

Building Credibility in Polarized Environments: Evidence from Fact-Checking

by

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To my parents

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This project started in Skip Lupia’s office a couple days after the first 2016 U.S. presidential debate. I told Skip that I was puzzled by the debate, in which Hillary Clinton urged people to come to her website to “fact check” Donald Trump. Clinton also repeatedly asked fact-checkers to adjudicate facts: “I hope the fact checkers are turning up the volume and really working hard”; “please, fact checkers, get to work.” I asked Skip if Clinton assumed people would find her fact-checking site credible. I cautiously suggested that her fact-checking site would not be seen as credible, even among Democrats, let alone Republicans, given its partisan slant. I also expressed my doubt that the public may distrust even non-partisan fact-checkers in such a highly polarized context. If so, does checking facts matter in politics? I simply brought these questions up in casual conversation. To my surprise, Skip excitedly said, “That’s your dissertation.”

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ABSTRACT

As misinformation spreads in contemporary societies, many actors such as journalists, educators, scientists, and civil society organizations seek to communicate facts to the public. These efforts can promote informed democracy if people find the evidence-based communicators credible. However, polarized environments often undermine the perceived credibility of these actors and marginalize their efforts. This dissertation examines choices and strategies available to evidence-based communicators to increase their credibility.

I begin by identifying contexts that promote or hinder the perceived credibility of information sources. I then conduct a series of experiments and surveys to test these factors in the context of fact-checking, a genre of news reporting that adjudicates the accuracy of public claims. In three chapters, I examine 1) symmetry in coverage of political parties, 2) the scope of topics covered, and 3) public attitudes toward news sources.

How does the coverage of political parties affect source credibility perceptions? In Chapter 1, I demonstrate that asymmetric coverage of political parties, even if it reflects genuine asymmetries in the generation of misleading claims, has the unintended consequence of undermining credibility. Although fact-checking sites often cover political parties asymmetrically to objectively reflect evidence, experimental findings show that asymmetric coverage reduces perceived source credibility. This is the case not only when the coverage challenges one's own party more often, but even when it disproportionately challenges the opposing party. Symmetric coverage of political parties builds broad-based public perceptions of credibility in communicators who report on politics.

Another relevant question is how the breadth of topics covered affects perceptions of source credibility. Chapter 2 starts from the observation that while some fact-checkers focus on partisan politics, others report on a broader range of topics, such as science and popular culture. I experimentally test whether an exclusive focus on politics triggers defensive reactions that lower perceived source credibility, compared to sources that cover other topics. The results show that, compared to politics-focused coverage, specializing in science improves source credibility assessments. Unexpectedly, coverage of popular culture undermines judgments of source credibility. Evidence-based communicators are more successful at building credibility when they prioritize "serious" issues such as politics and science in their

coverage, rather than “softer” varieties of issues such as entertainment, sports, and lifestyle.

Finally, I go beyond these experimental tests to examine how Americans currently assess evidence-based communicators in the news media. Prior research shows that most Americans have favorable views on fact-checking, but relatively few visit fact-checking sites. In Chapter 3, I investigate factors that limit public trust in fact-checking sites. In two surveys, I demonstrate that, in the abstract, people trust fact-checking more than the conventional news media. However, many people are unaware of specific fact-checking sites and trust conventional news outlets more than fact-checking sites. Contrary to the conventional view that Republicans tend to distrust fact-checking, familiarity with specific fact-checking sites is associated with greater trust in those sites among both Democrats and Republicans.

This study leverages fact-checking to research the psychological and social processes that occur when information sources seek to correct misinformation and foster a more informed public. Because source credibility, when properly established, can overwhelm partisan defenses against corrective messages, this work sheds light on how evidence-based communicators build credibility, a critical step toward effectively conveying facts to the public across time and contexts.

CHAPTER 1

Objectivity Dilemma in Delivering Facts

Abstract

Evidence-based communicators correct misleading political claims, yet people do not always find these sources credible. This study leverages fact-checking to examine the choices evidence-based communicators have to increase credibility. To achieve objectivity, traditional journalism covers both sides of a contentious debate equally, whereas fact-checking interprets contexts and evidence to decide the relative coverage of each side. The fact-checking approach faces an “objectivity dilemma”: While asymmetric coverage may reflect genuine asymmetries in the prevalence of misinformation, it undermines perceived source credibility. In a pre-registered experiment, compared to symmetric coverage, uncongenial asymmetry (most articles challenge one’s own party) reduces perceived source credibility. Contrary to conventional belief, Democrats react more negatively to uncongenial asymmetry than Republicans. Surprisingly, congenial asymmetry (most articles challenge the opposing party) also harms source credibility perceptions, especially when in-group is challenged on polarized topics. Evidence-oriented organizations can consider symmetric coverage of political parties to build credibility across party lines.

Many evidence-based communicators, including journalists, scientists, educators, government officials, and civil society organizations, seek to inform citizens about misleading political claims. In polarized environments, however, their endeavors often do not produce the intended effects because the public does not find them to be credible. What choices do these communicators have to increase their credibility and matter to the broader public? Fact-checking, a genre of news reporting dedicated to assessing the accuracy of political claims, serves as a useful context to examine the motivation and available choices that evidence-based communicators have to build credibility.

Unlike traditional journalism, which focuses on describing events, fact-checking interprets and adjudicates the accuracy of public claims (Pingree, Brossard and McLeod 2014). The rise of fact-checking was fueled by the growing awareness that conventional reporting that centers on “he said, she said” and “both sides of the story” fell short of informing citizens about political misinformation (Dobbs 2012). To address this concern, fact-checkers adjudicate the factual accuracy of political claims and makes evidence-based, not balance-oriented, coverage decisions (Graves 2016). The fact-checking approach redefines the role of journalism from a dispassionate stenographer to an engaged arbitrator.

Although fact-checking has the potential to help improve democracy, fact-checking sites have limited audience 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 (Gottfried et al. 2013; Nyhan et al. 2020; Wood and Porter 2019), limited public trust and usage constrain the public impact of fact-checking. In search of ways to increase the benefits and relevance of fact-checking, I identify reporting practices that prevent fact-checking outlets from earning broader trust. I show that fact-checkers face what I call an “objectivity dilemma,” a trade-off between the goal of objectively reflecting the relative strength of evidence in their coverage and the goal of earning broader trust among the public.

Understanding when partisans trust fact-checking sites has important implications for building healthier democracies in two ways. First, source credibility has important democratic consequences in deciding which information shapes voters’ candidate assessments or policy preferences (Swire-Thompson et al. 2020; von Hohenberg and Guess 2022). Second, partisan divisions on factual beliefs can seriously undermine the legitimacy of democratic processes and obstruct deliberation (Berlinski et al. 2021; Tong et al. 2020). Seeking ways to address this concern, this study identifies coverage decisions that can help partisans converge on evidence-based news sources, fostering more informed and collaborative democracies.

Most research on fact-checking has focused on the effects of exposure to individual fact-

checking articles 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 an attribute of news sources, specifically the symmetry in news coverage, and explore the possibility that the manner in which fact-checking outlets cover political parties affects the public perception 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). I show that fact-checking reflects how the objectivity norm has been redefined from a descriptive, “equal weights on all sides” approach to a more interpretive, “weight of evidence” approach. I propose that this reformed notion of objectivity drives asymmetric coverage of political parties in fact-checking sites.

I draw upon partisan motivated reasoning and the criteria people use to assess one-sided news coverage to theorize the impact of asymmetric coverage on source credibility perceptions. Because partisans tend to discredit information and news outlets that challenge their own group (Druckman and McGrath 2019; Kahan 2015), 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. Because prior research suggests that Republicans tend to be more resistant to uncongenial news and facts (Garrett and Stroud 2014; Jost et al. 2003), 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 evaluations (Stroud 2011; Peterson and Iyengar 2021), yet its violation of audience expectations for balanced coverage might worsen source assessments (Allen 1991; Flanagin, Winter and Metzger 2020). To clarify, I examined whether congenial asymmetry would increase or decrease perceived source credibility among partisans.

The findings from my preregistered experiment suggest that asymmetrical coverage of political parties has reputational consequences. I find that, compared to symmetric coverage, asymmetric coverage in either direction harms an organization’s reputation as a credible source. First, compared to symmetric coverage, uncongenial asymmetry reduces source credibility perceptions among both partisan groups. Unexpectedly, I find that Democrats react more negatively to uncongenial symmetry than Republicans. Second, congenial asymmetry, despite being favorable to one’s party, also causes partisans to find a news source as less credible. Interestingly, results further suggest that 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 specific topics.

This study highlights the importance of coverage decisions of news outlets in building source credibility. While previous studies have focused on how partisans process particular fact-checks or news articles (Amazeen et al. 2018; Nyhan et al. 2020; Wood and Porter 2019) or messages from a source with known partisan slant (Traberg and van der Linden 2022), my work shows how the relative proportion of news items that target either party affects 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. This inquiry also helps us understand how partisans would assess fact-checking sites upon visiting these sites. One of the main routes through which people get exposed to fact-checking is by directly visiting these sites, as captured by web traffic data (e.g., more than one million visitors per day to PolitiFact during the 2012 election; 7.4 million views per day to NPR.org’s fact-checking site during the 2016 election; Graves, Nyhan and Reifler 2016; Hassan et al. 2017). 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 the weight of evidence approach 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.

1.1 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 print 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 weight” to 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). To be objective, 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 20th century, 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 (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, p. 188). However, these idealized images of fact-checking audience do not align with most audiences in reality (Graves 2016). For example, partisans may 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, I consider coverage decisions on how often to cover either political party as one potential contributing factor that obstructs bipartisan trust in fact-checking sources.

1.2 Fact-checking Coverage: Asymmetric Coverage of Political Parties

One likely consequence of pursuing interpretive objectivity is asymmetric coverage in which 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 weight” on both parties. Instead, it is influenced by the “weight of evidence” that allow reporters to disproportionately scrutinize one party more 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 sites target one party more often than another, people can easily notice the asymmetry due to their tendencies to highlight inaccurate claims. Fact-checking sites more often rate partisan figures’ claims as “false” rather than “true” (e.g., among FactCheck.org’s fact-checks in 2017–2019, 66% were negative (“false,” “partially false,” “very false”), only 8% were “partially true,” and 0% were “true”; Ferracioli, Knies and Marques 2022), sometimes even mockingly (e.g., “Pants on Fire” rating of PolitiFact, “Pinocchios” ratings of Washington Post Fact Checker). Because the partisan targets in these corrections are usually explicit in headlines, partisans who encounter fact-checking coverage—on the front page of a fact-checking site, fact-checking posts or warning tags on social media—likely easily identify coverage asymmetry in one direction or the other.

