News from the Other Side: How Topic Relevance Limits the Prevalence of Partisan Selective Exposure

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Prior research has demonstrated a preference among partisans for like-minded news outlets, a key mechanism through which the media may be polarizing Americans. But in order for source reputations to cause widespread selective exposure, individuals must prioritize them above other competing attributes of news content. Evaluating the relative influence of various contributors to media choice is therefore critical. This study pits two such factors, source reputation and topic relevance, against one another in conjoint survey experiments offering randomly paired news items to partisans. Making a news source's reputation politically unfriendly lowers the probability that an individual chooses an item, but this negative effect is often eclipsed by the positive effect of making a news topic relevant to the individual. In many popular modern news consumption environments, where consumers encounter a diverse mixture of sources and topics, the ability of source reputations to contribute to polarization via partisan selective exposure is limited.

Rapid changes in the way news content is produced and disseminated have led to widespread concern that partisan selective exposure—the tendency to restrict one's news diet to politically agreeable sources—will increase to alarming levels, a phenomenon that some argue is already contributing to mass polarization (Levendusky 2013a; Sunstein 2001). A robust finding fueling this concern is that partisans tend to prefer news outlets with reputations that comport with their own political points of view (e.g., Stroud 2010). So long as partisans prefer like-minded news sources and have the technology to personally tailor their news intake, many have predicted they may increasingly restrict themselves to partisan echo chambers (e.g., Iyengar and Hahn 2009; Sunstein 2001).

But while evidence for source preferences is strong, it is insufficient to demonstrate that rates of partisan selective exposure will increase. The reason is that the relative importance of source reputations when compared with other important attributes of news remains unclear. Just because source reputations exert marginal effects on the probability of consuming a news item does not mean they are strong enough to be substantively consequential in a multivariate news consumption environment. Put another way, if source reputations exert relatively modest effects compared to other countervailing forces, then the chances of them causing widespread partisan selective exposure are remote. Quantifying the relative influence of various aspects of news on media choice is therefore critical to assessing whether the rise of partisan news outlets will translate to meaningful changes in media consumption patterns and, in turn, political opinion.

To better understand the way partisans prioritize different aspects of news, this study features a novel experiment that measures the relative influence of two widely studied factors in news consumption: source reputation and topic relevance. A large body of prior work has demonstrated that individuals are more likely to consume news on topics about which they care passionately (Krosnick 1990), concern a group with which they strongly identify, or directly affect their well-being (Atkin 1973; Bolsen and Leeper 2013; Boninger, Krosnick, and Berent 1995; Iyengar et al. 2008). Although previously studied individually, partisan and issue-oriented news selectivity have rarely been pitted against one another—especially in experimental settings—partly due to the well-known methodological concern known as the "curse of dimensionality" (Ho et al. 2007). That is, simultaneously randomizing both the relevance of content (by offering news items on several topics) and partisan source

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reputations in a traditional factorial experiment would greatly expand the number of experimental conditions and quickly lead to underpowered hypothesis tests in the absence of a very large sample.

With these concerns in mind, this study employs a conjoint experimental design in which partisan survey respondents were asked to engage in repeated choice tasks between pairs of news items with independently randomized topics and sources that span a range of partisan reputations. This design is well suited for the question at hand, since the repeated observations on subjects provide ample power to estimate multiple treatment effects and because the technique has long been used in other disciplines to examine the effects of competing product attributes on consumption (Hainmueller, Hopkins and Yamamoto 2014). By offering partisans news items that vary in both topic and outlet simultaneously, this design also mimics several key features of news consumption environments that are increasingly common in the digital age. Recent work has shown that at least half of Americans now get their news online (Beujon 2012), where opportunities for incidental exposure to cross-cutting information on a range of issues are abundant (Bakshy, Messing, and Adamic 2015; Gentzkow and Shapiro 2011; Messing and Westwood 2012).

The results, replicated across two large samples,[1] show that, all else equal, partisans are averse to politically unfriendly news sources but that making a news topic relevant to an individual often exerts a far larger positive effect on the probability of news selection. For example, if a politically neutral source offers two news items to seniors, one on an irrelevant topic and one concerning Social Security, the mean rates of selection are 0.49 and 0.75, respectively—evidence for a massive, positive topic relevance effect. But if we took the same article on Social Security and changed the politically neutral source to one that is politically unfriendly, the rate of selection only drops to 0.74, on average. Thus, because of the relatively large positive effects of topic relevance—between 9 and 30 percentage points across subgroups, compared with source effects that range between roughly 3 and 8 percentage points—the probability of consuming relevant news items is very likely to be high in a variety of scenarios regardless of the source offering it. While partisan source reputations may be an important influence on news selection, the strength of topic relevance often prevents sources from being consequential in the selection decision. Such patterns reveal a severe limitation on the ability of source reputations to cause partisan selective exposure, and they also offer a plausible explanation for why, despite the ability and preference to consume news from agreeable sources, recent observational studies using an array of measurement techniques have concluded that most partisans consume an ideologically mixed diet of news (Bakshy et al. 2015; Garrett, Carnahan, and Lynch 2013; Gentzkow and Shapiro 2011).

THE POWER OF PARTISAN SOURCE CUES

As Iyengar and Hahn (2009) note, the idea that individuals seek to minimize their intake of dissonant information was presented by communications scholars over half a century ago (Festinger 1957; Mills 1965), and early tests of the political implications of this theory found that people tended to report greater levels of exposure to campaign communications from their preferred candidates and parties (Lazarsfeld, Berelson, and Gaudet 1948; Schramm and Carter 1959; Sears and Freedman 1967). The recent explosion of media outlets that cater to niche audiences with particular points of view (Hamilton 2005; Mullainathan and Shleifer 2005; Prior 2007; Stroud 2010) has led many scholars to worry that the days of incidental exposure to diverse opinions are at an end, a pattern that, some assert, is already leading to a less informed and more polarized electorate (Levendusky 2013a, 2013b; Sunstein 2001).

Given these changes to the news landscape, it is perhaps unsurprising that individuals are now more likely to view certain outlets as having biased coverage and political agendas (Iyengar and Hahn 2009; Pfau, Houston, and Semmler 2007). Consumers of Fox News content are not only fed a steady diet of conservative viewpoints (Groeling and Baum 2007), they are also consistently reminded by commentators of the bias that exists in "liberal" outlets such as *The New York Times*. Likewise, MSNBC frequently makes reference to the slanted reports emanating from the other side of the aisle. In turn, the partisan reputation of news sources has come to be viewed as an important heuristic in partisan news consumption.

In addition to substantial observational research on this tendency (see Stroud [2008] for a review), experimental studies have also shown evidence of partisan source effects. In Iyengar and Hahn (2009), online survey respondents were shown a collection of news headlines with randomly assigned sources. The study found that the Fox News label significantly increased the probability that Republicans would select a given article, all else constant, while Democrats showed an aversion to Fox. These preferences lead the authors to conclude that "although an infinite variety of information is available [online], individuals may well limit their exposure to news or sources that they expect to find agreeable. Over time, this behavior is likely to become habituated so that users turn

1. See tables A12 and A13 in the online appendix for replication results.

to their preferred sources automatically no matter what the subject matter" (34).

THE ROLE OF TOPIC RELEVANCE

Despite the recent prominence of partisan selectivity, a long line of research has characterized news selection as being driven by many competing factors, including the relevance of news topics to individuals (Atkin 1973; Iyengar et al. 2008; Johnson, Bichard, and Zhang 2009; Rubin 2009; Stroud 2008). "The individual," Atkin (1973) notes, "desires to formulate precise cognitive orientations toward those stimuli that potentially or currently impinge on his well-being" (cited in Knobloch, Carpentier, and Dolf Zillmann 2003, 94). In line with this idea, several studies have since found evidence that individuals select news content that is more likely to provide them with "instrumental utility," which can be defined as information that "affords individuals a better orientation in, as well as more effective means of acting on, their physical and social environments" (Knobloch et al. 2003, 92). For example, both Knobloch-Westerwick and Alter (2007) and Tewksbury (2005) show that demographic traits correlate with the type of news consumed. Similarly, Bolsen and Leeper (2013) found that women were far more likely than men to report following women's health issues in the news, while Campbell (2003) showed that senior citizens are especially attentive to issues like Social Security. In addition, a large literature on "issue publics" examines individuals who, for whatever reason, care passionately about certain topics and therefore consume more news on them (Feldman et al. 2013; Iyengar et al. 2008; Krosnick 1990; Stroud 2011).

PARTISAN SELECTIVE EXPOSURE IN THE DIGITAL AGE

While previous scholars have shown the tendency of most TV viewers to tune out news altogether (Arceneaux et al. 2012; Prior 2007), news online is often thrust into the view of consumers, imposing a consumption decision. The mix of viewpoints that reach partisans online also appears to differ from other mediums in important ways. Several studies suggest that incidental exposure to dissonant news outlets is common online, especially in two highly trafficked news arenas the present experiment mimics: news aggregator sites and social network sites (Gentzkow and Shapiro 2011; Messing and Westwood 2014). Sites like Google News offer items that range in both topic and source because "most aggregation services do not consider political slant when collecting content" (Hampton et al. 2009; Messing and Westwood 2014, 1045). Facebook news feeds include similar content when it is shared by members of one's social network (Messing and Westwood 2014; Mutz and Mondak 2006). As Bakshy et al. (2015) show, such networks are not merely made up of like-minded friends. Rather "on average more than 20 percent of an individual's Facebook friends who report an ideological affiliation are from the opposing party, leaving substantial room for exposure to opposing viewpoints" (1131).

In some cases, consumers in these high-choice digital environments may encounter optimal news items concerning a relevant topic and offered by a preferred source. But in many (if not most) other cases, consumers are presented with some other permutation. To understand how partisans navigate this increasingly common scenario, quantifying the relative importance of various drivers of news selection becomes critical. If source cues act as a litmus test for consumers, no factor will be powerful enough to convince the consumer to read a report from a dissonant source. But if the power of source cues is relatively weak, there may be a number of common situations in which source reputations are not determinative in the news consumption decision, limiting their ability to cause widespread selective exposure.

DATA AND METHOD

The data for the primary analysis in this study were collected from an online survey administered by Survey Sampling International (SSI) in June of 2014. The goal was to collect a representative sample of Democrats and Republicans based on the mean levels of gender, age, and racial categories found in the population-weighted 2012 Cooperative Congressional Election Study (CCES), a widely used survey for studying partisan preferences (Ansolabehere and Schaffner 2013). SSI targeted members of its large online panel in order to hit within-party demographic quotas based on the CCES. As table 1 shows, the 1,059 partisans in the SSI sample are nearly identical to the partisans in the CCES sample in terms of gender, race, and age.

The present study employs a conjoint experimental design. Conjoint experiments have long been used in marketing studies seeking to measure the relative influence of various product attributes on rates of consumption, making this design ideally suited for the questions at hand (Hainmueller, Hopkins, and Yamamoto 2014). Conjoint experiments differ from traditional vignette-style factorial experiments in key ways. For one, a typical conjoint experiment increases the statistical power of hypothesis tests for a given sample size by recording repeated responses from each participant. Second, rather than having respondents only view one experimental condition at a time, conjoint experiments frequently offer respondents multiple profiles to compare simultaneously—in this case, multiple news items—and ask them to register their preference for one profile over the other. In such forced-choice conjoint experiments with head-to-head comparisons, the unconditional probability of selecting a given profile is 0.5. While this feature may be unconventional,

Table 1. Means in Demographic Categories by Party

	Democrats		Republicans	
Variable	Democrats SSI	CCES 2012 (Weighted)	Republicans SSI	CCES 2012 (Weighted)
Female	.57	.58	.54	.51
Non-Hispanic white	.54	.57	.85	.87
Non-Hispanic black	.21	.24	.01	.01
Hispanic/Latino	.12	.13	.09	.07
Other race	.13	.06	.05	.05
Age (years)	44.58	45.26	48.70	49.14
Median household income ($1,000s)	45.00	45.00	55.00	55.00
Has BA	.40	.27	.40	.27
Student	.22	.07	.14	.06
Senior (over age 55)	.30	.32	.42	.41
Smoker	.27		.21	
Trying to lose weight	.58		.55	
Uninsured/health care worker	.21		.20	
N	527	21,040	532	15,751

there is evidence that the comparative nature of the exercise actually leads to more externally valid estimates of treatment effects than traditional designs, likely because such choice exercises foster respondent engagement and discourage satisficing (Hainmueller, Hangartner, and Yamamoto 2015, 2399).

