

Partisan Media Effects Beyond One-shot Experimental Designs

Online Appendices

APPENDIX A. News Portal Details

I. The Collection and Publication of Stories

Timely stories were drawn from Google News every 30 minutes by a computer programming script, using the language PHP, that queried RSS feeds of online content at regular intervals. To construct the baseline news feed, all stories that a human coder had identified as unbroken links and as actual stories (not ads), were eligible for the news portal. The researchers took turns monitoring coding decisions. In the event a researcher disagreed with a coding decision, the story would be suspended until a second researcher verified the changes. At this time the story would be published in the feed. In this way, the order of stories resembles Google News itself, which uses a computer algorithm to publish timely news that garners editorial interest (Sommerland, 2018). Leveraging this order of publication allows us to increase the realism of the portal.

Keyword-based RSS queries were also conducted each hour to identify stories that were candidates for inclusion based on experimental conditions. For this study, to build the partisan news conditions stories were added (not filtered) from partisan news feeds gathered from Google News using RSS with a source query set to either Fox News or MSNBC. The Fox News feed had 707 stories over the course of the week, but the MSNBC only had 132 stories. The relative infrequency with which MSNBC publishes textual news stories was a surprise, but in retrospect was not idiosyncratic to that particular week of news. Future research should perhaps include other liberal news outlets.

After keyword-based RSS queries were conducted researchers intervened to assign the results of queries to portal users and in that process, the researchers verified whether the story fit the intended manipulation. All stories were given a random publication delay, before they appeared to allow the authors time to log in once per hour to check stories before publication. To ensure there was no overlap between the MTurk workers that checked the news stories and the workers participating in the panel, examination of IP addresses and browser cookies were examined.

As noted in the text, there are other experimental factors that are not discussed in this study. The complete design was a fully factorial 2 (state factor: no state news added, state news added) X 3 (partisan news factor: no partisan news added, Fox News added, MSNBC added) X 3 (problem news factor: baseline, reduced exposure to crime, reduced exposure to all problem stories). These factors were all delivered continually within the news portal by filtering out or adding in the relevant types of stories. Thus, the design for all analyses here is the 2 X 3 X 3 factorial delivered in the news portal.

Participants in the no state news condition received only stories that appeared in the national feed, which was a combination of the stories Google News categorizes as either “U.S.” or “Top Stories.” This national feed at times included local stories from various local news outlets around the country that had received enough attention to be nationally newsworthy, according to Google News algorithms. In addition to these stories, participants in the state news condition also saw stories specific to their state. These were gathered from Google News using RSS with a location query (equivalent to results of a Google News search such as ‘location: Michigan’). We limit participants to the 10 most populous states in the United States, to ensure sufficient recruitment of participants for the state news added condition (California, Florida,

Georgia, Illinois, Michigan, New York, North Carolina, Ohio, Pennsylvania, or Texas). Across the 10 states used in the study, each state feed produced an average of 695 stories ($SD=92$) over the week, about 23% of the total of 2983 stories in the national feed. Participants in the problem news factor were exposed to feeds that had been filtered for crime stories, or filtered for problem stories, or not filtered at all (baseline). Note that filtering occurred after the other two experimental treatments had added stories to their feed, so the filter applies to all sources.

II. Examples of Partisan and Non-partisan Sources

As detailed in the main text, the partisan news conditions received a baseline news feed plus either Fox news or MSNBC, both of which we categorize as partisan. Specifically, our news portal included stories from 1,272 news outlets, from which the count of stories we collected ranged from 1 to 667. While part of the benefit of our design is that the baseline news feed every participant sees is drawn directly from Google News and thus, resembles a diverse and timely portal news environment much like people would encounter in the real world, it is worthwhile to examine the news outlets that comprise the baseline feed to ensure the treatment news feeds were more partisan, in relation. To this end, we compile a list of the most frequently occurring news outlets, or news outlets that appeared at least 100 times during the course of the experiment ($n=27$). Table A1 provides the name of outlet ranked by count. Note that each outlet appeared in each feed, with the exception of Fox News and MSNBC which appeared only in the partisan news feeds.

While this list provides a good face validity check on the diversity and non-partisan nature of our baseline news feed, it may also be instructive to take this check a step further by assessing the partisan nature of these outlet against another metric, or as a criterion validity

check. To that end we refer to Media Bias Chart (2018),¹ a source bias ranking system that relies on content analyses using media quality rubrics (developed in tandem with media experts) to develop partisan bias scores. The scores range from -42 (most extreme/left) to 42 (most extreme/right) and scores between -6 to 6 are considered neutral (indicator of minimal or balanced bias). Note that Fox Business was included in the “Fox News” partisan news stream. This ranking system was last updated in August 2018. Drawing from this reference, we assign media bias scores for all outlets included in the Media Bias Chart. Each outlet can be classified as neutral with the exception of Washington Post which falls just slightly outside of the neutral range with a score of 10. Taken together, we believe it is theoretically and methodologically appropriate to operationalize our partisan and non-partisan feeds in this way.