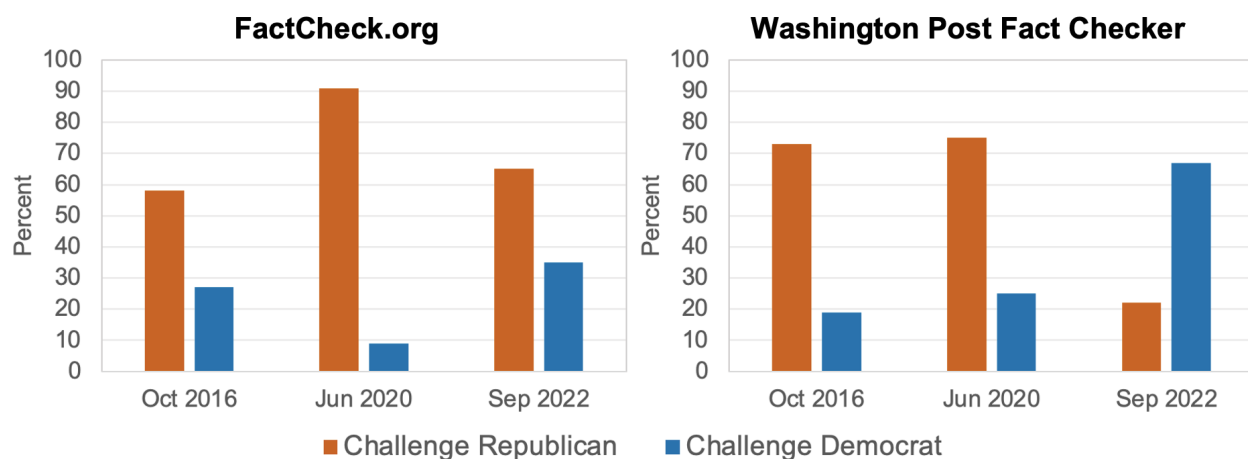
Even though many professional fact-checking sites are committed to nonpartisanship and strive to apply the same standards to both parties,¹ asymmetric coverage of political parties often takes place. For instance, in the early 2010s, PolitiFact was found to have corrected Republican claims three times more often than Democratic claims (Davis 2013; Ostermeier 2011). During the 2012 presidential election, among the fact-checks posted on Twitter by

¹“We treat conservatives and liberals alike and apply exactly the same standards of accuracy to claims made by both sides.” (FactCheck.org 2020); “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 International Fact-Checking Network (IFCN)’s Code of Principles lists “a commitment to nonpartisanship and fairness” as the first principle (IFCN n.d.).

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).

In addition to prior work that examined fact-checking coverage across multiple years, my own data collection also indicates that visitors of professional fact-checking sites have likely encountered asymmetric coverage in a given time period. To illustrate this point, I collected the entire set of fact-checking articles published by FactCheck.org and Washington Post Fact Checker during October 2016, June 2020, and September 2022.² For each article, I collected data on the party that was challenged or validated, publication date, headline, summary, and topic (details in Section A.1.2 of supplementary materials, Tables A.6-A.13).

Figure 1.1: Percentage of Partisan Targets in Fact-checking Coverage



Note: Percentages are calculated out of the total number of fact-checks with partisan targets. Percentages of Republican-challenging and Democrat-challenging fact-checks may not sum up to 100% because there are additional categories (e.g., validate a claim). Table A.6 presents the full results in tabular form.

As shown in Figure 1.1, in October 2016, among the fact-checks with partisan targets (e.g., politicians, partisan groups) in FactCheck.org, 58% challenged Republicans, whereas

²October 2016 reflects fact-checking coverage during the most recent presidential election at the time of this study (Google Trends data show peaks of public interest in fact-checking during the month before the presidential election, Figure A.1). June 2020 reflects fact-checking coverage when the experimental design was being finalized. October 2022 was originally selected to examine the month prior to election during the Biden administration. It was adjusted to September 2022, because Washington Post Fact Checker published only 3 fact-checks in October 2022, which was too few to examine distributions.

27% 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, where 91% challenged Republicans and only 9% challenged Democrats. As for Washington Post Fact Checker, 75% challenged Republicans and 25% challenged Democrats. In terms of additional categories not shown in Figure 1.1, occasionally a few fact-checks corrected both parties within an article or validated the accuracy of Democratic claims, but none validated Republican claims during these months. Another interesting observation is that fact-checking coverage rarely validated (once or never per month) but almost always critiqued the target claims. These results indicate that fact-checking coverage leans toward identifying inaccuracies, rather than validating the truthfulness, of political claims.

These observed asymmetries that disfavor Republicans do not mean that fact-checking coverage is inherently anti-Republican. In September 2022, after the presidency was transferred to the Democratic Party, FactCheck.org still leaned toward correcting Republicans (65%) more often than Democrats (35%). However, the asymmetry was reversed in Washington Post Fact Checker, which challenged Democrats (67%) more often than Republicans (22%). This shows that fact-checking coverage may also lean toward more heavily correcting Democrats. Moreover, one of the first politicians who cited a fact-checking site in public speech 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.³ While most prior research shows fact-checking sites have more often targeted Republicans (e.g., Davis 2013; Ferracioli, Knies and Marques 2022; Shin and Thorson 2017), if circumstances change (e.g., some prominent Democratic figures repeatedly make misleading claims), then fact-checking sites may produce asymmetric coverage that is adverse to Democrats.

1.3 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. To examine how individuals evaluate and trust a source, I focus on source credibility, defined

³Washington Post Fact Checker created a new rating category, “Bottomless Pinocchio,” in 2018 and assigned it to Donald Trump for repeatedly making misleading claims (Kessler and Clement 2018).

as “the believability of a communicator” (O’keefe 2010, p. 181) or “audience [perception that] they would benefit from believing [the communicator]” (Lupia 2016, p. 87).⁴ As an important precondition of learning, persuasion, and belief formation, source credibility perceptions 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 asymmetrical, “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). 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 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 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.

⁴In both definitions, receivers’ subjective perceptions, rather than objective traits of a source, determine the degree of perceived source credibility.

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; 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 the 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). The 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; FactCheck.org n.d.; Holan 2018) and given relatively low familiarity with fact-checking sites 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.⁵

RQ1: Does asymmetric coverage that more often challenges 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 measured in two different ways. There are largely two 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 (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 similar outcomes, whereas perceived expertise refers to the extent to which the speaker is knowledgeable about the consequences of the listener’s choice (pp. 87-88). However, because the literature lacks clear guidance on measurement, source credibility has been often measured in ways not consistent with this two-dimensional concept.

One major way to measure source credibility perceptions is in the context of news sources. 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., Flanagin and Metzger 2000; Tsfati 2010; Pingree et al. 2013; Turcotte et al. 2015). Given the focus on trust in news sources in this study, perceived news credibility is mainly used to test the proposed hypotheses.

Another approach to measuring source credibility disentangles the two dimensions of source credibility. The 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, I further examine how overall coverage affects a source’s potential persuasive effects. Because there is a lack of empirical research that compares the two different approaches to measuring source credibility perceptions, I propose to explore how asymmetric coverage

⁵Given two potential theoretical expectations, I hypothesized the effects of congenial asymmetric coverage in both directions in the preregistration. I present this inquiry as a research question because the underlying intention was to propose an exploratory question with unclear theoretical expectations.

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?

1.4 Study Design

To assess the effects of asymmetric coverage on perceived 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 Prolific’s prescreening data, I recruited an equal number of Democrats and Republicans, 720 respondents in total (360 Democrats, 360 Republicans).⁶ My hypotheses and analysis plan were preregistered on AsPredicted.org prior to data collection.⁷

1.4.1 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”) 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, Wall Street bailout, 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, target statements (Table A.6). Reflecting this active adjudication, the headlines for partisan topics were designed to explicitly challenge a partisan target as shown in Table 1.1. In actual fact-checking sites, a large number of headlines use languages of straightforward criticism of inaccuracy (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

⁶Using the typical two-step questionnaire, 56.3% were strong partisans, 37.2% were weak partisans, and 6.5% were partisan leaners. Partisan leaners were considered as partisans as they tend to hold partisan opinions as strong as weak and strong partisans (Petrocik 2009).

⁷The preregistration is available at: <https://aspredicted.org/8T6.2BJ>. The hypothesis wordings were refined to be more concise, compared to the preregistered versions.

coverage sometimes, although not frequently, suggests subjective assessments of a policy or phenomenon (Uscinski and Butler 2013, examples in Table A.15).

Table 1.1: Headlines for Baseline and Treatment Conditions

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

Because the main purpose was to manipulate asymmetric coverage of political parties, other features of fact-checking sites (e.g., rating scales, deck summary, issue-specific details) were eliminated⁸ and two of the headline wordings were more explicitly judgmental. This simplification helps remove confounding factors, strengthens the treatment, and better isolates the effects of coverage asymmetry on source assessments. These design choices reflect this study’s focus on clarifying the relationship between a source’s coverage decisions in terms of asymmetry and partisans’ credibility assessments, instead of perfectly mimicking fact-checking sites, whose reporting styles vary across specific outlets.

Two additional headlines unrelated to partisan controversies were included in the set of 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-checks (e.g., ABC, New York Times), thus allowing the current study to provide implications 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 head-

⁸Although fact-checking headlines can be detailed and specific, I follow examples that are broadly worded to plausibly target either party (e.g., “[A Democrat]’s Misleading Debt Claims,” “[A Republican] Wrong on Murder Rate”; Table A.7).

lines challenged each party (symmetric).⁹ To manipulate the coverage asymmetry, for six partisan topics, the bracketed part (e.g., “[Democratic/Republican]”) indicating the target was set to be either “Democratic” or “Republican” as shown in Table 1.2. Participants assigned to *uncongenial asymmetry* received the majority of the headlines challenging their own party (e.g., a Democrat assigned to Democrat-challenging asymmetry), whereas those assigned to *congenial asymmetry* saw most headlines challenging the opposing party (e.g., a Democrat assigned to Republican-challenging asymmetry).

Table 1.2: Topic-Party Variations per Randomized Conditions

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

Note: For each topic, “Rep” indicates the headline challenges Republicans, “Dem” indicates the headline challenges Democrats.

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 1.2. 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. Further details about the experimental design are available in Section A.1 of supplementary materials.

1.4.2 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

⁹There was a fourth condition that tested headline language effects (critical vs. neutral). The preregistration indicated that this condition was exploratory and that it would not be a part of the main hypotheses and analyses. Critical language had minimal impacts on source credibility assessments compared to neutral language (results in Figure A.3 and Table A.20).

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; Tsfati 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 question wordings from 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.”

1.5 Results

1.5.1 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).¹⁰ In Table 1.3, 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 as the baseline condition.

Consistent with H1, uncongenial asymmetric coverage reduced perceived news credibility compared to symmetric coverage. As illustrated in Figure 1.2, this negative impact of uncongenial coverage on perceived news credibility was present among both Republicans ($-0.13, p < .01$) and Democrats ($-0.18, p < .01$).¹¹ While I expected uncongenial asymme-

¹⁰Factor analysis results and item-total correlations are available in Table A.25.