In the present conjoint design, each of the 1,059 partisan respondents was presented with 12 choice tasks featuring two news items labeled "News Selection A" and "News Selection B" (see fig. 1). For each choice task in this experiment, the sources and headlines that populate the matrix in figure 1 were independently randomized.[2] After each choice matrix was displayed, respondents were asked, "Would you prefer to read News Selection A or News Selection B?" The response of each individual to each of the 12 choice tasks enters into the estimation data as two observations: one indicating a positive response to the profile that was selected and one indicating a negative response to the profile that was not selected, along with the levels of the attributes associated with each profile. The result is a pooled estimation data set with $1{,}059 \times 12 \times 2 = 25{,}416$ observations.[3]

Following recent applications of this method, treatment effects and predicted outcomes given various attribute combinations are estimated using ordinary least squares (OLS) regression (Hainmueller, Hopkins, and Yamamoto 2014). Specifically, within each subgroup, an indicator for whether or not a given news item was selected was regressed on indicators for whether that item was relevant to the individual, an indicator for whether the item's source was politically friendly (given the individual's party identification), and an indicator for whether the source was politically unfriendly.[4] Indicators for irrelevant content and neutral sources were omitted from the models as reference categories.

MEASURING TOPIC RELEVANCE

There are several plausible ways to conceive of a topic being "relevant" to a consumer and to measure relevance empirically. One option is to ask people directly what topics interest them most (e.g., Stroud 2011, 73–77). While intuitive, this approach has drawbacks given the construct of the current study. For one, self-reported measures are likely to be inaccurate (Prior 2009). Self-reported interest measures would also be so similar to the conjoint choice tasks presented in the experiment that any observed correlations between them and treatment assignments would be uninformative. This study therefore does not attempt to measure "interest," and instead attempts to capture the afore-

2. To avoid ordering effects, the placement of source and headline rows was randomized between respondents but fixed within respondents. Respondents were initially told that at the end of the survey they would be asked to read a news article in full based on their selections, a minor deception to help avoid satisficing. All participants were debriefed at the close of the survey.

3. See the "Checking the 'No Carryover' Assumption" section of the online appendix for robustness checks relevant to this pooling strategy.

4. All irrelevant headlines are pooled into a single condition. See figure A2 in the appendix for individual headline effects.

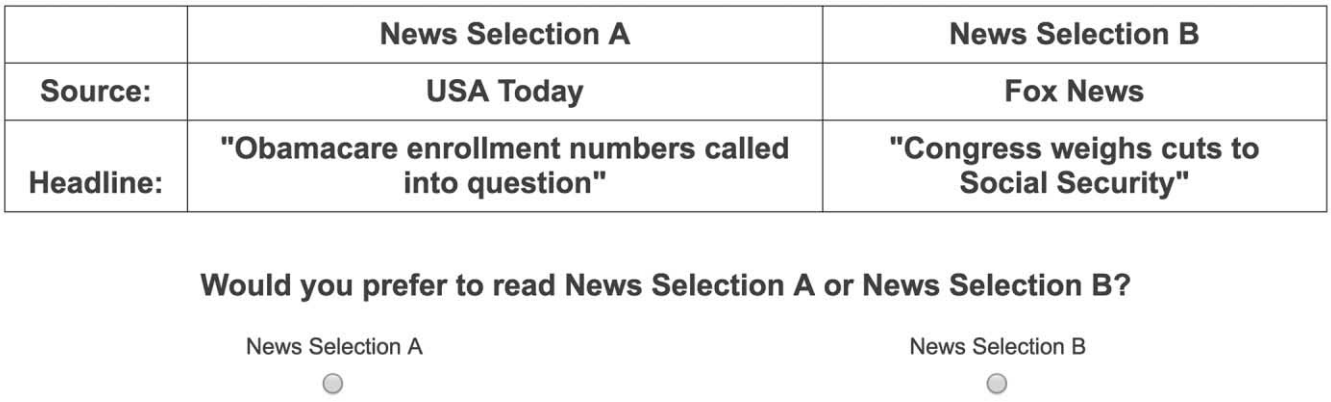

Figure 1. Randomly generated choice task

mentioned concept of "instrumental utility" (Knobloch et al. 2003)—a self-interest-based conception of topic relevance centering on issues that have a direct impact on groups' financial or physical well-being. Membership in these "Affected Publics" (hereafter APs) is often tied to more objective indicators of individual circumstances and is therefore often easier to validly measure. For example, to determine whether someone is especially affected by the Equal Pay Act, legislation designed to close a persistent wage gap between men and women, a standard item asking the respondent's gender can be used. Similarly, determining whether someone is close to retirement age can indicate whether topics like Social Security are especially relevant. Such demographic items are subject to only limited interpretation by respondents, and they were therefore used to code membership in APs (see the appendix, available online, for details).[5]

SURVEY CONTENT

Pretest results showed bipartisan agreement that MSNBC and Fox News inject substantial partisan bias into their news coverage in the Democratic and Republican directions, while *USA Today* is seen as supplying relatively middle-of-the-road content (see fig. A3 in the online appendix). Fox, MSNBC, and *USA Today* were therefore chosen to serve as the Republican-leaning, Democratic-leaning, and neutral news source treatments, respectively. Pretest data also revealed which groups could be plausibly sampled. Six APs were identified, several of which have been examined in prior work on issue publics and self-interest. The groups (and corresponding topics) are displayed in table 2 and include women (Bolsen and Leeper 2013), smokers (Green and Gerken 1989), current students, those near or above retirement age (Campbell 2003), the uninsured/health care workers (Iyengar et al. 2008), and those trying to lose weight. In order to maximize statistical power, the three news topics targeted at women—abortion, the Equal Pay Act, and breast cancer research—were collapsed into a single treatment condition in the subsequent analyses. Topics that might appeal to entertainment seekers (e.g., the upcoming NFL season and celebrity dating mishaps; Prior 2007) and a general politics item concerning the 2016 presidential election were also added in order to better mimic the mix of topics found on popular news aggregator sites. The full headlines pertaining to each of these topics are also displayed in table 2.[6]

HYPOTHESES

Given the aforementioned literature, several patterns should be apparent in the data analyzed below. For one, we should still expect the partisan reputations of sources to influence selections. That is:

> **H1.** All else equal, partisans should be more (less) likely to choose news content if the source of the content is perceived as friendly (unfriendly) to their preferred party, relative to a source that is perceived as politically neutral.

Second, given prior work on issue publics and self-interest, it is anticipated that:

> **H2.** Relative to other topics, members of APs should select news content at greater rates if it concerns a topic relevant to their group.

5. See the "Alternate Coding Scheme Results" and "Post-Treatment Bias Check" sections of the online appendix for additional robustness checks.

6. In order to avoid the unrealistic scenario of seeing identical headlines attributed to multiple sources, three versions of each topic's headline were constructed and later pooled within topic for analysis. See the "Headline Versions" section of the appendix for more details.

Table 2. Affected Publics and Relevant Headline (Topic) Treatments

Topic	Headline	Affected Public
Abortion restrictions	"Federal court puts abortion restrictions back in place"	Women
Equal Pay Act	"Senate votes against bill that would ensure equal pay for women"	Women
Breast cancer study	"Study finds potential cause of breast cancer"	Women
Health study on smoking	"Smokers who quit may cut heart risk faster than had been thought, study finds"	Smokers (reports smoking one pack per week or more)
Social Security cuts	"Congress weighs cuts to Social Security"	Seniors (over age 55)
Student debt tips	"How to drop all that student loan debt"	Current students
Health care	"Obamacare enrollment numbers called into question"	Uninsured/health care workers
Weight loss tips	"Weight-loss tips that make a difference"	Currently trying to lose weight
Fantasy football performers	"Fantasy Football 2014 Forecast"	
Celebrity gossip	"Celebrity dating fails"	
Campaign news	"Did bridge scandal kill Christie's 2016 bid?"	

It is also possible that topic relevance could be appealing enough to mute the impact of source cues. This suggests a third hypothesis:

> **H3.** Among members of APs, the presence of relevant content should significantly reduce the effect of source reputations.

There is little prior work on which to base expectations about the relative effect sizes of topic relevance and source reputations, and the question will therefore be assessed empirically below.

RESULTS

When offered an array of news items that varied in both topic and source, how did partisans respond? To assess this, we can first examine the rates of selection of news items across all experimental conditions. These are displayed in figure 2 for each AP (see the online appendix for intraparty results). As the figure makes clear, for a variety of subgroups, relevant topics are widely preferred, even when source reputations are suboptimal. Consider the scenario of seniors encountering news items on topics other than Social Security. In those cases, the items were selected at rates 0.40, 0.49., and 0.52 when offered by a politically unfriendly, neutral, or politically friendly source, respectively. However, when an item on Social Security was offered to the same group, even in the case where the source is politically unfriendly, the item was selected 74% of the time.[7] Women and smokers display similar consumption patterns: unfriendly sources tend to be less preferred, but the popularity of relevant topics is more than strong enough to counteract negative source reputations.

These average rates of consumption are revealing, but to characterize results in terms of effect sizes, table 3 displays estimates from separate models of news selection for each AP. The results indicate partial support for hypothesis 1. While sources with politically dissonant reputations impose a fairly consistent penalty on the probability that a news item is chosen—typically around a −4 percentage point effect—making an item politically friendly rarely results in a statistically significant increase in the probability of selection (though among smokers and seniors this treatment exerts discernible 3.8 and 3.6 percentage point effects, respectively). This result is in line with prior work positing that avoidance of dissonant information is driving partisan selective exposure (Bennett and Iyengar 2008; but see Garrett 2009), and it also replicates prior research on the effects of source reputations, lending face validity to the experimental design.

Hypothesis 2 stated that relevant content would be selected at greater rates than content concerning other topics by members of APs. Table 3 shows resounding support for this hypothesis. In five out of six of these subgroups, respondents chose relevant content at significantly higher rates than items on other topics, with effect sizes ranging from 7.7 percentage points among those trying to lose weight to a staggering 30 percentage points among seniors. In most cases, these effects are far larger than any effects exhibited by source cues, and further tests demonstrate that the differences in the effects of topics and sources are themselves often statistically significant (see "Differences in Treatment Effects" in the online appendix). While disso-

