

# How to Build Bipartisan Trust in Fact-Checking Sites: The Effects of Asymmetric Coverage on Source Credibility\*

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## Abstract

Unlike conventional journalism that achieves objectivity by giving “equal weights” to both sides of the debate, fact-checking takes a more interpretive and “weights of evidence” approach. One challenge is that the way fact-checking pursues objectivity allows for asymmetric coverage that covers one political party more heavily than the other. These imbalances may reflect genuine asymmetries in the prevalence of misinformation, but can also undermine trust among partisans. Findings from a preregistered experiment indicate that, compared to symmetric coverage, *uncongenial asymmetry* (most articles challenge in-group) leads partisans to find a source less credible. Contrary to conventional belief, Democrats react more negatively to uncongenial asymmetry than Republicans. *Congenial asymmetry* (most articles challenge out-group) also causes partisans to perceive the source as less credible, especially when a portion of coverage challenges their own party on polarized topics. These findings suggest more symmetric coverage of political parties can foster more bipartisan trust in fact-checking.

**Keywords:** fact-checking, source credibility, journalistic norms, partisan motivated reasoning

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Political fact-checking, a genre of news reporting dedicated to assessing the accuracy of political claims (Graves, Nyhan and Reifler 2016), aims to overcome the shortcomings of conventional media in addressing contemporary threats such as misinformation and partisan disagreements over facts (Graves 2016; Marietta and Barker 2019). For instance, conventional reporting that centers on “he said, she said” and “both sides of the story” falls short in helping citizens learn about the factual inaccuracies in political discourse and holding politicians accountable (Dobbs 2012). To address this concern, political fact-checking adjudicates the factual accuracy of political claims, and makes evidence-based, not balance-oriented, coverage decisions (Amazeen 2020; Graves 2016). These approaches of fact-checking redefine the role of journalism from a dispassionate stenographer to an engaged arbitrator.

Professional fact-checking sites abide by a set of rigorous principles and methods that highlight nonpartisanship and transparency (Amazeen 2019, e.g., Principles of International Fact-checking Network). Yet, fact-checking sources are neither widely used nor trusted among the public, with a greater suspicion from Republicans that fact-checkers are biased (Guess, Nyhan and Reifler 2020; Walker and Gottfried 2019). Despite previous findings that exposure to fact-checking articles can improve public knowledge and mitigate misperceptions (Bode and Vraga 2015; Gottfried et al. 2013; Nyhan et al. 2020; Weeks 2015; Wood and Porter 2019), limited public trust and usage limit the public impact of fact-checking sources. In search of ways to build bipartisan trust in fact-checking, I identify fact-checking practices that prevent fact-checking outlets from earning public trust.

Most research on fact-checking has focused on the effects of exposure to individual fact-checks on factual beliefs and candidate appraisals (e.g., Amazeen et al. 2018; Nyhan et al. 2020; Thorson 2016; Wood and Porter 2019). Largely missing from the literature is a better understanding of factors that affect the credibility of fact-checking at the *source* level. To advance understanding, I focus on a source-level factor, specifically coverage traits, and explore the possibility that the manner in which fact-checking outlets cover political parties affects the public reputation of fact-checking sites as credible sources.

To understand the nature of fact-checking coverage, I examine how the norm of objectivity in U.S. journalism has evolved over time (Bennett 1996; Hamilton 2006; Ladd 2012; Jamieson and Waldman 2003). I show that fact-checking reflects how the objectivity norm has been redefined from a conventional “he said she said” or “equal weights on all sides” approach to a more interpretive, “weights of evidence” approach. I propose that this reformed notion of objectivity drives asymmetric coverage of political parties in fact-checking sources.

I draw upon partisan motivated reasoning (Druckman and McGrath 2019; Kahan 2015) and the criteria people use to assess one-sided news coverage (Allen 1991; Flanagin, Winter and Metzger 2020) to theorize the impact of asymmetric coverage on how partisans assess the credibility of a news source. Because partisans tend to discredit information and news outlets that challenge their own groups (Druckman and McGrath 2019; Kahan 2015; Stroud 2011; Peterson and Iyengar 2021), I expected that compared to symmetric coverage, coverage with *uncongenial asymmetry* (the majority of articles challenge one’s own party) would decrease perceived source credibility among both partisan groups. Because prior research has found that Republicans tend to be more resistant to uncongenial news and facts (Garrett and Stroud 2014; Jost et al. 2003; Shook and Fazio 2009), I expected that uncongenial asymmetry would lower perceived credibility to a greater extent among Republicans than Democrats. When coverage has *congenial asymmetry* (the majority of articles challenge the opposite party), the existing literature offers mixed guidance, because its ingroup-favorable content could improve source assessments (Stroud 2011; Peterson and Iyengar 2021), yet its violation of audience expectations for balanced coverage from credible sources might worsen source assessments (Allen 1991; Flanagin, Winter and Metzger 2020). To clarify, I examine whether congenial asymmetry would increase or decrease perceived credibility among partisans.

The findings from my preregistered experiment suggest that fact-checking sites should reconsider the reputational consequences of asymmetrical coverage of political parties. I find that, compared to symmetric coverage of political parties, asymmetric coverage in either direction harms an organization’s reputation as a credible source. First, compared to sym-

metric coverage, uncongenial asymmetry reduces source credibility perceptions among both partisan groups. Unexpectedly, I find that Democrats react more negatively to uncongenial symmetry compared to Republicans. Second, congenial asymmetry, despite its content being favorable to one's party, also causes partisans to find a news source as less credible. This finding highlights that the violation of audience expectations for balanced coverage can harm credibility perceptions beyond partisans' predilection for like-minded content. Interestingly, Democrats find congenial asymmetry less credible particularly when a portion of coverage challenges their own party on highly polarized topics, whereas Republicans find congenial asymmetry less credible regardless of whether their party is challenged on more or less polarized topics. These results indicate that Democrats are more sensitive to and selective about the specific contexts of asymmetric coverage in their source assessments.

This study highlights the importance of fact-checkers' coverage decisions in building source credibility. While previous studies have focused on how partisans process individual fact-checks or news articles (Amazeen et al. 2018; Nyhan et al. 2020; Wood and Porter 2019) or a message from a source with known partisan slant (Traberg and van der Linden 2022), my work shows how the relative amount of news items that target either party in a source's coverage affects partisan source evaluations. This endeavor is particularly important given the nature of news outlets as *experience goods*, whose quality consumers can assess only by reading or observing the overall content of the outlet (Hamilton 2006). Thus, source assessment is unlikely to be achieved on the basis of just a single article. Furthermore, given the relative lack of familiarity with and use of fact-checking sites among the American public (Guess, Nyhan and Reifler 2020), it is valuable to experimentally test how the overall coverage of a relatively unfamiliar source shapes credibility assessments, which would strongly predict whether the public would continue to use and learn from the source. While fact-checking is often accepted as a reputable form of journalism (Graves, Nyhan and Reifler 2016), my work demonstrates that fact-checkers' coverage decisions driven by evidence-based arbitration may inhibit bipartisan trust. Instead, fact-checking sources need to exercise caution when evidence

leads them to asymmetrically cover political parties and look for ways to further signal the impartiality, value, and rigor of their reporting.

### **Reforming Journalism through Fact-checking: The Norm of Objectivity**

The fact-checking movement reflects the evolution of *journalistic norms*, which refer to a set of rules that guide news content decisions, such as objectivity, transparency, accountability, and efficiency (Bennett 1996). Journalistic norms can be reconfigured in response to shifting environments, such as the transformation of technology (e.g., the shift from paper to online news), growing distrust in the news media, and an increasingly fractured media landscape (e.g., the rise of partisan media, social media, and fabricated news) (Hayes, Singer and Ceppos 2007; Graves, Nyhan and Reifler 2016). To better understand the motivations behind the fact-checking movement, I specifically focus on how the norm of objectivity has been redefined over time in the U.S.

Ever since the partisan press of the 19th century was displaced by the objective journalism in the 20th century, the objectivity norm has cast journalists as independent of politics and as a “passive mirror” of society (Graves, Nyhan and Reifler 2016; Hamilton 2006; Kovach and Rosenstiel 2014). The independent media, dominant in the U.S. in the 1990s, was characterized by the emphasis on objectivity represented by the practice of giving “equal weights” on all sides and “he said, she said” reporting (Hiles and Hinnant 2014; Graves, Nyhan and Reifler 2016). To appeal to readers of diverse political affiliations and thereby increase profits, U.S. newspapers increasingly abandoned party affiliations, increased soft news coverage (e.g., entertainment, sports), and claimed a nonpartisan stance by covering public affairs in a balanced manner (Hamilton 2006). Under this norm, the broadcast media were heavily governed by “equal time” requirement to dedicate similar amount of airtime to Democrats and Republicans (D’Alessio and Allen 2000). The objectivity norm under the objective news paradigm during the 1990s can be described as *descriptive objectivity*.

As the news environment became more polarized and diverse in the late 1990s, it became

apparent that dispassionate, balanced coverage may not optimally inform voters about the issues and instead could confuse readers in terms of which claims are more valid (Budak, Goel and Rao 2016; Corbett and Durfee 2004). Starting in the late 1990s, the objectivity norm increasingly became more analytic and assertive, promoting the contextual and “weight of evidence” approach in news reporting (Barnhurst and Mutz 1997; Fink and Schudson 2014; Hiles and Hinnant 2014). Under this “interpretive turn” in journalism, rather than simply reporting events or quoting public speeches, reporters increasingly offered contexts and interpretations (Barnhurst 2014). This has led to increasing awareness that *false balance* (i.e., the equal coverage of both sides when one perspective is overwhelmingly supported by evidence) likely misleads readers (Dixon and Clarke 2013). These trends can be characterized as the objectivity norm gradually evolving into *interpretive objectivity*.

Political fact-checking is one manifestation of this transition from descriptive objectivity to interpretive objectivity in U.S. journalism. In the early 2000s, fact-checking emerged as a response to the problems of the descriptive nature of conventional reporting (e.g., FactCheck.org in 2003; PolitiFact and Washington Post Fact Checker in 2007). One key example that highlights the shortcomings of traditional reporting is the conventional media’s failure to adequately fact-check the Bush administration’s claims about weapons of mass destruction (WMD) in Iraq in 2003. According to Michael Dobbs, the founder of Washington Post Fact Checker, this WMD episode “helped discredit the idea that reporters are merely messengers or stenographers” and fueled the rise of fact-checking (Dobbs 2012, p. 3). Different from conventional reporting, fact-checking requires reporters to not only quote public figures, but also interpret contexts and analyze evidence to assertively draw conclusions and point out falsehoods (Pingree, Brossard and McLeod 2014; Thorson 2018). In this sense, the fact-checking approach stands in stark contrast to conventional reporting, which avoided taking sides and sought balanced coverage of both sides. For instance, the New York Times political editor Richard Stevenson stated that fact-checkers should “have the strength of character to call balls and strikes [ . . . ] be willing to say that one side is right, and the other is wrong.”

(Dobbs 2012, p. 13).

Through their evidence-based reporting aimed at interpretive objectivity, fact-checkers aspire to correct misperceptions across party lines. Glenn Kessler of the Washington Post Fact Checker said “What I love are the letters I get from readers—and it comes once, twice, three times a week—from readers that say, you know, ‘I was really thinking this, but you’ve convinced me otherwise’” (Graves 2016, pp. 187-188). This perspective is shared by Brooks Jackson of FactCheck.org, who said “sometimes we even get messages from people, like a guy will say, ‘Well I’m a Democrat, but I appreciate what you do because I want to know when my guys are lying to me.’ And there are people out there like that” (Graves 2016, pp. 188). However, these idealized images of fact-checking audience do not align with most audiences in reality (Graves 2016). For example, partisans resist factual information that runs counter to their existing beliefs (Nyhan and Reifler 2010; Kahan 2015). Moreover, only a small proportion of the public actually visit fact-checking sites, while many people suspect the impartiality of fact-checkers (Guess, Nyhan and Reifler 2020; Walker and Gottfried 2019). Among many factors that could contribute to this gap between the goals and the performance of fact-checking (e.g., widespread distrust in the news media, messages from politicians, the format of fact-checks; Agadjanian et al. 2019; Amazeen et al. 2018), I consider coverage decisions on how often to cover either political party as one potential contributing factor in obstructing bipartisan trust in fact-checking sources.

### **Fact-checking Coverage Trait: Asymmetric Coverage of Political Parties**

One likely consequence of pursuing interpretive objectivity is asymmetric coverage where one political party is more often covered than the other. When overall coverage—the aggregation of individual fact-checks—is considered, fact-checking coverage is not constrained by “equal weights” on both parties. Instead, it is influenced by the “weights of evidence” that allow reporters to disproportionately scrutinize one party than the other as needed. Moreover, because fact-checking coverage heavily focuses on monitoring the performance of

political authorities (Graves and Glaisyer 2012), most of their coverage corrects errors in what prominent political figures have said, rather than simply quoting their public statements. Illustrating these approaches, the mission statement of PolitiFact states that “We more often fact-check the party that holds power or people who repeatedly make attention-getting or misleading statements” (Holan 2018). In a similar vein, the Washington Post Fact Checker’s mission statement says “We fact check what matters—and what matters are people in power. When one political party controls the White House and both houses of Congress, it is only natural that the fact checks might appear too heavily focused on one side of the political spectrum” (Kessler 2017).

Asymmetric coverage, however, poses a dilemma for efforts to create bipartisan trust in fact-checking and help Democrats and Republicans converge on facts. While there is a need to occasionally diverge from symmetric coverage to accurately reflect evidence, asymmetric coverage may risk the loss of trust among partisans who perceive the coverage to be slanted or unfair. If this happens, the social value of political fact-checking significantly shrinks, because partisans who would benefit from fact-checking are likely to be alienated from fact-checking sites, reinforcing partisan divisions in perceptions of facts. This dilemma becomes more evident when we consider the reporting practices of professional fact-checking sites.

When fact-checking sources target one party more often than another, people can easily notice the asymmetry due to their tendencies to highlight inaccurate claims. Fact-checking sources more often rate partisan figures’ claims as “false” rather than “true” (e.g., among FactCheck.org’s fact-check ratings, 66% were negative (“false,” “partially false,” “very false”), only 8% were “partially true,” and 0% were “true”; Ferracioli, Kniess and Marques 2022), sometimes even mockingly (e.g., “Pants on Fire” rating of PolitiFact, “Five Pinocchios” or “Bottomless Pinocchios” ratings of Washington Post Fact Checker). Because the partisan direction in their corrections is usually explicit in their headlines, partisans who encounter fact-checking coverage—on the front page of a fact-checking site, fact-checks posted on social media, or fact-check warning tags to social media posts—likely easily identify coverage

asymmetry in one direction or the other.

Even though many professional fact-checking sites are committed to nonpartisanship and strive to apply the same standards to both parties,<sup>1</sup> asymmetric coverage of political parties often takes place. For instance, in the early 2010s, PolitiFact was found to have corrected Republican claims three times more often than Democratic claims (Davis 2013; Ostermeier 2011). During the 2012 presidential election, among the fact-checks posted on Twitter by FactCheck.org, PolitiFact, and Washington Post Fact Checker, 42% were unfavorable to Republicans and 23% were unfavorable to Democrats (Shin and Thorson 2017). This asymmetry persisted in later years. Between 2017 and 2019, among the fact-checks published by FactCheck.org, 73% targeted Republicans, whereas only 24% targeted Democrats (Ferracioli, Kniess and Marques 2022).

My own data collection of fact-checks published by professional fact-checking outlets reveals similar patterns. I collected the entire set of fact-checking articles published by FactCheck.org and Washington Post Fact Checker during October 2016 and June 2020.<sup>2</sup> For each article, I collected data on the party that was challenged or validated, publica-

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<sup>1</sup>Professional fact-checking sites express their commitment to nonpartisanship: “We treat conservatives and liberals alike and apply exactly the same standards of accuracy to claims made by both sides.” (FactCheck.org; FactCheck.org N.d.); “We will strive to be dispassionate and non-partisan. The identity or political ties of the person or organization making a charge is irrelevant.” (Washington Post Fact Checker; Kessler 2017); The Code of Principles of the International Fact-checking Network (IFCN) lists “a commitment to nonpartisanship and fairness” as the first principle. (IFCN N.d.)

<sup>2</sup>As explained in supplementary materials, the Google Trends data indicate that a month before the presidential election (October) is when the U.S. public is highly interested in search terms related to fact-checking. October 2016 was chosen because it reflected fact-checking coverage during the most recent presidential election at the time of this study. June 2020 was chosen because it reflected fact-checking trends when the experimental design was being finalized.

tion date, headline, deck summary, and topic (e.g., immigration, crime). A more detailed description of the data collection procedure is available in Section 1.2 of supplementary materials. The full list of fact-checks and collected data are provided in Tables S1.6-S1.10 in supplementary materials.