¹ Find more details on the Media Bias chart at <https://www.adfontesmedia.com/>.

Table A1. Top 27 News Outlets included in News Portal.

Source	Story Count	Bias Score from <i>Media Bias Chart</i> (2008)	
Fox News	667	27	
Chicago Tribune	373		NA
New York Times	261	-5	
Los Angeles Times	244		NA
Washington Post	225	-10	
ABC News	204	0	
MLive.com	202		NA
CBS Local	191	4	
cleveland.com	183		NA
Reuters	180	0	
CNN	166	-6	
Detroit Free Press	163		NA
Philly.com	154		NA
Miami Herald	147		NA
USA TODAY	147	0	
New York Daily News	146		NA
MSNBC	132	-19	
Greensboro News & Record	125		NA
News & Observer	114		NA
San Jose Mercury News	114		NA
Atlanta Journal Constitution	107		NA
Fox Business	106	27	
Bloomberg	104	4	
Wall Street Journal	102	11	
Dallas Morning News	102		NA
ESPN	101		NA
CBS News	101	4	

III. Manipulation Check**Table A2. ANOVA comparisons of partisan news headlines encountered and clicked, across three conditions.**

Condition	Headlines Encountered		Headlines Clicked	
	Mean	S.D.	Mean	S.D.
Control	0 _A	0	0 _A	0
FOX News added	3.73 _B	9.21	0.17 _B	0.56
MSNBC news added	0.40 _A	1.20	0.01 _A	0.11

Note: Using Holm's sequential Bonferroni post hoc comparison; means with no uppercase subscript in common differ at $p < .001$.

IV. Full Models

Table A3. Perceptions of Fox News and MSNBC Fairness, No Partisan News Added Condition. Test of Hypothesis 1, “Same as it ever was.” Corresponds to Figure 2.

	(1) Fox News fairness rating (post-test)	(2) MSNBC fairness rating (post-test)
Democrat	-0.136 (0.156)	
Fox News fairness (pre-test)	0.927*** (0.038)	
Republican		0.008 (0.185)
MSNBC fairness (pre-test)		0.691*** (0.043)
Age (logged)	-0.307* (0.175)	-0.108 (0.210)
Female	0.019 (0.103)	0.161 (0.126)
White	-0.162 (0.118)	0.013 (0.144)
College Degree	-0.073 (0.102)	-0.028 (0.125)
Political ideology (logged)	-0.043 (0.125)	-0.339** (0.144)
Political interest (logged)	-0.034 (0.141)	-0.189 (0.170)
Portal usage (logged)	-0.011 (0.047)	-0.023 (0.057)
Problems: Exp. conditions	-0.025 (0.062)	-0.024 (0.076)
State news added: Exp. conditions	-0.011 (0.100)	0.005 (0.122)
Constant	1.795** (0.710)	2.279*** (0.833)
Observations	306	308
R-squared	0.776	0.519

Note. Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table A4. Perceptions of Fox News and MSNBC Fairness, Random Effects Estimator. Tests of Hypotheses 2 and 3, “Learning from the enemy” and “Familiarity breeds contempt.” Corresponds to Figure 3.

	DV: Fairness rating, Fox News (1)	DV: Fairness rating, MSNBC (2)
Democrat	-1.865*** (0.114)	0.701*** (0.111)
Experimental conditions (No partisan news added omitted)		
Fox News Added	-0.523*** (0.192)	0.027 (0.187)
MSNBC Added	-0.344* (0.188)	-0.081 (0.183)
Interactions (Democrat X No partisan news added omitted)		
Democrat x Fox News Added	0.546*** (0.167)	0.027 (0.163)
Democrat x MSNBC Added	0.457*** (0.163)	0.116 (0.159)
More Problems Except Crime	0.101 (0.133)	0.033 (0.130)
More Problems Including Crime	-0.007 (0.134)	0.267** (0.130)
More Problems Except Crime X Fox News Added	0.018 (0.192)	-0.101 (0.186)
More Problems Except Crime X MSNBC Added	-0.284 (0.187)	-0.019 (0.182)
More Problems Including Crime X Fox News Added	0.100 (0.190)	-0.252 (0.185)
More Problems Including Crime X MSNBC Added	0.000 (0.188)	-0.175 (0.182)
State News Added	-0.096 (0.109)	0.116 (0.106)
State News Added X Fox News Added	-0.008 (0.156)	-0.083 (0.151)
State News Added X MSNBC Added	0.043 (0.153)	-0.171 (0.149)
Portal Usage (logged)	-0.103*** (0.019)	-0.040** (0.019)
Constant	4.676*** (0.179)	3.210*** (0.173)
Observations	2,242	2,246
Number of waves	2	2

