# 

# The Role of Source and Expressive Responding in Political News Evaluation

Maurice Jakesch<sup>1,2</sup>, Moran Koren<sup>3</sup>, Anna Evtushenko<sup>1</sup>, Mor Naaman<sup>1,2</sup>

<sup>1</sup>Cornell University <sup>2</sup>Cornell Tech <sup>3</sup>Technion

mpj32@cornell.edu,ko@technion.ac.il,ae392@cornell.edu,mor.naaman@cornell.edu

# **ABSTRACT**

Studies have observed that readers are more likely to trust news sources that align with their own political leanings. We ask: is the higher reported trust in politically aligned news sources due to perceived institutional trustworthiness or does it merely reflect a preference for the political claims aligned sources publish? Furthermore, do respondents report their actual beliefs about news or do they choose to express their political commitments instead? We conducted a US-based experiment (N=400) using random association of news claims to news sources as well as financial incentives to robustly identify the main drivers of trust in news and to evaluate response bias. We observe a comparatively weak effect of source on news evaluation and find that response differences are largely due to the alignment of the respondents' politics and the news claim. We also find significant evidence for expressive responding, in particular among right-leaning participants.

#### 1 INTRODUCTION

The proliferation of misinformation has led to a decline of public trust in traditional media sources [1, 6]. A 2018 survey by Gallup and the Knight Foundation found that "Americans believe the news media have a critical role to play in U.S. democracy but are not performing that role well" [10]. Respondents to their survey believe that 44% of news reporting is inaccurate and 62% of news is biased. For news on social media, these numbers rise to 64% and 80% respectively. United States residents who identify as Republicans, in particular, rated most mainstream news organizations (including CNN, The Washington Post and The New York Times) as highly inaccurate and biased [10].

Researchers have attempted to understand this development. An experiment by Gallup and the Knight Foundation found that readers' evaluation of news sources is aligned with their own political views: When the news source was revealed, Democrats reported higher trust in claims from the New York Times but severely devalued news from Fox News, while Republicans mistrusted New York Times pieces and trusted Fox News [9]. The same study found that, even

Շի։ Դւա Վork Շimes	ซิทะฟัลษ ปูอาห์ ซัเทเร
Trump lashes out at Vanity Fair, one	Companies are already canceling
day after it lambastes his restaurant	plans to move U.S. jobs abroad
<b>FOXNEWS</b> Trump lashes out at Vanity Fair, one day after it lambastes his restaurant	FOXNEWS  Companies are already canceling plans to move U.S. jobs abroad

Figure 1: Participants evaluated pro-Democrat and pro-Republican headlines that were randomly associated to either The New York Times or Fox News.

if the news source was not revealed, Democrats and Republicans evaluated claims from the New York Times differently. This finding suggests further investigation is needed to disentangle the different sources of partisan mistrust in news reporting. We consider three possible explanations:

- (a) *Perceived institutional trustworthiness*: People see news organizations that align with their views as more trustworthy. For example, Republicans will see Fox News reports as more trustworthy than the New York Times.
- (b) *Motivated reasoning*: Different point of view make it more likely for people to evaluate reports that align with their views as more trustworthy.
- (c) *Expressive responding*: People purposely report their inaccurate evaluations of trust in a partisan source to signal support for their own party.

While these mechanisms are not exclusive, it is important to estimate their separate impact to not conflate a *crisis in trust in the media* with a rise in political *expressive behavior*.

The current work estimates the relative influence these mechanisms have on the evaluation of political news. In a large-scale online experiment, we randomly assign headlines to sources as illustrated in Figure 1. In a highly controlled setting where news sources make the same claims we can measure the effect of news source attribution. Furthermore, we used economic incentives in an experimental treatment group to detect expressive responding.

Our findings show that an individual's alignment with the political message of a news claim largely drives the different evaluations it receives from left- and right-leaning participants. The identity of the news source plays a much smaller role than assumed based on studies that do not randomize

sources and claims. We also find significant evidence for expressive responding: when incentivized to provide correct answers, right-leaning participants in particular give higher credence to pro-Democrat claims.

# 2 BACKGROUND

There is a rich area of research on the factors and biases that affect people's trust in media [12, 16, 22]. Most related to our methods here, a recent experimental study exposed participants to headlines and articles with or without source information and asked them to rate the articles' trustworthiness [9]. The results showed that exposing the source generally *lowered* trust ratings and that the lower trust was related to partisanship.