Table 1: Count and Proportion of Fact-checks that Target Political Parties: FactCheck.org and Washington Post Fact Checker during October 2016 and June 2020

Source	Month/Year	Challenge Republicans	Challenge Democrats	Challenge both	Validate Democrats	Validate Republicans	Total Partisan	Total All
FactCheck.org	10/2016	15 (60%)	7 (28%)	2 (8%)	1 (4%)	0 (0%)	25	27
	06/2020	20 (91%)	2 (9%)	0 (0%)	0 (0%)	0 (0%)	22	47
Washington Post Fact Checker	10/2016	19 (73%)	5 (19%)	1 (4%)	1 (4%)	0 (0%)	26	27
	06/2020	12 (75%)	4 (25%)	0 (0%)	0 (0%)	0 (0%)	16	17

*Note:* *Total Partisan* indicates the total number of fact-checks with partisan targets (statements made by partisan figures or groups). *Total All* indicates the total number of fact-checks with and without partisan targets. The percentage of fact-checks that either challenge or validate each party is calculated out of *Total Partisan*.

As shown in Table 1, in October 2016, among the fact-checks with partisan targets (e.g., politicians, partisan groups) in FactCheck.org, 60% challenged Republicans, whereas 28% challenged Democrats. The asymmetry was more prominent in Washington Post Fact Checker, where 73% challenged Republicans and only 19% challenged Democrats. In June 2020, the asymmetry was more prominent in FactCheck.org. Among FactCheck.org’s fact-checks with partisan targets, 91% challenged Republicans, whereas only 9% challenged Democrats.<sup>3</sup> As for Washington Post Fact Checker, 75% challenged Republicans and 25% challenged Democrats. Only a few fact-checks corrected a similar number of statements from each party within an article (“challenge both”) or validated the accuracy of Democratic statements (“validate Democrats”), but none of the fact-checks during these months validated Republican statements. Another interesting observation is that fact-checking coverage

<sup>3</sup>In June 2020, partly due to the COVID pandemic, FactCheck.org published 25 fact-checks on non-partisan targets (usually social media posts).

rarely validated (4% or less) but almost always critiqued political claims of interest. These results indicate that fact-checking coverage heavily leans toward identifying inaccuracies, rather than validating the truthfulness, of political claims.

These observed asymmetries that disfavor Republicans do not mean that the asymmetry in fact-checking coverage is inherently anti-Republican. One of the first politicians who cited a fact-checking site in public speech actually was a Republican politician, Dick Cheney, who cited FactCheck.org to support a claim in the 2004 vice-presidential election debate. The recent asymmetry against Republicans is largely driven by circumstantial factors, such as the Republican Party being in power between 2017 and 2020 and some prominent Republican figures repeatedly making misleading claims.<sup>4</sup> If circumstances change, for instance the Democratic Party comes to power as it did in 2020<sup>5</sup> or some prominent Democratic figures repeatedly make misleading claims, then fact-checking sources are likely to produce asymmetric coverage adverse to Democrats.

### **Source Credibility and Asymmetric Coverage of Political Parties**

While asymmetric coverage is at times necessary to accurately portray reality on the basis of evidence, the dilemma lies in how partisans assess a source based on its coverage decisions. To examine individuals' overall evaluation of and trust in a source, I focus on source credibility,

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<sup>4</sup>Washington Post Fact Checker created a new category in their rating scale named “Bottomless Pinocchios” in 2018 and assigned it first time to Donald Trump for repeatedly making misleading claims (Kessler and Clement 2018).

<sup>5</sup>No published work has yet documented the relative amount of fact-checks that cover Democrats and Republicans since the 2020 presidential election. Anecdotally, professional fact-checking sources have targeted the Biden administration on a regular basis (e.g., As of 2022, PolitiFact displays Joe Biden and Kamala Harris on the top of the list of their fact-checked individuals), yet the asymmetry against the party in power is not as prominent as it was between 2017 and 2020.

defined as *receivers' perceptions of the believability of a communicator* (Hovland, Janis and Kelly 1953) or *audience's perception that they would benefit from believing the communicator* (Lupia 2016).<sup>6</sup> As an important precondition of learning, persuasion, and belief formation, perceptions of source credibility strongly determine whether partisans would accept or reject the information that the source provides (Berinsky 2017; Druckman and McGrath 2019; Lupia and McCubbins 1998).

One hurdle in earning bipartisan trust in fact-checking is *hostile media perception*, which refers to partisans' tendency to perceive neutral or balanced media reports to be biased against their own group or beliefs (Gunther and Schmitt 2004; Vallone, Ross and Lepper 1985). When media coverage is slanted, *relative* hostile media perception emerges, causing partisans to perceive greater bias in a source whose views do not align with their own (Coe et al. 2008; Gunther and Chia 2001). These hostile media perceptions imply that, absent convincing reasons to think otherwise, partisans are predisposed to suspect that fact-checking sources do not abide by their alleged nonpartisanship.

A major obstacle to bipartisan trust, particularly when fact-checking coverage more often targets one's own party than another ("uncongenial asymmetric coverage"), is *partisan motivated reasoning*, which refers to partisan tendencies to selectively reject uncongenial information to protect their partisan identity or beliefs (Druckman and McGrath 2019; Kahan 2015; Taber and Lodge 2006). This tendency persists even when the source is an expert on a given issue (Kahan, Jenkins-Smith and Braman 2011; Nisbet, Cooper and Garrett 2015). One ramification of partisan motivated reasoning on news consumption is *partisan selective exposure*, which refers to partisans' selective use of and trust in likeminded news sources (Stroud 2011). Selective exposure can further drive partisans to avoid and discredit news outlets and contents that challenge their own group or views (Bakshy, Messing and Adamic 2015; Garrett and Stroud 2014). In fact, partisans' use of and trust in news sources

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<sup>6</sup>In both definitions, receivers' subjective perceptions, rather than objective traits, of a source determine the degree of perceived source credibility.

are highly dependent on whether a source presents congenial political viewpoints (Peterson and Iyengar 2021). Drawing on evidence of partisan motivated reasoning, I propose that when the coverage of a source targets one's own party ("in-group") at a greater rate, partisans likely perceive the coverage as a potential threat to the legitimacy of their group, triggering distrust in the source as a means to protect their partisan identity.

**H1:** Asymmetric coverage that more often challenges one's own party ("uncongenial asymmetric coverage") will reduce perceived source credibility among partisans, compared to symmetric coverage that similarly challenges each party.

Regarding partisan reactions to uncongenial asymmetry, prior studies largely suggest Republicans would be more resistant to such coverage than Democrats. In studies on personality traits, conservatives have been found to be more resistant to aversive experience and more intolerant of opposing views or other groups, compared to liberals (Farwell and Weiner 2000; Jost et al. 2003, 2007; Oxley et al. 2008). In the context of information processing, studies have found that Republicans tend to be more resistant to uncongenial news and facts than Democrats (Garrett and Stroud 2014; Nyhan and Reifler 2010; Shook and Fazio 2009). Drawing on these studies, I hypothesized that uncongenial asymmetry is likely to lower perceived credibility to a greater extent among Republicans than Democrats.

**H2:** Uncongenial asymmetric coverage will decrease perceived source credibility to a greater extent among Republicans, compared to Democrats.

When a source more heavily targets the opposite party ("congenial asymmetric coverage"), there are two possible ways in which credibility assessments are affected. A first possibility is that congenial asymmetry would improve credibility assessments, because partisans selectively prefer and trust likeminded news and sources (Stroud 2011; Peterson and Iyengar 2021). It has also been found that people enjoy reading negative news about out-group, a tendency driven by their in-group favoritism (Ouwerkerk et al. 2018). Yet, the asymmetry

itself, even if it is adverse to out-group, can still lower credibility for two reasons. First, people tend to find two-sided or balanced sources more credible than one-sided sources (Allen 1991; Mayweg-Paus and Jucks 2018). Second, perceiving a source to be biased in favor of a group can lower credibility even when the source is considered honest and expert (Wallace, Wegener and Petty 2020). The *discounting hypothesis* further suggests that a source that fails to meet audience expectations will cause the audience to reevaluate and “discount” the credibility of the source (Allen 1991). For instance, in a context where the audience expects non-partisan reporting from a given source (e.g., online encyclopedia), one-sided coverage could be perceived as an indicator of persuasive intent, likely violating expectations, and decrease perceived credibility of the source (Flanagin, Winter and Metzger 2020). This *expectation violation heuristic* is especially powerful in credibility assessments of relatively unfamiliar sources (Flanagin, Winter and Metzger 2020). Because professional fact-checkers proclaim nonpartisanship in their reporting (e.g., mission statements of FactCheck.org, PolitiFact; Amazeen 2019; FactCheck.org N.d.; Holan 2018) and given relatively low familiarity with fact-checking sources among the U.S. public (Graves 2016; Guess, Nyhan and Reifler 2020), congenial asymmetry can negatively affect source credibility perceptions. Given two possible theoretical expectations, I explore how congenial asymmetric coverage affects source credibility perceptions.<sup>7</sup>

**RQ1:** Does asymmetric coverage that more often challenge the opposite party (“congenial asymmetric coverage”) increase or decrease perceived source credibility among partisans, compared to symmetric coverage?

A final focus of my inquiry pertains to source credibility perceptions under two different

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<sup>7</sup>Given two potential theoretical expectations, I hypothesized the effects of congenial asymmetric coverage in both directions in my preregistration, which I learned only later that such predictions should better be registered as an exploratory research question. Because the underlying intention was to propose an exploratory question with unclear theoretical expectations, I present this inquiry as a research question.

contexts, as a news source and as a source of policy advice. These two contexts partly stem from two different approaches to measuring source credibility in the literature, where one of them somewhat deviates from the theoretical concept of source credibility. Theoretically, source credibility is widely assumed to have two underlying dimensions (Druckman and McGrath 2019; Hovland, Janis and Kelly 1953; Lupia and McCubbins 1998). According to Lupia (2016), *perceived shared interest*, or perceived trustworthiness, refers to the extent to which the listener and communicator want the same outcomes, whereas *perceived expertise* refers to the extent to which the speaker is knowledgeable about the consequences of the listener's choice.<sup>8</sup> However, because the literature lacks clear guidance on how to measure source credibility, source credibility has been often measured in ways not consistent with its two-dimensional concept.

One major way to measure source credibility perceptions is in the context of *news sources*, which is the main focus of this study. Under this context, the qualities of being accurate, fair, or complete are important traits expected for credible news sources. These expected values of credible news informed the development of a *news credibility scale* (Gaziano and McGrath 1986; Meyer 1988). Although this scale, being one-dimensional, does not neatly fit with the two-dimensional assumption of source credibility, it has been widely adopted to measure perceived credibility of news messages or outlets (e.g., West 1994; Flanagin and Metzger 2000; Jensen 2008; Tsfati 2010; Pingree et al. 2013; Eastin 2001; Turcotte et al. 2015). Because the major focus of my study is credibility perceptions of news sources, perceived news credibility is mainly used to test my proposed hypotheses.

Another important context is source credibility as a source of policy advice, or precon-

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<sup>8</sup>Hovland, Janis and Kelly (1953) define the two dimensions in a related but slightly different way. According to Hovland et al. (1953), *trustworthiness* refers to the degree to which the communicator intends to communicate the assertions that he or she considers most valid, and *expertise* refers to the degree to which the communicator is perceived to be in the position to know the truth, which is to know what is right or correct.

dition of persuasion, which more prominently brings the two dimensions of credibility into play. These two dimensions are important because credibility perception or persuasion is assumed to require non-zero, positive amount of shared interest and expertise perceptions from the communicator (Hovland, Janis and Kelly 1953; Lupia and McCubbins 1998). By examining how asymmetric coverage affects perceived shared interest and expertise (Lupia and McCubbins 1998), I further examine how coverage decisions affects a source's potential persuasive effects on partisan controversies. Because there is a lack of empirical research that compares how partisans assess a source as a credible news source versus as a credible source of policy advice, I propose to explore how asymmetric coverage affects the perceptions of shared interest and expertise, compared to news credibility, among partisans.

**RQ2:** Do uncongenial and congenial asymmetries reduce perceived shared interest and expertise among partisans?

### Study Design

To assess the effects of asymmetric coverage on source credibility, I conducted a survey experiment on August 10, 2020. Participants were recruited through Prolific, an online crowdsourcing platform that has been found to provide higher quality data compared to alternative online platforms, demonstrated through better performance on attention checks, less dishonest behavior, and its ability to reproduce existing results (Palan and Schitter 2018; Peer et al. 2017). Using the survey firm's prescreening data, I recruited an equal number of Democrats and Republicans, 720 respondents in total (360 Democrats, 360 Republicans).<sup>9</sup> My hypotheses and analysis plan were preregistered on AsPredicted.org before the study

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<sup>9</sup>Based on the typical two-step questionnaire on partisan identity, 56.3% were strong partisans, 37.2% were weak partisans, and 6.5% were partisan leaners. Partisan leaners were considered as partisans in the analyses, because leaners hold partisan opinions as strong as those identified as weak and strong partisans (Petrocik 2009).

was conducted.<sup>10</sup>

### Experimental Treatments

Participants were told they would be presented with a list of headlines from an online news site. Among eight headlines, six challenged one of the two political parties (“partisan topics”)<sup>11</sup> and two were neutral to political parties (e.g., health, finance). Partisan topics involved issues where political elites of both parties have made misstatements: abortion, black teen pregnancy, immigration, gun violence, the Wall Street bailout (Troubled Assets Relief Program), and US national debt (Wood and Porter 2019). For this reason, it was plausible to attribute either party as the source of misinformation to manipulate coverage asymmetry. As discussed earlier, the majority of fact-checking coverage challenges, rather than validates, the fact-checked statements (e.g., Table 1). Reflecting this active adjudication of fact-checking practice, the headlines for partisan topics were designed to explicitly challenge a political figure or entity as shown in Table 2. In the coverage of actual fact-checking sites, a large number of headlines use language of straightforward criticism that pinpoints inaccuracy in target claims (e.g., “wrong,” “misleading,” “incorrect”), and sometimes even employ derogatory language (e.g., “ridiculous,” “nonsensical”). As some critiques of fact-checking practice have noted, fact-checking coverage sometimes, although not frequently, suggest subjective assessments of a policy or phenomenon (e.g., a policy brought “bad” consequences) (Uscinski and Butler 2013). These characteristics of fact-checking coverage are found in the actual headlines from professional fact-checking sites (provided in supplementary materials, Tables S1.6-S1.12), which informed the design of stimulus headlines.

Two additional headlines unrelated to partisan controversies were included in the set of

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<sup>10</sup>The preregistration is available at: [https://aspredicted.org/8T6\\_2BJ](https://aspredicted.org/8T6_2BJ). The hypothesis wordings were refined to be more concise, compared to the preregistered versions.

<sup>11</sup>These headlines had *partisan implications*, which refer to facts having positive or negative implications for political parties (Jerit and Barabas 2012).

Table 2: Headlines for Baseline and Treatment Conditions

Partisan	<ul style="list-style-type: none"> <li>• What [Democrats/Republicans] have wrong about the pregnancy rate among black teenagers</li> <li>• [Democratic/Republican] National Committee pursues a policy for the worse on the deportation of illegal immigrants</li> <li>• [Democratic/Republican] Senator misleads on which president signed the Wall Street bailout into law</li> <li>• What [Democrats/Republicans] get incorrect about the number of abortions over time</li> <li>• [Democratic/Republican] Party takes the wrong path to the policy on gun homicide</li> <li>• [Democratic/Republican] governor mischaracterizes the causes of US debt</li> </ul>
Neutral	<ul style="list-style-type: none"> <li>• Exercise can greatly reduce your risk of cancer and heart disease</li> <li>• Google to spend \$10 billion on offices, data centers in US this year</li> </ul>

headlines for two reasons. First, through these additions, I intended to mitigate the perception that the given news outlet was solely dedicated to partisan issues, which might otherwise reinforce partisan reactions. Second, the inclusion of neutral topics reflects reporting practices of conventional news outlets that run standalone fact-checking operations endorsed by the IFCN (e.g., Associated Press, USA Today, Daily Caller) or those that regularly produce articles labeled as “fact-check” (e.g., ABC, New York Times), thus allowing the current study to provide implications of asymmetric coverage with respect to a broader set of outlets that engage with fact-checking.

There were three main experimental conditions: among six partisan topics, 1) five challenged Republicans and one challenged Democrats (Republican-challenging); 2) five challenged Democrats and one challenged Republicans (Democrat-challenging); or 3) three headlines challenged each party (symmetric).<sup>12</sup> To manipulate the coverage asymmetry, for six partisan topics, the bracketed part (e.g., “[Democratic/Republican]”) that indicates the target of correction was set to be either “Democratic” or “Republican” as shown in Table 3.

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<sup>12</sup>There was a fourth experimental condition that tested how the headline language (critical vs. neutral language) affects source credibility perceptions. In the preregistration, I indicated that this fourth condition was exploratory and specified that it would not be a part of the main hypotheses and analyses. The results about this condition are presented in Section 3.2 of supplementary materials.

Participants were considered as being assigned to *uncongenial asymmetry* when the majority of the headlines challenged their in-group (e.g., a Democrat assigned to Democrat-challenging asymmetry), whereas they were considered as assigned to *congenial asymmetry* if the majority of headlines challenged their out-group (e.g., a Democrat assigned to Republican-challenging asymmetry).

