor or oppose an issue were classified as neutral. Using this alternative classification, the probability of like-minded selection was naturally lower, because more respondents qualify as moderate and/or as making a non-like-minded choice; however, the pattern among the predictors of selective exposure was nearly identical. As such, we are less concerned that we may be obscuring important information as a result of trichotomizing attitudes.

One may note that the probabilities reported in Table 1 do not account for differences in the number of articles from which respondents could choose. When given only three political news options, the probability of randomly selecting a pro-attitudinal story is 0.333. When given both political and entertainment options (3 political news, 3 entertainment news), the probability of randomly selecting a pro-attitudinal story is 0.167. Thus, increasing the number of options could reduce selectivity just by chance. However, there is little evidence in our data that respondents made their selections randomly. For one, political news, in general, was disproportionately preferred to entertainment, and among the political options, respondents demonstrated a preference for the pro-attitudinal story, rather than their selections being equally distributed across the three articles. We also examined whether those who initially preferred
entertainment may have chosen an article at random when their choices were confined only to news stories. Here, we found that the likelihood of making a pro-attitudinal selection did not differ significantly between those who initially chose entertainment and those who initially chose news. There also were no consistent interactions between initial entertainment preference and our theoretical predictors (attitude strength, knowledge, news interest, participation) when analyzing preferences for likeminded news articles. In other words, the predictors mattered equally for those who initially chose news and those who initially chose entertainment, suggesting that even those with an entertainment preference did not make a random selection. It appears, then, that we are capturing systematic news preferences rather than a random process; therefore, we do not adjust for the probability of random selection as a function of the number of choices available.

Although these probabilities are based on different sample sizes, because the “choice” condition is a random subset of the full sample, we felt the comparison was appropriate.

Identical patterns were observed among non-moderates. The probability of selective exposure was statistically equivalent when using the post-hoc adjustment with “somewhat likely” as the threshold for inclusion as when offering entertainment and political news options (McNemar’s $\chi^2 (1) = 1.58, p = .23$), and there were no significant differences in the magnitude of coefficients across models (Table 2 column 3 vs. Table 3 column 3). The probability of selective exposure was significantly lower when using “likely” as the threshold for inclusion than when offering entertainment and political news options (McNemar’s $\chi^2 (1) = 133.07, p < .001$), and participation was the only coefficient to vary significantly across models ($\chi^2 (1) = 3.85, p < .05$; Table 2 column 3 vs. Table 3 column 4).
### Table 1
Comparing Probability and Predictors of Pro-Attitudinal Choice Across Design Options

<table>
<thead>
<tr>
<th></th>
<th>All Subjects, Political and Entertainment News Options</th>
<th>All Subjects, Political News Option Only</th>
<th>Non-moderates, Political and Entertainment News Options</th>
<th>Non-moderates, Political News Option Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probability of Pro-Attitudinal Choice</td>
<td>34.7%</td>
<td>46.4%</td>
<td>40.5%</td>
<td>54.3%</td>
</tr>
<tr>
<td>Predictors of Pro-Attitudinal Choice&lt;sup&gt;A&lt;/sup&gt;</td>
<td>B (SE)</td>
<td>B (SE)</td>
<td>B (SE)</td>
<td>B (SE)</td>
</tr>
<tr>
<td>Knowledge</td>
<td>.06 (.03)*</td>
<td>.007 (.03)</td>
<td>.02 (.03)</td>
<td>-.05 (.03)</td>
</tr>
<tr>
<td>Attitude Strength</td>
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<td>.59 (.06)***</td>
<td>.50 (.07)***</td>
<td>.41 (.07)***</td>
</tr>
<tr>
<td>Interest</td>
<td>.25 (.07)**</td>
<td>.02 (.06)</td>
<td>.26 (.08)**</td>
<td>.02 (.07)</td>
</tr>
<tr>
<td>Participation</td>
<td>.16 (.03)***</td>
<td>.07 (.03)*</td>
<td>.16 (.03)***</td>
<td>.07 (.03)*</td>
</tr>
<tr>
<td>Control Variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.01 (.003)***</td>
<td>.02 (.003)***</td>
<td>.01 (.003)**</td>
<td>.02 (.003)***</td>
</tr>
<tr>
<td>Gender (female)</td>
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<td>-.29 (.10)</td>
<td>-.16 (.10)</td>
<td>-.25 (.10)*</td>
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<td>-.02 (.03)</td>
<td>-.09 (.04)*</td>
<td>-.04 (.04)</td>
</tr>
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<td>.10 (.10)</td>
<td>.04 (.12)</td>
<td>-.06 (.11)</td>
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<td>Political ideology</td>
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<td>.17 (.04)***</td>
<td>.13 (.04)**</td>
<td>.18 (.04)***</td>
</tr>
<tr>
<td>Issue Condition&lt;sup&gt;B&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gun Control</td>
<td>.27 (.14)</td>
<td>-.05 (.13)</td>
<td>.23 (.14)</td>
<td>-.15 (.13)</td>
</tr>
<tr>
<td>Health Care</td>
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<td>.11 (.13)</td>
<td>.48 (.14)**</td>
<td>.11 (.14)</td>
</tr>
<tr>
<td>Teacher Funding</td>
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<td>-.11 (.13)</td>
<td>.23 (.15)</td>
<td>-.15 (.14)</td>
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<tr>
<td>Nagelkerke R&lt;sup&gt;2&lt;/sup&gt;</td>
<td>.20</td>
<td>.15</td>
<td>.16</td>
<td>.11</td>
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<tr>
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<td>1,936</td>
</tr>
</tbody>
</table>