¹¹Treatment effects are calculated from Table 1.3. For instance, the treatment effect of uncongenial asymmetry compared to symmetric coverage is the coefficient estimates for *[Uncongenial]* for Democrats and *[Uncongenial + Uncongenial×Rep]* for Republicans. The subgroup analysis provides the same estimates of conditional treatment effects (Table A.18).

Table 1.3: 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)
Republican	0.05 (0.03)	-0.003 (0.03)	0.03 (0.03)
Uncongenial x Republican	0.05 (0.05)	0.08* (0.05)	-0.06 (0.05)
Congenial x Republican	-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 ²	0.08	0.07	0.05

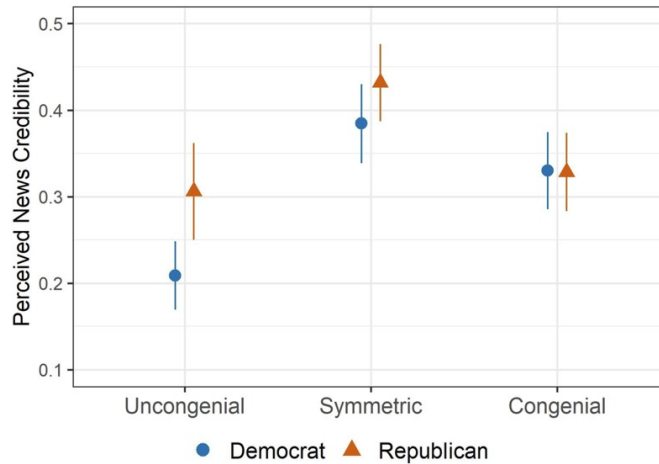
Note: Entries are the ordinary least squares (OLS) regression coefficients with robust standard errors in parentheses. *Uncongenial* = 1 if ingroup-challenging asymmetry condition, 0 otherwise; *Congenial* = 1 if outgroup-challenging asymmetry condition, 0 otherwise. *Republican* = 1 if Republican, 0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

try to reduce perceived credibility to a greater extent among Republicans than Democrats (H2), it was not the case in this study. Not only was the magnitude of treatment effect 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.¹² 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 coverage challenges their own party, compared to when it evenly challenges both parties.

Congenial asymmetric coverage also had an effect of decreasing perceived news credibility

¹²Section A.3.4 of supplementary materials discusses an exploratory question of whether uncongenial asymmetry decreases perceived credibility to a greater extent than congenial asymmetry. It was the case among Democrats, but not Republicans.

Figure 1.2: Average Perceived News Credibility by Experimental Conditions



Note: Means and 95% confidence intervals by experimental conditions. *Uncongenial* = Ingroup-challenging asymmetric coverage; *Symmetric* = Symmetric coverage (baseline); *Congenial* = Outgroup-challenging asymmetric coverage. Perceived News Credibility was coded to range from 0 to 1. The estimates are derived from Table 1.3.

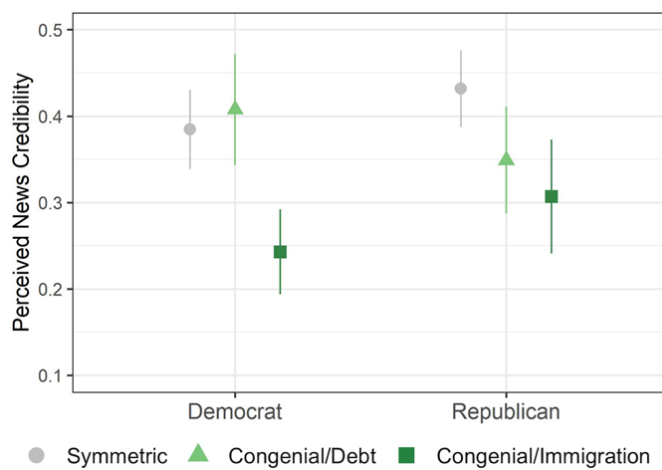
(RQ1). As shown in Figure 1.2, partisans who were given coverage where most headlines challenged the opposite party perceived the source to be less credible, relative to those who received symmetric coverage. The negative effects of congenial asymmetry on credibility perceptions were observed across both partisan groups (Rep: -0.10 , $p < .01$, Dem: -0.05 , $p < .10$).

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.¹³ As shown in Figure 1.3, 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 suggest that Republicans might perceive congenial asymmetry as more of

¹³There was no statistically significant difference in source assessments between the two randomized versions in all other conditions and partisan groups (Tables A.22-A.24). The only exception was Democrats under congenial asymmetry as discussed here.

Figure 1.3: 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*. Perceived News Credibility was coded to range from 0 to 1. Table A.21 in supplementary materials presents these results in tabular form.

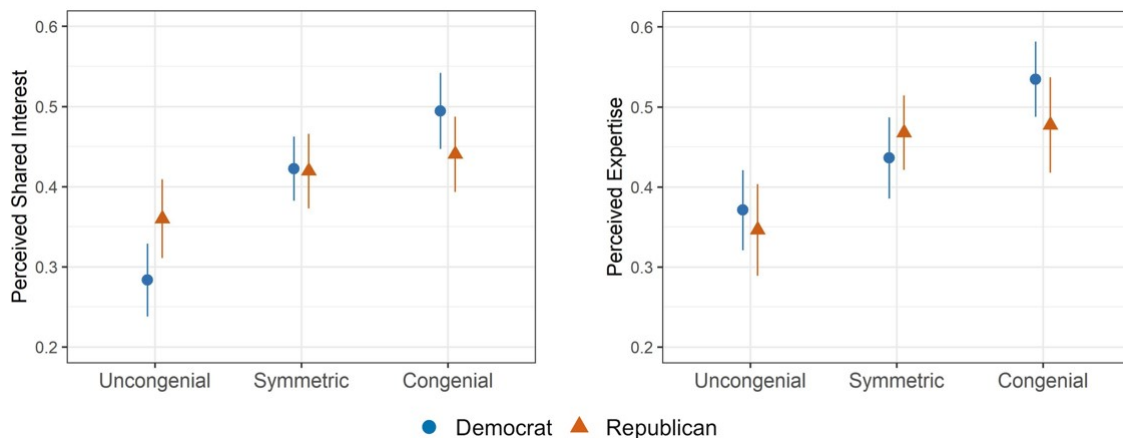
a sign that the source is not reliable than as an endorsement of their group. Democrats, on the other hand, could perceive congenial asymmetry as credible as symmetric coverage when Democrats are challenged on less politicized issues (e.g., national debt). However, Democrats may find congenial asymmetry less credible when a portion of coverage challenges Democrats on highly polarized issues (e.g., immigration). Although there are limits to generalize this finding to other topics on the basis of this single study, because fact-checking sites heavily focus on political controversies,¹⁴ it is possible that at least a minority of their headlines challenge Democrats on controversial topics and cause Republican-challenging asymmetry to lower perceived credibility among not only Republicans, but also Democrats.

¹⁴Professional fact-checking sites heavily focus on partisan topics, oftentimes more than 90% of their articles addressing statements made by partisan figures and groups (Table A.6).

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

Next, I consider how coverage asymmetry affects two underlying dimensions of source credibility, perceptions of shared interest and expertise (RQ2). Compared to symmetric 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 uncongenial asymmetry effects (H2) is that uncongenial asymmetry reduced perceived shared interest to a greater extent among Democrats than Republicans. As for perceived expertise, uncongenial asymmetry decreased perceived expertise among both Republicans (-0.12 , $p < .01$) and Democrats (-0.07 , $p < .10$) compared to symmetric coverage.

Figure 1.4: Average Perceived Shared Interest and Expertise by Experimental Conditions



Note: Means and 95% confidence intervals by experimental conditions. *Uncongenial* = Ingroup-challenging asymmetric coverage; *Symmetric* = Symmetric coverage (baseline); *Congenial* = Outgroup-challenging asymmetric coverage. All variables were coded to range from 0 to 1. The estimates are derived from Table 1.3.

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 Republi-

cans are more indifferent to symmetric coverage and congenial asymmetric coverage.¹⁵

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 suggest 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.

1.6 Discussion

This study examines news coverage choices that facilitate bipartisan trust in news sources, which can enable evidence-based information sources such as fact-checking sites to benefit society. It shows that asymmetric coverage in either direction causes a loss of credibility among not just on one side of the partisan spectrum, but among people across party lines. While previous studies have focused on how partisans process individual articles or pieces of facts (e.g., Nyhan et al. 2020; Wood and Porter 2019), my work focuses on how overall coverage, or a collection of articles, affects partisans' initial evaluations of a source. This endeavor is important because there is still room for more Americans to learn about and familiarize themselves with fact-checking sites (Guess, Nyhan and Reifler 2020) and because credibility perception is the first step toward learning, persuasion, and continued use of those outlets (Druckman and McGrath 2019; Lupia 2016). By taking this approach, this study clarifies the choices that journalists, educators, and policymakers have to build credibility in evidence-based news sources and help more citizens make informed decisions and hold politicians accountable.

The asymmetric coverage of political parties often found in professional fact-checking sites, although it is driven by the interpretive, weight of evidence approach, can have an unintended consequence of undermining credibility. Compared to symmetric coverage that corrects each party at a similar rate, asymmetric coverage lowered perceived source credibility among both partisan groups. Uncongenial asymmetry, in which a majority of headlines challenge one's own party, reduced perceived news credibility, shared interest, and expertise among both Democrats and Republicans. Contrary to popular belief, Democrats assessed

¹⁵An 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 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.

a source with uncongenial asymmetry more negatively than Republicans. Congenial asymmetry, in which most headlines challenge the opposite party, also reduced perceived news credibility among both partisan groups. Democrats found congenial asymmetry to be less credible particularly when a portion of coverage challenged their own party on a highly politicized issue. Interestingly, congenial asymmetry caused Democrats, but not Republicans, to perceive greater shared interest and expertise from the source.

Uncongenial asymmetry reduced perceived credibility among both partisan groups, which implies 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 dominantly determined source assessments. Congenial asymmetry is more likely to reduce perceived news credibility when the coverage challenges in-group on politicized topics, as shown in Democrats' reactions. Democrats, but not Republicans, perceived greater shared interest and expertise from a source with congenial asymmetry, suggesting Democrats would be more likely to be persuaded by messages delivered by such sources. 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 source assessments.

Overall, these 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 arbitrate factual controversies 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). My study suggests potential challenge from fact-checking practice to source reputations could 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 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 unreliable conservative 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 evidence-based information providers in polarized environments? A key takeaway is that evidence-based sources face an “objectivity dilemma” for producing asymmetric coverage to achieve interpretive objectivity, because asymmetric coverage is sometimes necessary to accurately reflect evidence but jeopardizes credibility. I do not intend to encourage fact-checking sites or other evidence-based sources to pursue balance for the sake of balance. Instead, my findings suggest that asymmetric coverage poses an obstacle to building broad-based public perceptions of credibility. While adhering to their evidence-oriented coverage decisions, communicators who seek to build credibility should 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;¹⁶ and how their non-partisan principles can sometimes lead to asymmetric coverage. Absent these extra efforts, asymmetric coverage of political parties, despite its merits and occasional need, likely alienates partisans from both sides.