Table 3: Partisan Topics and Challenged Parties: Two Variations per Condition

Topic	Symmetric Coverage		Republican-challenging Asymmetry		Democrat-challenging Asymmetry	
	1	2	1	2	1	2
Black teen pregnancy	Rep	Dem	Rep	Rep	Dem	Dem
Immigration	Dem	Rep	Rep	Dem	Dem	Rep
US debt	Dem	Rep	Dem	Rep	Rep	Dem
Abortion	Rep	Dem	Rep	Rep	Dem	Dem
Gun violence	Dem	Rep	Rep	Rep	Dem	Dem
Wall Street bailout	Rep	Dem	Rep	Rep	Dem	Dem

To ensure that the results would not hinge on the specific party-topic associations, participants were randomly assigned to one of the two party-topic variations per condition, as illustrated in Table 3. In the *asymmetric* coverage conditions, one headline with an opposite direction was designed to address either a highly controversial topic (immigration) or a less politicized one (US debt). In all variations, the headlines were ordered in a way that neutral topics were presented in between partisan topics to avoid either presenting six partisan topics in a row or presenting two neutral topics in a row. The order and full content of headlines displayed in the actual experiment are available in Section 1.1 of supplementary materials.

## Measures

To measure perceived news credibility, after reading the headlines, participants were asked to indicate the degree to which they thought the website could be described as follows: “is fair,” “is accurate,” “is unbiased,” “tells the whole story,” and “can be trusted,” on a five-point scale from “not at all” to “extremely” (Meyer 1988; Tsfaty 2010; Pingree et al. 2013). The

primary measure of news credibility perception was the composite score, constructed as the average, of the five items.

To measure perceptions of shared interest and expertise, the two underlying dimensions of source credibility, I adapted the questionnaires in Lupia and McCubbins (1998, p.188). Perceived shared interest was measured as the degree to which participants perceived the authors of the website as agreeing with them on most political issues on a five-point scale from “never” to “always.” Perceived expertise was measured as the degree to which participants perceived the authors of the website as knowledgeable about how political decisions affect people on a five-point scale from “nothing at all” to “a great deal.”

## Results

### Effects of Asymmetric Coverage on News Credibility Perceptions

To analyze how coverage asymmetry affects perceived source credibility relative to the baseline condition of symmetric coverage, I used ordinary least squares (OLS) with robust standard errors. The five items for the composite scale of source credibility loaded on a single underlying construct in factor analysis and had acceptable internal reliability (Cronbach’s  $\alpha = .92$ ; Bland and Altman 1997).<sup>13</sup> In Table 4, the model estimates the effects of asymmetric coverage compared to symmetric coverage while allowing for the treatment effects to vary by partisan identity. Because it is hard to directly interpret interaction terms (Brambor, Clark and Golder 2006), I focus my discussion on the conditional average treatment effects (CATE) among each partisan group (e.g., Guess and Coppock 2020). In subsequent discussions, the treatment effects of uncongenial and congenial asymmetries assume *symmetric coverage of political parties* as the baseline (reference) condition.

Consistent with H1, uncongenial asymmetric coverage reduced perceived news credibility

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<sup>13</sup>Factor loadings and fit statistics from factor analysis, and item-total correlations are available in supplementary materials.

Table 4: Asymmetric Coverage Effects on Perceived News Credibility, Shared Interest, and Expertise

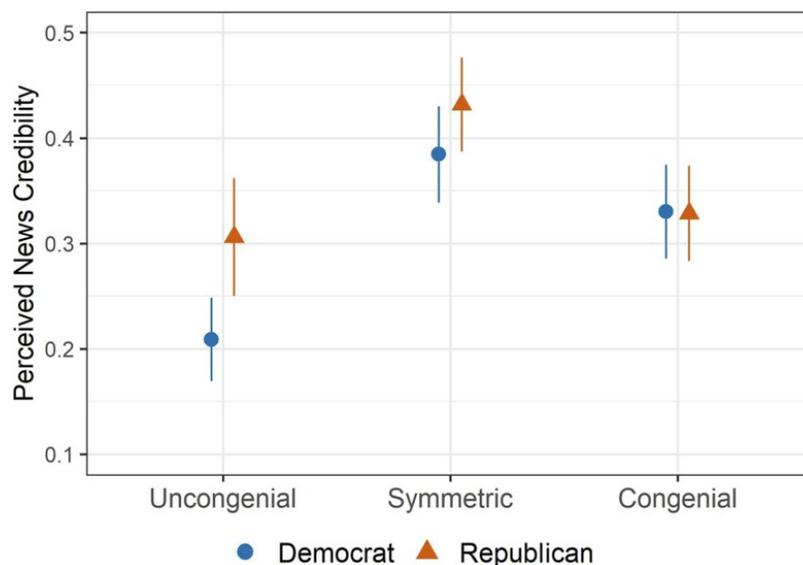
	Perceived News Credibility	Perceived Shared Interest	Perceived Expertise
Uncongenial	-0.18*** (0.03)	-0.14*** (0.03)	-0.07* (0.04)
Congenial	-0.05* (0.03)	0.07** (0.03)	0.10*** (0.04)
Rep	0.05 (0.03)	-0.003 (0.03)	0.03 (0.03)
Uncongenial x Rep	0.05 (0.05)	0.08* (0.05)	-0.06 (0.05)
Congenial x Rep	-0.05 (0.05)	-0.05 (0.05)	-0.09* (0.05)
Constant	0.38*** (0.02)	0.42*** (0.02)	0.44*** (0.03)
N	540	539	540
Adjusted R <sup>2</sup>	0.08	0.07	0.05

*Note:* Entries are the ordinary least squares (OLS) regression coefficients with robust standard errors are in parentheses. *Uncongenial* = 1 if ingroup-challenging asymmetry condition, 0 otherwise; *Congenial* = 1 if outgroup-challenging asymmetry condition, 0 otherwise. *Rep* = 1 if Republican; =0 if Democrat. All variables were coded to range from 0 to 1. \* $p < .10$ ; \*\* $p < .05$ ; \*\*\* $p < .01$ .

compared to symmetric coverage. As illustrated in Figure 1, this negative impact of uncongenial coverage on perceived news credibility was present among both Republicans ( $-0.13$ ,  $p < .01$ ) and Democrats ( $-0.18$ ,  $p < .01$ )<sup>14</sup>. While I expected uncongenial asymmetry to reduce perceived credibility to a greater extent among Republicans than Democrats (H2), it

<sup>14</sup>These treatment effects are calculated from Table 4. For instance, the treatment effect of uncongenial asymmetry compared to the baseline condition (symmetric coverage) is the coefficient estimates for [*Uncongenial*] among Democrats and [*Uncongenial* + *Uncongenial* × *Rep*] among Republicans. The results of OLS analyses by partisan subgroups provide the same estimates of conditional treatment effects (Table S3.1 in supplementary materials).

Figure 1: Average Perceived News Credibility by Experimental Conditions



*Note:* Means and 95% confidence intervals by experimental conditions. *Uncongenial* = Ingroup-challenging asymmetric coverage condition; *Symmetric* = Symmetric coverage condition (baseline); *Congenial* = Outgroup-challenging asymmetric coverage condition. All variables were coded to range from 0 to 1. The estimates are derived from Table 4.

was not the case in this study. Not only the magnitude of treatment effect was greater among Democrats ( $-0.13$  for Republicans,  $-0.18$  for Democrats), the average level of perceived news credibility under uncongenial asymmetry was significantly lower among Democrats than Republicans (Dem = 0.21; Rep = 0.31; t-test of difference in means,  $t = -2.79$ ,  $p < .01$ ). Further reinforcing this point, a tendency to more strongly discount uncongenial asymmetry than congenial asymmetry was found among Democrats but not among Republicans.<sup>15</sup> This again implies that Democrats have a stronger tendency to discount the credibility of uncongenial asymmetry than Republicans. Overall, these findings indicate that partisans from both sides find a source less credible when the majority of its content challenges their own party, compared to when it evenly challenges both parties.

<sup>15</sup>One exploratory research question discussed in Section 3.4 of supplementary materials is whether uncongenial asymmetry decreases perceived credibility to a greater extent than congenial asymmetry. It was the case among Democrats, but not Republicans.

Congenial asymmetric coverage also had an effect of decreasing perceived news credibility (RQ1). As shown in Figure 1, partisans who were given coverage where most headlines challenged the opposite party perceived the source to be less credible, relative to those who received symmetric coverage. The negative effects on credibility perceptions again were observed across both partisan groups, Republicans ( $-0.10, p < .01$ ) Democrats ( $-0.05, p < .10$ ).<sup>16</sup> However, a further examination reveals that Democrats are more sensitive to the specific context of congenial asymmetry. As discussed in the study design, there were two randomized versions of headline content (with different topic-party associations) per condition. In the congenial asymmetry condition, five headlines challenged the opposite party and one headline challenged one's own party on either *immigration* or *national debt*.<sup>17</sup> As shown in Figure 2, congenial asymmetry decreased credibility perceptions among Democrats when this single ingroup-challenging headline was on immigration ( $-0.14, p < .01$ ), but not when it was about national debt ( $0.02, p = .56$ ). In contrast, Republicans found a source with congenial asymmetric coverage to be less credible, regardless the topic of ingroup-challenging headline (immigration:  $-0.12, p < .01$ ; debt:  $-0.08, p < .05$ ).

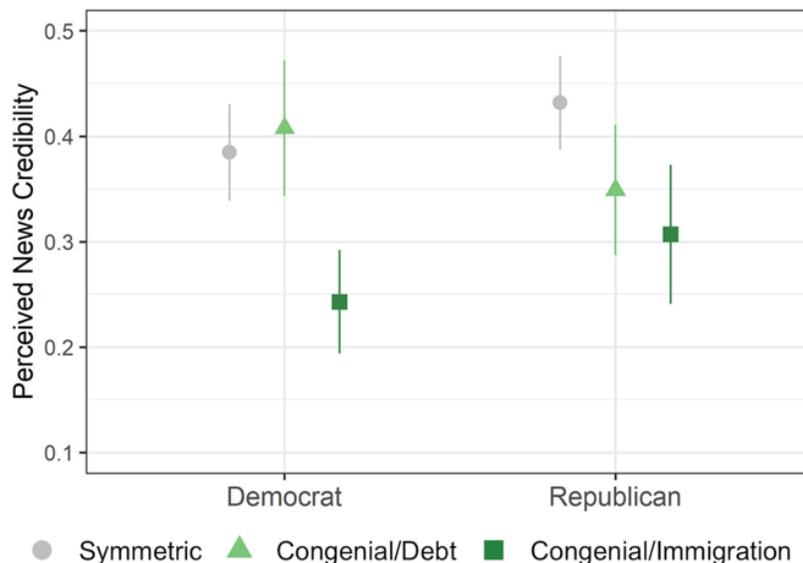
These findings imply that Republicans perceive congenial asymmetry as more of a sign that the source is not reliable than as an endorsement of their group. Democrats, on the other hand, perceive congenial asymmetry as credible as symmetric coverage when Democrats are challenged on less politicized issues (e.g., cause of U.S. debt). However, Democrats find congenial asymmetry less credible when a portion of coverage challenges Democrats on highly

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<sup>16</sup>From Table 4, the treatment effect of congenial asymmetry compared to the baseline condition is captured by the coefficient estimates of  $[Congenial]$  for Democrats and  $[Congenial + Congenial \times Rep]$  for Republicans.

<sup>17</sup>There was no statistically significant difference in source assessments between the two randomized versions in all other conditions and partisan groups (Tables S3.5-S3.7 in supplementary materials). The only exception was Democrats under congenial asymmetry as discussed here.

Figure 2: Average Perceived News Credibility under Congenial Asymmetry by Headline Content Variations Compared to the Baseline Condition



*Note:* Means and 95% confidence intervals by experimental conditions. *Symmetric* = Symmetric coverage (baseline condition); *Congenial/Debt* = Congenial asymmetric coverage where 5 headlines challenge out-group, and 1 challenges in-group on *national debt*; *Congenial/Immigration* = Congenial asymmetric coverage where 5 headlines challenge out-group, and 1 challenges in-group on *immigration*. All variables were coded to range from 0 to 1. Table S3.4 in supplementary materials presents these results in tabular form.

polarized issues (e.g., deportation of illegal immigrants). Because fact-checking coverage heavily focuses on political controversies,<sup>18</sup> there is ample chance that at least a minority of headlines challenge Democrats, and cause congenial asymmetry to lower perceived credibility among not only Republicans, but also Democrats.

### Effects of Asymmetric Coverage on Perceptions of Shared Interest and Expertise

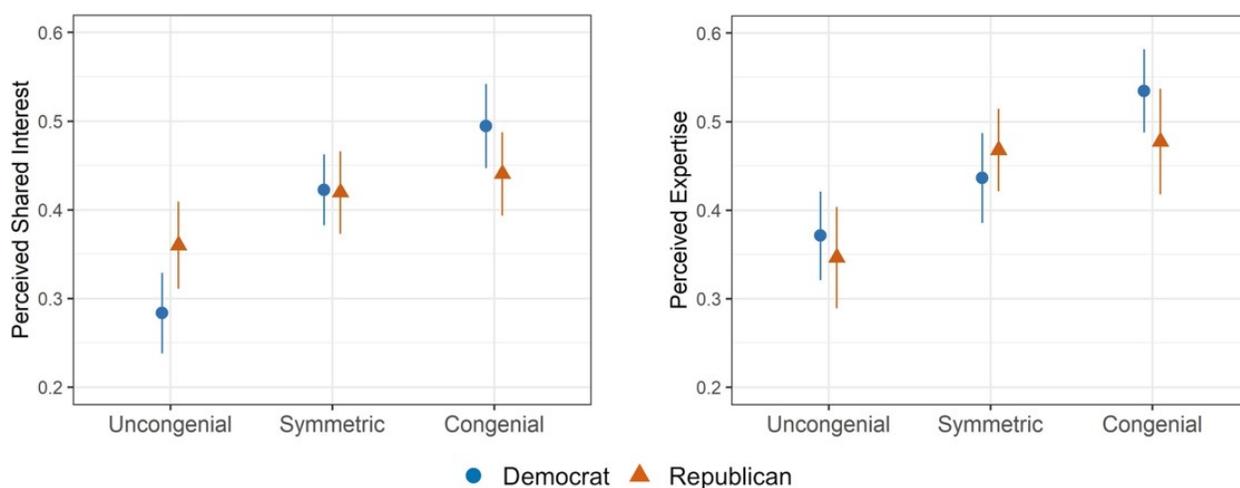
Next, I consider how coverage asymmetry affects two underlying dimensions of source credibility, which are perceptions of shared interest and expertise (RQ2). Compared to symmetric

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<sup>18</sup>As shown in Table 1, professional fact-checking sites heavily focus on partisan topics in their coverage, oftentimes more than 90% of their articles addressing statements made by partisan figures and groups.

coverage, uncongenial asymmetry decreased perceived shared interest among both Republicans ( $-0.06, p < .10$ ) and Democrats ( $-0.14, p < .01$ ). One finding relevant to the unexpected partisan difference in the effects of uncongenial asymmetry (H2) is that uncongenial asymmetry reduced perceived shared interest to a greater extent among Democrats than Republicans. In the case of perceived expertise, uncongenial asymmetry again decreased perceived expertise among both Republicans ( $-0.12, p < .01$ ) and Democrats ( $-0.07, p < .10$ ) compared to symmetric coverage.

Figure 3: Average Perceived Shared Interest and Expertise by Experimental Conditions



*Note:* Means and 95% confidence intervals by experimental conditions. *Uncongenial* = Ingroup-challenging asymmetric coverage condition; *Symmetric* = Symmetric coverage condition (baseline); *Congenial* = Outgroup-challenging asymmetric coverage condition. All variables were coded to range from 0 to 1. The estimates are derived from Table 4.

Congenial asymmetry, on the other hand, increased perceived shared interest among Democrats ( $0.07, p < .01$ ) but had minimal impact among Republicans ( $0.02, p = .28$ ), compared to symmetric coverage. Similarly, congenial asymmetry increased perceived expertise among Democrats ( $0.10, p < .01$ ) but minimally affected perceived expertise among Republicans ( $0.01, p = .80$ ). These results indicate that Democrats likely consider a source with congenial asymmetry to possess greater shared interests and expertise, while Republicans

are more indifferent to symmetric coverage and congenial asymmetry.<sup>19</sup>

Overall, Democrats were found to be more sensitive to the direction of coverage asymmetry when assessing shared interest and expertise of a source, compared to Republicans. Because shared interest and expertise are preconditions of persuasion (Lupia and McCubbins 1998), these findings imply that compared to Republicans, Democrats are less likely to be persuaded by a source with uncongenial asymmetry, but more likely to be persuaded by a source with congenial asymmetry.