7. Topic relevance effects are larger among AP members than their counterparts. See figure A6 in the appendix.

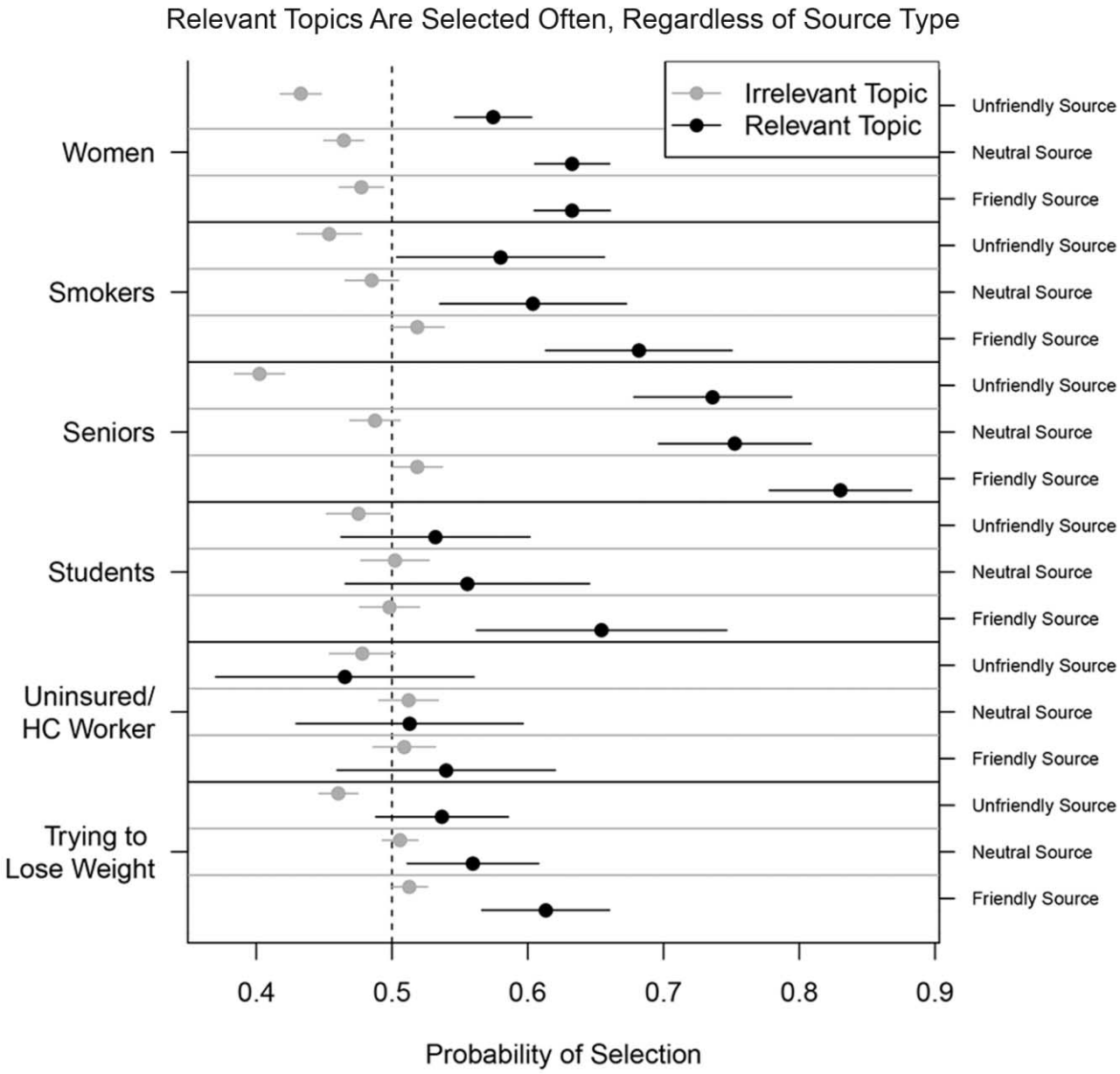

Figure 2. Rates of selection for a given news item by the item's source type and topic type for each Affected Public. Estimates were generated by the models in table 4. Shapes denote point estimates, bars denote 95% confidence intervals on mean predictions.

nant sources impose a slight penalty on news items, making a topic relevant causes a massive increase in the probability of selection.

DO SOURCES AND TOPICS INTERACT?

The previous results demonstrate the strong influence of topics on news selection. But can topics significantly reduce the effects of sources, as hypothesis 3 posits? To test this, additional models were estimated in which indicators for source and topic types were interacted (table 4).

We can first consider the interaction between topic relevance and politically friendly sources. Out of the six subgroups, the marginal effect of a friendly source was positive and statistically significant (when content was irrelevant) among smokers and seniors (the effects were 3.4 and 3.1 percentage points, respectively). In those two groups, the interaction between topic relevance and friendly sources shows that seeing relevant content increased the marginal effect of a friendly source further by 4.4 and 4.7 percentage points, suggesting that friendly content from a relevant source represents an optimum scenario for consumers. However, the standard errors on these interaction terms were quite large, and the estimates therefore not statistically discernible from zero.

Table 3. Treatment Effects Estimated via Ordinary Least Squares

	Women	Smokers	Seniors	Students	Uninsured/Health Care Workers	Trying to Lose Weight
Intercept	.468*	.483*	.484*	.499*	.512*	.504*
	(.008)	(.012)	(.009)	(.013)	(.012)	(.007)
Relevant topic	.155*	.136*	.303*	.087*	.007	.077*
	(.011)	(.024)	(.018)	(.030)	(.031)	(.017)
Friendly source	.009	.038*	.036*	.005	−.000	.011
	(.011)	(.016)	(.013)	(.019)	(.017)	(.011)
Unfriendly source	−.039*	−.031	−.078*	−.027	−.035	−.043*
	(.011)	(.018)	(.014)	(.020)	(.019)	(.011)
N	14,088	5,904	9,072	4,560	5,232	14,280

Note. Standard errors were computed in two ways, (*a*) conventional (homoscedastic) and (*b*) clustered by respondent. In order to be conservative, the larger of the two standard errors was used to determine statistical significance.
* $p < .05$.

We can also examine the ability of topic relevance to neutralize the effect of unfriendly sources, which had a statistically significant negative effect among women, seniors, and those trying to lose weight when content was irrelevant, (the effects are −3.2, −8.5, and −4.5 percentage points, respectively). To neutralize these effects, the coefficient on Relevant × Unfriendly would have to be equally as large in the positive direction. Among women and those trying to lose weight, relevant content changes the marginal effect of an unfriendly source by −2.7 and 2.3 percentage points, though the coefficients are not statistically significant. Among seniors, there is some evidence of a substantively meaningful interaction—the marginal effect of an unfriendly source increases by roughly 7 percentage points when content is made relevant—though again the result is imprecisely estimated.

Setting aside statistical significance, the point estimates on these interaction terms only exhibit the necessary direction and magnitude to neutralize (or enhance) source

Table 4. Interactive Ordinary Least Squares Models of News Selection

	Women	Smokers	Seniors	Students	Uninsured/Health Care Worker	Trying to Lose Weight
Intercept	.464*	.485*	.487*	.502*	.512*	.506*
	(.008)	(.012)	(.009)	(.014)	(.013)	(.008)
Relevant topic	.168*	.119*	.265*	.053	.001	.054*
	(.017)	(.037)	(.030)	(.049)	(.046)	(.026)
Friendly source	.013	.034*	.031*	−.004	−.003	.007
	(.012)	(.017)	(.014)	(.020)	(.018)	(.011)
Unfriendly source	−.032*	−.031	−.085*	−.027	−.034	−.045*
	(.012)	(.019)	(.014)	(.021)	(.020)	(.012)
Relevant × friendly	−.013	.044	.047	.103	.030	.047
	(.023)	(.053)	(.041)	(.063)	(.061)	(.036)
Relevant × unfriendly	−.027	.007	.069	.004	−.014	.023
	(.023)	(.054)	(.043)	(.060)	(.062)	(.035)
N	14,088	5,904	9,072	4,560	5,232	14,280

Note. Standard errors were computed in two ways, (*a*) conventional (homoscedastic) and (*b*) clustered by respondent. In order to be conservative, the larger of the two standard errors was used to determine statistical significance.
* $p < .05$.

effects sporadically. It appears that these two treatments do not meaningfully interact. The fact that these treatments operate largely independently has important implications for the likelihood of partisan selective exposure. Topic relevance, though a substantial determinant of news consumption, does not diminish the modest effects of source cues. However, the inverse is also true. That is, regardless of the political reputation of a news source, topic relevance exerts massive effects on consumption. This is a useful discovery, especially given the extensive literature on partisan motivated reasoning arguing that individuals assign immense weight to party cues when interpreting new information (see, e.g., Bolsen, Druckman, and Cook 2014; Cohen 2003; Slothuus and Vreese 2010). Source reputations appear to do little to prevent consumption when topics are relevant.

DISCUSSION AND CONCLUSION

Well-documented preferences for politically agreeable news sources have led many scholars to assert that rates of partisan selective exposure would climb to alarming levels and in turn serve to polarize the mass public. But such preferences will only result in widespread selective exposure if they are strong enough to overcome myriad countervailing drivers of news selection when partisans make news consumption decisions. While a large body of prior work has identified several attributes of news items as being influential, these competing factors have rarely been evaluated simultaneously, leaving the ways in which consumers prioritize various aspects of media content largely mysterious.

The present study employed a novel experimental design to test the relative strength of two important factors in news selection: partisan source cues and topic relevance. The results indicate that while both factors influence consumer decisions, the effects of negative source cues are often dwarfed by the massive countervailing effects of topic relevance. Across a range of subgroups of partisans, topic relevance drastically increased the probability of selecting news items even when sources were politically dissonant. In several cases, the subgroups under examination represent demographically and politically significant portions of the electorate, such as women and seniors, and the topics relevant to these groups—including abortion rights and Social Security—have been fixtures of American news coverage for decades. The scenarios simulated here are likely common ones, and the results offer insight into the observed disconnect between preferences for like-minded sources revealed in prior experiments (e.g., Iyengar and Hahn 2009) and observational work that shows partisan news diets to be heterogeneous (e.g., Gentzkow and Shapiro 2011).

These findings have important implications for the ability of media to polarize consumers via selective exposure, especially in the digital age. As previously noted, at least half of Americans now consume news online (Beaujon 2012), and previous research has shown that some of the most highly trafficked venues for online news expose partisans to an array of cross-cutting items (e.g., Messing and Westwood 2014). In some cases, partisans may encounter news items on relevant topics offered by preferred sources, but in many other circumstances they are presented with some other permutation of source reputation and topic. In such instances, source cues will only lead to widespread selective exposure if their effects are large enough to be determinative in the news consumption decision. According to the results above, the effects of source cues are relatively minor. Overall, these results expose a serious limitation on the ability of source cues to exacerbate mass polarization via partisan selective exposure—when relevant content is encountered, source effects are not typically large enough to dissuade partisans from consuming news from dissonant sources.

While compelling, there are important limitations to the present set of findings. Some may argue that relevant content may be infrequently encountered by most consumers. Indeed, the prevalence of relevant content for the typical partisan news consumer is hard to quantify. But even in the admittedly simplified environment of this experiment, in which a host of topics and Affected Publics are not included, 96% of the 1,059 partisans surveyed belonged to at least one AP. If we take into account the fact that individuals can consider multiple topics relevant, and if other frequently covered news topics important to other Affected Publics were added to the mix—such as racial and economic inequality or second amendment rights—the number of opportunities for Americans to encounter relevant content would quickly expand. This experiment also only contained three sources and 11 topics and two alternatives per choice task. While these design features limit external validity to a degree, they also served as a tough test for the hypothesis that topic relevance matters, since having such a low number of topics increased the probability that many respondents would not consider any topic relevant.

These results also highlight opportunities for further research. Future studies should endeavor to add complexity to experimental designs to test whether the high predicted probabilities for consuming relevant content recovered here are robust to choice environments containing more options. The conjoint framework presented above could also facilitate additional experiments that incorporate other news item attributes, such as pictures, ideologically slanted headlines, and variation in location on a web site. Additional observational work is necessary as well. While prior work has tracked the sources consumed by partisans online (e.g., Gentzkow and

Shapiro 2011), future research should track news topics as well and collect the individual-level covariates necessary to code membership in APs. A focus on characterizing individuals' behavior on politically dissonant news sites would also illuminate whether consuming an initial relevant item leads to consumption on other topics from the dissonant source.

As scholars of the political implications of media choice tackle outstanding questions, the results reported here should prompt a reassessment of the power of partisan treatments to explain patterns in news consumption. Although news outlets may be growing more partisan in nature, widespread coverage of topics partisans deem relevant to other facets of their lives may be fending off the emergence of large and tightly sealed partisan echo chambers.