*Note.* N includes all subjects/non-moderates who participated in the pre-wave study.

*<sup>A</sup> Based on the results of a logistic regression model.

*<sup>B</sup> Abortion served as the reference category.

***p < .001. **p < .01. *p < .05.
### Table 2

**Probability and Predictors of Pro-Attitudinal Choice When Measured with “Likelihood of Selection” Item**

<table>
<thead>
<tr>
<th></th>
<th>“Choice” Condition&lt;sup&gt;A&lt;/sup&gt;</th>
<th>Pro-Attitudinal “Forced” Condition&lt;sup&gt;B&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All subjects, at least somewhat likely to select</td>
<td>All subjects, likely or very likely to select</td>
</tr>
<tr>
<td>N</td>
<td>1,687</td>
<td>1,687</td>
</tr>
<tr>
<td>Probability of Pro-Attitudinal Choice</td>
<td>32.7%</td>
<td>19.3%</td>
</tr>
<tr>
<td>Predictors of Pro-Attitudinal Choice&lt;sup&gt;C&lt;/sup&gt;</td>
<td>B (SE)</td>
<td>B (SE)</td>
</tr>
<tr>
<td>Knowledge</td>
<td>.08 (.03)*</td>
<td>.02 (.04)</td>
</tr>
<tr>
<td>Attitude Strength</td>
<td>.68 (.08)**</td>
<td>.72 (.11)***</td>
</tr>
<tr>
<td>Interest</td>
<td>.15 (.09)</td>
<td>.23 (.11)*</td>
</tr>
<tr>
<td>Participation</td>
<td>.17 (.04)**</td>
<td>.28 (.05)**</td>
</tr>
<tr>
<td>Control Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.02 (.004)**</td>
<td>.02 (.005)**</td>
</tr>
<tr>
<td>Gender (female)</td>
<td>.14 (.12)</td>
<td>.04 (.13)</td>
</tr>
<tr>
<td>Education</td>
<td>-.001 (.04)</td>
<td>.01 (.05)</td>
</tr>
<tr>
<td>Race (white)</td>
<td>.01 (.13)</td>
<td>-.09 (.16)</td>
</tr>
<tr>
<td>Political ideology</td>
<td>.01 (.05)</td>
<td>.04 (.06)</td>
</tr>
<tr>
<td>Issue Condition&lt;sup&gt;D&lt;/sup&gt;</td>
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<td></td>
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<tr>
<td>Gun Control</td>
<td>.40 (.16)*</td>
<td>.30 (.20)</td>
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<tr>
<td>Health Care</td>
<td>.50 (.16)**</td>
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</tr>
<tr>
<td>Teacher Funding</td>
<td>.43 (.17)*</td>
<td>.37 (.21)</td>
</tr>
<tr>
<td>Nagelkerke R&lt;sup&gt;2&lt;/sup&gt;</td>
<td>.20</td>
<td>.21</td>
</tr>
<tr>
<td>N</td>
<td>1,649</td>
<td>1,649</td>
</tr>
</tbody>
</table>