## Discussion

This study finds that asymmetric coverage of political parties often found in professional fact-checking sources, although it is driven by evidence-based news coverage decisions, can have an unintended consequence of undermining bipartisan trust. Compared to symmetric coverage that corrects each party at a similar rate, asymmetric coverage lowered perceived source credibility among both partisan groups. *Uncongenial asymmetry* reduced perceptions of news credibility, shared interest, and expertise among both Democrats and Republicans. Contrary to popular belief, Democrats more negatively assessed a source with uncongenial asymmetry than Republicans. *Congenial asymmetry* also reduced perceived news credibility among both partisan groups. Democrats found congenial asymmetry as less credible particularly when a portion of coverage challenged their own party on highly politicized issues. Interestingly, congenial asymmetry triggered Democrats, but not Republicans, to perceive greater shared

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<sup>19</sup>An unexpected yet interesting finding is that congenial asymmetry reduced perceived news credibility compared to symmetric coverage among both partisan groups, yet increased perceived shared interest and expertise among Democrats, but not among Republicans. Given the importance of shared interest and expertise in persuasion, this pattern suggests Democrats, but not Republicans, are more likely to be persuaded by the messages and corrections from a source with congenial asymmetric coverage despite its lower credibility as a news source.

interest and expertise from the source, compared to symmetric coverage.

Because uncongenial asymmetry reduced perceived credibility among both partisan groups, it is evident that both are motivated to protect their partisan identity by distrusting a source that heavily challenges one's own group. Congenial asymmetry, on the other hand, caused both partisan groups to find the source to be less credible as a news source, indicating that the violations of audience expectations for balanced coverage more dominantly determine source assessments. The chance of congenial asymmetry reducing perceived news credibility is higher when the coverage contains in-group challenge on politicized topics, as shown in Democrats' reactions to congenial asymmetry. Democrats, but not Republicans, perceived greater shared interest and expertise from a source with congenial asymmetry, implying Democrats are more likely to be persuaded by the messages delivered by such source. These findings suggest that Democrats have greater tendencies to distrust uncongenial asymmetry and favor congenial asymmetry, while being more sensitive to the specific context of asymmetric coverage in their source assessments.

Overall, my findings imply that by producing asymmetric coverage, fact-checking sites run the risk of losing trust among not only Republicans but also Democrats who are often thought to be favorable to fact-checking. These results echo the concerns that some journalists have in their reluctance to embrace the arbitration model of fact-checking for fear that it will harm public perceptions of their objectivity, particularly if their corrections favor one party over the other (Dobbs 2012; Thorson 2018). This study suggests that this fear that fact-checking practice could harm source reputations can be mitigated by pursuing more symmetric coverage of political parties.

I propose several potential explanations for why Democrats more negatively react to uncongenial asymmetry and more sensitive to headlines that challenge their group, although further research is needed to fully understand this phenomenon. First, because Republicans tend to hold lower baseline trust in the news media than Democrats (Pennycook and Rand 2019), there could be a floor effect that limits the degree to which asymmetric coverage

decreases perceived source credibility among Republicans. Republicans also might already perceive their group to be disfavored by the media or fact-checkers (Shin and Thorson 2017), which would lower their baseline trust when asked to assess a news source. However, in this study, perceived source credibility under the baseline condition (symmetric coverage) was similar between Democrats and Republicans, requiring further investigation and alternative explanations. Second, Democrats and Republicans might hold different perceptions of reality. Given the relatively greater amount of Republican misstatements covered in fact-checking (Ferracioli, Kniess and Marques 2022) and the prevalence of conservative unreliable news outlets (Pennycook and Rand 2019), Democrats may perceive the reality to be tilted toward more Republican misstatements in recent years. If that is the case, Democrats could perceive uncongenial asymmetry as inaccurately reflecting reality and find the source to be not credible. A final possibility is that the existing theories on partisan personality traits and information processing (Jost et al. 2003; Garrett and Stroud 2014) need refinement because Democrats could be more resistant to adverse stimuli than Republicans under certain contexts.

What kind of practical recommendations can this research offer to professional fact-checkers? As discussed earlier, there is a dilemma for asymmetric coverage, because asymmetric coverage is sometimes necessary to accurately reflect evidence but jeopardizes public trust. My work does not intend to encourage professional fact-checkers to pursue balance for the sake of balance. Instead, my findings suggest that asymmetric coverage poses an obstacle to earning bipartisan trust. While adhering to their evidence-oriented coverage decisions, fact-checkers should extend their efforts to better communicate their motivation and non-partisan practice to the public: how they overcome shortcomings of conventional journalism; how they achieve transparent, nonpartisan, and rigorous reporting;<sup>20</sup> and how their

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<sup>20</sup>For instance, the International Fact-checking Network has the IFCN Code of Principles that lays out the specific ways through which professional fact-checkers are monitored and abide by a set of fact-checking rules to ensure non-partisan, transparent, and evidence-based

non-partisan principles could sometimes lead to asymmetric coverage.<sup>21</sup> Absent these extra efforts, their asymmetric coverage, despite its merits and occasional need, likely alienates partisans from both sides.

Another practical recommendation that this study suggests is that fact-checking sources, or any other evidence-based sources, can build public trust by pursuing symmetric coverage of competing political parties. Even when the reality has an imbalance in the amount of misstatements produced by different parties, there could be ways to signal symmetric coverage, while avoiding “false balance” that artificially imposes balance regardless of evidence. For instance, even when there is an asymmetry in partisan misstatements in the short run, fact-checking sites can keep track of the relative amount of fact-checked statements from each party to show a rough balance in the long run.<sup>22</sup> They can also consider sharing the pool of statements that they have considered and examined, which could be more balanced across parties than the set of statements that they ultimately publish as fact-checks. Another approach could be to explicitly present both major parties as the key targets and keep threads of fact-checks targeted at each party, to demonstrate similar amount of attention to both.<sup>23</sup>

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reporting (IFCN N.d.).

<sup>21</sup>So far, fact-checking sources and social media companies have exerted more effort in highlighting the threat of misinformation or medial literacy education (e.g., FactCheck.org’s video on “How to Spot Fake News” (FactCheck.org 2016); Facebook’s guide on “Tips to Spot Fake News” (Facebook N.d.); Clayton et al. 2020).

<sup>22</sup>One example can be found in a Canadian fact-checking site, FactsCan, launched in 2015 (currently inactive). They displayed a pie chart that tracked the share of their fact-checks targeted at different political parties. However, this practice—setting targets by party to roughly balance with recent popular vote—is explicitly rejected by the U.S. fact-checkers (Graves 2018).

<sup>23</sup>LeadStories, a U.S. fact-checking site, keeps the icons that say “Blue Feed” and “Red Feed” with the partisan symbols (a donkey and an elephant) on the top of its website, which

Like any single study, I conducted this one in a particular context. Several aspects of this context may affect its generalizability. For example, the sample for this study was recruited through an online crowdsourcing platform. Because the sample tends to be younger and more educated compared to the general population, further research is needed to evaluate the extent to which the results generalize to different populations. There are a few design limitations that can be addressed in future research. First, in designing experimental stimuli, I employed one version of asymmetric coverage, where five versus one out of eight headlines targeted either party. Future work can examine different combinations of asymmetric coverage. Second, there were two party-topic variations for each condition to minimize the chance that the results hinge on the specific party-topic associations. However, in asymmetric coverage conditions, only two out of six partisan topics could be associated with different parties, thus not entirely ruling out the influence of specific topic-party associations. In future work, the party-topic associations can be fully randomized to allow all partisan topics to be equally likely to be associated with either party. Additionally, two of the six headlines on partisan topics had relatively more opinionated language because I intended to make the asymmetry more explicit. Future study can employ strictly factual language in all headlines to keep the language and tone similar across headlines.

In closing, this study demonstrates that bipartisan trust in fact-checking can be facilitated under certain coverage decisions, further enabling the rigor and unique value of fact-checking to benefit society. It shows that asymmetric coverage in either direction causes a loss of trust among not just one side of partisan spectrum, but among partisans across the aisle. While previous studies have focused on how partisans process individual fact-checking articles (e.g., Nyhan et al. 2020; Wood and Porter 2019), my work focuses on how overall coverage, or a collection of fact-checks, affects partisans' initial evaluations of a source. This endeavor is important because most Americans are still relatively unfamiliar with fact-checking sites (Guess, Nyhan and Reifler 2020) and because credibility perception is the first

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explicitly signals that they consider both parties as their major targets.

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step toward learning, persuasion, and continued use of those outlets (Druckman and McGrath 2019; Lupia 2016). By taking this approach, this study clarifies conditions under which partisans can converge on trusted news sources. By identifying ways to build bipartisan trust in fact-checking, my hope is that this study can inform the work of journalists, educators, and policymakers in their efforts to create evidence-based news sources that help citizens find common factual ground, make informed decisions, and achieve democratic accountability.

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Supplementary Materials for  
*How to Build Bipartisan Trust in Fact-Checking Sites:  
The Effects of Asymmetric Coverage on Source Credibility*

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# 1 Experimental Design

## 1.1 Experimental Stimuli

In the experiment, subjects were randomly assigned to one of the four experimental conditions:

1. Symmetric coverage (baseline)
2. Republican-challenging asymmetric coverage (treatment 1)
3. Democrat-challenging asymmetric coverage (treatment 2)
4. Symmetric coverage with neutral language (exploratory condition)<sup>1</sup>

Table S1.1: Headline Wordings for Partisan Topics (Sets 1-3) and Neutral Topics (A, B)

Set	Partisan gap	Topic/Headline (a)	Topic/Headline (b)
1	Greater	<b>Black teenager pregnancy:</b> What [Republicans/Democrats] have wrong about the pregnancy rate among black teenagers	<b>Abortion:</b> What [Republicans/Democrats] get incorrect about the number of abortions over time
2	Greater	<b>Immigration:</b> [Republican/Democratic] National Committee pursues a policy for the worse on the deportation of illegal immigrants	<b>Gun homicide:</b> [Republican/Democratic] party takes the wrong path for the policy on gun homicide
3	Smaller	<b>Wall Street Bailout:</b> [Republican/Democratic] Senator misleads on which president signed the Wall Street bailout into law	<b>US foreign debt:</b> [Republican/Democratic] governor mischaracterizes the causes of US debt
A	N/A	<b>Health:</b> Exercise can greatly reduce your risk of cancer and heart disease	
B	N/A	<b>Finance:</b> Google to spend \$10 billion on offices, data centers in US this year	

The content of headlines was designed in the following ways:

- In all conditions, a total of eight headlines were presented, six headlines on the topics that have partisan implications<sup>2</sup> along with two headlines on the topics neutral to political parties.
- The choice of three sets of comparable partisan topics were informed by Wood and Porter (2019), which identified the six topics presented in Table S1.1 to be bipartisan misstatements (black teenager pregnancy rates, abortion, immigration, gun homicide, Wall Street Bailout (Troubled Asset Relief Program), US foreign debt). Because the politicians of both Republican and Democratic parties have previously made misstatements on these topics, it was plausible to attribute either party as the source of misstatements.
- Three sets of comparable partisan topics and headlines were chosen on the basis of Wood and Porter (2019)'s results (Figure 1, p. 144). On the bipartisan misstatements (Wood and Porter (2019)'s Study 2), the differences in correction effects between liberals and conservatives were relatively greater on topic sets 1 and 2 (black teenager pregnancy rates, abortion, immigration, gun homicide), compared to set 3 (Wall Street bailout, US foreign debt).

<sup>1</sup>The preregistration indicated that this condition was exploratory and would be excluded from main analyses.

<sup>2</sup>Facts with *partisan implications* have positive or negative implications for political parties (Jerit and Barabas 2012)

- The phrase and tone of the headlines were designed to be similar between the two headlines within each set.
- In the actual stimuli, the headlines were presented as a list, not as a table, using a font (Georgia) distinct from the survey. The words ‘Democratic’ and ‘Republican’ were not colored or bracketed.
- Coverage asymmetry was manipulated by adjusting party reference in each headline (to vary the number of headlines that refer to each party) across conditions, while keeping the content of headlines constant.
- Within each experimental condition, subjects were randomly assigned to one of the two different topic-party associations. The purpose was to reduce the chance that outcomes were affected by specific topic-party associations.

### (1) Symmetric Coverage (Baseline Condition)

Table S1.2: Symmetric Coverage (Baseline Condition)

Version 1		Version 2	
1-a	What [Republicans] have wrong about the pregnancy rate among black teenagers	1-b	What [Democrats] get incorrect about the number of abortions over time
2-a	[Democratic] National Committee pursues a policy for the worse on the deportation of illegal immigrants	2-b	[Republican] Party takes the wrong path for the policy on gun homicide
A	Exercise can greatly reduce your risk of cancer and heart disease	A	Exercise can greatly reduce your risk of cancer and heart disease
3-a	[Republican] Senator misleads on which president signed the Wall Street bailout into law	3-b	[Republicans] governor mischaracterizes the causes of US debt
1-b	What [Republicans] get incorrect about the number of abortions over time	1-a	What [Democrats] have wrong about the pregnancy rate among black teenagers
2-b	[Democratic] Party takes the wrong path for the policy on gun homicide	2-b	[Republican] National Committee pursues a policy for the worse on the deportation of illegal immigrants
B	Google to spend \$10 billion on offices, data centers in US this year	B	Google to spend \$10 billion on offices, data centers in US this year
3-b	[Democratic] governor mischaracterizes the causes of US debt	3-b	[Democratic] Senator misleads on which president signed the Wall Street bailout into law

The two variations of topic-party associations (Table S1.2) were generated in the following steps:

1. The headlines were ordered in a way that avoids presenting either six partisan topics in a row or two neutral topics in a row. For Version 1, the headlines were listed in the order of: 1-a, 2-a, A, 3-a, 1-b, 2-b, B, 3-b (headline labels are from Table S1.1). To create a list that has even number of Democrat-challenging and Republican-challenging headlines, the party references of “R-D-R-R-D-D (R = Republican; D = Democrat)” were assigned to partisan headlines. To make the list more realistic, there were variations in the number of consequent headlines with the same party reference, instead of alternating the two parties (e.g., R-D-R-D-R-D). In consequence, the order of headlines topics (party) in Version 1 looked like: 1-a (R), A, 2-a (D), 3-a (R), 1-b (R), B, 2-b (D), 3-b (D).
2. For Version 2, the party reference of partisan topics was reversed. Then the positions of the first three partisan headlines (1-a 3-a) and the last three partisan headlines (2-b 3-b) were

switched. Thus, the order of headlines topics (party) in Version 2 looked like: 1-b (D), B, 2-b (R), 3-b (R), 1-a (D), A, 2-a (R), 3-a (D).

3. The content and order neutral headlines (A, B) were kept the same across variations.

## (2) Republican-challenging Asymmetric Coverage (Treatment Condition 1)

Within asymmetric treatment conditions (Treatment conditions 1 and 2), two randomized versions were designed in a way that the topic-party associations were reversed for (1) one of the partisan topics with a greater partisan gap (immigration) or (2) one of the partisan topics with a smaller partisan gap (foreign debt), in order to minimize the influence of specific topic-party associations. The ways in which headlines were designed are explained below.

Table S1.3: Republican-challenging Asymmetric Coverage (Treatment Condition 1)

	Version 1		Version 2
1-a	What [Republicans] have wrong about the pregnancy rate among black teenagers	1-b	What [Republicans] get incorrect about the number of abortions over time
2-a	[Democratic] National Committee pursues a policy for the worse on the deportation of illegal immigrants	2-b	[Republican] Party takes the wrong path for the policy on gun homicide
A	Exercise can greatly reduce your risk of cancer and heart disease	A	Exercise can greatly reduce your risk of cancer and heart disease
3-a	[Republican] Senator misleads on which president signed the Wall Street bailout into law	3-b	[Democratic] governor mischaracterizes the causes of US debt
1-b	What [Republicans] get incorrect about the number of abortions over time	1-a	What [Republicans] have wrong about the pregnancy rate among black teenagers
2-b	[Republican] Party takes the wrong path for the policy on gun homicide	2-b	[Republican] National Committee pursues a policy for the worse on the deportation of illegal immigrants
B	Google to spend \$10 billion on offices, data centers in US this year	B	Google to spend \$10 billion on offices, data centers in US this year
3-b	[Republican] governor mischaracterizes the causes of US debt	3-b	[Republican] Senator misleads on which president signed the Wall Street bailout into law

1. Adopting Version 1 headlines of Baseline Condition, one of the highly partisan headlines (immigration) is set to challenge Democrats, while all other headlines challenge Republicans.
2. Adopting Version 2 headlines of Baseline Condition, one of the weakly partisan headlines (US debt) is set to challenge Democrats, while all other headlines challenge Republicans.
3. This treatment condition was considered as *uncongenial* asymmetric coverage when assigned to Republicans and *congenial* asymmetric coverage when assigned to Democrats.

## (3) Democrat-challenging Asymmetric Coverage (Treatment Condition 2)

1. Adopting Version 1 headlines of Baseline Condition, one of the highly partisan headlines (immigration) is set to challenge Republicans, while all other headlines challenge Democrats.
2. Adopting Version 2 headlines of Baseline Condition, one of the weakly partisan headlines (US foreign debt) is set to challenge Republicans, while all other headlines challenge Democrats.
3. This treatment condition was considered as *uncongenial* asymmetric coverage when assigned to Democrats and *congenial* asymmetric coverage when assigned to Republicans.