Another practical recommendation that this study generates is that fact-checking sites, or any other evidence-based sources, can build public trust by pursuing symmetric coverage of 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.¹⁷ They can also consider sharing the pool of statements that they have considered and examined, which could be more balanced than the set

¹⁶The IFCN Code of Principles describes how fact-checking sites are monitored to abide by a set of rules for nonpartisan, transparent, and evidence-based reporting (IFCN n.d.).

¹⁷A Canadian fact-checking site, FactsCan (currently inactive), displayed a pie chart tracking the share of fact-checks targeted at different political parties. This practice—setting targets by party to roughly balance with recent popular vote—is explicitly rejected by the U.S. fact-checkers (Graves 2018).

of statements that they ultimately publish as fact-checks. Another approach could be to explicitly present both parties as the key targets and keep threads of fact-checks targeted at each party, to demonstrate attention to both.¹⁸

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 than the general population (Table A.17), 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 what ways does this study help evidence-based organizations that seek to help citizens discern facts from falsehoods in politics? When competing political groups generate an equal amount of misinformation, then they can follow evidence and cover each side equally. However, when competing political groups generate an asymmetric amount of misinformation, solely following evidence to determine whom to scrutinize may unintentionally jeopardize their reputation, resulting in the “objectivity dilemma.” To build credibility in the organization that seeks to promote informed democracy, it is thus important to understand that citizens not only need factual guidance but also easily suspect the credibility of the source when faced with asymmetric coverage of political parties.

¹⁸LeadStories, a U.S. fact-checking site, keeps the “Blue Feed” and “Red Feed” icons with partisan symbols (a donkey and an elephant) on the top of its website, explicitly signaling that they consider both parties as major targets.

CHAPTER 2

How Does Topical Diversity Affect Source Credibility?

Abstract

While evidence-based information providers, such as fact-checking sites, seek to promote informed democracy, public trust in these outlets remains limited. Is their politics-focused coverage one factor behind the limited trust? Politics-focused coverage highlights partisan competition, which can harm credibility by activating identity-protective biases or resistance to persuasive intent. One way to mitigate these negative consequences could be to broaden the scope of topics, leveraging depoliticized contexts and the audience's diverse topic interests. I employ a preregistered experiment to test how the topical focus of coverage affects source credibility perceptions. Compared to politics-focused coverage, specializing in scientific issues improves credibility assessments. Unexpectedly, focusing entirely or partially on popular culture topics such as entertainment, sports, and lifestyle undermines judgments of source credibility. The results suggest that evidence-based communicators are seen as more credible when they cover a range of "serious" topics, but less credible when they cover lighter topics.

To help citizens make informed decisions in the face of misinformation, a growing number of organizations have joined the efforts to correct misperceptions. For these endeavors to help promote informed democracy, it is crucial that the public sees these evidence-based sources as credible. One prominent example is fact-checking organizations, which emphasizes their democratic mission in the “watchdog” role of journalism (Amazeen 2020; Ferracioli, Kniess and Marques 2022). The enterprise of fact-checking stemmed from the growing awareness that conventional media failed to provide information that would allow citizens to hold public figures accountable (Dobbs 2012). In an attempt to reform conventional media, major U.S. fact-checking sites produce politics-focused coverage. Their mission statements state: “aims to reduce [...] deception and confusion in U.S. politics [...] we monitor [...] major U.S. political players” (FactCheck.org n.d.); “focused on [...] specific statements made by politicians” (PolitiFact; Holan 2018); and “the purpose is to ‘truth squad’ the statements of political figures regarding issues of great importance” (Washington Post Fact Checker; Kessler 2017).

Despite the growth of fact-checking in professional journalism (Graves 2016), only a small fraction of the American public visits fact-checking sites (Guess, Nyhan and Reifler 2020). Many people, especially Republicans, express suspicion that fact-checkers are biased (Brandtzaeg, Følstad and Chaparro Domínguez 2018; Walker and Gottfried 2019). Despite the democratic mission of fact-checking, why do many people still distrust and rarely use fact-checking sites?

There are theoretical reasons to suspect that a heavy focus on partisan politics may inhibit public trust in fact-checking sites. When partisan conflict is made salient, people are more likely to distrust the information in order to protect their identities or more readily counterargue (Kahan 2015; Groenendyk and Krupnikov 2021). Politicized contexts also intensify the tendency to see balanced coverage as biased (hostile media bias; Feldman 2017) and the tendency to overestimate political bias in others’ views (naïve realism; Robinson et al. 1995). People often react with skepticism when they perceive a message on political topics as a persuasion attempt (Dillard and Shen 2005; Friestad and Wright 1994). Prior research suggests that these defensive psychological tendencies may be mitigated by broadening the topical scope to include depoliticized contexts. For instance, partisan defenses or partisan selective exposure are weaker when the messages pertain to non-political topics or when party cues are removed (Druckman, Peterson and Slothuus 2013; Mummolo 2016; Pingree, Brossard and McLeod 2014).

Despite the insights from existing theories, it remains unknown whether politics-focused coverage helps or hinders credibility. It is important to test this question empirically for two reasons. First, no study has yet compared how people assess fact-checking sites with different

topical scopes. While some major U.S fact-checking sites (e.g., PolitiFact, Washington Post Fact Checker) tend to focus on partisan politics, not all do. For instance, Snopes focuses on non-political popular culture topics such as entertainment, sports, and lifestyle. Science Feedback, on the other hand, focuses on scientific topics and claims. LeadStories covers a mix of topics, both partisan politics and non-political topics.¹ Second, comparing different topical scopes can clarify which approach more effectively contributes to building credibility in evidence-based sources. Using a preregistered experiment, I examine how people assess a source whose coverage focuses on (1) partisan politics, relative to one that covers (2) non-political scientific topics,² (3) non-political popular culture topics,³ (4) a mix of partisan and scientific topics, or (5) a mix of partisan and popular culture topics.

Because source credibility, when properly established, may overwhelm partisan defenses against corrective messages (Druckman and McGrath 2019) and generate continued visits to news sources (Taneja and Yaeger 2019), I examine how the topical scope of fact-checking coverage influences perceptions of source credibility. As to whether focusing on politics helps or hinders building credibility, this study provides two key answers. First, compared to politics-only coverage, coverage that specializes in science increases credibility. Second, surprisingly, covering only non-political popular culture topics or mixing politics and popular culture hinders credibility. People expect serious public affairs reporting, rather than entertainment reporting, from credible fact-checking sites.

2.1 Politics-focused Fact-checking Coverage

Motivated by the goal of enhancing democratic accountability, the coverage of major fact-checking sites is focused on high-profile politicians and highly salient partisan controversies. Between 2017 and 2019, 88% of fact-checks produced by FactCheck.org targeted federal-level politicians and government officials (Ferracioli, Knies and Marques 2022). Another study of the same time frame finds that fact-checking operations affiliated with conventional media (Associated Press, CNN, New York Times, Washington Post) heavily focused on high-

¹All of these fact-checking sites were endorsed by the International Fact-Checking Network (IFCN) as of 2023 (Poynter n.d.).

²Because scientific topics may become politicized (Kahan 2015), I specifically focus on scientific topics that are unrelated to partisan controversies.

³This category includes ‘softer’ varieties of topics, as opposed to ‘harder’ news. Compared to ‘harder’ news, ‘softer’ news is less politically relevant, more individually relevant (less societal relevance), more episodic (less thematic), and more personal and emotional (less impersonal) (Reinemann et al. 2012). Hard news concerns topics such as politics, economics, international relations, and scientific developments, whereas soft news involves human-interest stories, gossip, and celebrity (Tuchman 1973). Because soft news conceptually includes political news that reorients policies to personalities (Baum 2007), I focus on popular culture topics that are not political.

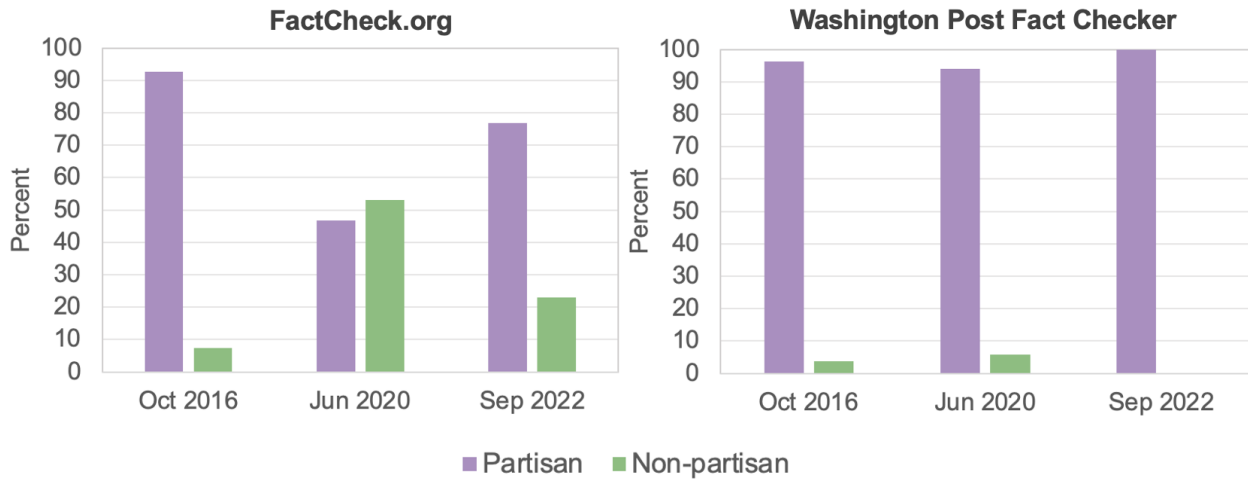
profile political figures (81% of their coverage targeted the president) and salient partisan controversies such as national security, healthcare, and the economy (Yousuf 2023).

My own data collection also shows that visitors to major U.S. fact-checking sites routinely encounter politics-heavy coverage. For all fact-checking articles published by FactCheck.org and Washington Post Fact Checker during October 2016, June 2020, and September 2022,⁴ I collected data on the fact-checked targets, specifically whether the fact-checked individuals or organizations had partisan affiliations (“partisan”) or did not (“non-partisan”). Figure 2.1 illustrates that fact-checking coverage tends to focus heavily on partisan targets (details in Table B.5 in supplementary materials). For FactCheck.org, partisan-target fact-checks constituted 93% of coverage in October 2016 and 77% in September 2022. In an extraordinary time, the early stages of a novel pandemic (COVID-19) in June 2020, the coverage of FactCheck.org tilted toward less partisan coverage (47%). As for Washington Post Fact Checker, almost all coverage (94 to 100%) was dedicated to partisan targets during all three months. The heavy focus on partisan targets in fact-checking sites is distinct from the broader news environment that has a moderate dose of politics amid many other topics (e.g., only 14% of articles published by major US news outlets pertained to political events in 2013; Budak, Goel and Rao 2016).