<sup>A</sup> Pro-Attitudinal Choice represents those who *selected* a pro-attitudinal article and reported, after reading the article, that they were likely to select it in everyday life. N includes all subjects/non-moderates who were assigned to the choice condition in the main study.
Pro-Attitudinal Choice represents those who, in the main study, were assigned to read a pro-attitudinal article and reported, after reading the article, that they were likely to select it in everyday life. N includes only those subjects who were assigned to read the pro-attitudinal article in the forced condition in the main study.

Based on the results of a logistic regression model.

Abortion served as the reference category.

***p < .001. **p < .01. *p < .05.
## Table 3
Comparing Probability and Predictors of Ideologically Consistent Choice Across Design Options

<table>
<thead>
<tr>
<th></th>
<th>All Subjects, Political and Entertainment News Options</th>
<th>All Subjects, Political News Option Only</th>
<th>Non-moderates, Political and Entertainment News Options</th>
<th>Non-moderates, Political News Option Only</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>Ideologically Consistent Choice</td>
<td>23.1%</td>
<td>29.9%</td>
<td>39.3%</td>
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<td>Predictors of</td>
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<td>B (SE)</td>
<td>B (SE)</td>
<td>B (SE)</td>
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<td>Ideologically Consistent Choice</td>
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<tr>
<td>Knowledge</td>
<td>.16 (.03)***</td>
<td>.07 (.03)*</td>
<td>.11 (.04)**</td>
<td>-.009 (.03)</td>
</tr>
<tr>
<td>Attitude Strength</td>
<td>.46 (.08)***</td>
<td>.36 (.07)***</td>
<td>.42 (.09)***</td>
<td>.34 (.08)***</td>
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<tr>
<td>Interest</td>
<td>.47 (.09)***</td>
<td>.25 (.07)**</td>
<td>.36 (.10)**</td>
<td>.08 (.09)</td>
</tr>
<tr>
<td>Participation</td>
<td>.20 (.04)***</td>
<td>.13 (.03)**</td>
<td>.23 (.04)***</td>
<td>.15 (.04)***</td>
</tr>
<tr>
<td>Control Variables</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Age</td>
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<td>.006 (.003)</td>
<td>.01 (.004)*</td>
<td>.02 (.004)***</td>
</tr>
<tr>
<td>Gender (female)</td>
<td>-.23 (.12)</td>
<td>-.25 (.10)*</td>
<td>-.28 (.13)*</td>
<td>-.36 (.12)**</td>
</tr>
<tr>
<td>Education</td>
<td>-.12 (.04)**</td>
<td>-.09 (.04)*</td>
<td>-.12 (.05)*</td>
<td>-.08 (.04)</td>
</tr>
<tr>
<td>Race (white)</td>
<td>.19 (.13)</td>
<td>.20 (.12)</td>
<td>.04 (.15)</td>
<td>.03 (.14)</td>
</tr>
<tr>
<td>Political ideology</td>
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<td>.27 (.04)</td>
<td>.10 (.04)*</td>
<td>.13 (.04)***</td>
</tr>
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<td>Issue Condition</td>
<td></td>
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<tr>
<td>Gun Control</td>
<td>.56 (.16)***</td>
<td>.19 (.14)</td>
<td>.74 (.17)***</td>
<td>.33 (.16)*</td>
</tr>
<tr>
<td>Health Care</td>
<td>.59 (.16)***</td>
<td>.26 (.14)</td>
<td>.97 (.18)***</td>
<td>.60 (.17)***</td>
</tr>
<tr>
<td>Teacher Funding</td>
<td>.17 (.17)</td>
<td>-.29 (.15)</td>
<td>.27 (.18)</td>
<td>-.28 (.17)</td>
</tr>
<tr>
<td>Nagelkerke R²</td>
<td>.23</td>
<td>.16</td>
<td>.24</td>
<td>.16</td>
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<tr>
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<td>2,243</td>
<td>1,338</td>
<td>1,338</td>
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</table>

*Note. N includes all subjects/non-moderates who participated in the pre-wave study.*

*A Based on the results of a logistic regression model.*

*B Abortion served as the reference category.