Notes. Robust standard errors in parentheses. ‘Democrat’ is a dummy variable; and the omitted reference condition for ‘Fox News Added’ and ‘MSNBC News Added’ is ‘No Partisan News Added’ (control). Though participants’ pre-existing view about partisan news fairness is not included in this table, it is controlled for through random-effect models (the ‘xtreg’ feature in Stata). *** $p < 0.01$, ** $p < 0.05$ and * $p < 0.10$ (all two-sided).

Table A5. Perceptions of Fox News and MSNBC Fairness, Random Effects Estimator. Includes individual-level covariates.

	DV: Fairness rating, Fox News (1)	DV: Fairness rating, MSNBC (2)
Democrat	-1.165*** (0.131)	0.378*** (0.133)
Experimental conditions (No partisan news added omitted)		
Fox News Added	-0.439** (0.188)	0.044 (0.191)
MSNBC Added	-0.389** (0.184)	0.037 (0.186)
Interactions (Democrat X No partisan news added omitted)		
Democrat x Fox News Added	0.553*** (0.165)	0.172 (0.167)
Democrat x MSNBC Added	0.500*** (0.161)	0.118 (0.164)
More Problems Except Crime	0.187 (0.132)	0.104 (0.134)
More Problems Including Crime	0.121 (0.132)	0.308** (0.134)
More Problems Except Crime X Fox News Added	-0.080 (0.189)	-0.161 (0.192)
More Problems Except Crime X MSNBC Added	-0.329* (0.184)	-0.077 (0.187)
More Problems Including Crime X Fox News Added	-0.025 (0.188)	-0.294 (0.191)
More Problems Including Crime X MSNBC Added	-0.087 (0.184)	-0.228 (0.187)
State News Added	-0.139 (0.108)	0.149 (0.109)
State News Added X Fox News Added	-0.069 (0.153)	-0.190 (0.156)
State News Added X MSNBC Added	0.171 (0.151)	-0.227 (0.153)
<i>Individual covariates</i>		
Age (logged)	0.543*** (0.106)	0.306*** (0.108)
Female	0.084 (0.063)	0.330*** (0.064)
White	-0.224*** (0.074)	-0.126* (0.075)

College Degree	-0.096 (0.063)	-0.097 (0.064)
Political ideology (logged)	0.900*** (0.073)	-0.289*** (0.074)
Political interest (logged)	-0.096 (0.088)	-0.213** (0.089)
Portal usage (logged)	-0.091*** (0.020)	-0.040** (0.020)
Constant	1.525*** (0.420)	2.887*** (0.425)
Observations	2,075	2,079
Number of waves	2	2

Notes. Robust standard errors in parentheses. ‘Democrat’ is a dummy variable; and the omitted reference condition for ‘Fox News Added’ and ‘MSNBC News Added’ is ‘No Partisan News Added’ (control). Age, ideology, political interest, and portal usage were logged to curve for extreme skewness. Though participants’ pre-existing view about partisan news fairness is not included in this table, it is controlled for through random-effect models (the ‘xtreg’ feature in Stata). *** $p < 0.01$, ** $p < 0.05$ and * $p < 0.10$ (all two-sided).

V. *Alternate dependent variable: index of fairness, unbiasedness, and accuracy.*

Table A6. Perceptions of Fox News and MSNBC (index of opinions), No Partisan News Added Condition. Test of Hypothesis 1, “Same as it ever was.”

	(1) Fox News index rating (post-test)	(2) MSNBC index rating (post-test)
Democrat	-0.464 (0.382)	
Fox News fairness (pre-test)	0.935*** (0.034)	
Republican		-0.324 (0.478)
MSNBC fairness (pre-test)		0.727*** (0.041)
Age (logged)	-0.695 (0.429)	0.376 (0.543)
Female	0.314 (0.251)	0.542* (0.323)
White	-0.620** (0.287)	0.268 (0.372)
College Degree	-0.298 (0.251)	-0.125 (0.320)
Political ideology (logged)	-0.040 (0.302)	-0.474 (0.373)
Political interest (logged)	0.336 (0.346)	-0.412 (0.440)
Portal usage (logged)	0.056 (0.115)	-0.084 (0.146)
Problems: Exp. conditions	0.004 (0.150)	-0.107 (0.194)
State news added: Exp. conditions	0.014 (0.245)	0.041 (0.313)
Constant	3.168* (1.746)	3.152 (2.153)
Observations	301	303
R-squared	0.819	0.578

Note. Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table A7. Perceptions of Fox News and MSNBC (index of opinions), Random Effects Estimator.