Professional fact-checkers take pride in their emphasis on highly salient political figures and topics. For instance, Glenn Kessler of the Washington Post Fact Checker said in an interview that “all [fact-checking organizations] have a passion for holding politicians accountable for their statements” (Kessler 2014). Bill Adair of PolitiFact expressed his belief that the work of fact-checkers can help people be “better armed with the truth so they make smarter judgments about the candidates” (Adair 2012). Brooks Jackson of FactCheck.org indicated his vision of fact-checking as “a resource for citizens who are bewildered and confused and looking for help” in the complex political world (Graves 2016, p. 89). The question remains: Does politics-focused coverage help or hinder fact-checking sites in building credibility?

⁴As shown in Figure B.2 (search interest in fact-checking captured by Google Trends), public interest in fact-checking peaked in October 2016 (the month preceding the 2016 presidential election). June 2020 reflects fact-checking coverage several months into the COVID-19 pandemic. I originally selected October 2022 for a third period, to capture the month preceding the 2022 midterm election under Joe Biden’s administration. It was adjusted to September 2022, because Washington Post Fact Checker published only three fact-checks in October 2022, which was too few to examine distributions.

Figure 2.1: Proportion of Partisan and Non-partisan Targets in Fact-checking Coverage



Note: “Partisan” refers to fact-checked targets being individuals or organizations with partisan affiliations. “Non-partisan” refers to fact-checked targets being individuals or organizations without partisan affiliations. Table B.5 presents this result in tabular form.

2.2 Does Politics-Focused Coverage Reduce Source Credibility?

Prior research has identified a number of psychological tendencies that may reduce the credibility of politics-focused fact-checking. Studies of identity-protective reasoning (Kahan 2015) and resistance to persuasive intent (Dillard and Shen 2005) suggest fact-checking coverage focused on partisan politics likely diminishes perceived source credibility. These obstacles may be mitigated by broader topical scope, leveraging the role of depoliticized contexts (Pingree, Brossard and McLeod 2014; Mummolo 2016).

2.2.1 Obstacle 1: Identity-protective Reasoning

When an information source focuses on political content, people tend to be more defensive against potential threats to their own group and values. When competition with the opposing group is salient, individuals are more likely to perceive threats to their identity (Bobo and Hutchings 1996) and react with identity-protective reasoning (e.g., partisan motivated reasoning, cultural-protective cognition; Druckman and McGrath 2019; Kahan 2015). Because individuals associate politics with conflict, rather than deliberation, people process information labeled as “political” with greater partisan bias (e.g., readiness to counterargue)

compared to information without such a label (Groenendyk and Krupnikov 2021).

Illustrating the role of political contexts in how people assess news sources, prior studies have shown that polarized contexts tend to reduce trust in the news media (Ladd 2012; Marietta and Barker 2019) and lead individuals to prioritize partisan opinions over the quality of evidence (Druckman, Peterson and Slothuus 2013). The salience of group competition likely intensifies the hostile media effect, the tendency to perceive a balanced source of information as biased (Vallone et al. 1985). When news sources cover political topics, partisans tend to perceive balanced news coverage as biased in favor of the other side, especially on topics they deeply care about (Feldman 2017; Gunther and Schmitt 2004) and when news coverage is opinionated (Feldman 2011). These tendencies can be exacerbated by “naïve realism,” the tendency for individuals to believe that their own views are objective and well-informed, while attributing and overestimating political bias in others’ views (Robinson et al. 1995).

In the context of fact-checking, messages that cue partisan controversies are often less effective at reducing misperceptions (Garrett, Nisbet and Lynch 2013; Nyhan and Reifler 2010). Because the salience of partisan conflict matters, these identity-protective biases are apt to be triggered when people visit fact-checking sites that focus heavily on partisan leaders, groups, and issues.

2.2.2 Obstacle 2: Resistance to Persuasive Intent

Individual tendencies to resist persuasive intent can pose another obstacle to fostering trust in politics-centered fact-checking coverage. Prior studies suggest two forms of such resistance: “psychological reactance” and “persuasion knowledge.” Psychological reactance refers to a response to a persuasive message that is characterized by perceived threat to the ability to freely form an opinion, often resulting in anger and defensive counterarguing (Dillard and Shen 2005). Persuasion knowledge refers to the knowledge that individuals deploy to cope with a persuasion attempt (e.g., knowledge about source or topic that can aid their decision), where a common coping response to political messages (e.g., political advertising) is skepticism toward the source of information (Nelson, Ham and Haley 2021). The salience of partisan conflict in news coverage likely strengthens these oppositional reactions, because these tendencies are prominent in highly politicized topics and contexts, such as climate change and election campaigns, particularly among those whose partisan views are challenged (Binder et al. 2022; Chinn and Hart 2023).

While fact-checkers claim that their reporting seeks merely to inform, not to persuade (Graves 2016), for the enterprise of fact-checking to be of value (e.g., correct misperceptions), it may be more appropriate to understand fact-checking messages as “a form of persuasive

or strategic communication” (Garrett and Weeks 2013, p. 1049). This understanding of fact-checking suggests that, despite fact-checkers’ dispassionate intention, the audience may still perceive fact-checking messages as having a persuasive intent, and therefore react with anger, counterargument, or suspicion, as implied by prior research on motivated reasoning, hostile media bias, psychological reactance, and persuasion knowledge.

2.2.3 Mitigation Strategy: Leveraging Depoliticized Contexts

Defenses against identity threats or persuasive intent should not be as strong in contexts where individuals are not expecting political contention. Illustrating this point, partisan defenses against corrections or expert messages on less politicized topics (e.g., skin cream, nuclear waste) are weaker compared to messages involving partisan controversies (e.g., gun control, climate change) (Bolsen and Druckman 2018; Kahan, Jenkins-Smith and Braman 2011; Kahan et al. 2017). A backfire effect, where corrective messages rather intensify misperceptions, was found on politicized topics (e.g., weapons of mass destruction in Iraq) but not on less politicized topics (e.g., stem cell research) (Nyhan and Reifler 2010). Individuals also pay greater attention to the quality of evidence than to a partisan endorsement when partisan competition cues are removed (Druckman, Peterson and Slothuus 2013).

In the context of fact-checking, fact-check ratings—a short summary of the accuracy evaluation (e.g., “mostly true,” “false”)—are more effective in correcting misperceptions when the topic is non-political (e.g., a corporate executive’s claim about nutritional benefits of their cereal) than political (e.g., a politician’s claim about the opponent’s advertisement) (Amazeen et al. 2018). Relatedly, despite concerns that readers may mistake fact-checkers’ accuracy judgments for bias, factual adjudication that avoids strong partisan cues (i.e., deemphasizes competitive framing of partisan interests) updated people’s factual beliefs in the direction of adjudication and improved news quality assessments, compared to a news story without adjudication (Pingree, Brossard and McLeod 2014).

One way to depoliticize the context, or to reduce the salience of group competition or persuasive intent, is to cover topics not associated with partisan conflict. While partisans tend to avoid politically unfriendly news sources, this tendency is often eclipsed by their interest in personally relevant topics, whether political (e.g., Social Security cuts) or non-political (e.g., weight loss tips) (Mummolo 2016). Relatedly, individuals select and assess news content based not only on partisan congruence, but also on “informational utility”—relevance to “individuals’ immediate and prospective encounter of threats or opportunities”—that can overpower the tendency to discredit or avoid dissonant news content (Knobloch, Carpentier and Zillmann 2003, p. 95). Thus, broadening the scope of coverage to non-political topics

not only reduces the salience of party competition, but may also open up the possibility that individuals find the news content more relatable and useful.

Given prior work, I expect people to be less defensive against partisan threats or persuasive intent, when partisan topics are embedded in topics that people find less controversial or conflict-oriented. Thus, I expected that topic coverage that includes either 1) non-political popular culture topics such as sports, movies, food, or cultural figures or 2) non-political scientific topics would increase partisans' perceptions of source credibility, compared to when a source focuses predominantly or exclusively on partisan issues.

Mixed Coverage Hypothesis: Compared to when a source covers only partisan issues, perceived source credibility will increase when the source additionally covers non-political (popular culture or science) topics.

Specialized Coverage Hypothesis: Compared to when a source covers only partisan issues, perceived source credibility will increase when the source covers only non-political (popular culture or science) topics.⁵

In assessing the effects of topical scope, I examine whether Democrats and Republicans differ in their source credibility perceptions. Because Democrats have higher baseline trust in news media and fact-checking (Pennycook and Rand 2019; Walker and Gottfried 2019), it is possible that treatment effects of non-political popular culture coverage could be more muted among Democrats than Republicans. On the other hand, because Republicans tend to be more distrustful of science than Democrats (Krause et al. 2019; Gauchat 2012), coverage of non-political scientific topics may improve credibility assessments to a greater extent among Democrats than Republicans.

Partisan Difference Question: Compared to when a source covers only partisan issues, does mixed or exclusive coverage of non-political topics improve credibility perceptions to a greater extent among Democrats or Republicans?

2.3 Study Design

To understand how people assess a source with politics-focused coverage compared to those with different topical coverage, I conducted a survey experiment in February 2021. Participants were recruited via Prolific, an online crowdsourcing platform whose participants have

⁵The preregistration originally contained a hypothesis that, compared to mixed coverage, the specialized non-political coverage will increase perceived source credibility. This hypothesis coupled with the Mixed Coverage Hypothesis leads to the Specialized Coverage Hypothesis, which the paper focuses on for simplicity and clarity.

been found to perform better on attention checks, more honest behavior, and reproducibility of existing results compared to other counterparts (Palan and Schitter 2018; Peer et al. 2017). Using the prescreening data, I recruited an equal number of Democrats and Republicans, 1000 respondents in total.⁶ The proposed hypotheses, exploratory research question, and analysis plan were preregistered at AsPredicted.org prior to data collection.⁷

2.3.1 Experimental Conditions

Participants were told that they would be given a list of headlines from an online news outlet and be asked to assess the credibility of the source. They were presented with six headlines, where the composition of topics differed across experimental conditions. These headlines were randomly pulled from a larger set of 18 headlines, 6 each from three topic areas: partisan politics, non-political popular culture, and non-political science.