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Appendix A

Survey Content

The pre-treatment survey instructions read:

> You will now be asked to consider approximately 10 pairs of news articles taken from various major online news providers. For each pair, please indicate which of the two articles you would be more interested in reading. We will then ask you various demographic questions about yourself. Following these questions, you will be presented with a complete news article that we think you will enjoy reading based on your previous responses. You will be asked to read the article in full and answer questions about its content.
>
> *Please consider the following choices carefully!*

Post-Treatment Measures Used to Code Affected Public Membership:

Exact wording of survey items in quotes, response options in brackets:

1. Age: "In what year were you born?" [drop-down menu of birth years supplied]

2. Gender: “What is your gender?” [Male / Female]

3. Insurance status: “Do you currently have health insurance?” [Yes / No]

4. Health care worker status: “Are you currently employed as a doctor, nurse, health insurance provider or have another job in the health care industry?” [Yes / No]

5. Student status: “Are you currently a student?” [Yes, I’m a part-time student / Yes, I’m a full-time student / No, I am not currently a student]

6. Weight loss status: “Are you currently trying to lose weight?” [Yes / No]

7. Smoker status: “On average, how many cigarettes do you smoke in a week?” [I never smoke / One cigarette / One pack / Two to four packs / Five to ten packs / More than ten packs]

The text of the debrief at the end of the survey read:

> Thank you for your participation in this survey. Although earlier instructions indicated that you would be asked to read a full news article based on your stated preferences, this will not be necessary. That instruction was included to help ensure that participants provide us with

their true preferences for news content. All the headlines you saw were based on real events and topics that have appeared on various online news outlets, though some may have contained slight wording changes.

Table A1: Affected Public Coding Schemes

Affected Public	**Coding Rule**
Women	Females
Smokers	Those who smoke one pack or more per week
Trying to Lose Weight	Those who indicated they are currently trying to lose weight
Seniors	Over 55 Yrs. Old
Students	Current Students, Part-time or Full-Time
Health Care	Uninsured / Health care workers

Headline Versions

In order to avoid the unrealistic scenario in which respondents saw a headline attributed to a particular source, and then later saw the exact same headline attributed to a different source, three versions of each headline were generated. Headline versions were paired with sources within respondents, but these associations were randomly reshuffled across respondents. Headline versions for each topic were pooled in the final analysis. The full list of headline versions appear in Table A2, and selection rates for each version appear in Figure A1.

Figure A1: The figure shows that within each headline topic, different headline versions elicited similar response rates. Headline versions were pooled within topic in the final analysis. See Footnote 15 for more details on the use of different headline versions.

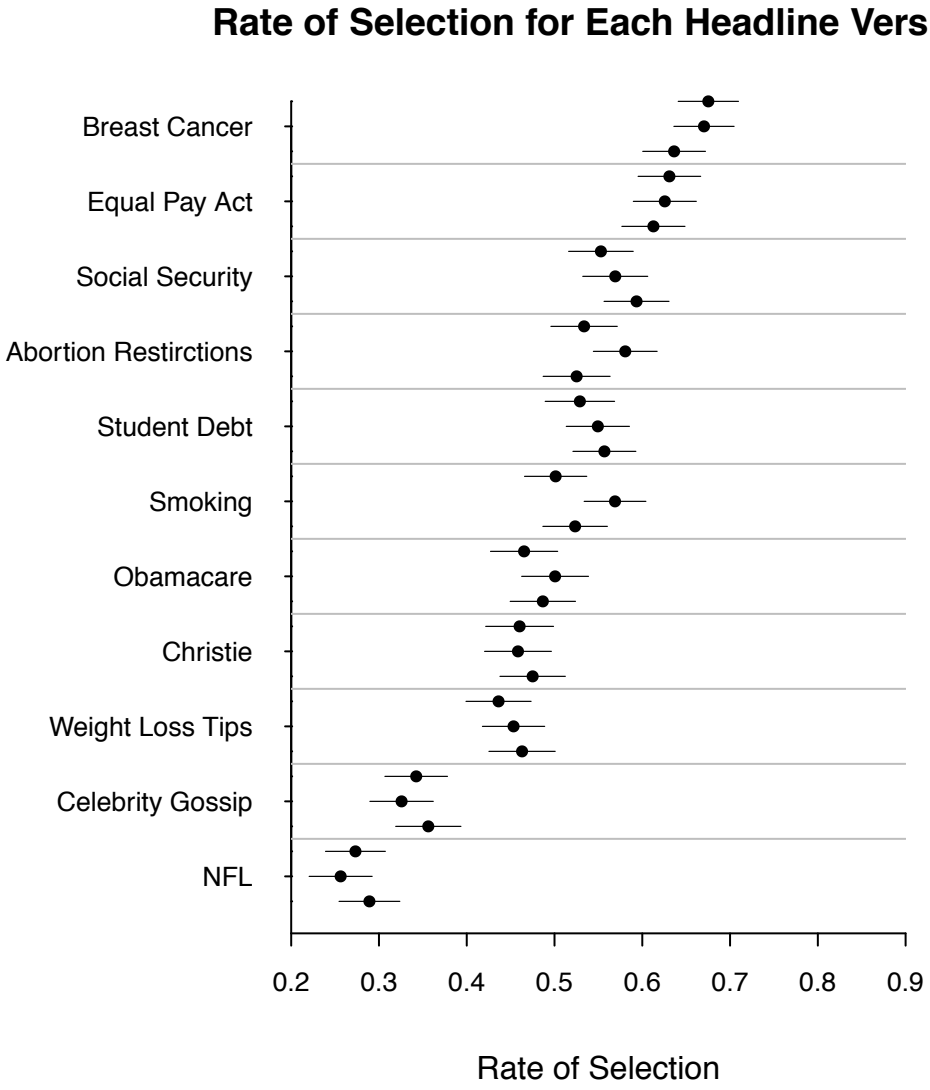


Table A2: Headline Versions

Topic	Headline Versions
Abortion	"Federal court puts abortion restrictions back in place" "Federal court reinstates abortion restrictions" "Abortion restrictions reinstated by federal court"
Equal Pay Act	"Senate votes against bill that would ensure equal pay for women" "Bill to mandate equal pay for women fails in Senate vote" "Bill to guarantee equal pay for women blocked in Senate"
Breast Cancer	"Study identifies possible breast cancer cause" "Study points to new cause of breast cancer" "Study finds potential cause of breast cancer"
Smoking Study	"Study: quitting smoking repairs heart damage more quickly than was thought" "Study finds those who quit smoking repair heart damage faster than expected" "Smokers who quit may cut heart risk faster than had been thought, study finds"
Social Security	"Congress weighs cuts to Social Security" "Congress considering cuts to Social Security" "Congress debates cuts to Social Security"
Student Loan Debt	"Tips for getting rid of student loan debt" "How to drop all that student loan debt" "The best ways to get rid of student loan debt"
Health Care	"Some question Obamacare enrollment figures" "Obamacare enrollment numbers called into question" "Obamacare enrollment figures met with doubt"
Campaign News	"Has bridge scandal killed Christie's 2016 run?" "Did bridge scandal ruin Christie's chances in 2016?" "Did bridge scandal kill Christie's 2016 bid?"
Football	"Fantasy Football 2014 Predictions" "Fantasy Football 2014 Forecast" "Fantasy Football 2014 Preview"
Weight Loss Tips	"Weight-loss tips and success stories" "Weight-loss tips that work" "Weight-loss tips that make a difference"
Celebrity Gossip	"Celebrity dating fails" "Celebrities' worst dating stories" "Celebrity dating nightmares"

Table A3: Real-World Basis for Headline Treatments

Headline	**Source and Date**
"Federal appeals court reinstates most of Texas' abortion restrictions"	FoxNews.com, 11/1/13
"Paycheck Fairness Act Fails Senate Vote"	HuffingtonPost.com, 7/5/12
"UT Southwestern study points to new culprit in breast cancer"	Dallas Morning News via Google News, 11/4/2013
"Smokers who quit may cut heart risk faster than had been thought"	nbcnews.com 11/20/13
"Why Democrats Might Cave On Social Security Cuts"	HuffingtonPost.com, 10/20/13
"Why it's so hard to settle student loan debt"	Reuters via Google News 11/4/2013
"GOP suspicious of Obamacare enrollment figures"	cbsnews.com, 1/11/14
"Water under the bridge in 2016? Christie aims to repair public trust, image after scandal"	FoxNews.com,1/9/14
"Fantasy football Week 16 studs, duds"	foxsports.com, 12/22/13
"Super Dieters Share Their 6 Weight-Loss Tips"	abcnews.com, 1/8/14
"That Awkward Moment When Zac Efron Discussed Sex On The First Date"	HuffingtonPost.com, 1/11/14
"Fantasy Football 2014: Early Predictions for the Upcoming Season"	bleacherreport.com, 5/24/2014

Figure A2: The figure displays the effect of each headline on the probability of selection relative to a given subgroup's relevant headline. Shapes denote point estimates and bars denote 95% confidence intervals generated by respondent-clustered standard errors. Among women, the omitted category is a condition that pools the abortion, Equal Pay Act and breast cancer research headlines. Irrelevant headlines are nearly always less preferred than relevant topics.