	DV: Fairness rating, Fox News (1)	DV: Fairness rating, MSNBC (2)
Democrat	-5.025*** (0.310)	2.090*** (0.312)
Experimental conditions (No partisan news added omitted)		
Fox News Added	-1.180** (0.519)	0.276 (0.525)
MSNBC Added	-0.855* (0.506)	0.032 (0.510)
Interactions (Democrat X No partisan news added omitted)		
Democrat x Fox News Added	1.273*** (0.451)	-0.250 (0.456)
Democrat x MSNBC Added	1.336*** (0.442)	0.265 (0.445)
More Problems Except Crime	0.339 (0.361)	0.175 (0.364)
More Problems Including Crime	-0.206 (0.361)	0.400 (0.365)
More Problems Except Crime X Fox News Added	0.079 (0.518)	-0.310 (0.523)
More Problems Except Crime X MSNBC Added	-0.798 (0.506)	-0.281 (0.510)
More Problems Including Crime X Fox News Added	0.476 (0.514)	-0.250 (0.521)
More Problems Including Crime X MSNBC Added	0.191 (0.506)	-0.203 (0.511)
State News Added	-0.235 (0.295)	0.124 (0.297)
State News Added X Fox News Added	-0.038 (0.420)	0.097 (0.424)
State News Added X MSNBC Added	-0.090 (0.413)	-0.244 (0.416)
Portal Usage (logged)	-0.273*** (0.052)	-0.100* (0.052)
Constant	13.046*** (0.482)	9.158*** (0.486)
Observations	2,219	2,229
Number of waves	2	2

Notes. Robust standard errors in parentheses. ‘Democrat’ is a dummy variable; and the omitted reference condition for ‘Fox News Added’ and ‘MSNBC News Added’ is ‘No Partisan News

Added' (control). Though participants' pre-existing view about partisan news fairness is not included in this table, it is controlled for through random-effect models (the 'xtreg' feature in Stata). *** $p < 0.01$, ** $p < 0.05$ and * $p < 0.10$ (all two-sided).

Table A8. Perceptions of Fox News and MSNBC (index of opinions), Random Effects Estimator. Includes individual-level control variables.

	DV: Fairness rating, Fox News (1)	DV: Fairness rating, MSNBC (2)
Democrat	-3.194*** (0.352)	1.251*** (0.371)
Experimental conditions (No partisan news added omitted)		
Fox News Added	-0.860* (0.506)	0.259 (0.534)
MSNBC Added	-0.981** (0.493)	0.305 (0.520)
Interactions (Democrat X No partisan news added omitted)		
Democrat x Fox News Added	1.336*** (0.443)	0.195 (0.468)
Democrat x MSNBC Added	1.533*** (0.434)	0.293 (0.457)
More Problems Except Crime	0.697** (0.355)	0.413 (0.375)
More Problems Including Crime	0.221 (0.355)	0.528 (0.375)
More Problems Except Crime X Fox News Added	-0.351 (0.509)	-0.503 (0.537)
More Problems Except Crime X MSNBC Added	-1.086** (0.495)	-0.442 (0.522)
More Problems Including Crime X Fox News Added	-0.023 (0.505)	-0.384 (0.535)
More Problems Including Crime X MSNBC Added	-0.153 (0.495)	-0.328 (0.522)
State News Added	-0.293 (0.290)	0.260 (0.306)
State News Added X Fox News Added	-0.307 (0.413)	-0.231 (0.436)
State News Added X MSNBC Added	0.237 (0.405)	-0.414 (0.427)
<i>Individual covariates</i>		
Age (logged)	1.417*** (0.286)	1.155*** (0.301)
Female	0.282* (0.170)	1.024*** (0.179)
White	-0.617*** (0.199)	-0.356* (0.210)

College Degree	-0.260 (0.170)	-0.287 (0.180)
Political ideology (logged)	2.440*** (0.196)	-0.711*** (0.207)
Political interest (logged)	-0.248 (0.236)	-0.693*** (0.248)
Portal usage (logged)	-0.229*** (0.053)	-0.135** (0.056)
Constant	4.574*** (1.131)	7.391*** (1.191)
Observations	2,055	2,066
Number of waves	2	2

Notes. Robust standard errors in parentheses. ‘Democrat’ is a dummy variable; and the omitted reference condition for ‘Fox News Added’ and ‘MSNBC News Added’ is ‘No Partisan News Added’ (control). Age, ideology, political interest, and portal usage were logged to curve for extreme skewness. Though participants’ pre-existing view about partisan news fairness is not included in this table, it is controlled for through random-effect models (the ‘xtreg’ feature in Stata). *** $p < 0.01$, ** $p < 0.05$ and * $p < 0.10$ (all two-sided).