In this study, partisan topics refer to the issues where “facts have positive or negative implications for political parties” (defined as “partisan relevance” in Jerit and Barabas 2012). A set of issues on which Democrats and Republicans substantially diverge in factual beliefs, such as gun violence, abortion, and immigration, falls into this category (Wood and Porter 2019). Non-political popular culture topics refer to the issues that pertain to non-political realms of everyday life, such as weather, sports, entertainment, and food, and where facts have neither positive nor negative implications for political parties (Mutz 2007; LaMarre et al. 2014; Yu 2016). Non-political scientific topics refer to the issues where facts are based on scientific research and do not have partisan implications, such as astronomy, biology, and electronics (Kahan 2015; Pew Research Center 2015). In devising the headlines, I avoided scientific topics that are associated with partisan disagreements (e.g., climate change; Kahan, Jenkins-Smith and Braman 2011). Participants were randomly assigned to one of the five experimental conditions:

- Baseline: Partisan politics only (e.g., abortion, gun violence)
- Treatment 1: Popular culture only (e.g., entertainment, sports)
- Treatment 2: Science only (e.g., astronomy, biology)
- Treatment 3: Partisan politics & popular culture
- Treatment 4: Partisan politics & science

⁶Based on the two-step questionnaire (first identifies party, then identifies the strength of partisanship), partisan leaners were considered as partisans (Petrocik 2009). There was no pure independent in the sample.

⁷The preregistration is available at: https://aspredicted.org/MLL_499.

These experimental conditions represent different approaches that fact-checking sites may adopt. The baseline condition (partisan issues only) resembles the approach of professional fact-checking sites such as FactCheck.org, PolitiFact, and Washington Post Fact Checker. This condition serves as the baseline because it represents the fact-checking ideal of holding politicians accountable through evidence-based corrections (Graves 2016; Kessler 2014). Treatment 1 resembles the approach taken by Snopes, a fact-checking site that focuses on urban legends, hoaxes, and folklore.⁸ Treatment 2 resembles websites such as FactCheck.org’s SciCheck section, Science Feedback, and Climate Central. Treatments 3 and 4 represent the mixed coverage of partisan plus one other topic area, which resembles fact-checking sites like LeadStories and may take place in other sites when time-sensitive issues drive fact-checking sites to cover topics beyond their usual focus (e.g., FactCheck.org in June 2020 after the COVID-19 pandemic, Figure 2.1).

Table 2.1 presents the headlines that were used in the experiment. In the baseline condition, to reflect fact-checking practices, six headlines on partisan issues were either in the form of corrections to misstatements or raising questions about factual controversies. For the four headlines in the form of correction, I employed topics where political elites of both parties had made misstatements (black teenager pregnancy, gun violence, abortion, immigration; Wood and Porter 2019), so that it would be plausible to associate the misstatement with either party. Two additional partisan headlines were presented as an interrogative statement that raises question without any party references (solar power labor market, defense spending). To ensure that the results do not hinge on the specific associations between topic and political party or the order of headlines, topic-party associations and the order of headlines were randomized. To ensure partisan balance in coverage, party references were randomly assigned in a way that two of the four corrective headlines were assigned to challenge Republicans and two challenged Democrats.

In Treatment 1 (pop culture only), six popular culture topics were adopted from the news stories that other studies used as non-political contexts: cultural figure (Graves 2016, p. 90), home field advantage in sports (Mutz 2007), Olympics (Settle and Carlson 2019), cartoon characters (LaMarre et al. 2014), food and movies (Yu 2016). Headline wordings were adapted from actual fact-checking articles published by Snopes and AP News (more details in Section B.1.1 of supplementary materials).

For Treatment 2 (science only), I avoided science-related issues where facts have positive or negative implications for political parties, such as climate change and fracking (Kahan 2015). Instead, the headlines addressed scientific issues that lacked partisan relevance. Based on

⁸While Snopes occasionally cover political issues, Snopes’s mission statement states that their coverage focuses on “investigating urban legends, hoaxes, and folklore” (Snopes n.d.).

Table 2.1: Headlines for Experimental Stimuli

Coverage	Topic	Headline
Partisan Politics	Black teenager pregnancy	What [Republicans/Democrats] get incorrect about the pregnancy rate among black teenagers
	Gun violence	[Republican/Democratic] Party offers misleading statistics on gun violence
	Solar power labor market	Are there more jobs in solar than oil in the US?
	Abortion	What [Republicans/Democrats] get wrong about the number of abortions over time
	Immigration	[Republican/Democratic] National Committee misrepresents the deportation rate of illegal immigrants
	Defense spending	Has US defense spending decreased in recent years?
(Non-political) Popular Culture	Cultural figure	Atlanta’s celebrity groundhog, General Beauregard Lee, claims he predicts weather better than Punxsutawney Phil in Philadelphia – it’s mostly true according to meteorologists
	Sports	What really causes home field advantage in sports – and why it’s on the decline
	Cartoon	Claim that Disney’s Goofy character actually is a cow lacks evidence
	Food	Map of America’s favorite restaurants goes viral – but it’s mostly inaccurate
	Movie	Which movies and shows is Netflix losing versus gaining this year?
	Sports	What we know about Tokyo Olympics – it will happen, but when?
(Non-political) Science	Nanotechnology	Scientists debunk misunderstandings about nanotechnology
	Artificial sweeteners	Does drinking one diet soda a day really increase the risk of dementia and strokes?
	Radiation and mobile phone	Scientific reasons why mobile phone towers don’t pose a radiation risk
	Physics/astronomy	Study says universe is expanding faster and is younger than previously thought
	Genetics/biology	Are dogs really 99.9% wolf, according to genetic analysis?
	Bioengineered artificial organs	Study on the prospect of artificial kidneys soon replacing dialysis

Note. More information about original fact-checking articles that informed the headline content is available in Section B.1.1 of supplementary materials (Tables B.1, B.3, and B.4).

Kahan (2015) and Pew Research Center (2015), I chose issues that were generally unrelated to partisan controversies, such as radio waves from cell phones, use of artificial sweeteners, nanotechnology, astronomy, and biology. Headline wordings were designed to resemble the fact-checking articles published by the SciCheck section of FactCheck.org, adapting examples from Snopes, Full Fact, and AP News (Section B.1.1 in supplementary materials).

Treatment 3 (partisan politics & pop culture) displayed six headlines, consisting of three headlines randomly chosen from the six partisan topics and three randomly chosen from the six popular culture topics. Treatment 4 (partisan politics & science) also displayed six head-

lines, where three were randomly selected from the six partisan topics plus three randomly chosen from the six scientific topics. To keep the balance of partisan headlines, three partisan issues were selected in a way that one challenged Republicans, one challenged Democrats, and one had no party reference. In all treatment conditions, the order of headlines was randomized.

2.3.2 Measures

After reading the headlines, source credibility perceptions were measured as the perceived credibility of the source as a news source (news credibility; Meyer 1988) and two underlying dimensions of source credibility, perceptions of shared interest and expertise (Lupia and McCubbins 1998).

Perceived News Credibility. Respondents indicated 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 ranging from “not at all” to “a great deal” (Tsfati 2010; Pingree et al. 2013). The primary measure of news credibility perception was the composite score, constructed as the average, of the five items.

Perceptions of Shared Interest and Expertise. Because different experimental conditions involved a broad range of topics beyond politics, instead of adopting question wordings in Lupia and McCubbins (1998) that were specific to political topics, I adopted a set of items applicable to sources that report on broader topics. I adopted items that ask participants to indicate the degree to which they perceive the website’s reporters “are concerned about public interest,” “watch out for your interest” (Meyer 1988), “are well trained,” and “are experienced” (Jensen 2008), all on a five-point scale ranging from “not at all” to “a great deal.” The composite score of the first two items constituted the measure of perceived shared interest, whereas the latter two were used to measure perceived expertise.⁹

2.4 Results

To analyze how topical scope variations affect perceived source credibility relative to the politics-centered coverage, I used ordinary least squares (OLS) with robust standard errors using the preregistered model specification (Table B.8). Factor analysis on the five news credibility items, two perceived shared interest items, and two perceived expertise items

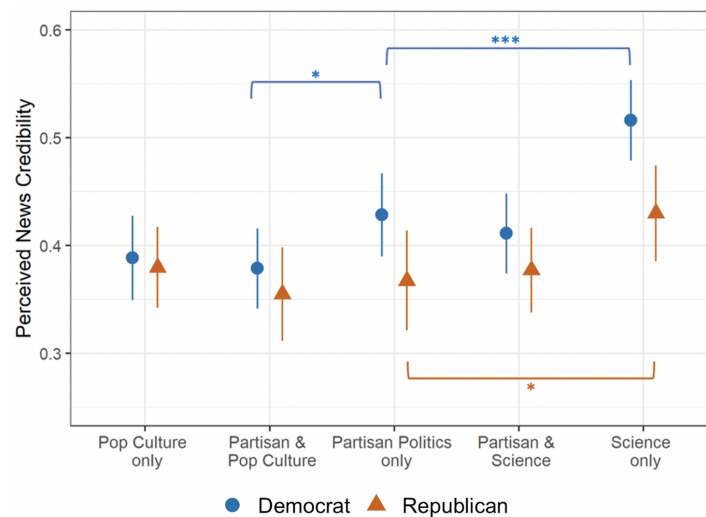
⁹These three measures capture different aspects of source credibility assessments. News credibility items reflect the traits that are expected for credible news outlets (Meyer 1988), whereas shared interest and expertise are perceptions expected for a credible source to be persuasive (Lupia and McCubbins 1998).

suggested a three-factor solution, where the related items loaded together on each factor (news credibility, shared interest, expertise) as expected (Tables B.10-B.11). Each measure had acceptable internal reliability (Cronbach’s α): .91 (news credibility), .90 (perceived shared interest), and .85 (perceived expertise).

2.4.1 Topic Scope Effects of Mixed and Specialized Coverage

Figure 2.2 illustrates the treatment effect of popular culture or science coverage, compared to partisan-only coverage (baseline condition) presented at the center. To the left of baseline condition, mixed and specialized coverage conditions of popular culture topics (Treatments 1, 3) are shown. To its right, mixed and specialized coverage conditions of scientific topics (Treatments 2, 4) are presented. For each treatment condition, the existence of a horizontal bar with stars indicates a statistically significant difference compared to the baseline (Democrats: blue bars on the top, Republicans: red bars on the bottom).¹⁰

Figure 2.2: Topic Scope Effects on Perceived News Credibility



Note: Means and 95% confidence intervals by experimental conditions. Perceived News Credibility was coded to range from 0 to 1. Asterisks indicate statistically significant differences from the baseline (“Partisan Politics only”); * $p < .10$; ** $p < .05$; *** $p < .01$. The estimates are derived from Table B.8.

The Mixed Coverage Hypothesis predicted that, compared to when a source covers only partisan issues, covering both partisan and popular culture topics would increase source cred-

¹⁰To illustrate, from Table B.8, the treatment effect of Treatment 1 (scientific only) compared to baseline (political only) is the coefficient estimates for [Sci] for Democrats and [Sci + Sci×Rep] for Republicans. The subgroup analysis provides the same estimates of conditional treatment effects (Table B.9).

ibility perceptions. However, expanding the scope of coverage to include popular culture as well as partisan issues had minimal impact on perceived news credibility among Republicans ($-0.01, p = .69$) and decreased news credibility among Democrats ($-0.05, p < .10$). Although the Specialized Coverage Hypothesis predicted that popular culture-only coverage would increase perceived credibility compared to politics-focused coverage, there was no significant treatment effect among Republicans ($0.01, p = .69$) and Democrats ($-0.04, p = .16$).