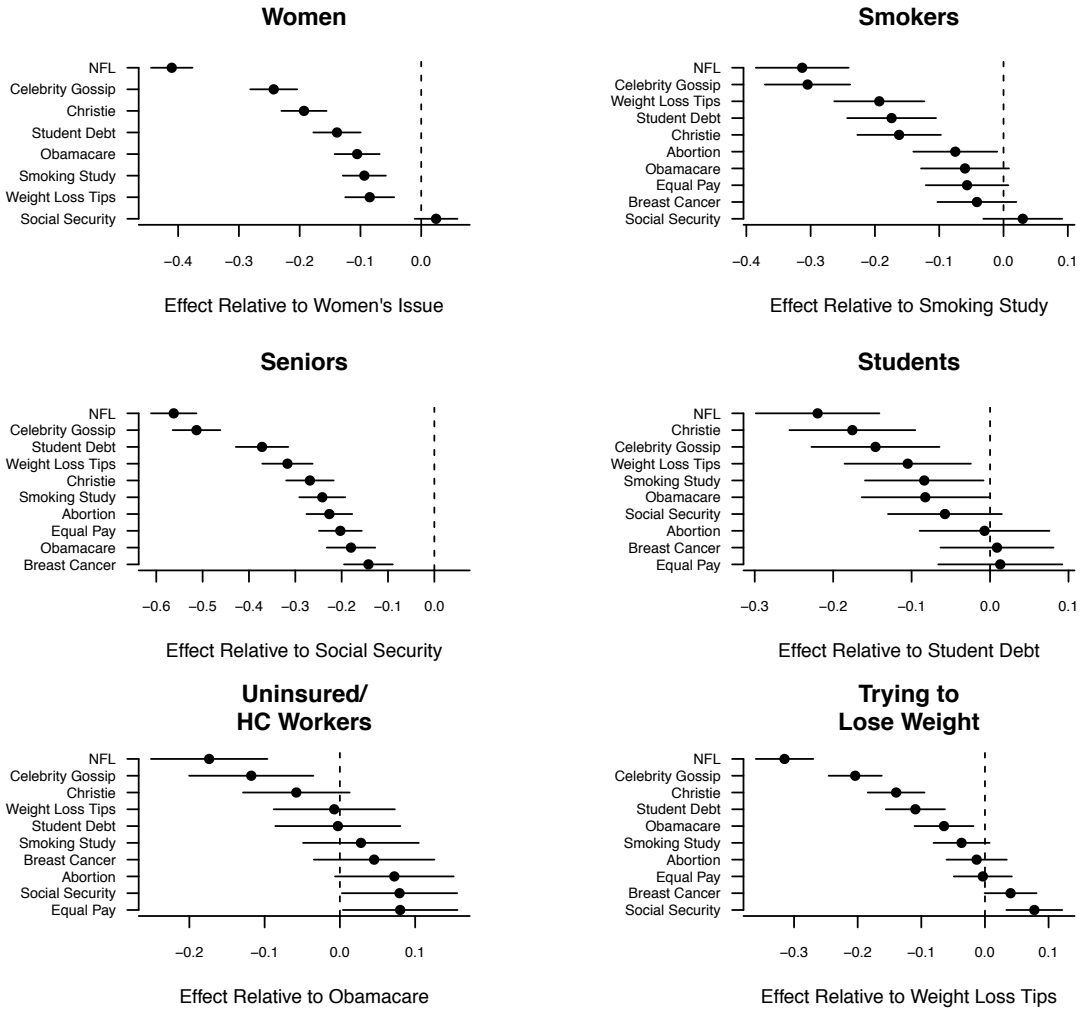
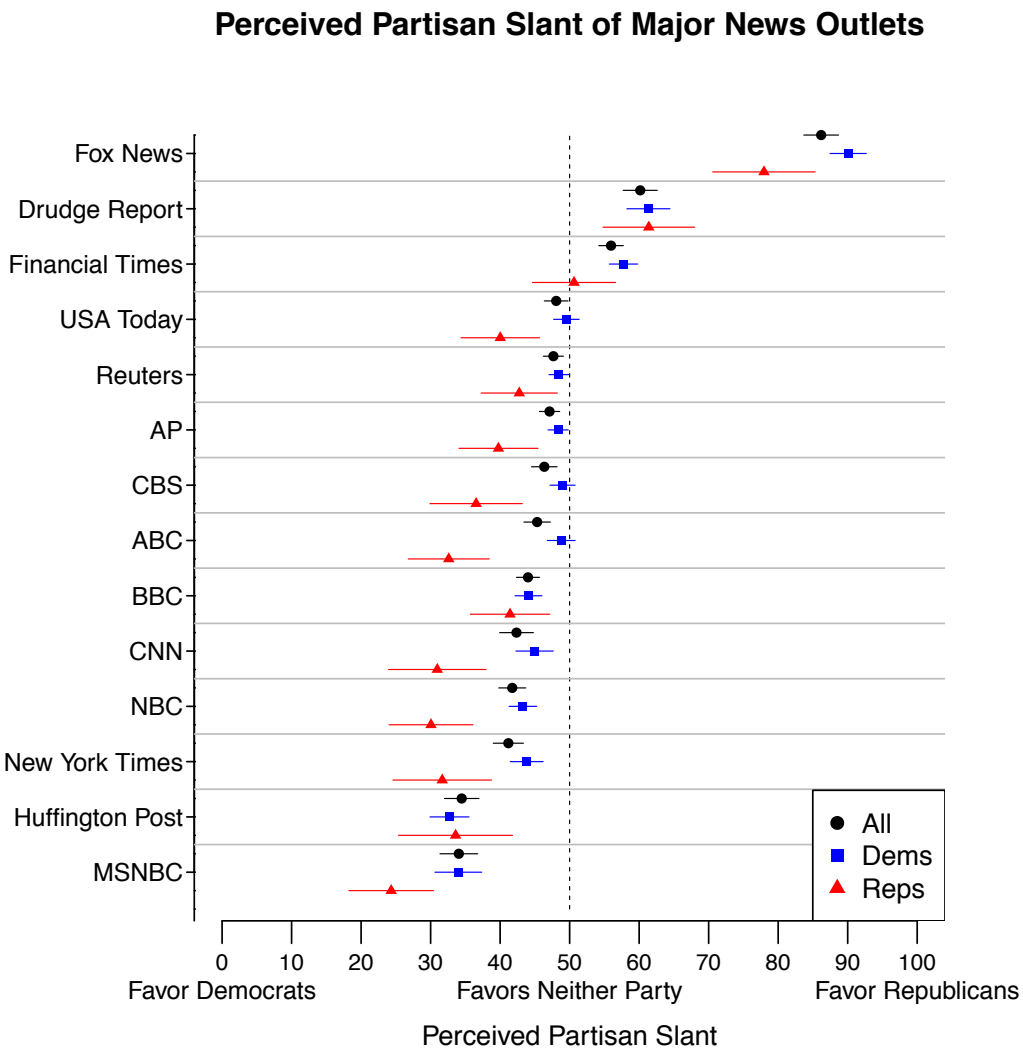


Figure A3: Pre-Test Results (Amazon Mechanical Turk)



Core Results by Party

Table A4: OLS Models of News Selection, Democrats Only

	Women	Smokers	Seniors	Students	Uninsured/ HC Workers	Trying to Lose Weight
Intercept	0.470*	0.495*	0.512*	0.495*	0.523*	0.519*
	(0.011)	(0.015)	(0.014)	(0.017)	(0.017)	(0.01)
Relevant Topic	0.172*	0.171*	0.293*	0.158*	-0.034	0.048
	(0.015)	(0.031)	(0.027)	(0.038)	(0.041)	(0.025)
Friendly Source	-0.001	0.006	0.004	-0.004	-0.020	-0.011
	(0.015)	(0.021)	(0.02)	(0.024)	(0.024)	(0.014)
Unfriendly Source	-0.047*	-0.041	-0.125*	-0.025	-0.041	-0.058*
	(0.016)	(0.025)	(0.022)	(0.025)	(0.026)	(0.016)
N	7,200	3,360	3,744	2,736	2,688	7,320

Maximum of conventional and respondent-clustered standard errors in parentheses.

* indicates $p < 0.05$.

Table A5: OLS Models of News Selection, Republicans Only

	Women	Smokers	Seniors	Students	Uninsured/ HC Workers	Trying to Lose Weight
Intercept	0.466*	0.468*	0.463*	0.504*	0.499*	0.489*
	(0.011)	(0.018)	(0.012)	(0.021)	(0.018)	(0.01)
Relevant Topic	0.138*	0.093*	0.311*	-0.015	0.052	0.105*
	(0.016)	(0.038)	(0.024)	(0.046)	(0.045)	(0.023)
Friendly Source	0.021	0.080*	0.059*	0.018	0.020	0.033*
	(0.015)	(0.024)	(0.017)	(0.030)	(0.026)	(0.016)
Unfriendly Source	-0.030*	-0.018	-0.045*	-0.025	-0.030	-0.029
	(0.015)	(0.028)	(0.017)	(0.033)	(0.027)	(0.016)
N	6,888	2,544	5,328	1,824	2,544	6,960

Maximum of conventional and respondent-clustered standard errors in parentheses.

* indicates $p < 0.05$.

Table A6: Interactive OLS Models of News Selection, Democrats Only

	Women	Smokers	Seniors	Students	Uninsured/ HC Workers	Trying to Lose Weight
Intercept	0.463*	0.497*	0.515*	0.497*	0.523*	0.520
	(0.012)	(0.016)	(0.014)	(0.018)	(0.018)	(0.011)
Relevant Topic	0.197*	0.151*	0.260*	0.135*	-0.029	0.029
	(0.024)	(0.050)	(0.049)	(0.061)	(0.062)	(0.037)
Friendly Source	0.007	0.002	-0.003	-0.014	-0.02	-0.013
	(0.017)	(0.022)	(0.021)	(0.025)	(0.025)	(0.015)
Unfriendly Source	-0.034*	-0.042	-0.127*	-0.022	-0.039	-0.061*
	(0.017)	(0.026)	(0.023)	(0.027)	(0.028)	(0.017)
Relevant*Friendly	-0.029	0.046	0.066	0.104	-0.003	0.028
	(0.032)	(0.072)	(0.066)	(0.079)	(0.084)	(0.051)
Relevant*Unfriendly	-0.047	0.015	0.028	-0.042	-0.016	0.030
	(0.032)	(0.074)	(0.068)	(0.081)	(0.088)	(0.050)
N	7,200	3,360	3,744	2,736	2,688	7,320

Maximum of conventional and respondent-clustered standard errors in parentheses.

* indicates $p < 0.05$.

Table A7: Interactive OLS Models of News Selection, Republicans Only

	Women	Smokers	Seniors	Students	Uninsured/ HC Workers	Trying to Lose Weight
Intercept	0.466*	0.469*	0.467*	0.509*	0.501*	0.491*
	(0.012)	(0.018)	(0.012)	(0.021)	(0.018)	(0.011)
Relevant Topic	0.138*	0.084	0.272*	-0.071	0.037	0.079*
	(0.025)	(0.058)	(0.039)	(0.078)	(0.069)	(0.037)
Friendly Source	0.019	0.076*	0.056*	0.011	0.014	0.027
	(0.019)	(0.026)	(0.019)	(0.033)	(0.027)	(0.017)
Unfriendly Source	-0.029	-0.017	-0.055*	-0.034	-0.028	-0.03
	(0.017)	(0.028)	(0.018)	(0.036)	(0.028)	(0.017)
Relevant*Friendly	0.004	0.037	0.03	0.072	0.067	0.061
	(0.033)	(0.077)	(0.053)	(0.121)	(0.088)	(0.05)
Relevant*Unfriendly	-0.004	-0.013	0.096	0.089	-0.022	0.016
	(0.033)	(0.079)	(0.056)	(0.093)	(0.089)	(0.051)
N	6,888	2,544	5,328	1,824	2,544	6,960

Maximum of conventional and respondent-clustered standard errors in parentheses.

* indicates $p < 0.05$.

Figure A4: The figure displays the mean rates of selection for a given news item **among Democrats** by the item's source type (politically unfriendly, neutral, or politically friendly) and topic type (relevant or irrelevant) for each Affected Public. The estimates were generated by the models displayed in Table 4. Shapes denote point estimates and bars denote 95% confidence intervals.