Figure A1. Coefficient plots for partisan ratings of news organization ratings (index of opinions), respondents in “no partisan news added” condition. Full results in Table A6.

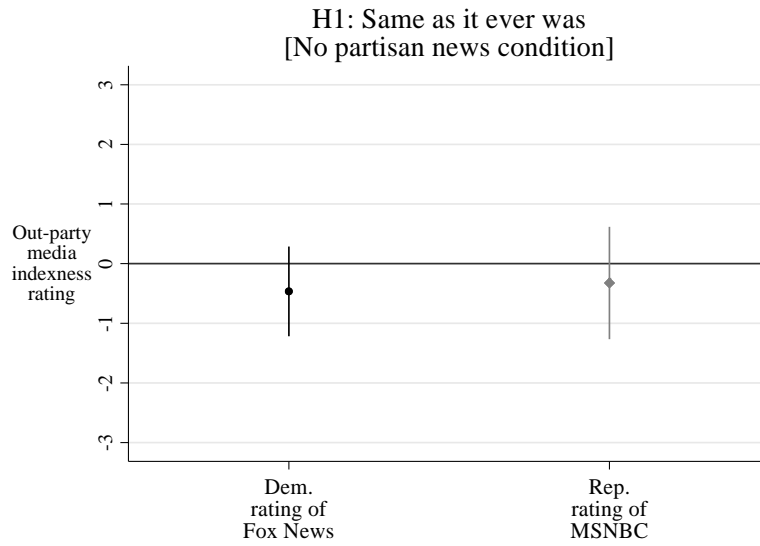
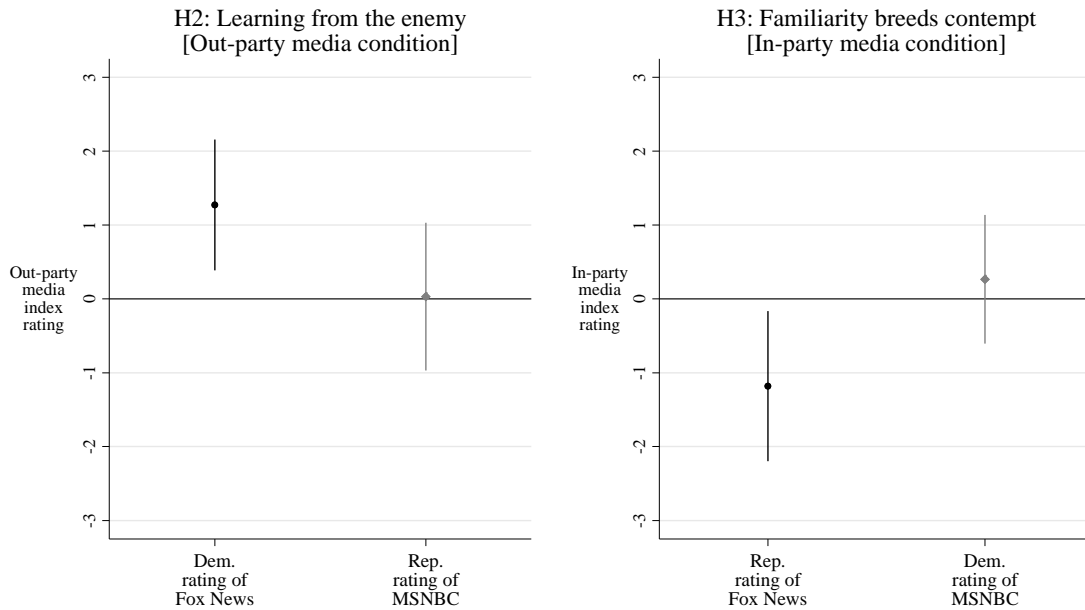


Figure A2. Coefficient plots for partisan ratings of news organization (index of opinions), across experimental conditions. Point estimates of coefficients with 95% confidence intervals. Full results in Table A7.



APPENDIX B: Threats to Internal Validity Analyses

One major methodological concern for longitudinal studies is attrition, which may lead to biased estimates (e.g., Barry, 2005; Gustavson, von Soest, Karevold, & Røysamb, 2012). As found in this panel study, 19.08% of Wave-1 respondents dropped out of Wave-2; when comparing participants in Wave 1 and Wave 3, the drop-out rate was 29.91%. In order to make sure the attrition rate was not due to forced exposure to experimental conditions, as well as to ensure that participants who returned for Wave 2 and Wave 3 did not differ from those who dropped out, we tested for differential attrition by two primary factors in this study: experimental conditions and participants' partisanship.