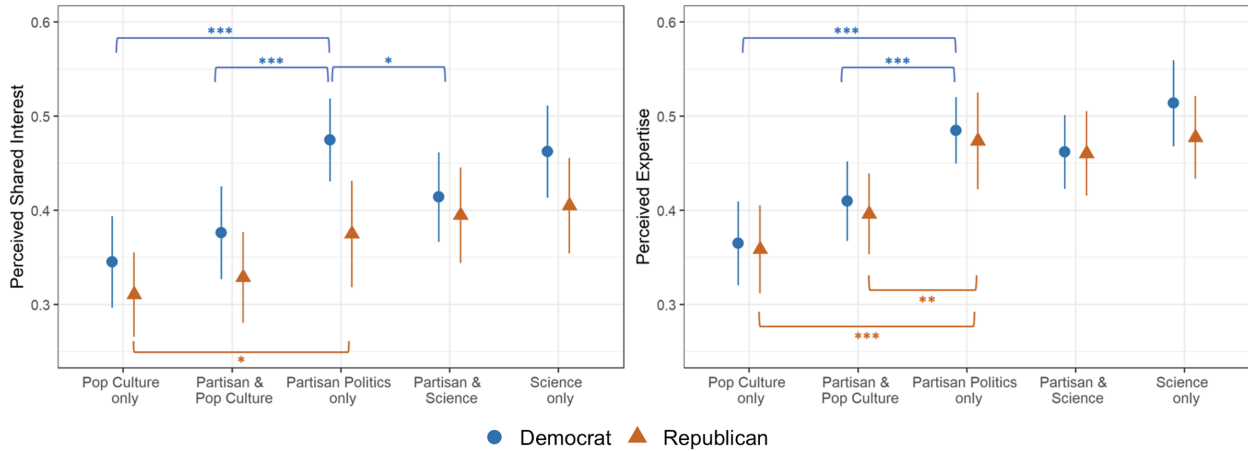
The Mixed Coverage Hypothesis also predicted that broadening coverage to include both scientific and partisan issues would increase source credibility, compared to when the source covers only partisan issues. This expectation was not met; the inclusion of scientific issues did not significantly affect perceived news credibility compared to the baseline among Republicans ($0.01, p = .75$) or Democrats ($-0.02, p = .53$). However, the Specialized Coverage Hypothesis, which predicted science-only coverage would increase credibility perceptions compared to partisan-only coverage, was consistent with the results. Compared to partisan-only coverage, perceived news credibility significantly increased when the source covered only scientific issues, among both Democrats ($0.09, p < .01$) and Republicans ($0.06, p < .10$).

2.4.2 Topic Scope Effects on Perceived Shared Interest and Expertise

I further examined how topic coverage scope affected the perceptions of shared interest and expertise, two important factors that underlie source credibility assessments (Lupia and McCubbins 1998). As shown in Figure 2.3, inclusion of popular culture topics lowered perceived shared interest and expertise. Compared to partisan-only coverage, when the source covered both partisan and popular culture topics, perceived shared interest significantly decreased among Democrats ($-0.10, p < .01$) but not Republicans ($-0.05, p = .22$). Popular culture-only coverage significantly decreased perceived shared interest among both partisan groups (Republicans: $-0.06, p < .10$, Democrats: $-0.13, p < .01$) compared to partisan-only coverage. The negative effects of popular culture coverage were even stronger on perceived expertise. Compared to partisan-only coverage, perceived expertise significantly decreased among both partisan groups when the source covered partisan and popular culture topics (Republicans: $-0.08, p < .05$, Democrats: $-0.08, p < .01$) or only popular culture topics (Republicans: $-0.12, p < .01$, Democrats: $-0.12, p < .01$). On the other hand, scientific coverage did not meaningfully affect perceived shared interest and expertise compared to partisan-only coverage, except for mixed coverage of partisan and scientific issues, which lowered perceived shared interest among Democrats ($-0.06, p < .10$).

Overall, people were likely to perceive lower levels of shared interest and expertise when

Figure 2.3: Topic Scope Effects on Perceived Shared Interest and Expertise



Note: Means and 95% confidence intervals by experimental conditions. All variables were coded to range from 0 to 1. Asterisks indicate statistically significant differences from the baseline (“Partisan Politics only”); * $p < .10$; ** $p < .05$; *** $p < .01$. The estimates are derived from Table B.8.

a source covered popular culture, compared to when it covered partisan or scientific issues. This finding implies that people tend to attribute greater professional value to serious public affairs coverage than popular culture coverage, consistent with the news hierarchy in the journalistic field (Graves and Konieczna 2015). Similar to the finding on perceived news credibility, treatment effects of topic scope on perceptions of shared interest and expertise suggest that fact-checking coverage that focuses on partisan or scientific issues is seen as more credible across partisan groups, compared to coverage focused on popular culture.

2.4.3 Topic Scope Effects of Popular Culture vs. Scientific Coverage

While I hypothesized that broadening the coverage to non-political topics, either scientific or popular culture, would increase perceived source credibility, scientific and popular culture topic coverage unexpectedly diverged in how each type affected credibility assessments. The results suggest that science coverage is more conducive to increasing credibility than popular culture coverage.

When all five conditions are compared, science-only coverage was perceived as most credible in terms of news credibility among both Democrats and Republicans (Figure 2.2). In contrast, popular culture-only coverage significantly lowered perceived source expertise and

shared interest (Figure 2.3). Compared to partisan-only coverage, mixed coverage of partisan and scientific issues did not meaningfully affect perceived news credibility, whereas mixed coverage of partisan and popular culture topics lowered perceived news credibility, shared interest, and expertise (Figures 2.2-2.3).

2.4.4 Partisan Differences in Topical Scope Effects

Across all treatment conditions and source credibility measures, there were no noticeable partisan differences in terms of the relative magnitude of treatment effects. As shown in Table 2.2, there was no statistically significant difference in the treatment effects between Republicans and Democrats.

Table 2.2: Partisan Difference in Topic Scope Effects

Treatment	Perceived News Credibility		Perceived Shared Interest		Perceived Expertise	
	Difference	t-statistic	Difference	t-statistic	Difference	t-statistic
Pop Culture	0.05	1.26	0.07	1.31	0.005	0.1
Science	-0.03	-0.59	0.04	0.82	-0.03	-0.56
Partisan + Pop Culture	0.04	0.88	0.05	1.03	-0.002	-0.05
Partisan + Science	0.03	0.65	0.08	1.58	0.01	0.21

Note: Difference refers to the difference in treatment effects (treatment effect among Republicans – treatment effect among Democrats), and corresponding t-statistics from t-test of difference are presented in t-statistic columns. Partisan differences in treatment effect are captured by the coefficient estimates [Topical Scope \times Rep] (Topical Scope is each treatment condition, Rep is 1 if Republican, 0 if Democrat) in Table B.8.

2.5 Discussion

To examine whether politics-focused coverage helps or hinders the public reputation of evidence-based sources such as fact-checking sites, this study examines how the topical scope of a source affects source credibility perceptions. Contrary to the theoretical expectation that coverage of both scientific and popular culture topics would improve credibility, surprisingly, each topical scope has different reputational consequences. First, compared to politics-only coverage, the exclusive coverage of non-political scientific topics improved perceived news credibility among both partisan groups. However, mixed coverage of partisan and scientific topics rather decreased perceived shared interest among Democrats. Second, the coverage of non-political popular culture topics—either exclusively or mixed with partisan topics—worsened perceived news credibility among Democrats, and decreased perceived shared interest and expertise among both partisan groups. Third, while there was minimal

partisan difference in the magnitude of treatment effects, Democrats were more likely to discount the credibility of mixed coverage than Republicans.

The results suggest that people expect serious reporting rather than entertainment reporting from credible fact-checking sites, and find the sites less credible overall when they focus on less serious topics. This finding further implies that the public likely shares the notion of the hierarchy of news (i.e., serious public affairs coverage is central to reputable journalism).¹¹ Coverage of partisan politics, a typical area of public affairs coverage, fares quite well for source credibility perceptions, compared to other topical scopes. Scientific news, particularly the topics not associated with politics, is conceptually closer to serious public affairs coverage, and improves credibility assessments. In contrast, coverage of non-political popular culture, such as sports, entertainment, and lifestyle, worsens credibility assessments.

Future research can build on this study in a number of directions. First, how do different approaches to politics-centered coverage influence credibility perceptions? While the current study focuses on partisan politics, future research can consider contexts where political news is reported in non-partisan contexts (e.g., a city council’s hearing on a public park). Second, does coverage of partisan politics have different reputational consequences depending on whether the coverage corrects misstatements about data (e.g., statistics) versus other types of claims or evidence (e.g., claims about policy outcomes)? Third, another extension could be to use web tracing data to examine if people’s interest in fact-checking (e.g., visits to fact-checking sites, sharing fact-checking posts on social media) varies by topics.

This study generates suggestions for fact-checkers and a wide range of communicators—including journalists, government officials, scientists, and civil society organizations—who want to build credibility in evidence-based sources. In those endeavors, a focus on politics could be a relatively effective strategy compared to mixed coverage of partisan politics and other topics. It is important to be cautious in diversifying the scope of coverage. In particular, broadening coverage to popular culture likely harms the reputation of evidence-based sources.¹² Mixing the coverage of politics with science is less risky, although it may harm shared interest perceptions. Overall, the specialized coverage on either partisan politics or science likely promotes greater credibility than mixed coverage or coverage of

¹¹Across a variety of specialties in journalism, the field of journalism “has a clear center in the journalistic imagination: the serious public affairs reporting that builds professional status, wins prestigious awards, and is seen to fulfill the press’s Fourth Estate role” (Graves and Konieczna 2015, p. 55).

¹²Snopes, a fact-checking site focused on popular culture topics, is used and liked by many people. While the current study’s findings may seem to be in conflict with Snopes’s popularity, different mechanisms may explain how Snopes has expanded its readership.

popular culture.¹³ For the enterprise of fact-checking, the motivating case of this study, the breadth of topics relatively more favorable to fostering credibility is to focus on more serious topics such as politics or science, while avoiding lighter types of topics such as entertainment, sports, and lifestyle.

¹³In a slightly different, but related, context, public trust in scientists and the scientific journal *Nature* deteriorated upon its political endorsement of a presidential candidate (Lupia 2023). Because fact-checking involves (factual) endorsement or disapproval, mixed coverage of politics and science may have implications for public trust in not only fact-checking sites but also science.

CHAPTER 3

Do People Really Want Corrective Information?