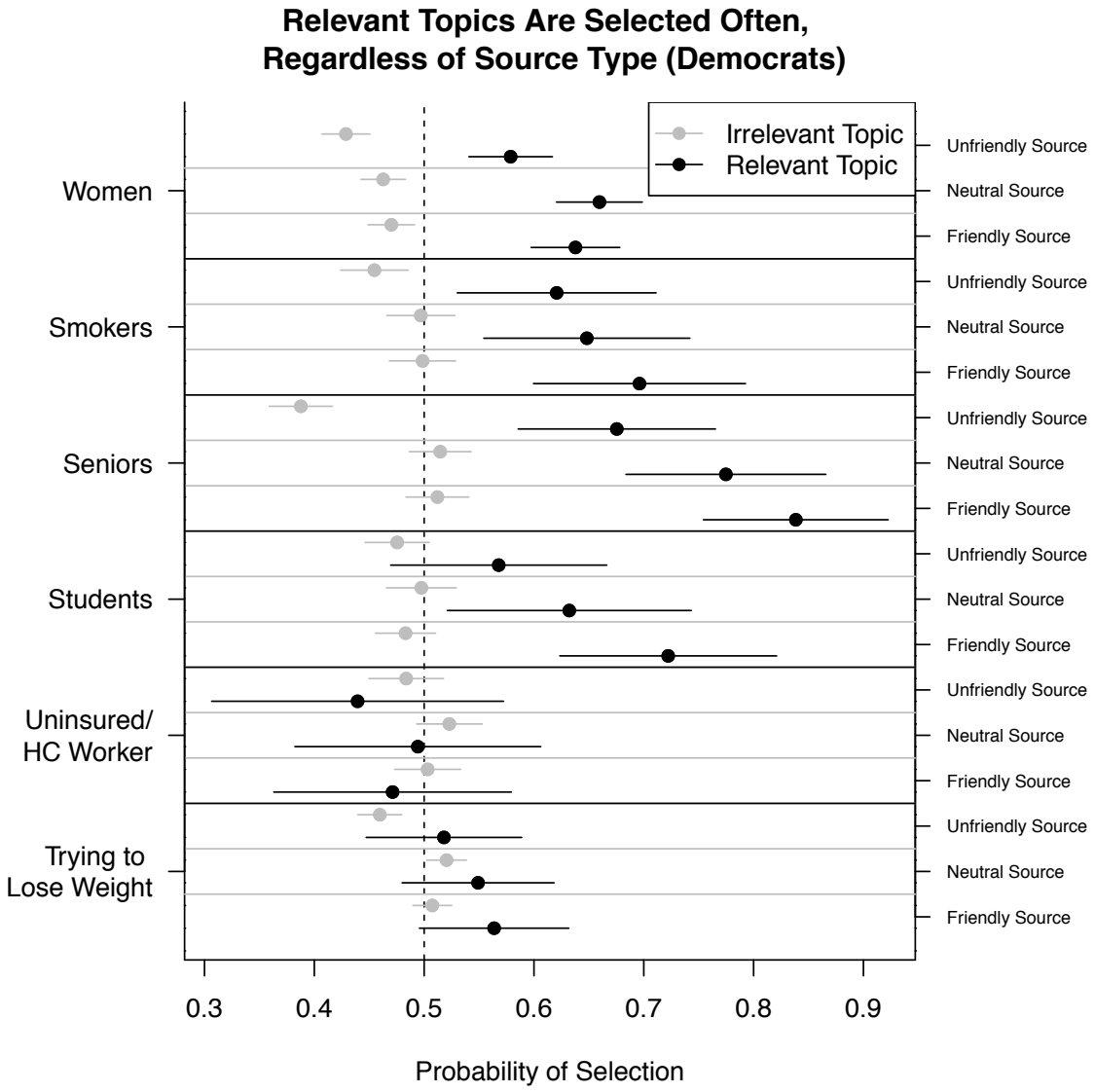
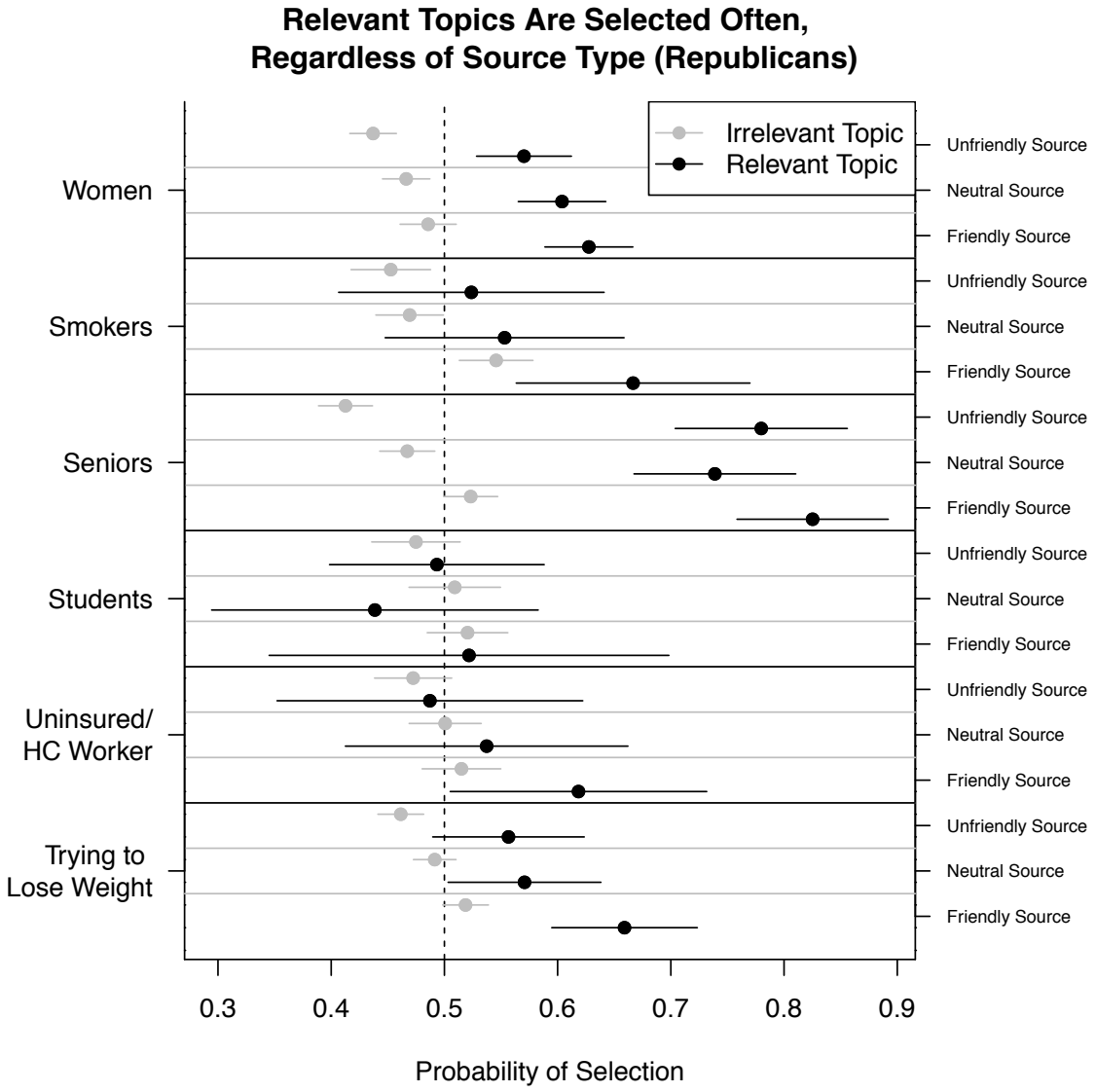


Figure A5: The figure displays the mean rates of selection of a given news item **among Republicans** by the item's source type (politically unfriendly, neutral, or politically friendly) and topic type (relevant or irrelevant) for each Affected Public. The estimates were generated by the models displayed in Table 4. Shapes denote point estimates and bars denote 95% confidence intervals.



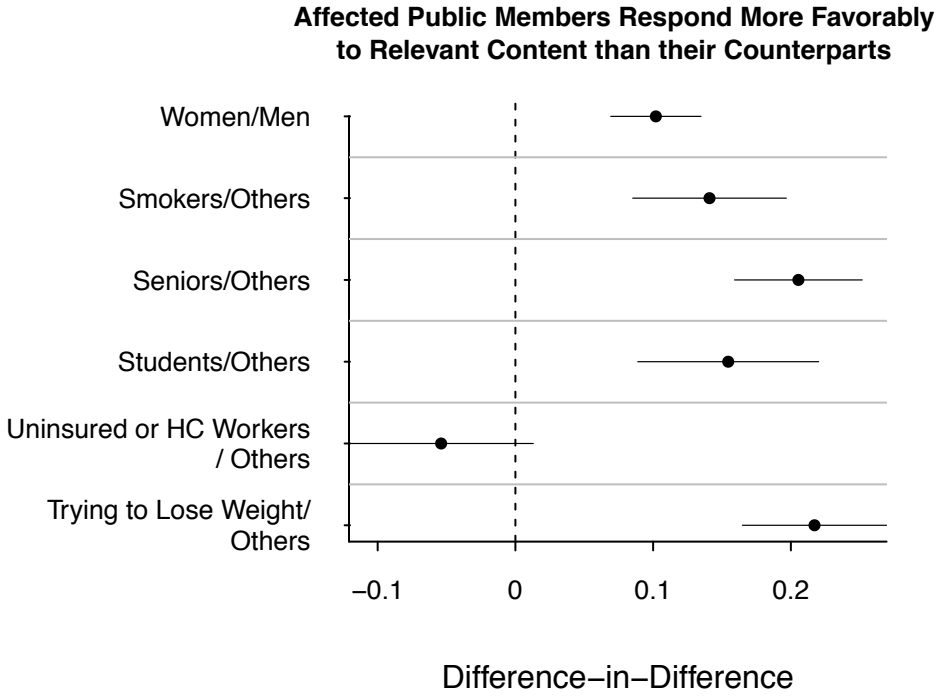
Treatment Precision and Causal Mechanism

In order to maximize external validity, the headline treatments were crafted to mimic real news headlines that have appeared online, making it a difficult task

to achieve completely precise treatments, (i.e. headlines that varied by topic but were the same in all other respects). In light of that concern, some might argue that the headlines chosen to serve as "relevance" treatments are simply more interesting than other topics regardless of whether the individual encountering them is a member of an Affected Public. This concern speaks not only to experimental precision but to the causal mechanism being posited here: topics drive up rates of news consumption within these subgroups because they are more relevant to group members than the other topics being offered. While causal mechanisms are notoriously difficult to verify, a key observable implication of this assertion is that relevant topics should increase the probability of selection significantly more among Affected Public members than among non-Affected Public members.

To test this, difference-in-differences were estimated comparing the effect of relevant content among Affected Public members to the effect among others in the sample, and the results are displayed in Figure A6. The figure shows that five out of six tests yield positive and statistically significant results and none shows a statistically significant negative result. All five significant estimates have point estimates of roughly 10 percentage points or above, indicating that for those who

Figure A6: The figure below shows the differences in the effects of relevant content between Affected Public members and non-Affected Public members in the pooled Democratic-and-Republican sample. By and large, relevant content has significantly larger positive effects on news selection for group members than for their counterparts.



do not belong to Affected Publics, the effect of seeing a relevant headline is, in general, much smaller than the effect among Affected Public members.

Differences in Treatment Effects

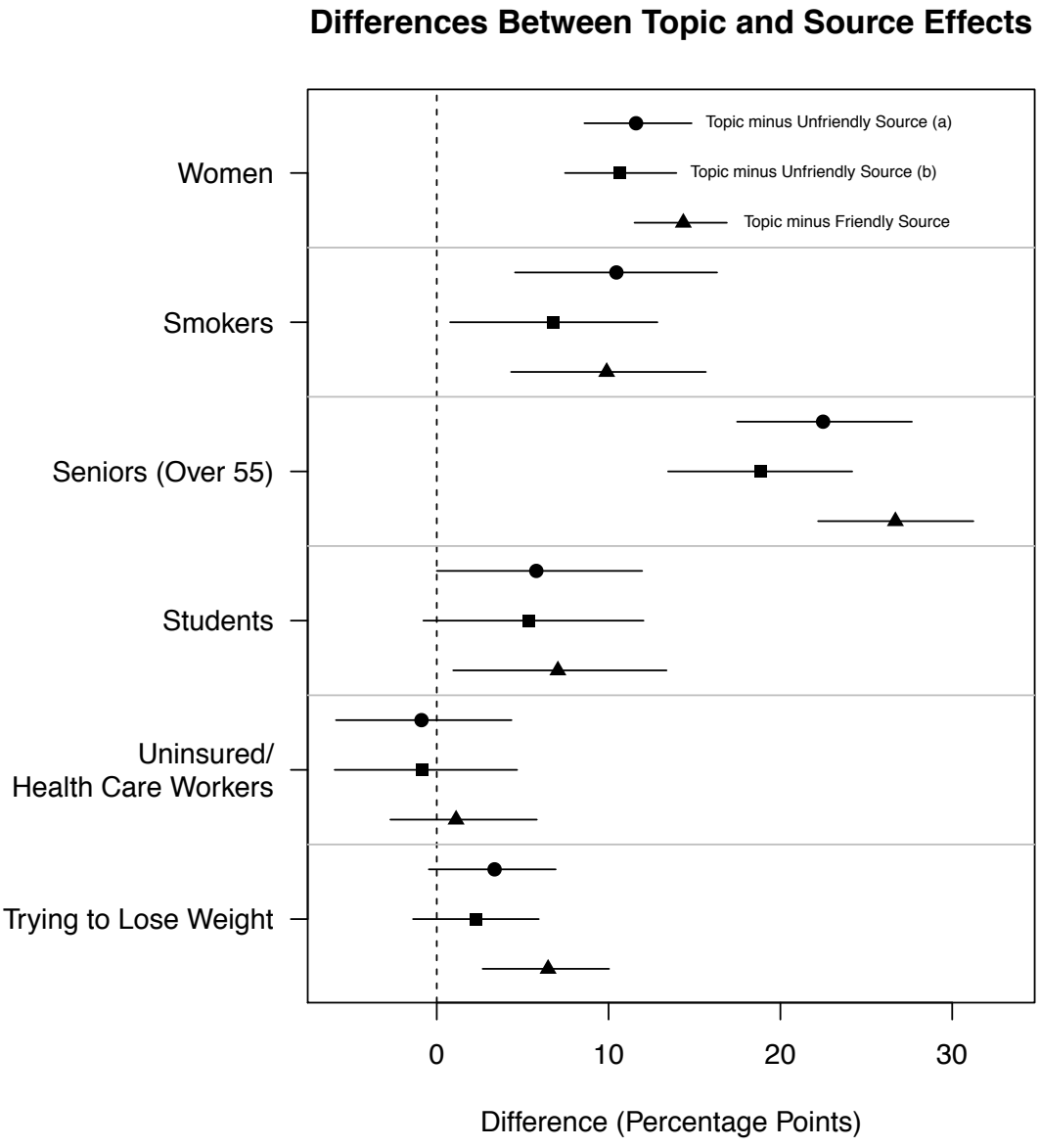
In order to determine whether the effects of topic relevance are statistically larger than the effects of source reputations, it is necessary to compute the standard error of the difference in the absolute values of these effects. In other words, the quantities of interest are $|\hat{\beta}_{Relevant}| - |\hat{\beta}_{UnfriendlySource}|$ and $|\hat{\beta}_{Relevant}| - |\hat{\beta}_{FriendlySource}|$. These standard errors can be obtained through a block bootstrapped procedure which simulates the sampling distribution of these quantities (Efron and Tibshirani 1994) while mimicking the data generation process of respondent-clustered standard errors. Specifically, complete blocks of respondents' observations were drawn with replacement and reassembled to construct a new bootstrapped data set, with the number of blocks drawn equal to the original number of respondents. This resampling procedure preserves the dependencies between respondent observations. An OLS model was then estimated on the resampled data and the absolute value of the estimated source effect, (either politically friendly or unfriendly), was