Attrition is not a threat to internal validity. As displayed in Table B1, average attrition was not statistically distinguishable across three partisan news conditions for Wave 3, though some slight difference was found for Wave 2 – participants exposed to MSNBC news were more likely to drop out than those in “no partisan news added” condition. However, when looking at the interaction effects between respondents' partisanship and the manipulated partisan news treatment, all estimates were insignificant (see Table B2). This suggests that Wave 2 and Wave 3 attrition cannot be attributed to forced exposure to news from intra-party outlets or opposing media. The same patterns hold when also controlling for other demographic variables including age, gender, education level, and pre-test political interest (see Table B3). Altogether, these results suggest that attrition is not a threat to internal validity and generalizability of this study.

Table B1. Attrition by Experimental Treatment.

	Wave 1-2 attrition	Wave 1-3 attrition
Fox News Added	-0.090 (0.150)	-0.032 (0.138)
MSNBC News Added	0.305* (0.158)	0.093 (0.139)
More Problems Except Crime	0.198 (0.153)	0.272** (0.138)
More Problems Including Crime	0.237 (0.153)	0.344** (0.139)
State News Added	0.039 (0.126)	0.100 (0.113)
Constant	0.883*** (0.150)	0.330** (0.137)
Observations	1,362	1,362

Note: "State News Added" is a dummy variable. The omitted reference for "Fox/MSNBC News Added" conditions is control condition that has "No Partisan News Added." Baseline for "More Problems except for/including crime" conditions is "no problem filtering." * $p < .05$, ** $p < .01$, and *** $p < .001$ (two-sided).

Table B2. Attrition by Experimental Treatment and Partisanship.

	Wave 1-2 attrition	Wave 1-3 attrition
Democrat	0.059 (0.224)	-0.017 (0.206)
Fox News Added	0.269 (0.283)	0.368 (0.262)
MSNBC Added	0.500* (0.286)	0.290 (0.252)
Democrat X Fox News Added	-0.500 (0.336)	-0.567* (0.311)
Democrat X MSNBC Added	-0.286 (0.344)	-0.293 (0.303)
More Problems Except Crime	0.203 (0.154)	0.262* (0.139)
More Problems Including Crime	0.245 (0.155)	0.340** (0.140)
State News Added	0.064 (0.127)	0.126 (0.115)
Constant	0.837*** (0.207)	0.347* (0.191)
Observations	1,346	1,346

Note: "State News Added" is a dummy variable. The omitted reference for "Fox/MSNBC News Added" conditions is control condition that has "No Partisan News Added." Baseline for "More Problems except for/including crime" conditions is "no problem filtering." * $p < .05$, ** $p < .01$, and *** $p < .001$ (two-sided).

Table B3. Attrition by Experimental Treatment, Partisanship and Demographic Characteristics.

	Wave 1-2 attrition	Wave 1-3 attrition
Democrat	0.029 (0.277)	0.056 (0.254)
Fox News Added	0.215 (0.305)	0.419 (0.284)
MSNBC News Added	0.448 (0.301)	0.289 (0.267)
Democrat X Fox News	-0.486 (0.361)	-0.648* (0.336)
Democrat X MSNBC News	-0.116 (0.366)	-0.191 (0.323)
More Problems Except Crime	0.218 (0.165)	0.285* (0.150)
More Problems Including Crime	0.361** (0.167)	0.424*** (0.151)
State News Added	0.017 (0.136)	0.111 (0.123)
<i>Control Variables</i>		
Age (logged)	1.143*** (0.240)	1.593*** (0.219)
Female	-0.005 (0.139)	-0.154 (0.125)
White	0.067 (0.156)	-0.085 (0.143)
College Degree	0.300** (0.139)	0.077 (0.125)
Political Ideology (logged)	-0.179 (0.160)	-0.143 (0.143)
Political Interest (logged)	0.520*** (0.171)	0.286* (0.161)
Constant	-3.932*** (0.918)	-5.474*** (0.842)
Observations	1,239	1,239

Note: "State News Added" is a dummy variable. The omitted reference for "Fox/MSNBC News Added" conditions is control condition that has "No Partisan News Added." Baseline for "More Problems except for/including crime" conditions is "no problem filtering." * $p < .05$, ** $p < .01$, and *** $p < .001$ (two-sided).

Attrition does not account for differences between Wave 2 and Wave 3. When restricting our analyses to participants who returned for Wave 3 only (see Tables B4 & 5), our findings regarding the “Fox/MSNBC news added X Democrat” interaction effects remained largely unchanged (see Tables A3), suggesting that attrition did not bias the estimates for our main factors in this study.

Table B4. Perceptions of Fox News Fairness, Using Wave 3 Participants Only. Random Effects Estimator.