We know that political affiliation and partisanship impact how people evaluate information [18, 30]. When presented with identical information, different people arrive at different conclusions that tend to align with their own political leanings. This bias - termed motivated reasoning [21] - has been observed in a wide range of studies [2, 19, 30] and has been associated with conservative traits [17]. Understanding readers' views of the media is further complicated by what has been called expressive responding [13, 14]: Respondents may provide inaccurate evaluations to signal support for their political party or candidate. Expressive responding is distinct from motivated reasoning. Motivated reasoning leads to genuinely held beliefs that are "re-aligned" one's motives, whereas subjects who respond expressively choose to misreport their beliefs to show support for their political group.

For example, when viewing photos of the presidential inaugurations of Donald Trump in 2017 and Barack Obama in 2009 and asked which photo has more people, 26% of Trump supporters with college degrees provided clearly wrong answers [29]. Studies also found evidence that Democrats' reports of mental distress after the 2016 election were exaggerated by expressive responding [20]. Bullock et al. [4] developed a conceptual model to distinguish sincere from expressive partisan differences. They evaluated the model using financial incentives to detect expressive responding. Similar to prior studies [26, 27] they find reductions in party differences when incentivizing correct answers.

This usage of effort-eliciting mechanisms is rooted in classical *agency theory* [28] and has been found to be consistent with incentives for crowdsourcing workers on Amazon Mechanical Turk [5, 23]. The current work expands on prior research by applying incentive mechanisms to the study of news evaluation.

# 3 EXPERIMENT

We designed an online experiment to estimate (1) the importance of the news source in participants' evaluation of

political news, (2) the bias resulting from participants' political alignment with the news claim, and (3) the salience of expressive responding in political news evaluation. We randomly associate sources to headlines to measure their independent impact and use financial incentives to elicit truthful answers. Our design takes inspiration from Pennycook's and Rand's prior work on crowdsourcing news source quality [24] and cognitive bias in news consumption [25].

#### Methods

Materials and procedure. Participants read a series of news claims and rated whether they thought each claim was true or false. 16 headline stimuli were shown in random order: 12 decoys that disguised the purpose of our study and four that we experimentally controlled to answer the study questions. The four experimental headlines were picked from a set of six headlines we collected from an earlier study [25]. Two of the headlines shown aligned with US Democrat views, the other two supported US Republican views. While all headlines represented accurate reporting, we have selected headlines that were hard to evaluate (in a pre-test respondents could not reliably tell whether they were true or false).

To measure the effect of source independent of the claims it publishes, the headlines were randomly shown as coming from either a right-leaning or a left-leaning publisher. We decided to compare the New York Times and Fox News – both mainstream publishers familiar and relevant to a large US audience [24]. They have been shown to be seen as inversely biased and inaccurate by Democrats and Republicans [10] and allowed us to compare our results with previous studies [8, 24]. Each participant rated four experimental headlines, two associated with the New York Times and two associated with Fox News. For each source, one of the headlines shown was pro-Democrat, while the other was pro-Republican. Figure 1 shows four sample stimuli. In addition, participants rated 12 headlines that obfuscated the study goal to avoid demand characteristics.

Participants rated headlines in randomized order within a 15-second time limit. We made it impossible to copy the headline text, so it was highly unlikely that participants were able to search for articles before answering. After the rating task, we collected data on political preferences and demographics.

Experimental manipulation. Participants were randomly assigned to either the control group, where they received a set compensation for their participation, or the treatment group, where they received a bonus payment depending on how many answers they answered correctly. We choose a "linked" payment structure inspired by Jackson and Sonnenschein [15], telling participants they would receive a bonus if they evaluated at least 12 of the 16 headlines correctly. We

266

267

268

269

270

271

272

273

274

275

277

278

279

281

283

285

286

287

288

289

290

291

292

293

294

296

297

298

300

302

303

304

305

306

307

308

309

310

311

312

313

314

315

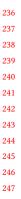
316

317

318



235







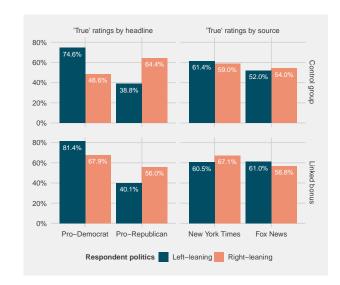


Figure 2: Effects of headline and source politics on news evaluation.

awarded the full bonus to all participants in the treatment group irrespective of their answers.