subtracted from the absolute value of the estimated topic relevance effect. These differences were stored, and the process was repeated 1,000 times for each subgroup of the data to form simulated sampling distributions for these statistics. The means of these distributions provide point estimates for the differences, and the 2.5th and 97.5th percentiles of these distributions give the 95% confidence intervals for the quantities of interest. The procedure also varied the reference category used to estimate source effects. In the (a) scenario, as labeled in Figure A7, unfriendly source effects were estimated relative to the neutral source condition, and in the (b) scenario unfriendly source effects were estimated relative to the friendly source condition.

Figure A7 displays the results of block-bootstrapped estimates of the difference in the absolute sizes of topic and source effects. As the figure shows, the magnitude of the topic relevance effect is nearly always estimated to be larger than the effects of both friendly and unfriendly sources. For every subgroup of the data, these differences are statistically discernible from zero at the 5% level, with the exception of the student, health care and weight loss subgroups (the differences among students just barely miss statistical significance), for whom topic relevance

and sources exerted effects that were statistically indistinguishable in size. This suggests that for many subgroups of partisans, the negative effects of unfriendly source cues may be effectively outweighed by a relevant topic.

Figure A7: The figure displays the difference in the absolute effects of topic relevance and the absolute effects of source reputation as computed in the block bootstrap analysis, along with 95% confidence intervals. The first estimate within each subgroup displays the difference in the effect of a relevant topic (relative to all other topics) and the effect of an unfriendly news source (relative to a neutral source). The second estimate within each category displays the difference in the effect of a relevant topic (relative to all other topics) and the effect of an unfriendly news source (relative to a friendly news source). The third estimate within each category displays the difference in the effect of a relevant topic (relative to all other topics) and the effect of a friendly news source (relative to a neutral source).



Ideological Partisans and News Avoiders

While the above analysis indicates that source reputation effects are relatively weak for most partisans, it may be the case that ideologically "sorted" partisans, (Fiorina and Levendusky 2006), that is, conservative Republicans and liberal Democrats, who are more committed in their devotion to extreme political positions, may be more influenced by the partisan reputation of a news source than the pooled sample. To test this, core models were re-estimated on conservative Republicans and liberal Democrats in turn, and the results appear in the tables below. Isolating these ideological partisans does not change the substantive conclusions reported above, although conservative Republicans and liberal Democrats do appear more (less) likely to choose a Fox News item.

Still others may wonder, given the forced-choice nature of this design, whether these results are driven by individuals who do not actually consume hard news (Arceneaux et al. 2012; Arceneaux and Johnson 2013; Prior 2007). As previously noted, to the extent that individuals prefer to avoid hard news, they had some ability to do so during the course of the experiment since the choice pool contained entertainment items. However, as a further check on the robustness of

these findings, key tests were re-run on the subset of respondents who indicated in a post-treatment survey question that they consumed online news at least one day in the past week. The question read "Many Americans now get their news online. How many days in the past week did you read news online?" which response options ranging from 0 to 7 days per week. These results appear in Table A10 and indicate that all estimated effects are very stable even when the news avoiders (about 11% of the sample) are omitted.

Table A8: OLS Models of News Selection, Liberal Democrats Only

	Women	Smokers	Seniors	Students	Uninsured/ HC Workers	Trying to Lose Weight
Intercept	0.486*	0.508*	0.535*	0.520*	0.507*	0.534*
	(0.016)	(0.022)	(0.020)	(0.023)	(0.023)	(0.015)
Relevant Topic	0.170	0.153*	0.242*	0.079	0.038	0.023
	(0.021)	(0.045)	(0.038)	(0.057)	(0.055)	(0.035)
Friendly Source	-0.011	0.002	-0.007	-0.048	-0.018	-0.018
	(0.022)	(0.030)	(0.028)	(0.034)	(0.032)	(0.021)
Unfriendly Source	-0.084*	-0.067	-0.176*	-0.033	-0.012	-0.090*
	(0.026)	(0.037)	(0.035)	(0.036)	(0.036)	(0.024)
N	3,240	1,608	1,824	1,488	1,488	3,576

Maximum of conventional and respondent-clustered standard errors in parentheses.

* indicates $p < 0.05$.

Table A9: OLS Models of News Selection, Conservative Republicans Only

	Women	Smokers	Seniors	Students	Uninsured/ HC Workers	Trying to Lose Weight
Intercept	0.449*	0.464*	0.449*	0.479*	0.491*	0.478*
	(0.014)	(0.022)	(0.014)	(0.030)	(0.022)	(0.013)
Relevant Topic	0.152*	0.118*	0.314*	0.002	0.101	0.095*
	(0.020)	(0.049)	(0.027)	(0.069)	(0.057)	(0.031)
Friendly Source	0.053*	0.109*	0.089*	0.069	0.037	0.067*
	(0.019)	(0.032)	(0.020)	(0.045)	(0.035)	(0.020)
Unfriendly Source	-0.024	-0.044	-0.040	-0.011	-0.039	-0.026
	(0.019)	(0.037)	(0.021)	(0.044)	(0.035)	(0.021)
N	4,440	1,560	4,008	912	1,584	4,320

Maximum of conventional and respondent-clustered standard errors in parentheses.

* indicates $p < 0.05$.

Table A10: OLS Models of News Selection, News Consumers Only

	Women	Smokers	Seniors	Students	Uninsured/ HC Workers	Trying to Lose Weight
Intercept	0.468*	0.482*	0.488*	0.499*	0.508*	0.503*
	(0.008)	(0.012)	(0.010)	(0.014)	(0.013)	(0.008)
Relevant Topic	0.160*	0.114*	0.293*	0.088*	0.010	0.065*
	(0.012)	(0.026)	(0.021)	(0.031)	(0.032)	(0.018)
Friendly Source	0.004	0.039*	0.032*	0.003	0.001	0.013
	(0.011)	(0.017)	(0.015)	(0.019)	(0.018)	(0.011)
Unfriendly Source	-0.038*	-0.021	-0.083*	-0.026	-0.028	-0.041*
	(0.012)	(0.019)	(0.016)	(0.020)	(0.019)	(0.012)
N	12,264	5,280	7,200	4,392	4,896	12,768

Maximum of conventional and respondent-clustered standard errors in parentheses.

* indicates $p < 0.05$.

Checking the "No Carryover" Assumption

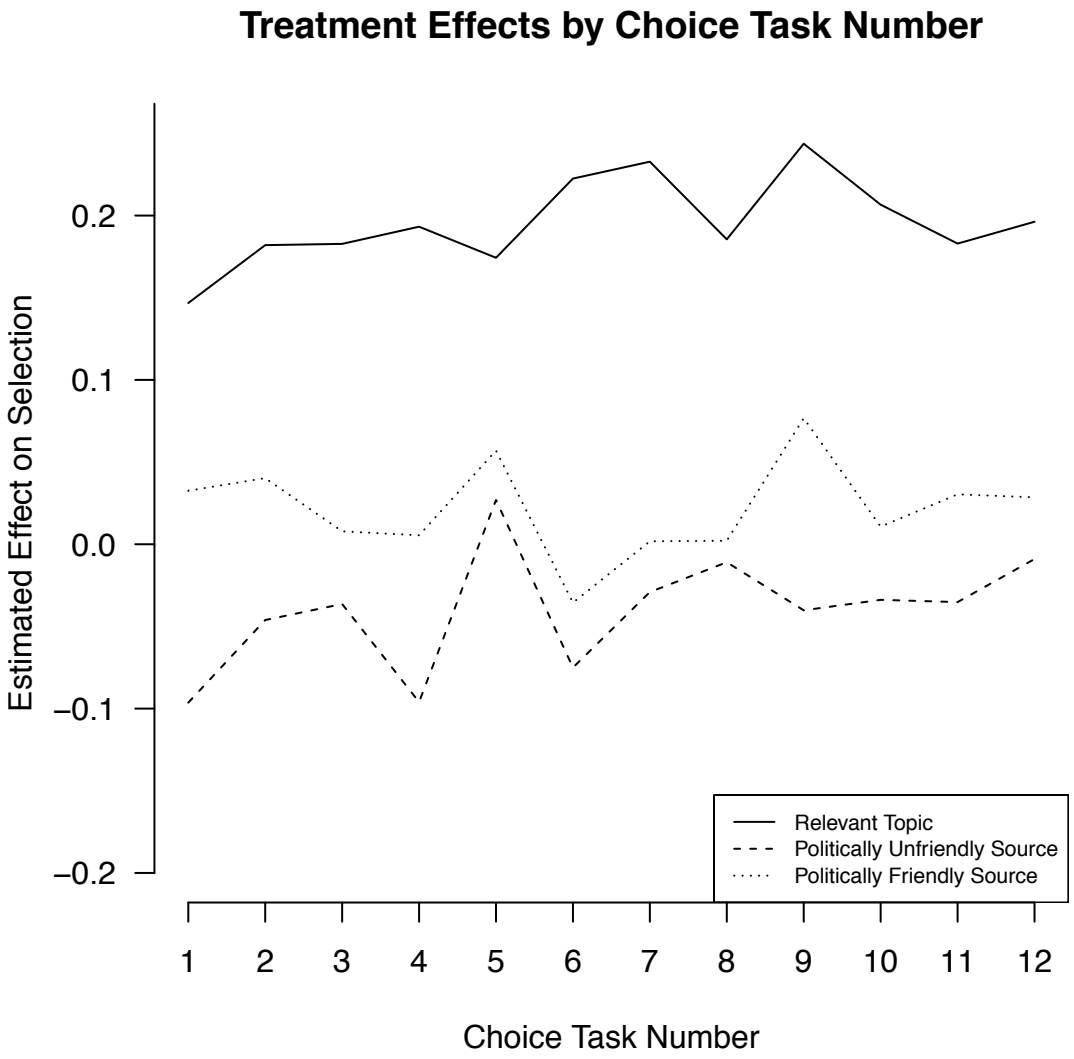
Pooling the data in this way requires no "carryover" effects across choice tasks, an assumption akin to SUTVA. This assumption, which states that a given choice task does not influence responses to other choice tasks, is difficult to verify, but a crude test of its violation would be if the treatment effects in the first choice task were statistically different than in the rest of the data. To test for this, a model was estimated in which selection was regressed on indicators for the topic relevance and source reputation treatments, interactions between the treatments and an indicator for an observation being in the first choice task, and controls for membership in each Affected Public.[8] The results of this model indicate that topic relevance exerts a weaker effect in the Choice 1 observations than in the rest of the data (15.21 percentage points compared to 0.19.9 percentage points; though the interaction term is statistically significant depending on whether standard errors are clustered by respondent), while the effect of unfriendly sources is larger in the first task

[8] Since membership in these groups partially determines assignment to the relevance treatment, these controls were added at the suggestion of a reviewer to avoid confounding when pooling across Affected Publics.