Table S1.4: Democrat-challenging Asymmetric Coverage (Treatment Condition 2)

Version 1		Version 2	
1-a	What [Democrats] have wrong about the pregnancy rate among black teenagers	1-b	What [Democrats] get incorrect about the number of abortions over time
2-a	[Republican] National Committee pursues a policy for the worse on the deportation of illegal immigrants	2-b	[Democratic] Party takes the wrong path for the policy on gun homicide
A	Exercise can greatly reduce your risk of cancer and heart disease	A	Exercise can greatly reduce your risk of cancer and heart disease
3-a	[Democratic] Senator misleads on which president signed the Wall Street bailout into law	3-b	[Republican] governor mischaracterizes the causes of US debt
1-b	What [Democrats] get incorrect about the number of abortions over time	1-a	What [Democrats] have wrong about the pregnancy rate among black teenagers
2-b	[Democratic] Party takes the wrong path for the policy on gun homicide	2-b	[Democartic] National Committee pursues a policy for the worse on the deportation of illegal immigrants
B	Google to spend \$10 billion on offices, data centers in US this year	B	Google to spend \$10 billion on offices, data centers in US this year
3-b	[Democratic] governor mischaracterizes the causes of US debt	3-b	[Democratic] Senator misleads on which president signed the Wall Street bailout into law

#### (4) Symmetric Coverage with Neutral Language (Exploratory Condition)

Taking the headline orders of Versions 1 and 2 in Baseline Condition, headlines language for partisan topics was revised be non-judgemental and neutral.

Table S1.5: Symmetric Coverage with Neutral Language (Exploratory Treatment Condition)

Version 1		Version 2	
1-a	What [Republicans] claim about the pregnancy rate among black teenagers	1-b	What [Democrats] say about the number of abortions over time
2-a	[Democratic] National Committee's policy proposals for the deportation of illegal immigrants	2-b	[Republican] Party's approach for the policy on gun homicide
A	Exercise can greatly reduce your risk of cancer and heart disease	A	Exercise can greatly reduce your risk of cancer and heart disease
3-a	[Republican] Senator comments about which president signed the Wall Street bailout into law	3-b	How a [Republicans] governor characterizes the causes of US debt
1-b	What [Republicans] say about the number of abortions over time	1-a	What [Democrats] claim about the pregnancy rate among black teenagers
2-b	[Democratic] Party's approaches to the policy on gun homicide	2-b	[Republican] National Committee policy proposals for the deportation of illegal immigrants
B	Google to spend \$10 billion on offices, data centers in US this year	B	Google to spend \$10 billion on offices, data centers in US this year
3-b	How a [Democratic] governor characterizes the causes of US debt	3-b	[Democratic] Senator comments about which president signed the Wall Street bailout into law

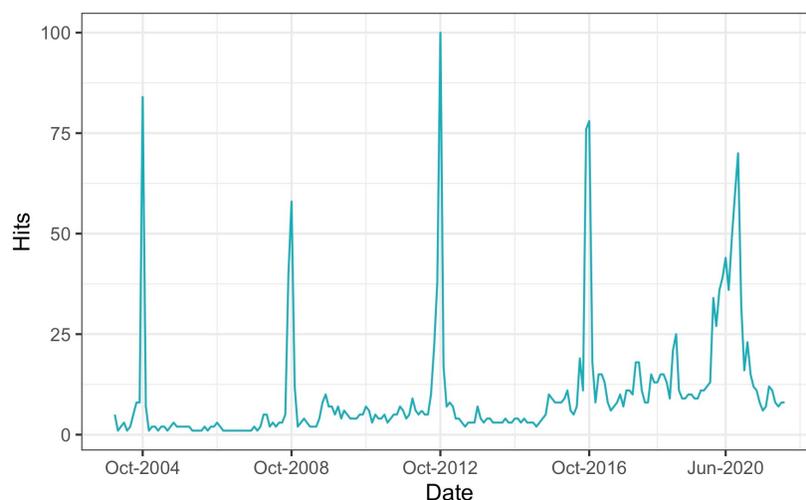
## 1.2 External Validity of Experimental Stimuli: Examples of Fact-checking Coverage

The design of experimental stimuli reflects reporting practices of professional fact-checking sources. To explain the rationale behind the design of stimulus headlines and experimental conditions, I present examples of actual headlines and coverage that professional fact-checking sources produced.

When designing the experimental stimuli, I referred to fact-checking coverage published by various fact-checking outlets at various points in recent years. To illustrate reporting practices of professional fact-checking sites, I present the entire fact-checking coverage of FactCheck.org and Washington Post Fact Checker during October 2016 and June 2020 as examples.

FactCheck.org and Washington Post Fact Checker were chosen because they are two of the leading fact-checking sites with monthly fact-check archives<sup>3</sup>. October 2016 was chosen because it when the public was relatively more likely to be exposed to fact-checking sites, as shown in Figure S1.1.<sup>4</sup> October 2016 is especially informative to the design of the study because it was the most recent election period at the time of this study, illustrating the typical coverage that people likely have experienced with fact-checking sites. June 2020 was chosen because it was when the experimental design for this study was being finalized.

Figure S1.1: The Relative Search Interest Activities Over Time: Fact-checking (Topic)



*Note:* The peak in the year 2020 was October 2020, but June 2020 is indicated on the horizontal axis for being the month of interest for the data collection.

<sup>3</sup>FactCheck.org archive links: Oct 2016, June 2020; WaPo archive links: Oct 2016, June 2020

<sup>4</sup>To examine over-time interest in fact-checking among the U.S. public, I retrieved the Google Trends data using the R package ‘gtrendsR.’ Google Trends offers two different approaches to measure the relative search volume. First, a ‘search term’ is the results specific to the terms in the given query. Second, a ‘topic’ is the results regarding a group of search terms with the same concept or entity. Among the topics specified by Google, Figure S1.1 is based on the search ‘topic’ ‘fact-checking,’ which includes related search terms such as ‘fact-check,’ ‘fact checking,’ etc.

## (1) Typical headline language in fact-checking coverage

To illustrate typical fact-checking practices, I collected data from the entire fact-checking articles published by FactCheck.org and Washington Post in the months of October 2016 and June 2020. I collected data on fact-checking articles (“fact-checks”) that provide assessments about specific claims made by specific entities (e.g., individual, group). Articles that were not typical fact-checks were excluded from the data collection (e.g., articles that contained explanations of a topic absent target figure/statement, a summary of fact-checks that were previously published, video that summarizes a previously published fact-check, or quizzes about past fact-checks).

I collected the following article-level information: date, source, title, deck summary, topic, challenged party, and validated party. The collected data include the following variables:

- date: a variable that indicates the date of publication in the format of dd/mm/yy.
- source: the name of the fact-checking site where the article was published.
- title: the title of the article.
- summary: a variable that contains the summary of main conclusions of the article (usually presented in the deck section below headlines or as a conclusion on a rating scale)
- topic: a variable that records the topic that is mainly addressed in the article. It can take entries such as: “immigration,” “debate,” “economy,” etc.
- challenged: a variable that indicates which party is predominantly challenged in a fact-checking article. “Democrat” if the Democratic Party is predominantly challenged, “Republican” if the Republican Party is predominantly challenged, and “both” if both parties are similarly challenged, and empty if neither party is challenged.
- validated: a variable that indicates which party is predominantly validated in a fact-checking article. “Democrat” if the Democratic Party is predominantly validated, “Republican” if the Republican Party is predominantly validated, and “both” if both parties are similarly validated, and empty if neither party is validated.

As shown in the fact-checking headlines published by FactCheck.org and Washington Post Fact Checker during October 2016 and June 2020 (Tables S1.6 through S1.10), the headlines and their accompanied decks explicitly indicate which partisan figures or groups are wrong. The headline language, along with its deck, indicates the inaccuracy by characterizing the target claims as “false,” “wrong,” “misleading,” “false,” “unsupported,” “misguided,” “inaccurate,” “ridiculous,” “bogus,” “bizarre” or describe the speaker’s statement using verbs such as “muddy,” “mischaracterize,” “twist,” “spin,” “cherry-pick.” To reflect the typical language used in the actual fact-checking coverage while avoiding overly mocking language, I designed the four of the stimulus headlines to employ expressions such as “have wrong,” “mislead,” “get incorrect,” and “mischaracterize.”

Table S1.6: The Full List of Fact-checking Articles by FactCheck.org: October 2016

Date	Headline	Deck Summary	Topic	Challenge	Validate
10/03/16	Spinning Trump's Taxes	Trump's surrogates put the best spin on Trump's loss from income tax	tax	Republican	
10/03/16	Clinton on the Stump	Clinton's false claims in speeches	multiple issues	Democrat	
10/04/16	To Be or Not to Be a Wolf	Science is not clear about whether red wolves are hybrids between coyotes and gray wolves	science		
10/05/16	Fact-Checking the VP Debate	VP debate (Pence 5 wrong, Kaine 4 wrong)	debate	both	
10/06/16	Fired Over VA Wait Times	Obama's wrong claim about firing people at the Department of Veterans Affairs	veterans	Democrat	
10/07/16	Trump Muddies Immigrant Voting Issue	Trump mangled the facts about immigrant voting	immigration	Republican	
10/10/16	Fact-Checking the Second Presidential Debate	The second debate (Trump 9 wrong, Clinton 7 wrong)	debate	both	
10/12/16	Trump Twists Facts on WikiLeaks	Trump twisted excerpts from Clinton's past speeches	multiple issues	Republican	
10/13/16	Trump's Misguided Debate Bias Claim	Trump wrongly labeled the debates "rigged"	debate	Republican	
10/14/16	Jolly, Trump Photos Are Fake	Democratic TV ad about David Jolly and Trump uses fake images	abortion	Democrat	
10/14/16	Trump Twists Facts on Murder Case	Trump falsely claimed a convicted killer set free by Clinton's watch	crime	Republican	
10/14/16	Clinton's Auto Bailout Falsehood	Clinton wrongly quote Trump out of context	economy	Democrat	
10/18/16	Pence's Unsupported Haiti Claim	Pence's repeated, wrong claim about ABC News and Clinton	disaster relief	Republican	
10/19/16	Trump's Bogus Voter Fraud Claims	Trump's false narrative about rampant voter fraud	voter fraud	Republican	
10/19/16	A Deal That Never Happened	Trump false and grossly inflated claim about FBI and Clinton emails	Clinton emails	Republican	
10/20/16	Clinton's Misleading Debt Claims	Contrary to Clinton's claim, her plan will add \$200 billion to the debt over 10 years	economy	Democrat	
10/20/16	Fact-Checking the Final Presidential Debate	The final debate (Trump 9 wrong, Clinton 2 wrong)	debate	Republican	
10/21/16	More Bogus Trumponomics	Donald Trump mangled his economic facts - again	economy	Republican	
10/24/16	Did the Pope Endorse Trump?	No, the pope did not	endorsement		
10/24/16	More Bogus Voter Fraud from Trump	Trump falsely claimed Podesta was quoted	voter fraud	Republican	
10/25/16	Clinton's Connection to FBI Official	Trump lacked evidence	Clinton emails	Republican	
10/25/16	A False 'Corruption' Claim	Trump's ad falsely claim Clinton's corrupt behavior	corruption	Republican	
10/26/16	Clinton and Nuclear Launch Times	Clinton did not disclose classified info - it's common knowledge	defense		Democrat
10/27/16	A False Attack on Toomey	A Democratic ad falsely accused Republican Sen. Pat Toomey	banking	Democrat	
10/28/16	Democratic Deceptions	TV ads falsely ties Trump to GOP candidates	endorsement	Democrat	
10/28/16	Trump Wrong on Murder Rate	Trump's claim is wildly inaccurate	crime	Republican	
10/28/16	Still Cherry-Picking Premiums	Trump cherry-picked increases about premiums	health care	Republican	
10/31/16	Spinning the FBI Letter	Comey's vague announcement sparks partisan distortions	Clinton emails		

Table S1.7: The Full List of Fact-checking Articles by Washington Post Fact Checker: October 2016

Date	Headline	Deck Summary	Topic	Challenge	Validate
10/03/16	Trump's claim that his hotel in D.C. is 'under budget, ahead of schedule'	It's hard to tell for now	economy	Republican	
10/04/16	Clinton, Kaine go too far in touting a nuclear deal with Russia	The Clinton campaign says a treaty with Russia cut nuclear arms, but there's less than meets the eye	defense	Democrat	
10/05/16	Fact-checking the vice-presidential debate between Kaine and Pence	Kaine 7 wrong, Kaine 6 correct, Pence 10 wrong , Pence 2 correct	debate	Republican	
10/06/16	Clinton, Kaine airbrush out inconvenient details about U.S. troop departure from Iraq	The reasons are more complex	defense	Democrat	
10/07/16	Neither Kaine nor Pence was 'absolutely' correct about Clinton emails and court-martial	Both Kaine and Pence spoke in absolute terms, but the reality is much less clear	debate	both	
10/09/16	Fact-checking the second Clinton-Trump presidential debate	25 suspect claims from the second debate (most by Trump)	debate	Republican	
10/11/16	Trump's claim about Canadians traveling to the United States for medical care	Trump exaggerates one data point to extrapolate, but that's misleading	health care	Republican	
10/11/16	The facts about Hillary Clinton and the Kathy Shelton rape case	victim is angry at Clinton for requesting a psychiatric exam, but the request was denied	crime		Democrat
10/12/16	Trump's ridiculous claim that he won 'every poll' on the second presidential debate	Actually, Trump lost every single poll using a credible, scientific method	debate	Republican	
10/12/16	'Whole bunch' of facts don't support Obama's claim that many VA bosses were fired over scandal	Obama mischaracterized the firings of senior VA officials	veterans	Democrat	
10/13/16	Trump's false claim that Clinton 'lost' \$6 billion at the State Department	Trump ventures into fantasyland with a strange claim	budget	Republican	
10/14/16	Trump flip-flops on whether women's sexual allegations should be believed	Trump has a double standard	sexual assault	Republican	
10/17/16	Trump's claim that a Clinton-backed Haiti factory 'amounted to a massive sweatshop'	Four Pinocchios for Trump distorting a Clinton-backed earthquake recovery in Haiti	disaster relief	Republican	
10/18/16	Clinton's bogus claim that Trump didn't want to save the auto industry	Four Pinocchios for Clinton's claim about auto industry	economy	Democrat	
10/19/16	Fact-checking two false claims by Trump alleging widespread voter fraud	Four Pinocchios for two of Trump's claims	voter fraud	Republican	
10/19/16	Trump's claim of 'collusion' by the FBI and State to make Hillary Clinton 'look less guilty'	Trump alleges collusion but FBI documents show much less than meets the eye	clinton emails	Republican	
10/20/16	Fact-checking the third Clinton-Trump presidential debate	Trump 17 wrong, Clinton 3 wrong, Clinton 4 correct	debate	Republican	
10/21/16	Trump's claim that the Islamic State 'is in 32 countries'	Trump's number lacks context	foreign relations	Republican	
10/21/16	Trump's claim tying violence at his rallies to the Clinton campaign	Trump stretches the available facts too far	violence	Republican	
10/24/16	No, Eric Trump, 14 percent of noncitizens are not registered to vote	Eric Trump repeats a debunked claim about unfair voting practices	immigration	Republican	
10/24/16	Trump's claim that Clinton 'allowed thousands of criminal aliens to be released'	Trump has gone off the rails to directly blame Clinton	crime	Republican	
10/25/16	Abortion-rights advocates' claim that 'one in three women has had an abortion'	Abortion-rights advocates inaccurately cite data	abortion		
10/25/16	Trump's mixed-up version of the latest Hillary Clinton email controversy	Trump got the story of a Wall Street Journal article wrong	Clinton emails	Republican	
10/26/16	The facts behind Trump's repeated claim about Hillary Clinton's role in the Russian uranium deal	Trump naming Clinton as an agent, but that was not the case	foreign relations	Republican	
10/27/16	Clinton campaign's claim that Trump 'says he'd deport 16 million people'	Clinton campaign spun Trump's words	immigration	Democrat	
10/28/16	Trump's claim that he predicted that Obamacare 'can't work'	Little evidence that Trump predicted Obamacare would fail	health care	Republican	
10/30/16	Trump's bizarre claim that the Clinton email controversy is 'bigger than Watergate'	Four Pinocchios for this absurd comparison	clinton emails	Republican	

Table S1.8: The Full List of Fact-checking Articles by FactCheck.org: June 2020 (Partisan Targets)