***p < .001. **p < .01. *p < .05.
### Appendix. Headlines and Leads for News and Entertainment Articles

<table>
<thead>
<tr>
<th>Topic</th>
<th>Headline</th>
<th>Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abortion</td>
<td>Abortion Debate Heats Up</td>
<td>There is a heated debate about abortion. Opponents see recent changes as limiting a cruel method of terminating life, while proponents see them as an assault on the freedoms of women.</td>
</tr>
<tr>
<td></td>
<td>Abortion is a Woman’s Right</td>
<td>The anti-choice laws that have been proposed are an assault on women’s freedoms and overlook what abortion means for real, living women, not for embryos or fetuses.</td>
</tr>
<tr>
<td></td>
<td>Cruelty of Pro-Choice</td>
<td>The pro-life laws that have been proposed are important steps towards limiting abortion: a cruel method of easing a person’s burden, “playing God” and terminating innocent life.</td>
</tr>
<tr>
<td>Healthcare Reform</td>
<td>Healthcare Law Inspires Praise, Criticism</td>
<td>The recent healthcare reform legislation has earned both applause and disapproval as debate heats up over the legality, costs, and benefits of the plan.</td>
</tr>
<tr>
<td></td>
<td>Universal Healthcare Legislation Benefits</td>
<td>The recently-passed, impressive healthcare legislation will extend benefits to millions of citizens who are suffering due to the crippling costs of health insurance.</td>
</tr>
<tr>
<td></td>
<td>The Expensive, Unconstitutional Healthcare Law</td>
<td>As provisions from the federal healthcare law take effect, Americans realize that the law infringes on states’ rights and will increase the federal deficit.</td>
</tr>
<tr>
<td>Teacher Funding</td>
<td>Teacher Funding Bill Sparks Debate</td>
<td>Supporters claim that a $10 billion education funding bill has saved thousands of teachers’ jobs; opponents call it a special interest bailout</td>
</tr>
<tr>
<td></td>
<td>Teacher Funding Bill Rescues States, Saves Jobs</td>
<td>A $10 billion education funding bill has saved thousands of teachers’ jobs and helped avert catastrophe in the nation’s public schools</td>
</tr>
<tr>
<td></td>
<td>Teacher Funding Bill is a Special Interest Bailout</td>
<td>A $10 billion education funding bill is just another costly special interest bailout that will do little to stimulate growth in the economy.</td>
</tr>
<tr>
<td>Gun Control</td>
<td>Gun Control Debated Again</td>
<td>Leaders in Washington are debating a ban on assault weapons. Supporters say too many weapons are available to criminals, while opponents say restrictions would only affect law-abiding citizens’ rights.</td>
</tr>
<tr>
<td></td>
<td>Assault Weapon Ban Necessary for Public Safety</td>
<td>The nation’s weak gun laws are under discussion in the Capitol, and officials are debating whether to eliminate military-style assault weapons, because these pose such a grave threat to our children and to our communities.</td>
</tr>
<tr>
<td></td>
<td>Citizens Constitutional Right to Own Guns Attacked Again</td>
<td>Liberals in Washington are again pursuing an assault weapon ban, using biased arguments to support their agenda of taking guns away from law-abiding citizens</td>
</tr>
<tr>
<td>Entertainment</td>
<td>Homerun Record Still Contested</td>
<td>Baseball purists continue to challenge Barry Bonds’ position as Major League Baseball’s all time homerun leader, due to allegations of his performance enhancing drug use.</td>
</tr>
<tr>
<td></td>
<td>Madonna and Lady Gaga</td>
<td>The 25-year-old pop princess has admitted to being inspired by the Queen of Pop in the past and many people have compared their styles of music.</td>
</tr>
<tr>
<td></td>
<td>Summer in Barcelona</td>
<td>Barcelona is perfect as a holiday destination, with good beaches, guaranteed sun, cafés, restaurants and nightclubs, first-rate cultural venues, unusual architecture and fashionable shops.</td>
</tr>
</tbody>
</table>