Participants. We recruited 400 participants via Amazon Mechanical Turk (AMT) [3]. Although not nationally representative, Amazon Mechanical Turk has been found to reliably reproduce treatment effects in political research [7]. To counterbalance the under-representation of conservatives on MTurk, we posted an otherwise identical conservativeonly task in addition to our main task. We received complete data from 388 respondents ( $M_{age} = 38; 49.2\%$  women) with balanced political ideologies (50.3% identified as left-center or left, 49.7% right-center or right). Participants received \$1 based on an estimated work time of 5 minutes and received an additional bonus payment of \$1.6 in the treatment group. We performed manipulation checks and undertook a series of steps to refine data quality. Participants were debriefed upon study completion. The study protocols were approved by the Institutional Review Board at the primary investigator's university.

# Results

In a first step, we analyzed the responses of participants in the control condition. The upper row in Figure 2 shows the responses in the control condition, with each bar representing an average of 175 ratings (total N=702 observations). The figure's y-axis shows the ratio of 'true' responses out of all responses in each category. Responses of left-leaning participants are shown in blue and of right-leaning participants in red. The top-left quadrant of the figure illustrates the headline bias in the control condition, with responses grouped by the political valence of the headline. The top-right quadrant

Table 1: Probit model coefficients predicting news evaluation

	Est.	SE	Pr(> t)
(Intercept)	0.815	0.16	0.00 ***
Right-leaning subject	-0.516	0.221	0.02 *
Opposite headline	-0.96	0.195	0.00 ***
Opposite source	-0.267	0.141	0.06 ·
Right-leaning subject x opposite source	0.416	0.197	0.04 *
Right-leaning subject x opposite headline	0.55	0.334	0.10 ·
Linked bonus	0.079	0.183	0.67
Linked bonus x right reader	-0.343	0.249	0.17
Linked bonus x opposite headline	-0.189	0.203	0.35
Linked bonus x opposite source	0.285	0.202	0.16
Bonus x right-leaning s. x opp. source	-0.169	0.283	0.55
Bonus x right-leaning s. x opp. headline	0.903	0.283	0.00 **
σ	0.234	0.085	0.01 **

N = 1392,  $P>\chi^2<$  0.0001, Log-likelihood = -866.46

Significance codes: \*\*\* p < 0.001, \*\* p < 0.01, \* p < 0.05

illustrates the source bias in the control condition, where responses are grouped by the political leaning of the source. For example, the top left bar shows that left-leaning participants rated pro-Democrat headlines as true in 74.6% of the cases—independently of whether they came from Fox News or the New York Times. The top right bar shows that rightleaning participants rated headlines coming from Fox News as true 54% of the time, regardless of the political direction of the headline.

The figure shows that participants from the left and right rated New York Times articles and Fox News articles as true at a similar rate (right panel). However, they responded quite differently to headlines aligned with or opposed to their own politics (left panel).

We conducted a mixed factorial ANOVA on the influence of respondents' political views, claim alignment and source allignment on the ratings given. We find no significant main effect of source alignment, F(1, 522) = 0.32, p > 0.05, but a significant main effect of headline alignment, F(1, 522) = 50.0, p < 0.0001.

The bottom row of Figure 2 represents the observations in the treatment condition, where participants rated the same headlines and sources while incentivized to evaluate them correctly (total N=690 observations). In the bottom left, for example, we observe that left-leaning subjects evaluate pro-Democrat headlines as true in 81.4% of the cases. Compared to the control group, right-leaning subjects significantly change their evaluation of pro-Democrat headlines, rating them as true 67.9% of the time. In other words, when incentivized to answer correctly, these participants reported higher credence to pro-Democrat headlines than participants

who were not incentivized to be truthful, independent of the source. Democrats also slightly change their evaluation of headlines, but this difference is not statistically significant.

To estimate how the particular characteristics of an observation affect the answers of participants, we calculate a panel-Probit regression with random headline effects. The model and results are shown in Table 1. The model shows no main effect of the incentive, but, as shown in Figure 2, predicts a significant increase in the number 'true' responses of right-leaning participants for opposing (pro-Democrat) headlines.

#### 4 DISCUSSION

We have experimentally estimated the separate influence that a news claim and its source have for a small set of publishers. Unlike prior work, we have randomly associated claims to news sources to distinguish between the actual institutional trust in the publisher to a preference for the type of claims it publishes.

Our results show that, when evaluating trust in partisan claims, the "brand" of the publisher plays a minor role: In an experimentally controlled setting where the New York Times and Fox News publish identical claims, left- and right-leaning participants evaluate the sources similarly. In contrast, the political valence of the claims significantly influences who believes it and who does not: both Democrats and Republicans found the headlines that supported their own view significantly more credible. As in our experimental design the claims were balanced – equally associated with either the New York Times or Fox News – we control for the identity source the observed difference in evaluation of headlines. Politically aligned views are seen as more credible regardless of whether an aligned or non-aligned source publishes them.