Date	Headline	Deck Summary	Topic	Challenge	Validate
06/04/20	The Semantics of ‘Tear Gas’ Versus ‘Pepper Spray’	Trump leaves false impression that White House didn’t use chemical agents	protest	Republican	
06/09/20	Trump Tweets Baseless Claims About Injured Buffalo Protester	Trump promoted a conspiracy theory	protest	Republican	
06/09/20	Statue in Lincoln Memorial Was Not Defaced by Protesters	A meme spreads a doctored image of the Lincoln Memorial, from a conservative website	protest	Republican	
06/09/20	China Didn’t Stop Virus ‘Cold’ Outside Wuhan	Trump wrongly said China didn’t stop COVID from spreading to the world	COVID	Republican	
06/10/20	Misleading Ad Targets Biden on Fossil Fuels, Fracking	A TV ad from a Republican super PAC inaccurately describe Biden’s plan	climate change	Republican	
06/10/20	Trump’s False Claim on Tijuana Coronavirus Cases	Trump falsely claimed Tijuana is the most heavily infected	COVID	Republican	
06/11/20	Trump Wrong on Crime Record	Trump wrongly claimed that crime statistics are record setting	crime	Republican	
06/12/20	Trump’s Deceptive Ad on Biden and Defunding the Police	Trump deceptively suggests Biden will defund the police	police	Republican	
06/12/20	Colorado Vaccine Bill Includes Nonmedical Exemptions for Children	A Facebook meme false claim about Colorado bill	public health	Republican	
06/16/20	Ahead of Trump Rally, Republicans Spin COVID-19 Metrics	Trump and his supporters misleading claims about COVID	COVID	Republican	
06/17/20	Biden on Economic Growth and Trump’s Tax Cuts	Biden wrongly says conservative think tanks agree Trump’s tax cuts no growth at all	tax	Democrat	
06/17/20	Trump Wrong on Obama-Biden Actions on Policing	Trump falsely claimed Obama never tried to fix police violence	violence	Republican	
06/17/20	Pence’s False Claims About Trump’s Handling of Coronavirus	Pence’s false claims about Trump’s handling COVID	COVID	Republican	
06/18/20	Azar, Trump Mislead on FDA’s Hydroxychloroquine Decision	White House left misleading impression about FDA decision	COVID	Republican	
06/19/20	Trump’s Absentee vs. Mail-In Ballot Spin	Trump’s false distinctions between mail-in and absentee ballots	election	Republican	
06/22/20	Trump Inherited More Ventilators Than Have Been Distributed	Contrary to Trump’s claim, federal government had more ventilators in stock	public health	Republican	
06/23/20	Viral Photo Misidentified as Trump Tulsa Crowd	False social media post supportive of Trump	politician	Republican	
06/24/20	Trump’s Unsupported Claim About Opportunity Zone Investments	Trump asserted without evidence that \$100 billion was invested	economy	Republican	
06/25/20	Trump Falsely Says COVID-19 Surge ‘Only’ Due to Testing, Misleads on Deaths	Trump falsely asserts cases are up due to testing	COVID	Republican	
06/25/20	Trump’s Shaky Warning About Counterfeit Mail-In Ballots	Trump’s unfounded claim that mail-in ballots will be printed by foreign countries	election	Republican	
06/26/20	Biden Floats Baseless Election Conspiracy	Biden’s claim about Trump and mail-in ballots lacks evidence	election	Democrat	
06/26/20	Trump Falsely Claims Obama ‘Destroyed’ Maine Lobster Industry	There has been absolutely no impact	economy	Republican	

Table S1.9: The Full List of Fact-checking Articles by FactCheck.org: June 2020 (Non-partisan Targets)

Date	Headline	Deck Summary	Topic
06/03/20	Post on Floyd Protests Uses Old Vandalism Photos	A Facebook post images are old and irrelevant	protest
06/04/20	Viral Posts Share Old, Edited White House Photo in Dark	the image is actually from 2014 and was edited	protest
06/05/20	Trump Touts Strong Jobs Report, Flubs Some Facts	Trump false, misleading claims about performance	economy
06/05/20	Bricks Were Placed for Construction, Not to Incite Protesters	misleadingly suggest that bricks were staged to incite protest	protest
06/05/20	LEGO Temporarily Halts Marketing, Not Sales, of Police Toy Sets	LEGO isn't discontinuing the sale	business
06/05/20	Meme Misrepresents Fauci's Position on Vaccine Trials	falsely suggests Fauci supports administering vaccine before clinical trials	COVID
06/08/20	The Continuing 'Tear Gas' Debate	National semantics exercise over "pepper balls" and "tear gas" has continued	science
06/08/20	Video of Trump's 'Choke' Quote Refers to Political Rivals	Video clips misleadingly suggest Trump was mocking George Floyd	violence
06/08/20	Nuremberg Code Addresses Experimentation, Not Vaccines	A bogus claim that "[v]accines are in direct violation of The Nuremberg Code"	COVID
06/08/20	Does Vitamin D Protect Against COVID-19?	no direct evidence	COVID
06/09/20	Posts Distort Facts on Floyd Pathologist's Role in Past Cases	Instagram posts erroneously claim about the doctor for Floyd case	violence
06/12/20	Donations to Black Lives Matter Group Don't Go to DNC	Social media posts falsely claim donations for BLM went to DNC	protest
06/12/20	Unpacking WHO's Asymptomatic COVID-19 Transmission Comments	WHO scientist confusingly suggestion about asymptomatic COVID transmission	COVID
06/12/20	Bogus Claims of 'Crisis Actors' in Death of George Floyd	False claims that those involved in Floyd case are crisis actors	violence
06/16/20	Sarah Huckabee Sanders Did Not Post Conspiratorial Tweet	A tweet was falsely attributed to Sanders, misspelled her name	conspiracy
06/17/20	Facebook Post Repeats Flawed Claim on Wuhan Lab Funding	A Facebook post false claim that Obama gave fund to a lab in Wuhan	COVID
06/17/20	Meme Spreads Wrong Photo, Details in Floyd Criminal Case	A meme distorts Floyd's case	violence
06/17/20	Conspiracy Theory on Floyd's Death Disproved by Footage	A Facebook post falsely claiming Floyd case was filmed before COVID	violence
06/19/20	Trump Campaign Didn't Advertise for 'MINORITY Actors' in Tulsa	False Craigslist about Trump campaign	eleciton
06/19/20	Gifting a Folded Flag Isn't 'Only For Fallen Veterans'	Misleading social media post saying Nancy Pelosi violated a military tradition	politician
06/23/20	Posts Falsely Claim Wallace Mistook 'Automotive Belt for a Noose'	A Facebook post with false claim	hate crime
06/24/20	Fake AOC Tweet Politicizes COVID-19 Business Restrictions	No evidence that AOC sent the bogus tweet	COVID
06/29/20	Wearing Face Mask During Pandemic Doesn't Affect Concealed Carry Permit	A meme has bogus claim that wearing a mask removes conceal carry ability	COVID
06/30/20	Painting of Children in Masks Isn't a 1994 Airport Mural	Viral posts wrongly claim a painting was a mural for Denver airport	COVID
06/30/20	Meme Misrepresents Florida Surgeon General's Position on Face Masks	A meme falsely claims a FL surgeon general recommended stop wearing masks	COVID

Table S1.10: The Full List of Fact-checking Articles by Washington Post Fact Checker: June 2020

Date	Headline	Deck Summary	Topic	Challenge	Validate
06/02/20	Mitch McConnell got 'rich' the old-fashioned way	An attack ad misleadingly suggests how McConnell got rich	politician	Democrat	
06/03/20	White House targets protesters with misleading video	White House tweeted misleading clips	protest	Republican	
06/03/20	Donald Trump, friend of 'all' peaceful protesters?	Trump supports peaceful protesters only when their interests are aligned with his	protest	Republican	
06/04/20	How specific were Biden's recommendations on the coronavirus?	Biden's suggestions were misleading	COVID	Democrat	
06/05/20	Trump's claim that he's done more for black Americans than any president since Lincoln	Four Pinocchios - Historians scorn Trump's statement	race	Republican	
06/08/20	William Barr's Four-Pinocchio claim that pepper balls are 'not chemical'	Bogus claim obscures the event	protest	Republican	
06/09/20	Trump tweets outrageous conspiracy theory about injured Buffalo man	Trump makes us regret we can award no more than Four Pinocchios	violence	Republican	
06/12/20	Joe Biden's shifting recollection on his civil rights activities	Two Pinocchios - Biden says he was involved, but records say not	civil rights	Democrat	
06/15/20	Democratic ad misleadingly attacks Susan Collins on the Paycheck Protection Program	Three Pinocchios - a narrative crated out of facts left a false impression	economy	Democrat	
06/16/20	Trump's zombie claim that he has invested \$2 trillion in the military	Three Pinocchios - Trump falls short of his claim	military	Republican	
06/17/20	Trump's false claim that Obama 'never even tried to fix' police brutality	Four Pinocchios - Trump cannot say his predecessor didn't even try	violence	Republican	
06/18/20	Video evidence of anti-black discrimination in China over coronavirus fears	Black residents in Guangzhou are facing discriminations over COVID fears	foreign country		
06/22/20	Who caused the violence at protests? It wasn't antifa.	Four Pinocchios - little evidence supports Trump administration's claim	protest	Republican	
06/24/20	Fact-checking the GOP's 'satirical' vote-by-mail video	Four Pinocchios - RNC tweeted a video filled with false and misleading claims	election	Republican	
06/25/20	Trump keeps saying Obama left him 'no ventilators.' The number is 16,660.	Four Pinocchios - Trump's claim is false	public health	Republican	
06/26/20	Michael Flynn, Barack Obama and Trump's claims of 'treason'	unsubstantiated claims by Trump allies	national security	Republican	
06/29/20	Bottomless Pinocchio: Trump's claim that he will 'always' protect those with preexisting conditions	Four Pinocchios - Trump has repeated this falsehood nearly 100 times.	health care	Republican	

As shown in preceding tables, in many of the fact-checking headlines, the targets were individual public figures, such as politicians. The names of specific politicians were masked in the stimulus headlines (e.g., “a Democratic/Republican Senator,” “a Democratic/Republican governor”), in order to prevent preexisting attitudes toward high-profile politicians from affecting source assessments. Actual fact-checking headlines also target each party collectively or as a group as shown in Table S1.11. To indicate partisan targets without invoking specific politicians, some of the stimuli headlines referred to partisan groups or entities such as “Democratic/Republican National Committee,”<sup>5</sup> “Democratic/Republican party,” or “Democrats/Republicans.”

Table S1.11: Examples of Fact-checking Headlines that Refer to Partisan Groups

Source	Date	Headline
FactCheck.org	04/26/13	Democrats Distort Vote on Climate Change
FactCheck.org	10/22/13	Democrats Exaggerate Shutdown Costs
FactCheck.org	07/28/16	Day 3 at the Democratic Convention
FactCheck.org	10/28/16	Democratic Deceptions
FactCheck.org	05/08/17	Republican Health Care Spin
FactCheck.org	01/26/18	Democrats’ Misleading Tax Line
FactCheck.org	01/07/19	RNC Misleads on ‘Immoral’ Democratic Bill
FactCheck.org	01/07/19	RNC Misleads on ‘Immoral’ Democratic Bill
FactCheck.org	03/15/19	Democrats Mislead on Military Pay, Pensions
FactCheck.org	08/07/19	What Republicans Did on Mental Health, Guns
FactCheck.org	12/05/19	Republicans Cherry-Pick Facts on Impeachment
FactCheck.org	03/03/20	Democrats’ Misleading Coronavirus Claims
FactCheck.org	01/23/21	Republican Spin on Democrats’ Voting Bill
FactCheck.org	10/08/21	Republicans Mischaracterize Proposed Financial Reporting Requirement
FactCheck.org	05/02/22	Article, RNC Tweet Distort Biden’s Comments on Teachers
WaPo Fact Checker	12/11/15	Democrats’ misleading claims about closing the no-fly list ‘loophole’
WaPo Fact Checker	03/14/16	What GOP candidates got wrong — and right
WaPo Fact Checker	07/19/16	Fact-checking the first day of the 2016 Republican National Convention
WaPo Fact Checker	01/09/17	Republicans once again rely on a misleading Obamacare factoid
WaPo Fact Checker	02/22/17	Democrats persist with the slippery claim of a ‘60-vote standard’ for Supreme Court nominees
WaPo Fact Checker	08/07/18	Democrats seize on cherry-picked claim that ‘Medicare-for-all’ would save \$2 trillion
WaPo Fact Checker	06/24/20	Fact-checking the GOP’s ‘satirical’ vote-by-mail video

## (2) Examples of subjective headline language in fact-checking coverage

As shown in Table S1.12, professional fact-checking sites sometimes provide subjective assessments about a policy or an issue. For instance, they sometimes explicitly state that a certain politician did “worse” compared to other candidates or provided “bad” advice to people. Other examples include providing assessments on whether a gun law would improve or worsen crime rates, whether an immigration policy would improve or hurt the economy, whether a health care bill would improve or worsen health care options, or whether a tax cut would improve or worsen the lives of affected people. To succinctly deliver such a subjective tone in stimulus headlines, two of the stimuli headlines adopt language such as “worse” and “wrong path.” It should be noted, however, that the typical headline language discussed in the prior section (i.e., critiques of factual inaccuracy), rather than subjective or normative assessments of an issue, is more often found in professional fact-checking sites.

<sup>5</sup>PolitiFact considers DNC and RNC as major targets of their reporting and keeps track of their past ratings on these two organizations (Links to PolitiFact’s fact-checks on each: RNC, DNC)

Table S1.12: Examples of Fact-checking Headlines with Subjective, Judgmental Language

Source	Date	Headline	Summary	Topic
WaPo Fact Checker	12/02/14	Has House Republicans' inaction on immigration cost \$37 million a day?	Two Pinocchios	immigration
WaPo Fact Checker	12/10/15	Marco Rubio's claim that no recent mass shootings would have been prevented by gun laws	True - Geppetto Checkmark	gun control
WaPo Fact Checker	04/02/16	Trump's nonsensical claim he can eliminate \$19 trillion in debt in eight years	Four Pinocchios	deficit
WaPo Fact Checker	09/08/16	Actuarial math: Trump has a slightly higher chance of dying in office than Clinton	Life expectancy for Trump 17yr, Clinton 19yr	candidates
WaPo Fact Checker	09/13/16	Trump's ridiculous claim that veterans are 'treated worse' than undocumented immigrants	absurd comparison	veteran
WaPo Fact Checker	09/21/16	Cruz's claim that ICANN's transition will empower foes to censor the Internet	Three Pinocchios	internet
WaPo Fact Checker	02/01/17	Trump's claim that he did 'substantially' better with blacks than other GOP presidential candidates	Trump did worse	race
WaPo Fact Checker	06/20/17	Pelosi's claim that an estimated 1.8 million jobs will be lost	Two Pinocchios	health care
WaPo Fact Checker	10/17/17	Does a city with the 'toughest gun laws' end up with 'worst gun violence'?	Chicago is often cited, but facts are wrong	gun control
WaPo Fact Checker	10/17/17	Do tougher gun laws lead to 'dramatically lower rates of gun violence'?	Little evidence that gun laws reduce gun violence	gun control
WaPo Fact Checker	10/23/17	EPA Administrator Scott Pruitt's claim that the U.S. is 'leading the world' in 'CO2 footprint' reductions	Three Pinocchios	environment
WaPo Fact Checker	10/25/17	Trump's claim that he's done more 'by far' than Obama in the fight against ISIS	Two Pinocchios	foreign relations
WaPo Fact Checker	10/27/17	Nancy Pelosi's claims on middle-income taxpayers and state and local tax deductions	Two Pinocchios	tax
WaPo Fact Checker	01/12/18	Is the Trump tax cut good or bad for the middle class?	Two Pinocchios	tax
PolitiFact	03/26/12	Marcy Kaptur stated "The poorest in this country are women."	True	economy
PolitiFact	06/29/12	Becky Moeller stated "the federal health care law upheld by the Supreme Court "has improved or saved the lives of more than 4,000 Texans" otherwise prevented from obtaining health coverage due to pre-existing conditions."	True	health care
PolitiFact	02/01/13	Ted Cruz stated "the jurisdictions with the strictest gun control laws, almost without exception . . . have the highest crime rates and the highest murder rates."	False	gun control
PolitiFact	04/08/13	Ted Cruz stated "Expanding Medicaid will worsen health care options for the most vulnerable among us in Texas."	False	health care
PolitiFact	09/16/14	Rand Paul stated "Income inequality is worse in towns run by Democrat mayors than in towns run by Republican mayors."	Half True	economy
PolitiFact	03/05/15	Julie Lassa stated "The infant mortality rate is 15 percent higher in states with right-to-work laws."	Half True	public health
PolitiFact	08/25/15	Julius Jones stated "The policy mistakes that ... the Clintons made got us, in large degree, to the situation that we are in today with mass incarceration."	Half True	crime
PolitiFact	03/22/16	Paul Ryan stated "70 percent of Americans believe that we are on the wrong path."	Mostly True	economy
PolitiFact	09/09/16	Donald Trump stated "Our veterans, in many cases, are being treated worse than illegal immigrants."	False	veteran
PolitiFact	08/22/17	John Moorlach stated "Crime has been getting worse since Jerry Brown was elected governor."	Mostly False	crime
PolitiFact	10/13/17	Roy Blunt stated "Missouri "is leading the country when it comes to improving services for mental and behavioral health. Innovation is happening right here."	Mostly True	health care
PolitiFact	10/09/20	Greg Abbott stated "Property crime rising in Austin. This is the kind of thing that happens when cities defund and deemphasize police. Residents are left to fend for themselves."	Mostly False	crime
FactCheck.org	07/07/04	Economy Producing Mostly Bad Jobs? Not so fast.	Higher-paying jobs growing faster	economy
FactCheck.org	05/13/10	Does Immigration Cost Jobs?	immigration doesn't hurt American workers	immigration
FactCheck.org	06/27/14	Misassigning Blame for Immigration Crisis	Tennessee Sen Alexander is not for a surge of illegal aliens	immigration
FactCheck.org	07/10/15	Is Medicaid Bad for Your Health?	Medicaid patients are poorer and sicker, but not because of Medicaid	health care
FactCheck.org	10/11/18	Trump's School Safety Funding Falsehood	new law doesn't fund school safety at historic levels	education
FactCheck.org	10/26/18	Trump Stump Speeches: Health Care "Under the new "right to try" law, "we've had some incredible results already."	No evidence	health care
FactCheck.org	10/26/18	Trump Stump Speeches: Health Care "Democrats have signed up for a socialist takeover of American health care that would utterly destroy Medicare and rob our seniors of the benefits they paid into their entire lives.")	Bill adds more benefits	health care
FactCheck.org	10/26/18	Trump Stump Speeches: Economy "We gave you the biggest tax cut in the history of our country."	False	economy
FactCheck.org	10/26/18	Trump Stump Speeches: Economy "In less than two years, we have created over 4.2 million new jobs and lifted over 4 million Americans off of food stamps."	Exaggerates	economy
FactCheck.org	12/09/19	A Misleading Take on Immigrant, Veterans Health Care	A health records system Democrats voted down did not affect veterans	immigration
FactCheck.org	09/04/20	Trump's Bad Advice for Mail-In Voters	Trump gave bad advice to mail-in voters	election

### 1.3 Manipulation Check and Perceived Source Bias

At the end of the survey, the following question was asked to assess how well the key differences across experimental conditions were perceived by the respondents:

“Thinking back to the long list of headlines that you saw earlier (8 headlines were presented on a single screen), which of the following best describes those headlines?”