	Wave 1-2 attrition	Wave 1-3 attrition
Democrat	-1.847*** (0.132)	-1.115*** (0.151)
Fox News Added	-0.462** (0.224)	-0.518** (0.218)
MSNBC News Added	-0.128 (0.221)	-0.225 (0.215)
Democrat X Fox News Added	0.509*** (0.192)	0.496*** (0.187)
Democrat X MSNBC Added	0.414** (0.188)	0.399** (0.185)
More Problems Except Crime	0.164 (0.158)	0.215 (0.154)
More Problems Including Crime	0.049 (0.156)	0.206 (0.152)
More Problems Except Crime X Fox Added	-0.038 (0.226)	-0.031 (0.221)
More Problems Except Crime X MSNBC Added	-0.395* (0.220)	-0.400* (0.214)
More Problems Including Crime X Fox Added	0.050 (0.223)	0.042 (0.218)
More Problems Including Crime X MSNBC Added	-0.164 (0.220)	-0.279 (0.213)
State News Added	-0.147 (0.126)	-0.227* (0.123)
State News Added X Fox Added	0.081 (0.181)	0.137 (0.177)
State News Added X MSNBC Added	0.137 (0.177)	0.358** (0.173)
<i>Control Variables</i>		
Age (logged)		0.713*** (0.123)
Female		0.010 (0.073)
White		-0.252*** (0.085)

College Degree		-0.033 (0.073)
Political Ideology (logged)		0.897*** (0.085)
Political Interest (logged)		-0.092 (0.103)
Portal Usage (logged)		-0.155*** (0.035)
Constant	3.950*** (0.156)	1.327*** (0.510)
Observations	1,704	1,579
Number of waves	2	2

Note: 'Democrat' is a dummy variable; and the omitted reference condition for 'Fox News Added' and 'MSNBC News Added' is the control condition that has 'No Partisan News Added.' Age, ideology, political interest, and portal usage were logged to curve for extreme skewness. Though participants' pre-existing view about Fox fairness is not included in this table, it is controlled for in both models due to the use of linear random-effect models (the 'xtreg' feature in Stata). *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$ and # $p < 0.10$.

Table B5. Perceptions of MSNBC Fairness, Using Wave 3 Participants Only. Random Effects Estimator.

	Wave 1-2 attrition	Wave 1-3 attrition
Democrat	0.781*** (0.127)	0.450*** (0.153)
Fox News Added	0.046 (0.216)	0.053 (0.221)
MSNBC News Added	-0.057 (0.214)	0.131 (0.218)
Democrat X Fox News Added	-0.041 (0.185)	0.060 (0.190)
Democrat X MSNBC Added	0.091 (0.182)	0.021 (0.187)
More Problems Except Crime	0.010 (0.152)	0.117 (0.156)
More Problems Including Crime	0.277* (0.151)	0.383** (0.154)
More Problems Except Crime X Fox Added	-0.062 (0.218)	-0.122 (0.224)
More Problems Except Crime X MSNBC Added	0.049 (0.213)	-0.037 (0.216)
More Problems Including Crime X Fox Added	-0.235 (0.216)	-0.290 (0.220)
More Problems Including Crime X MSNBC Added	-0.098 (0.212)	-0.213 (0.216)
State News Added	-0.015 (0.122)	0.021 (0.125)
State News Added X Fox Added	-0.037 (0.175)	-0.082 (0.179)
State News Added X MSNBC Added	-0.135 (0.171)	-0.199 (0.175)
<i>Control Variables</i>		
Age (logged)		0.356*** (0.124)
Female		0.292*** (0.074)
White		-0.142* (0.086)

College Degree		-0.007 (0.074)
Political Ideology (logged)		-0.329*** (0.086)
Political Interest (logged)		-0.314*** (0.104)
Portal Usage (logged)		-0.125*** (0.035)
Constant	2.970*** (0.151)	3.465*** (0.516)
Observations	1,706	1,581
Number of waves	2	2

Note: Robust standard errors in parentheses. ‘Democrat’ is a dummy variable; and the omitted reference condition for ‘Fox News Added’ and ‘MSNBC News Added’ is the control condition that has ‘No Partisan News Added.’ Age, ideology, and political interest were logged to curve for extreme skewness. Though participants’ pre-existing view about MSNBC fairness is not included in this table, it is controlled for in both models due to the use of linear random-effect models (the ‘xtreg’ feature in Stata). *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$ and # $p < 0.10$.

APPENDIX C: Checking Effects by Usage and Partisanship

First, we calculated usage score as $(\text{link hits} + \text{clicks}) * 40$, where 40 represents the average number of headlines participants scrolled through. Thus, a score of 922.51 suggests the average user scrolled past 40 headlines and engaged with the portal 23 times. (either through clicks or link hits). This effectively captures two usage behaviors important in a portal: clicking on a story and exposure to headlines. We also account for usage behavior that indicated dishonest usage (such as repeated refreshing of pages, repeated clicks on the same story, clicking too fast on multiple stories) by including a penalty for such behaviors in the usage score. We use the natural logarithm of this score due to dispersion.