To investigate the extent of expressive responding, we offered a bonus payment to participants in the treatment group if they rated claims correctly. While the incentives had no significant effect on source evaluations, we do observe a significant change in evaluation of *claims*. In particular, When incentivized to answer correctly, right-leaning readers reported higher credence to pro-Democrat claims and lower credence to pro-Republican claims. This finding aligns with results of previous studies [26, 27] and could be explained as suggested by Bullock et al. [4]: Right-leaning respondents held beliefs closer to the ones reported by left-leaning respondents in the first place but without incentives, "partisan cheerleading" was more attractive than providing accurate responses. Further research will have to exclude the possibility of demand effects, and replicate this study on a wider set of claims to understand why we did not observe Democrat expressive responding.

Our observation that the news source has relatively little impact on news evaluation is in direct contrast to the claim of a recent study reporting that "the 'brand' reputation of these sources affects perceived trustworthiness of the content more than the information presented" [9]. Similarly, our results do not replicate findings in previous work that suggest that Republicans generally see media as less accurate than Democrats do [10]. These discrepancies show the limitations of both approaches. The earlier findings, based on experiment in showing headlines with or without the actual source information, offer more ecological validity as articles were associated with their actual source (after all, Fox News can be trusted to publish more right-leaning headlines [9]). However, we believe our study better captures the actual effect of source on news evaluation, as it does not conflate the politics of the headline with that of the source.

Our findings demonstrate that one needs to be careful when interpreting what people say about the news. Asking whether someone "trusts the information that comes from [a] media source" [24] invites expressive responding. While our artificial scenario may have exaggerated the influence of the multiple biases, further work is needed to estimate their influence and separate trends in motivated cognition and expressive behaviors from a crisis of trust in the news.

The role of platforms and content providers may be a central one: algorithmic prediction of what news readers would like to read effectively supports motivated cognition and exacerbates the effects of motivated reasoning; comments sections and the affordances of social media are enablers of expressive behaviors and amplify its reach. Our findings suggest that Google News' approach of showing multiple publishers for specific headline claim may be less effective than assumed. However, our study has shown that that it is "possible to slow down the direct expression of popular passion" [11] using targeted incentive mechanisms. While it is unlikely that platforms will pay readers to consume news, they may be able to develop means of making expressive behavior less convenient and more costly.

### 5 CONCLUSION

In this study, we offer an experimental approach to understand various sources of bias in the evaluation of news. There is some good news in our study: we show that the bias that is introduced by evaluating a politically aligned source may not be as severe as has been widely believed. We offer some bad news as well: there is a large gap in evaluating headline claims, depending on whether they align with a person's politics. Worse, this gap is not significantly reduced even when the claims are made by a publisher that aligns with participant's political views.

In addition, our study shows that responses to surveys that evaluate trust in news suffer from expressive responding, where respondents signal support for their political group instead of reporting genuinely held beliefs. We show that some of this effect can be curbed using economic incentives. Content providers might be able to use different sharing incentives and risk to reduce the prevalence of expressive behaviors on their platforms.

#### 6 ACKNOWLEDGEMENTS

The work was supported in part by Oath and Yahoo! Research through the Connected Experiences Lab at Cornell Tech.