- Most of the headlines were critical of Republicans (1)
- Most of the headlines were critical of Democrats (2)
- Roughly equal numbers of headlines were critical of Democrats and Republicans (3)
- Most of the headlines were NOT critical of either political party (4)

Per Hauser, Ellsworth and Gonzalez (2018)’s recommendation not to place manipulation check in between the treatment and outcome variables (in order to prevent any unintended influence of manipulation check on observed outcomes), I placed this question at the very end of the survey. When analyzing the data, I did not drop respondents who failed the manipulation check, because Aronow, Baron and Pinson (2019) suggested that excluding respondents who failed the manipulation check can result in biased results.

Table S1.13: Responses to Manipulation Check by Experimental Conditions

	Experimental Conditions				Total
	Symmetric coverage (baseline)	Republican- challenging asymmetry	Democrat- challenging asymmetry	Symmetric, neutral language	
Most headlines critical of R	8.2	<b>66.9</b>	6.1	16.1	24.2
Most headlines critical of D	7.7	4.5	<b>64.2</b>	8.9	21.2
Roughly equal numbers critical of D and R	<b>79.2</b>	21.3	26.3	<b>53.9</b>	45.4
Most NOT critical of either	4.9	7.3	3.4	<b>21.1</b>	9.2
N	183	182	175	180	720

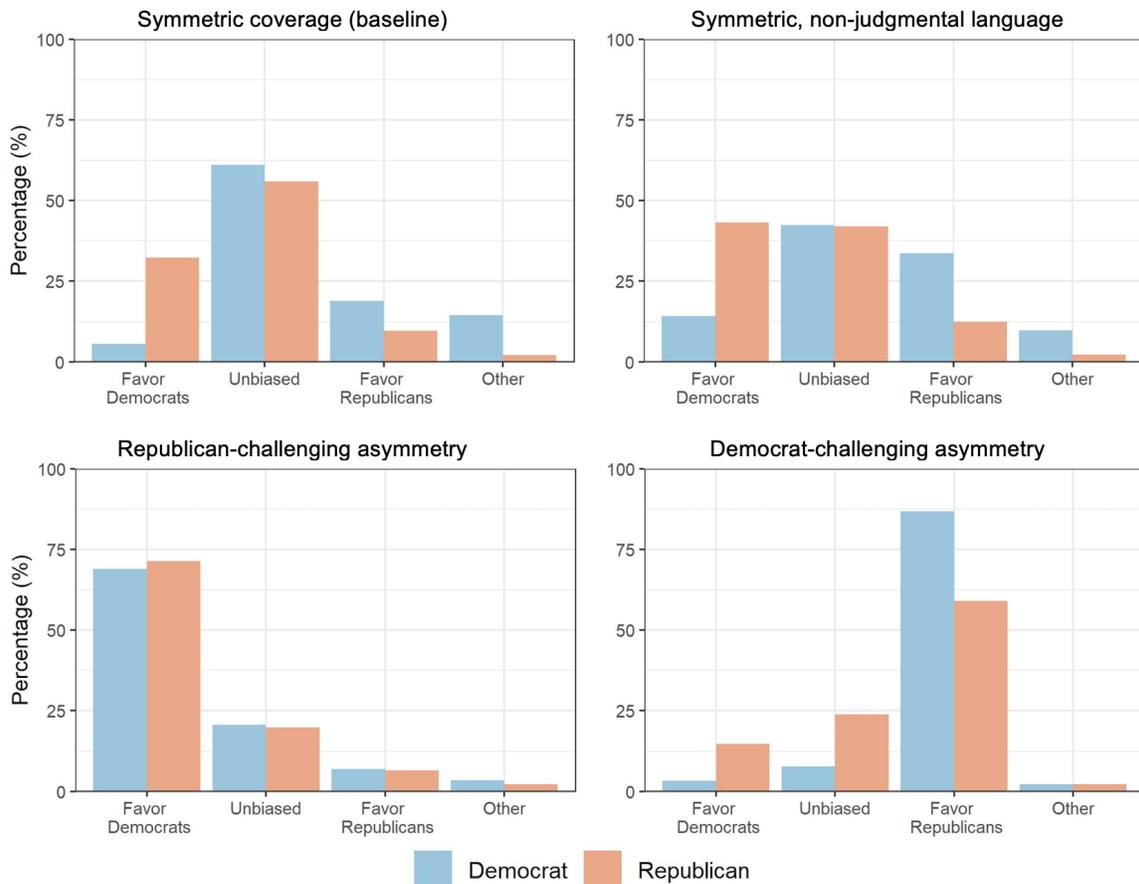
*Note:* Entries are the percentage of each response per experimental condition.

As shown in Table S1.13, responses to the manipulation check across different conditions indicate that the key experimental manipulation—*relative asymmetry in coverage of political parties*—in this study was effective. In all conditions, a majority of respondents responded in a way that was consistent with the intentions of the study design. In the baseline condition that was designed to be symmetric coverage (an equal number of headlines challenged each party), 79.2% of the respondents said they were given a list where roughly equal numbers of headlines were critical of Democrats and Republicans. In the treatment condition that was designed to be Republican-challenging asymmetric coverage (five headlines challenged Republicans and one challenged Democrats), 66.9% of respondents recalled that most headlines were critical of Republicans. Among respondents assigned to the treatment condition of Democratic-challenging asymmetric coverage (five headlines challenged Democrats and one challenged Republicans), 64.2% recalled they were given a list where most headlines were critical of Democrats. As for the exploratory treatment condition that was designed to be symmetric coverage with neutral language, a greater percentage of respondents (21.2%) recalled that most headlines were not critical of either party, compared to symmetric coverage (baseline, 4.9%). Interestingly, 53.9% in this neutral language condition still recalled that roughly equal numbers of

headlines were critical of each party, indicating that many respondents assumed that the headlines with neutral language were critical of political parties.

To further understand how partisans perceive a source with different coverage asymmetry, I examined how respondents assessed source bias. In a question presented after credibility-related questions, participants indicated whether they thought the website tended to be unbiased or biased when presenting information, with four possible answer choices: 1) not biased, 2) biased in favor of Republicans, 3) biased in favor of Democrats, and 4) other (open-ended response).

Figure S1.2: Perceptions of Source Bias by Experimental Conditions



As shown in Figure S1.2, a majority of respondents found symmetric coverage (baseline) to be unbiased, Republican-challenging asymmetry to be biased in favor of Democrats, and Democrat-challenging asymmetry to be biased in favor of Republicans. There were two interesting findings. First, the percentage of Democrats who found ingroup-challenging asymmetry to be biased in favor of Republicans was extremely high (86.8%) relative to other cases. This is another illustration that Democrats tend to be more sensitive to uncongenial asymmetric coverage, in line with the findings in the main text that Democrats more negatively react to uncongenial asymmetric coverage than Republicans. Second, under symmetric coverage with neutral language, compared to symmetric coverage with critical language (baseline), fewer people found the source to be unbiased and more people found the source to be biased in favor of the opposite party. In line with the patterns found in the manipulation check responses, this result further implies that partisans likely assume news headlines with neutral language to be critical of their own party.

## 2 Distribution of Demographics across Experimental Conditions

Table S2.1: Distribution of Demographics by Experimental Conditions (%)

	<b>Experimental Conditions</b>				Total
	Symmetric coverage (baseline)	Uncongenial asymmetry	Congenial asymmetry	Symmetric, neutral language	
<b>Age</b>					
18-24	23.0	18.1	21.7	26.1	22.2
25-34	40.4	33.0	33.1	35.6	35.6
35-44	14.8	24.7	19.4	17.8	19.2
45-54	14.2	13.2	12	11.1	12.6
55-64	6.0	7.1	12.0	5.6	7.6
65-	1.6	3.8	1.7	3.9	2.8
<b>Gender</b>					
Female	49.7	42.3	47.4	50.6	47.5
Male	48.1	56.6	52.0	47.8	51.1
Non-binary	2.2	1.1	0.6	1.7	1.4
<b>Education</b>					
No college degree	33.9	34.6	36.0	37.8	34.8
College degree	66.1	65.4	64.0	62.2	65.2
<b>Partisanship</b>					
Democrat	49.2	50.0	49.7	51.1	50.0
Republican	50.8	50.0	50.3	48.9	50.0
<b>N</b>	183	182	175	180	720

## 3 Additional Analyses

### 3.1 Conditional Treatment Effects by Partisan Subgroups

Average conditional treatment effects by partisan groups can be estimated by conducting OLS analysis by subgroup (Guess and Coppock 2020). In Table S3.1, coefficient estimates for the variables “Uncongenial” and “Congenial” indicate average conditional treatment effects of “uncongenial asymmetry” condition and “congenial asymmetry” condition compared to the baseline condition (“symmetric coverage”). The magnitude and statistical significance of treatment effects calculated by these coefficients are the same with the estimates calculated from the pooled model in Table 3 in the main text of this paper.

Table S3.1: Conditional Treatment Effects of Asymmetric Coverage by Partisan Identity

	Perceived News Credibility		Perceived Shared Interest		Perceived Expertise	
	Republicans	Democrats	Republicans	Democrats	Republicans	Democrats
Uncongenial	-0.13*** (0.04)	-0.18*** (0.03)	-0.06* (0.03)	-0.14*** (0.03)	-0.12*** (0.04)	-0.07* (0.04)
Congenial	-0.10*** (0.03)	-0.05* (0.03)	0.02 (0.03)	0.07** (0.03)	0.01 (0.04)	0.10*** (0.04)
Constant	0.43*** (0.02)	0.38*** (0.02)	0.42*** (0.02)	0.42*** (0.02)	0.47*** (0.02)	0.44*** (0.03)
N	272	268	272	267	272	268
Adjusted R <sup>2</sup>	0.05	0.11	0.01	0.14	0.04	0.07

*Note:* Entries are the ordinary least squares (OLS) regression coefficients with robust standard errors are in parentheses. *Uncongenial* = 1 if ingroup-challenging asymmetry condition, 0 otherwise; *Congenial* = 1 if outgroup-challenging asymmetry condition, 0 otherwise. All variables were coded to range from 0 to 1. \* $p < .1$ ; \*\* $p < .05$ ; \*\*\* $p < .01$ .

### 3.2 Exploratory Treatment Condition: Effects of Neutral Language

There was a fourth randomized condition—symmetric coverage with neutral headline language—as an exploratory condition. The purpose of the fourth condition was to explore the impact of language choices in headlines: critical language versus neutral language. Because some journalists fear that arbitrating who is right or wrong would risk the reputation of objective journalism (Thorson 2018), and because some of the stimulus headlines took a particularly subjective tone, there could be a concern that the critical language may negatively affect credibility assessments. To test this concern, in the exploratory condition, as shown in Table S3.2, the six partisan headlines were revised to employ neutral language that simply introduced the topic and the party involved, absent any accuracy judgments. To compare with the baseline condition, this exploratory condition was set to be symmetric coverage, where three out of six partisan topics referred to each party. The order of headlines were randomized in the same manner as explained in Section 1.1.

Table S3.2: Headlines for the Exploratory Treatment Condition (Neutral Language)

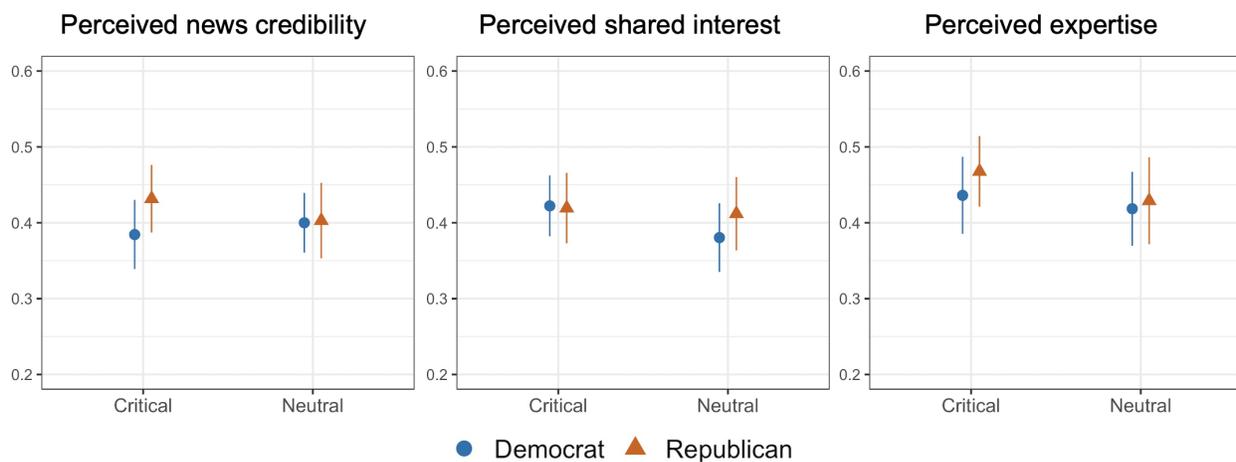
Partisan	<ul style="list-style-type: none"> <li>• What [Democrats/Republicans] <b>claim</b> about the pregnancy rate among black teenagers</li> <li>• [Democratic/Republican] National Committee’s policy <b>proposals</b> for the deportation of illegal immigrants</li> <li>• [Democratic/Republican] Senator <b>comments</b> about which president signed the Wall Street bailout into law</li> <li>• What [Democrats/Republicans] <b>say</b> about the number of abortions over time</li> <li>• [Democratic/Republican] Party’s <b>approaches</b> to the policy on gun homicide</li> <li>• How a [Democratic/Republican] governor <b>characterizes</b> the causes of US debt</li> </ul>
Neutral	<ul style="list-style-type: none"> <li>• Exercise can greatly reduce your risk of cancer and heart disease</li> <li>• Google to spend \$10 billion on offices, data centers in US this year</li> </ul>

*Note:* Bolded texts indicate neutral language. None of the text was bolded in the actual treatment.

As shown in Figure S3.3, when the symmetric coverage with critical language (baseline) is compared with the symmetric coverage with neutral language, there is no statistically significant difference

in perceived news credibility (Democrats = 0.02,  $p = .61$ ; Republicans =  $-0.03$ ,  $p = .40$ ), shared interest (Democrats =  $-0.04$ ,  $p = .18$ ; Republicans =  $-0.01$ ,  $p = .83$ ), and expertise (Democrats =  $-0.02$ ,  $p = .62$ ; Republicans =  $-0.04$ ,  $p = .30$ ). These results suggest that, under symmetric coverage, neutral language likely has minimal impact on source assessments compared to critical language.

Figure S3.3: Average Perceived News Credibility, Shared Interest, and Expertise by Headline Language Conditions



*Note:* Means and 95% confidence intervals by experimental conditions. *Critical* = 1 if symmetric, critical language condition (baseline), 0 otherwise; *Neutral* = 1 if symmetric, neutral language condition, 0 otherwise. All variables were coded to range from 0 to 1.

Table S3.3: Neutral Language Effects on Perceived News Credibility, Shared Interest, and Expertise

	Perceived News Credibility	Perceived Shared Interest	Perceived Expertise
Neutral	0.02 (0.03)	-0.04 (0.03)	-0.02 (0.04)
Rep	0.05 (0.03)	-0.003 (0.03)	0.03 (0.03)
Neutral x Rep	-0.04 (0.05)	0.03 (0.05)	-0.02 (0.05)
Constant	0.38*** (0.02)	0.42*** (0.02)	0.44*** (0.03)
N	363	363	363
Adjusted R <sup>2</sup>	-0.002	-0.002	-0.003

*Note:* Entries are the ordinary least squares (OLS) regression coefficients with robust standard errors are in parentheses. *Neutral* = 1 if Symmetric, neutral language condition (baseline condition), 0 otherwise. *Rep* = 1 if Republican, 0 if Democrat. All variables were coded to range from 0 to 1. \* $p < .1$ ; \*\* $p < .05$ ; \*\*\* $p < .01$ .