Second, to increase our confidence that partisanship did not moderate treatment effects as a function of usage, we estimated models with a three-way interaction between portal usage and our partisan news treatment and partisanship. Results in Table C1 and Table C2 yield yielded little evidence for three-way interaction effect.² Thus, portal usage nor partisanship condition the effects of our news treatment.

² Though not shown here, estimates are the same for models including control variables (i.e. demographics and political interest). We focus on these truncated models for brevity here.

Table C1. Perceptions of Fox News and MSNBC Fairness, by News Portal Usage.

	Fox News fairness	MSNBC fairness
Democrat	-2.127*** (0.171)	0.720*** (0.166)
Fox News Added	-0.586*** (0.206)	-0.037 (0.200)
MSNBC News Added	-0.405* (0.207)	-0.218 (0.201)
Portal Usage (logged)	-0.540*** (0.187)	-0.141 (0.181)
Democrat X Fox News	0.741*** (0.247)	-0.047 (0.240)
Democrat X MSNBC News	0.591** (0.248)	0.143 (0.241)
<i>Conditional Effect of Portal Usage</i>		
Democrat X Portal Usage	0.485** (0.230)	-0.031 (0.224)
Fox News X Portal Usage	0.169 (0.278)	-0.182 (0.270)
MSNBC News X Portal Usage	-0.022 (0.272)	-0.015 (0.264)
Democrat X Fox News X Portal	-0.349 (0.336)	0.142 (0.326)
Democrat X MSNBC News X Portal	-0.243 (0.330)	-0.059 (0.321)
More Problems Except for Crime	0.031 (0.078)	0.017 (0.076)
More Problems Including Crime	0.020 (0.077)	0.129* (0.075)
State News Added	-0.076 (0.063)	0.029 (0.061)
Constant	4.335***	3.132***

	(0.150)	(0.146)
Observations	2,242	2,246
Number of waves	2	2

Note: Robust standard errors in parentheses. “Democrat” is a dummy variable; and the omitted reference condition for “Fox News Added” and “MSNBC News Added” is the control condition, “No Partisan News Added.” *** $p < 0.001$, ** $p < 0.01$, and * $p < 0.05$.

APPENDIX D: Robustness Checks, Models without Interactions

Table D1. Perceptions of Fox News Fairness without Interactions, Random Effects Estimator.

	(1)	(2)	(3)	(4)
	Fox News fairness		MSNBC fairness	
Democrat	-1.520***	-0.814***	0.757***	0.478***
	(0.068)	(0.090)	(0.066)	(0.092)
Fox News Added	-0.121	-0.134*	-0.114	-0.088
	(0.078)	(0.077)	(0.075)	(0.078)
MSNBC News Added	-0.115	-0.106	-0.144*	-0.101
	(0.077)	(0.075)	(0.074)	(0.076)
More Problems Except for Crime	-0.019	0.040	-0.010	0.028
	(0.078)	(0.076)	(0.075)	(0.077)
More Problems Including Crime	-0.001	0.082	0.113	0.135*
	(0.078)	(0.076)	(0.075)	(0.077)
State News Added	-0.076	-0.101	0.024	0.009
	(0.063)	(0.062)	(0.061)	(0.063)
Age (logged)		0.544***		0.297***
		(0.106)		(0.107)
Female		0.066		0.323***
		(0.063)		(0.064)
White		-0.213***		-0.114
		(0.074)		(0.075)
College Degree		-0.100		-0.100
		(0.063)		(0.064)
Political Ideology (logged)		0.903***		-0.286***
		(0.073)		(0.074)
Political Interest (logged)		-0.080		-0.213**
		(0.088)		(0.088)
Portal Usage (logged)		-0.090***		-0.041**
		(0.020)		(0.020)
Constant	3.839***	1.308***	3.035***	3.008***
	(0.089)	(0.405)	(0.086)	(0.409)
Observations	2,251	2,075	2,255	2,079
Number of wave	2	2	2	2

Note: Robust standard errors in parentheses. ‘Democrat’ is a dummy variable; and the omitted reference condition for ‘Fox News Added’ and ‘MSNBC News Added’ is the control condition that has ‘No Partisan News Added.’ Age, ideology, political interest, and portal usage were logged to curve for extreme skewness. Though participants’ pre-existing view about Fox fairness is not included in this table, it is controlled for in both models due to the use of linear random-effect models (the ‘xtreg’ feature in Stata). *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.