(in absolute terms; -9.6 percentage points compared to -3.5 percentage points in the rest of the data). Though the difference between source and topic effects is smaller in the first choice task, the point estimate for the topic relevance effect is still larger in absolute terms than that of assignment to a politically unfriendly source. The effect of politically friendly sources remains largely unchanged (there is no significant interaction with the Choice 1 indicator).

Figure A8 displays the estimated treatment effects across all 12 choice tasks. The figure shows that each treatment retains its relative ranking across choice tasks, and thus supports the broad conclusion of the paper, regardless of which choice task is examined. That is, the magnitude of the topic relevance effect appears to be at least as large as the magnitude of the unfriendly source effect, meaning the two could plausibly cancel one another out in a variety of news consumption settings.

Figure A8: The figure shows the effects of the topic relevance, politically unfriendly source and politically friendly source treatments among members of Affected Publics across the 12 conjoint choice tasks in the SSI sample.



Post-Treatment Bias Check

Questions related to Affected Public membership were measured post-treatment. The advantage of post-treatment measures is that they avoid priming participants on the topics under study prior to engaging in the choice exercises; the disadvantage is that they may themselves be influenced by the treatments, which would bias estimates of causal effects (King and Zeng 2006). To determine whether treatments were influencing measures of post-treatment variables, each post-treatment measure, as well as and indicator for being a Republican, (which was also measured post-treatment), was regressed on indicators for each treatment, (indicators for every level of source and topic), with standard errors clustered by respondent. If the treatments influenced responses to the group membership items, we should expect their coefficients in these regressions to be substantively large and statistically significant. But of the 98 regressions estimated in this validity check, (six dichotomous membership variables plus one party ID indicator, regressed on 14 dichotomous treatments, pairwise), the largest coefficient (in absolute value) was -2.85 percentage points (S.E.=1.1), which was generated by regressing an indicator for being a Republican on the NFL news treatment. Only three other smaller

coefficients were significant at the $p < 0.05$ level. However, there was no clear pattern in the sign of these statistically significant coefficients (one was negative and two were positive), and the fact that four out of 98 (4.08%) results were statistically significant is not worrisome since we would expect to find a few such results by chance alone. Taken as a whole, these results justify the decision to measure Affected Public membership post-treatment.

Alternate Coding Scheme Results

Table A11 shows the estimated coefficients and standard errors from models using alternate codings for Affected Public membership. The results show that the Social Security and Smoking Affected Publics are quite robust to alternate coding schemes, while the treatment effects within the Student Debt Affected Public vary depending on how membership is coded. Treatment effects within the Obamacare Affected Public remain small and statistically insignificant regardless of coding scheme.

Table A11: Estimated Treatment Effects Using Alternate Coding Schemes

Coding:	Over 55	Over 60	Over 65	Current Students	$\leq$25 w/ B.A.	$\leq$30 w/ B.A.	$\geq$1 Pack Per Week	$\geq$1 Cig. Per Week	$\geq$2-4 Packs Per Week	H.C. Worker/ Uninsured	Uninsured	H.C. Worker
Intercept	0.484*	0.488*	0.479*	0.499*	0.468*	0.501*	0.483*	0.488*	0.487*	0.512*	0.502*	0.523*
	(0.009)	(0.011)	(0.013)	(0.013)	(0.030)	(0.018)	(0.012)	(0.011)	(0.014)	(0.012)	(0.016)	(0.018)
Relevant Topic	0.303*	0.333*	0.349*	0.087*	0.020	0.028	0.136*	0.139*	0.153*	0.007	0.035	-0.03
	(0.018)	(0.020)	(0.025)	(0.030)	(0.074)	(0.045)	(0.024)	(0.022)	(0.029)	(0.031)	(0.044)	(0.04)
Friendly Source	0.036*	0.023	0.039*	0.005	0.069	0.010	0.038*	0.035*	0.048*	0	0.016	-0.019
	(0.013)	(0.015)	(0.018)	(0.019)	(0.042)	(0.025)	(0.016)	(0.015)	(0.019)	(0.017)	(0.023)	(0.026)
Unfriendly Source	-0.078*	-0.089*	-0.081*	-0.027	0.019	-0.020	-0.031	-0.043*	-0.059*	-0.035	-0.030	-0.042
	(0.014)	(0.017)	(0.020)	(0.020)	(0.049)	(0.03)	(0.018)	(0.017)	(0.022)	(0.019)	(0.024)	(0.029)
N	9,072	6,576	4,224	4,560	864	2,352	5,904	6,840	4,248	5,232	3,072	2,352

Maximum of conventional and respondent-clustered standard errors in parentheses.

* indicates $p < 0.05$.

M-Turk Results

A final concern is whether the aforementioned results are robust to repeated sampling. Fortunately, online survey experiments lend themselves to replication. Prior to conducting the SSI experiment, a nearly identical experiment was conducted with a convenience sample of 1,444 partisans on Amazon's Mechanical Turk. There were some small design tweaks made between iterations of this study, (e.g., the number of choice tasks was increased from 10 to 12, and the football headline was updated before the SSI study to reflect the fact that the NFL season had ended), but on the whole, the experiments were identical. Tables A12, A13 and Figure A9 show that the M-turk sample produced results highly similar to the SSI sample.

Table A12: Treatment Effects Estimated via OLS, M-Turk Sample

	Women	Smokers	Seniors	Students	Uninsured / HC Workers	Trying to Lose Weight
Intercept	0.481*	0.514*	0.495*	0.529*	0.526*	0.529*
	(0.008)	(0.013)	(0.017)	(0.010)	(0.010)	(0.007)
Relevant Topic	0.188*	0.128*	0.311*	0.164*	0.023	0.029
	(0.011)	(0.028)	(0.035)	(0.022)	(0.021)	(0.017)
Friendly Source	-0.005	-0.016	0.019	-0.025	0.006	-0.008
	(0.011)	(0.019)	(0.023)	(0.016)	(0.014)	(0.011)
Unfriendly Source	-0.091*	-0.059*	-0.089*	-0.110*	-0.090*	-0.088*
	(0.011)	(0.019)	(0.027)	(0.015)	(0.015)	(0.011)
N	13,560	4,980	2,620	7,160	8,680	14,980

Maximum of conventional and respondent-clustered standard errors in parentheses.

* indicates $p < 0.05$.

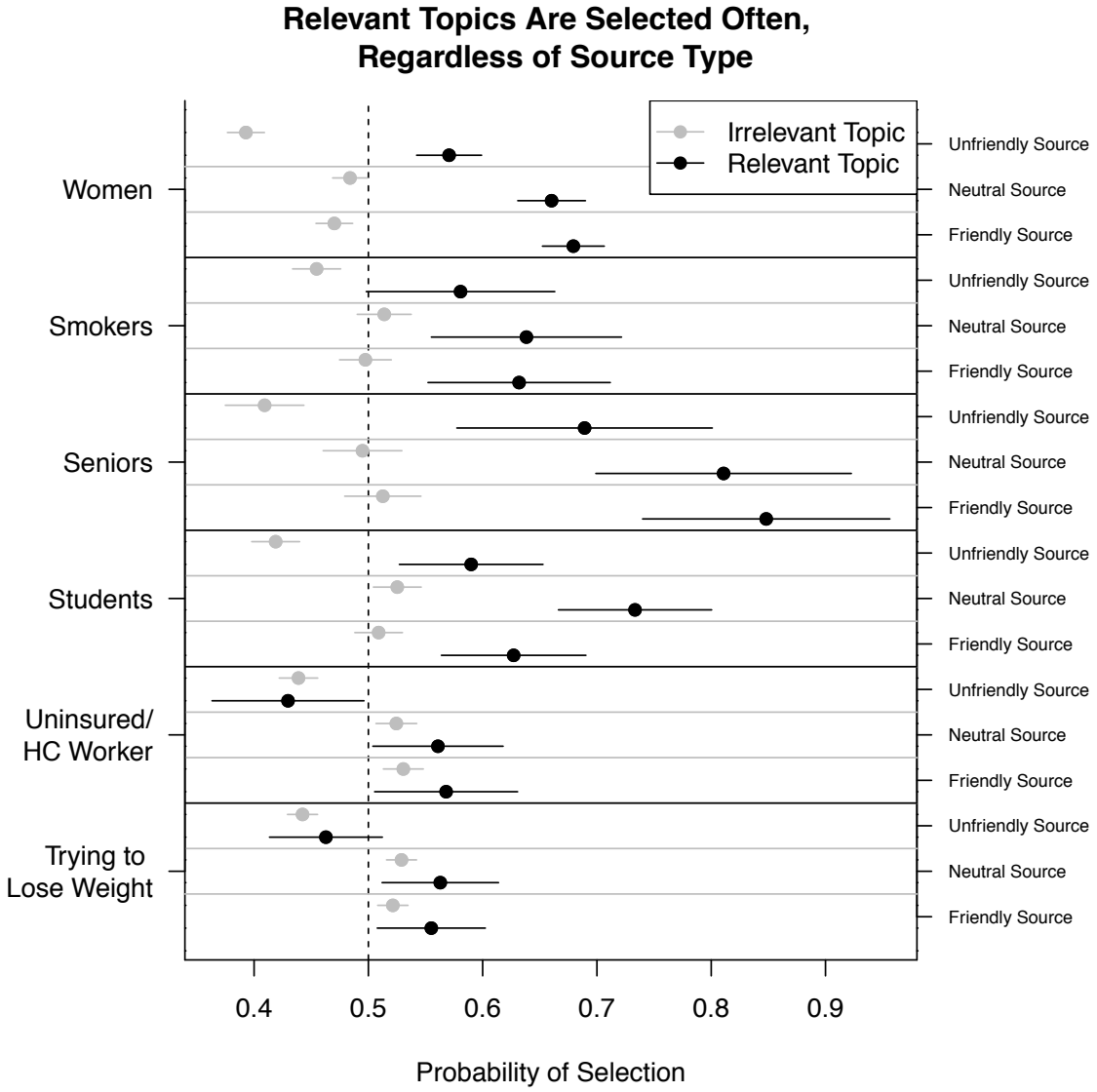
Table A13: Interactive OLS Models of News Selection, M-Turk Sample

	Women	Smokers	Seniors	Students	Uninsured / HC Worker	Trying to Lose Weight
Intercept	0.484*	0.514*	0.495*	0.525*	0.524*	0.529*
	(0.009)	(0.013)	(0.018)	(0.011)	(0.010)	(0.007)
Relevant Topic	0.176*	0.124*	0.316*	0.208*	0.036	0.034
	(0.018)	(0.046)	(0.060)	(0.036)	(0.031)	(0.028)
Friendly Source	-0.014	-0.016	0.018	-0.016	0.006	-0.008
	(0.012)	(0.020)	(0.024)	(0.016)	(0.015)	(0.011)
Unfriendly Source	-0.091*	-0.059*	-0.086*	-0.106*	-0.086*	-0.087*
	(0.013)	(0.019)	(0.029)	(0.016)	(0.015)	(0.011)
Relevant * Friendly	0.033	0.010	0.020	-0.09	0.001	0.000
	(0.023)	(0.060)	(0.083)	(0.049)	(0.045)	(0.035)
Relevant * Unfriendly	0.001	0.001	-0.036	-0.037	-0.046	-0.013
	(0.024)	(0.062)	(0.084)	(0.049)	(0.044)	(0.037)
N	13,560	4,980	2,620	7,160	8,680	14,980

Maximum of conventional and respondent-clustered standard errors in parentheses.

* indicates $p < 0.05$.

Figure A9: The figure displays the predicted probabilities of selecting a given news item by the item's source type (politically unfriendly, neutral, or politically friendly) and topic type (relevant or irrelevant) for Affected Publics **in the M-Turk sample**. Shapes denote point estimates and bars denote 95% confidence intervals. Relevant content nearly always leads to a greater than 50% chance of consumption, regardless of the type of source offering the content.



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