The finding that, given symmetric coverage, partisans are indifferent to critical and neutral language suggests additional benefits of symmetric coverage. Given symmetric coverage of political parties, the critical language that fact-checkers employ to indicate factual inaccuracy does not pose an obstacle to building broader trust, relative to neutral language. It should be noted, however, that this study does not clarify whether critical language would not affect source assessments under asymmetric coverage or when the language employs particularly derogatory or mocking tone (e.g., “whopper,” “nonsensical,” “amnesia”), which can be further investigated in future studies.

### 3.3 Randomized Content Variations within Condition

As described in Section 1.1, there were two randomized content variations for each condition. Overall, source assessments in terms of news credibility, shared interest, and expertise were similar between the two variations per condition as shown in Tables S3.5, S3.6, and S3.7, except for Democrats under congenial asymmetry. In designing the stimuli, I expected the two variations of asymmetric coverage will affect perceived credibility in the same direction, compared to symmetric coverage. Average treatment effects of each variation is estimated for each partisan group in Table S3.4. Asymmetric coverage of either variation had the effects of decreasing perceived news credibility compared to symmetric coverage in all cases, with one exception. Democrats’ reactions to congenial asymmetry where a single ingroup-challenging headline was about immigration (Version 1) versus national debt (Version 2) were distinct. These differences are discussed in more detail in the results section (Figure 2) of the paper.

Table S3.4: Treatment Effects of the Two Variations of Asymmetric Coverage on Perceived News Credibility

	Perceived news credibility			
	Democrats	Republicans	Democrats	Republicans
Uncongenial-Debt	-0.18*** (0.03)	-0.18*** (0.04)	Congenial-Debt 0.02 (0.04)	-0.08** (0.04)
Uncongenial-Immig	-0.18*** (0.04)	-0.08* (0.05)	Congenial-Immig -0.14*** (0.03)	-0.12*** (0.04)
Constant	0.38*** (0.02)	0.43*** (0.05)	Constant 0.38*** (0.02)	0.43*** (0.04)
N	181	184	N	177
Adjusted R <sup>2</sup>	0.15	0.07	Adjusted R <sup>2</sup>	0.08

*Note:* Entries are the ordinary least squares (OLS) regression coefficients with robust standard errors are in parentheses. Under uncongenial asymmetry (five ingroup-challenging, one outgroup-challenging headlines), *Uncongenial-Debt* = 1 if one outgroup-challenging headline was on national debt, = 0 otherwise; *Uncongenial-Immig* = 1 if it was on immigration, = 0 otherwise. Under congenial asymmetry (five outgroup-challenging, one ingroup-challenging headlines), *Congenial-Debt* = 1 if one ingroup-challenging headline was on national debt, = 0 otherwise; *Congenial-Immig* = 1 if it was on immigration, = 0 otherwise. All variables were coded to range from 0 to 1. \* $p < .1$ ; \*\* $p < .05$ ; \*\*\* $p < .01$ .

Table S3.5: Average Perceived News Credibility under the Two Variations of Each Condition

Experimental Condition	Partisan Identity	Version 1	Version 2	Difference
Symmetric Coverage	Democrats	0.42	0.35	$t = 1.48, p = .14$
	Republicans	0.45	0.41	$t = 1.04, p = .30$
Uncongenial asymmetry	Democrats	0.21	0.21	$t = -0.08, p = .98$
	Republicans	0.35	0.26	$t = 1.71, p = .09$
Congenial asymmetry	Democrats	0.24	0.41	$t = -4.01, p < .01$
	Republicans	0.31	0.35	$t = 0.90, p = .37$
Symmetric, Neutral Language	Democrats	0.39	0.41	$t = -0.27, p = .79$
	Republicans	0.38	0.43	$t = -0.92, p = .36$

*Note:* The *Difference* column presents t-statistics and p-value for the difference in means between the two versions. Under asymmetric coverage conditions, Version 1 is when *immigration* headline in opposite direction, whereas Version 2 is when *national debt* headline in opposite direction. All variables were coded to range from 0 to 1.

Table S3.6: Average Perceived Shared Interest under the Two Variations of Each Condition

Experimental Condition	Partisan Identity	Version 1	Version 2	Difference
Symmetric Coverage	Democrats	0.45	0.42	$t = 0.48, p = .63$
	Republicans	0.44	0.39	$t = 1.03, p = .31$
Uncongenial asymmetry	Democrats	0.27	0.3	$t = -0.58, p = .56$
	Republicans	0.35	0.37	$t = -0.46, p = .65$
Congenial asymmetry	Democrats	0.48	0.51	$t = -0.48, p = .63$
	Republicans	0.44	0.44	$t = 0.06, p = .95$
Symmetric, Neutral Language	Democrats	0.38	0.38	$t = 0.12, p = .90$
	Republicans	0.39	0.43	$t = -0.88, p = .38$

*Note:* Refer to the note for Table S3.5 for the description of randomized versions and the entries for the *Difference* column.

Table S3.7: Average Perceived Expertise under the Two Variations of Each Condition

Experimental Condition	Partisan Identity	Version 1	Version 2	Difference
Symmetric Coverage	Democrats	0.45	0.42	$t = 0.48, p = .63$
	Republicans	0.48	0.46	$t = 0.50, p = .62$
Uncongenial asymmetry	Democrats	0.33	0.41	$t = -1.58, p = .12$
	Republicans	0.35	0.34	$t = 0.29, p = .77$
Congenial asymmetry	Democrats	0.49	0.57	$t = -1.61, p = .11$
	Republicans	0.43	0.52	$t = -1.52, p = .13$
Symmetric, Neutral Language	Democrats	0.42	0.42	$t = -0.07, p = .94$
	Republicans	0.39	0.47	$t = -1.36, p = .18$

*Note:* Refer to the note for Table S3.5 for the description of randomized versions and the entries for the *Difference* column.

### 3.4 Comparing Treatment Effects of Congenial and Uncongenial Asymmetries

Between a tendency to prefer like-minded information and a tendency to resist discordant information, which manifests more strongly when partisans assess a source based on its overall coverage?<sup>6</sup> Because congenial asymmetry decreased (rather than increased) perceived news credibility (RQ1), I compared the relative degree to which uncongenial and congenial asymmetry reduced perceived news credibility. Among Democrats, uncongenial asymmetry decreased perceived credibility to a greater extent than congenial asymmetry. The difference between the size of treatment effects of the two asymmetry types was statistically significant ( $-0.12, p < .01$ ).<sup>7</sup> However, among Republicans, there was no statistically significant difference in the degree to which uncongenial and congenial asymmetries decrease perceived credibility ( $-0.02, p = .50$ ). Contrary to the popular notion that Republicans more strongly engage with selective resistance of uncongenial news and facts than Democrats (Garrett and Stroud 2014; Jost et al. 2003), in the context of assessing a source, Democrats discounted the credibility of uncongenial asymmetry to a greater extent than congenial asymmetry, whereas Republicans discounted the credibility of uncongenial and congenial asymmetries to a similar extent. These findings indicate Democrats tend to be more discriminating and selective about the direction of coverage asymmetry compared to Republicans.

### 3.5 Internal Reliability of the News Credibility Scale

The five items in the news credibility scale were highly correlated with the underlying construct, as indicated by item-total correlations that ranged between .65 and .86 and Cronbach's  $\alpha$  of .92. In factor analysis, The one-dimensional solution had acceptable model fit (the recommended criteria for adequate fit are RMSEA and SRMR  $\leq .08$ , and CFI and TLI  $\geq .90$ ; Bentler 1990; Brown 2015). All individual items meaningfully loaded on the latent factor as well, with factor loadings ranging between .67 and .92.

Table S3.8: Item-total Correlations and Factor Loadings for the News Credibility Scale Items

News credibility items	Item-total correlation	Factor loadings
Is accurate	0.82	0.88
Is fair	0.86	0.89
Is unbiased	0.65	0.67
Tells the whole story	0.80	0.85
Can be trusted	0.86	0.92
Cronbach's alpha = .92		RMSEA = .06; SRMR = .01; CFI = .99; TLI = .99

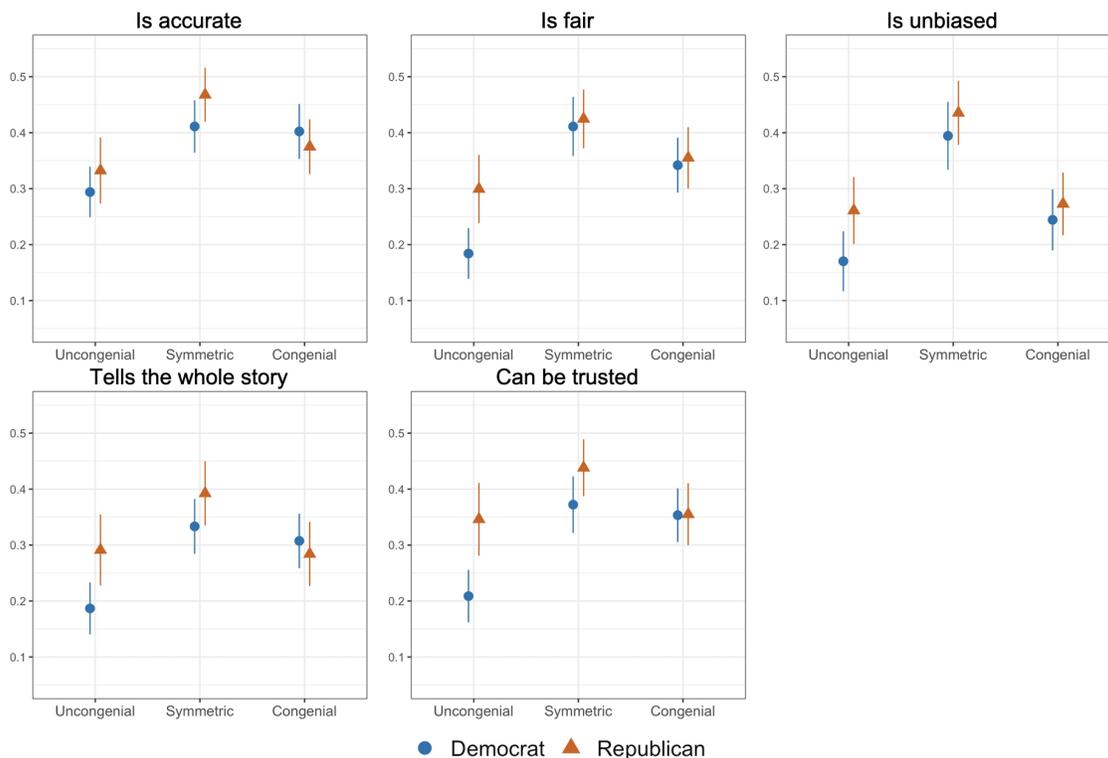
As a post-hoc analysis, I additionally examined the treatment effects of asymmetric coverage on individual items of the news credibility scale. The purpose was to assess whether asymmetric coverage treatments were affecting a specific item differently from other items, or whether one specific item was strongly driving the outcome on the composite news credibility scale, the main outcome variable. As shown in Figure S3.4, all five individual news credibility items (accurate, fair, unbiased, whole,

<sup>6</sup>This was an exploratory research question proposed in the preregistration.

<sup>7</sup>From Table 4, the difference in the size of treatment effects of uncongenial asymmetry compared to congenial asymmetry (effect of congenial asymmetry - effect of uncongenial asymmetry) is calculated as the coefficient estimates of [*Congenial* - *Uncongenial*] for Democrats, and [*Congenial* + *Congenial\*Rep* - *Uncongenial* - *Uncongenial\*Rep*] for Republicans.

trusted) indicated similar patterns with respect to the treatment effects of asymmetric coverage. These additional analyses imply that the news credibility scale is highly internally consistent (none of the constituent items is an outlier) and that the constituent items are likely to tap on to a shared underlying trait of news credibility perception.

Figure S3.4: Average Perceptions of News Credibility Traits by Experimental Conditions



*Note:* Means and 95% confidence intervals by experimental conditions. *Uncongenial* = Ingroup-challenging asymmetric coverage condition; *Symmetric* = Symmetric coverage condition (baseline); *Congenial* = Outgroup-challenging asymmetric coverage condition. All variables were coded to range from 0 to 1.

## 4 Survey Questionnaire

The study materials, data, and code will be made available at a public repository upon the publication of this paper. The questions that are most relevant to the current study are presented below.

At the beginning of the study, participants were given a consent form that described the study instrument (evaluate online news outlets, reading a set of headlines), ensured that their responses will be kept anonymous, and that the study involves minimal risks. After the study, participants were told that the set of headlines they read did not appear on a single real website. Participants were paid \$1.3 for a 8-min survey, which was set to be higher than the minimum hourly wage at the time of the study.

## 5.1 Pre-treatment Questions

[**Partisan Identity**] **PID1**. Generally speaking, do you usually think of yourself as a Democrat, a Republican, an Independent, or something else?

- Republican (1)
- Democrat (2)
- Independent (3)
- Other (4) -----

[If  $PID1 == 1$ ] **PID2**. Would you call yourself a strong Republican or not a very strong Republican?

- Strong (1)
- Not very strong (2)

[If  $PID1 == 2$ ] **PID3**. Would you call yourself a strong Democrat or not a very strong Democrat?

- Strong (1)
- Not very strong (2)

[If  $PID1 == 3$  or  $4$ ] **PID4**. Do you think of yourself as closer to the Republican Party or to the Democratic party?

- Closer to Republican (1)
- Closer to Democrat (2)
- Neither (3)

## 5.2 Experimental Treatment

### [Instructions]

Now, we'd like to ask you how you assess the website based on what you read in the headlines.

Now, we'd like to show you some headlines from an online news outlet and see what you think about them. We are specifically interested in how you evaluate **a news provider website** on the basis of **their headlines**.

[page break]

Before we start, please read the instructions below. It will help you understand what comes next.

- **One website will be randomly chosen** from a pool of online news outlets (This pool is irrelevant to the list of websites you saw earlier).
- **The name of the website will not be revealed** so you can focus on the news that the site reports.
- If the article is about a specific person, we **blocked out the person's name** so you can focus on the information in the headline.
- In the interest of saving your time, we will **display only the headlines** appearing on the front page, instead of asking you to read the whole articles.

**\*Note:** Once a website is randomly selected, **an arrow** ( $\rightarrow$ ) will appear below. Please click it to proceed.

[page break]

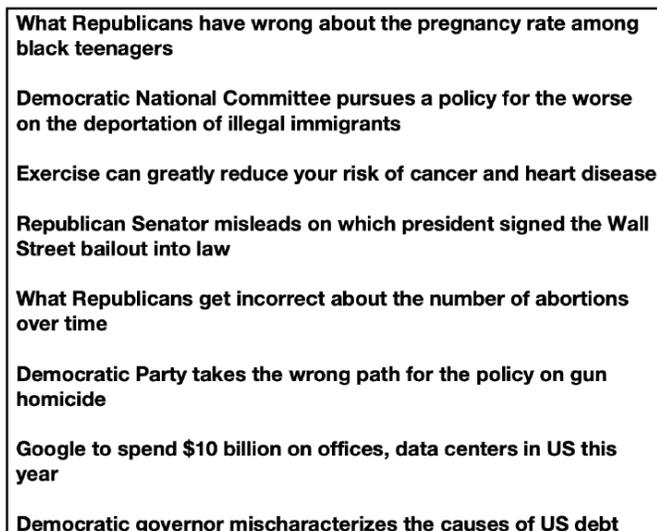
**[Experimental Treatment]**

One website was chosen from a pool of online news outlets.

Here are **the headlines from the website**. Please take a moment to read the list.

In the next screen, we will ask you questions about **your evaluation of the website** based on what you saw.

*Example screenshot of Baseline Condition, Version 1 (refer to Section 1.1 for all conditions):*



*\* Please note: You won't be able to refer back to these headlines once you reach the next screen. So please read the headlines carefully and make assessments of the website before you move on to the next screen.*

**5.3 Post-treatment Questions**

**[Perceived News Credibility]** How well do you think each of the following describes the website?

The website...	Not at all (1)	A little (2)	Moderately (3)	Very (4)	Extremely (5)
is fair (1)					
is accurate (2)					
is unbiased (3)					
tells the whole story (4)					
can be trusted (5)					

*Note:* The order of items was randomized across respondents.

**[Perceived Shared Interest]** On most political issues, how often would you say that you and the authors of the website agree?

- Never (1)
- Some of the time (2)
- About half of the time (3)
- Most of the time (4)

- Always (5)

**[Perceived Expertise]** How much would you say the authors of the website know about how political decisions affect people like you?

- Nothing at all (1)
- A little (2)
- A moderate amount (3)
- A lot (4)
- A great deal (5)

**[Perceived source bias]** Do you think the website tends to be unbiased or biased when presenting information?

- It is not biased (1)
- It is biased in favor of Republicans (2)
- It is biased in favor of Democrats (3)
- Other (4) -----

[page break]

**[Manipulation Check]** Thinking back to **the long list of headlines that you saw earlier** (8 headlines were presented on a single screen), which of the following best describes those headlines?

- Most of the headlines were critical of Republicans (1)
- Most of the headlines were critical of Democrats (2)
- Roughly equal numbers of headlines were critical of Democrats and Republicans (3)
- Most of the headlines were NOT critical of either political party (4)

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