#### **REFERENCES**

425

426

427

428

429

430

431

432

433

434

435

436

437

438

439

440

442

443

444

445

446

447

448

449

450

451

452

453

454

455

456

457

458

459

460

461

462

463

464

465

466

467

468

469

470

471

472

473

474

475

476

477

- [1] Michael Barthel and Amy Mitchell. 2017. Americans' Attitudes About the News Media Deeply Divided Along Partisan Lines.
- Toby Bolsen, James N Druckman, and Fay Lomax Cook. 2014. The influence of partisan motivated reasoning on public opinion. Political Behavior 36, 2 (2014), 235-262.
- [3] Michael Buhrmester, Tracy Kwang, and Samuel D Gosling. 2011. Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? Perspectives on psychological science 6, 1 (2011), 3-5.
- John G Bullock, Alan S Gerber, Seth J Hill, and Gregory A Huber. 2013. Partisan bias in factual beliefs about politics. Technical Report. National Bureau of Economic Research.
- [5] Colin F. Camerer and Robin M. Hogarth. 1999. The Effects of Financial Incentives in Experiments: A Review and Capital-Labor-Production Framework. Journal of Risk and Uncertainty 19, 1-3 (1999), 7-42.
- [6] Pew Research Center. 2017. State of the News Media reports.
- [7] Alexander Coppock. 2018. Generalizing from survey experiments conducted on mechanical Turk: A replication approach. Political Science Research and Methods (2018), 1-16.
- [8] Gallup and Knight Foundation. 2018. American views: Trust, media and democracy. https://knightfoundation.org/reports/ american-views-trust-media-and-democracy
- [9] Gallup and Knight Foundation. 2018. An online experimental platform to assess trust in the media. https://knightfoundation.org/reports/ an-online-experimental-platform-to-assess-trust-in-the-media
- [10] Gallup and Knight Foundation. 2018. Perceived accuracy and bias in the news media. https://knightfoundation.org/reports/ perceived-accuracy-and-bias-in-the-news-media
- [11] Jeffrey Goldberg. 2018. The American Crisis. The Atlantic (Oct 2018). https://www.theatlantic.com/magazine/archive/2018/10/ editors-note-the-crisis-in-democracy/568276/
- [12] Albert Gunther. 1988. Attitude extremity and trust in media. Journalism Quarterly 65, 2 (1988), 279-287.
- [13] Alan Hamlin and Colin Jennings. 2011. Expressive political behaviour: Foundations, scope and implications. British Journal of Political Science 41, 3 (2011), 645-670.
- Arye L Hillman. 2010. Expressive behavior in economics and politics. European Journal of Political Economy 26, 4 (2010), 403-418.
- [15] Matthew O Jackson and Hugo F Sonnenschein. 2007. Overcoming Incentive Constraints by Linking Decisions 1. Econometrica 75, 1 (2007),
- [16] David A Jones. 2004. Why Americans don't trust the media: A preliminary analysis. Harvard International Journal of Press/Politics 9, 2 (2004), 60-75.
- [17] John T Jost, Jack Glaser, Arie W Kruglanski, and Frank J Sulloway. 2003. Political conservatism as motivated social cognition. Psychological bulletin 129, 3 (2003), 339.
- [18] Dan M Kahan. 2012. Ideology, motivated reasoning, and cognitive reflection: An experimental study. (2012).
- Kabir Khanna and Gaurav Sood. 2018. Motivated Responding in Studies of Factual Learning. Political Behavior 40, 1 (2018), 79–101.

- [20] Masha Krupenkin, Shawndra Hill, David Rothschild, and Elad Yom-Tov. 2018. President Trump Stress Disorder: Partisanship, Ethnicity, and Expressive Reporting of Mental Distress after the 2016 Election. Unpublished manuscript (2018).
- [21] Ziva Kunda. 1990. The case for motivated reasoning. Psychological bulletin 108, 3 (1990), 480.
- [22] Tien-Tsung Lee. 2010. Why they don't trust the media: An examination of factors predicting trust. American Behavioral Scientist 54, 1 (2010),
- [23] Winter Mason and Duncan J Watts. 2009. Financial incentives and the performance of crowds. In Proceedings of the ACM SIGKDD workshop on human computation. ACM, 77-85.
- [24] Gordon Pennycook and David G. Rand. 2018. Crowdsourcing Judgments of News Source Quality. SSRN Electronic Journal (2018).
- [25] Gordon Pennycook and David G Rand. 2018. Lazy, not biased: Susceptibility to partisan fake news is better explained by lack of reasoning than by motivated reasoning. Cognition (2018).
- [26] Markus Prior. 2007. Is partisan bias in perceptions of objective conditions real? The effect of an accuracy incentive on the stated beliefs of partisans. In Annual Conference of the Midwest Political Science Association, Chicago.
- [27] Markus Prior, Gauray Sood, Kabir Khanna, et al. 2015. You cannot be serious: The impact of accuracy incentives on partisan bias in reports of economic perceptions. Quarterly Journal of Political Science 10, 4 (2015), 489-518.
- [28] Stephen A. Ross. 1973. The Economic Theory of Agency: The Principal's Problem. The American Economic Review 63, 2 (1973), 134-139.
- [29] Brian F Schaffner and Samantha Luks. 2018. Misinformation or Expressive Responding? What an inauguration crowd can tell us about the source of political misinformation in surveys. Public Opinion Quarterly 82. 1 (2018), 135-147.
- [30] Rune Slothuus and Claes H De Vreese. 2010. Political parties, motivated reasoning, and issue framing effects. The Journal of Politics 72, 3 (2010), 630 - 645.

478 480 481

482

483 484 485

486 487

489

491 492

493 495

496 497

498 499 500

501 502

503 504

506

507 508

> 510 512

513 514

515 516 517

518 519

520 521

522 523

525

527

529 530