Abstract

Many news outlets provide information to correct misperceptions, with fact-checking being a prominent example. Most Americans have favorable views on fact-checking, but relatively few use fact-checking sites. To clarify why, I compare the abstract perceptions of fact-checking with the views on specific fact-checking sites. In the abstract, people trust fact-checking more than the conventional media. However, many people are unaware of specific fact-checking sites and trust conventional news outlets more than fact-checking sites. Contrary to the conventional wisdom that Republicans tend to distrust fact-checking, familiarity with fact-checking sites is associated with greater trust in those sites among both Democrats and Republicans. The findings imply that more people will trust fact-checking sites as they learn more about these outlets and find fact-checking sites as useful complements to conventional news outlets. Questions remain about how fact-checkers effectively publicize their services, which could translate favorable views into greater trust and use.

As the spread of misinformation jeopardizes important decision-making in individuals' lives and the health of democracy, people are in need of information sources that check available evidence and correct misperceptions. Reflecting the urgency of this problem and a widespread desire for a remedy, a substantial majority of Americans (more than 80%) have favorable views of the general idea of fact-checking (Nyhan and Reifler 2016). However, when it comes to the actual use of fact-checking sites, only a small proportion of Americans (about one in four) visit fact-checking sites for information (Guess, Nyhan and Reifler 2020). This limited use of fact-checking sites is surprising in light of widespread support for fact-checking as a general practice. What is preventing these favorable views from translating into broader use of fact-checking sites?

To explain the inconsistency between favorable views and limited use, I take two approaches. First, I examine public assessments of fact-checking at two different levels: fact-checking in aggregate versus individual fact-checking sites. Although people hold distinct views on the media in the abstract versus individual news sources (Ladd 2012), prior research on fact-checking has focused on either the aggregate-level or source-level perceptions. This study is the first to directly compare how people assess fact-checking in the aggregate with individual sites. Second, this study focuses on familiarity with and trust in news sources, two important determinants of the usage of news sources. Familiarity with a news source is an important first step in forming evaluations about the source (Hamilton 2006). Trust in news sources is an important predictor of direct visits to and continued use of the sources (Hmielowski et al. 2022; Stroud and Lee 2013; Taneja and Yaeger 2019). While prior research suggests that the “disconnect” between favorability and usage of fact-checking occurs because different factors explain awareness and attitudes (Robertson, Mourão and Thorson 2020), my approach examines how recognition and trust in fact-checking sites are related to each other. By doing so, this study lays the groundwork for behavioral research that examines the contexts that promote the actual usage of fact-checking sites.

To examine public perceptions of fact-checking sites relative to fact-checking in the aggregate and conventional news media, I conducted two surveys among partisans in the U.S. A noteworthy attribute of this study is that both surveys examine people's perceptions of fact-checking and the news media in general (macro level) and specific fact-checking sites and news outlets (micro level). Study 1 focused on public views of leading fact-checking sites (FactCheck.org, PolitiFact, Washington Post Fact Checker, Snopes; Graves 2016) in addition to fact-checking sites that Facebook partnered with for its fact-checking program. Study 2 focused on fact-checking sites endorsed by the International Fact-Checking Network (IFCN), many of which have partnered with Facebook. Unlike Study 1, Study 2 additionally examined people's perceptions of conventional news outlets and employed a bipolar measure

of source trust to capture the degree of both trust and distrust. These features of Study 2 allowed for comparisons between fact-checking sites and conventional news outlets, and a refined analysis of the relationship between source familiarity and trust.

This study answers two questions that have remained unanswered in prior research on fact-checking. First, do people assess fact-checking in aggregate more favourably than the conventional media or individual fact-checking sites? Second, under what circumstances are individuals less likely to trust fact-checking sites? Specifically, how is trust in fact-checking sites related to knowing fact-checking sites or trusting conventional media? To the first question, people trust fact-checking more in the aggregate than the conventional news media. However, at the level of individual sources, many Americans remain unaware of specific fact-checking sites and trust individual fact-checking sites less than fact-checking in the aggregate. Regarding the second question, limited awareness of individual sites and the availability of trusted conventional outlets likely have prevented the widespread use of fact-checking sites. Knowing a fact-checking site is associated with greater trust in the site. Surprisingly, source familiarity is positively associated with greater trust in the site among not only Democrats but also Republicans who often encounter uncongenial fact-checks and suspect fact-checkers to be biased (Ferracioli, Kniess and Marques 2022; Shin and Thorson 2017; Walker and Gottfried 2019). Second, partisans from both sides have conventional news outlets that they trust more than fact-checking sites.

This work also clarifies a question where the answer remained speculative: Are people distrusting of or neutral toward unknown news outlets? Because many people remain unaware of specific fact-checking sites, an answer to this question can refine our understanding of how people assess less-known fact-checking sites. Prior research used unipolar trust measures (e.g., choices ranging from “not at all” to “entirely”) and speculated that people tend to distrust unfamiliar news sources (Pennycook and Rand 2019). I employ two different measures (unipolar in Study 1, bipolar in Study 2) and find that when individuals are allowed to express degrees of both trust and distrust (e.g., bipolar scale from “strongly distrust” to “strongly trust”), it becomes clear that people are neutral toward, rather than strongly distrust, unknown news outlets.

This paper presents both an in-depth examination of public perception of fact-checking sites and a refined understanding of how the public assesses fact-checking at both macro- and micro-levels vis-à-vis conventional media. Theoretically, this study expands the research on fact-checking that has previously focused on how people assess fact-checking in the aggregate (e.g., Nyhan and Reifler 2016; Walker and Gottfried 2019) or the effects of exposure to fact-checking articles (e.g., Fridkin, Kenney and Wintersieck 2015; Gottfried et al. 2013; Nyhan et al. 2020; Wood and Porter 2019). Many existing studies have relied on experiments that

require individuals to read fact-checking articles, a rare activity if most people do not visit or trust fact-checking sites. To advance our understanding, the current study assesses how much Americans recognize and trust individual fact-checking sites. Practically, this research helps assess the performance and promise of fact-checking. By focusing on source trust, which can motivate individuals to seek information and learn from the source (Taneja and Yaeger 2019), this study identifies potential factors that can limit public trust in fact-checking sites. By doing so, this work offers insights into how evidence-based sources build broader trust, such as by publicizing the usefulness and credibility of their services and information.

3.1 Public Awareness of and Trust in Fact-checking Sites

Americans hold distinct opinions about the news media in the abstract—conceived as a body of institutionalized journalism—and individual news outlets (Ladd 2012). While public trust in the news media has been in decline (Ladd 2012), a majority of Americans are supportive of the idea of fact-checking (Nyhan and Reifler 2016). Thus, people likely trust fact-checking in general—conceived as a collection of fact-checking sites—more than the news media in general.

H1: Trust in fact-checking in general will be greater than trust in the news media in general.

A discrepancy between trust in a category and its individual components is likely to emerge when the preferences for individual entities are stable while the attitudes toward the category are unstable. When people receive negative information about a category (e.g., news media, Congress), the negative information likely worsens the trust in the category, but not individual entities for which people already have stable preferences (e.g., trusted news outlets, own representatives) (Lammers et al. 2022). For instance, while public trust in the news media in general has declined in the past decades, Americans have remained more trusting of the news sources that they prefer (Media Insight Project 2017; Gottfried 2021). However, there are two reasons that this pattern may not apply to fact-checking. First, most people are relatively unfamiliar with fact-checking and may not have developed stable preferences for individual fact-checking sites (Guess, Nyhan and Reifler 2020; Nyhan and Reifler 2016). Second, people tend to assume news sources to be less trustworthy when they do not recognize them (Pennycook and Rand 2019). In light of these findings, I examine whether people’s trust in individual fact-checking sites is lower than trust in fact-checking sites generally conceived.

RQ1: Is fact-checking in general trusted more than individual fact-checking sites?

When people assess information sources, familiarity can play an important role. Because news sources are experience goods, actual consumption by reading or watching news stories is essential for readers to assess the quality of news outlets (Hamilton 2006). While people initially tend to be hesitant to trust an unfamiliar source, depending on the experience they have with the source, they can come to either trust or distrust it (e.g., uncongenial content may generate distrust; Pennycook and Rand 2019).¹ Because fact-checking sites have corrected Republicans more often than Democrats in recent years (Ferracioli, Kniess and Marques 2022; Shin and Thorson 2017), prior experience with fact-checking is likely to be positive among Democrats but negative among Republicans. Thus, I examine whether familiarity with fact-checking sites is positively associated with greater trust in those sites among Democrats, but with greater distrust among Republicans.

H2: Familiarity with fact-checking sites will be positively associated with trust in those sites among Democrats, but negatively among Republicans.

The way the public assesses conventional news outlets is another important factor that can shape how people assess fact-checking sites. While fact-checking was initiated to reform conventional journalism (Amazeen 2020; Dobbs 2012; Iannucci 2017), little is known about how the public views fact-checking sites relative to conventional media outlets. While fact-checkers believe their reporting overcomes the shortcomings of conventional media (Dobbs 2012), the public may not necessarily share this notion and instead trust preferred conventional media more than fact-checking sites. To explore whether fact-checkers' expectations are warranted, I examine whether people trust fact-checking sites more than conventional news outlets.

RQ2: Are fact-checking sites trusted more than conventional news outlets?

Because approximately half of Americans consider themselves to be unfamiliar with fact-checking (Nyhan and Reifler 2016), it is important to understand how people assess unfamiliar fact-checking sites. Two conjectures are available in prior research. Pennycook and Rand (2019) speculated that people tend to strongly distrust unfamiliar news sources. However, because people can assess news outlets only after experiencing them (Hamilton 2006), it is also possible that people hold neutral attitudes toward unknown news outlets. The first

¹Knowing a news source may result in either greater trust or greater distrust in the source. For instance, most Democrats and Republicans are aware of Fox News and MSNBC, but they diverge in whether they trust or distrust each (Pennycook and Rand 2019).

conjecture is based on a unipolar trust scale (“not at all trust” to “entirely trust”; Pennycook and Rand 2019), where both weak distrust and neutral attitudes likely manifest as the extreme choices on the lower end of the scale. To clarify whether people tend to hold neutral attitudes or distrust toward unknown sources, I examine trust ratings using both unipolar (Study 1) and bipolar scales (“strongly distrust” to “strongly trust”; Study 2), where the latter allows the expression of the degree of both trust and distrust toward a news source.

RQ3: Are people strongly distrustful of or neutral toward fact-checking sites that they do not recognize?

3.2 Study Design

To examine public perceptions of fact-checking, I analyzed two sets of data. I conducted two surveys through Prolific, an online crowdsourcing platform that has been found to offer higher response quality compared to alternative platforms, demonstrated through more honest behavior, attention check performance, and ability to reproduce prior findings (Palan and Schitter 2018; Peer et al. 2017). As noted below, a key difference between Studies 1 and 2 was that they measured source trust on two different scales—unipolar (“not at all,” “barely,” “somewhat,” “a lot,” “entirely”) in Study 1 and bipolar (“strongly distrust,” “distrust,” “neither distrust nor trust,” “trust,” “strongly trust”) in Study 2.

3.2.1 Study 1 Materials and Methods

For Study 1, I recruited 720 adults residing in the U.S. via Prolific on August 10, 2020. Equal numbers of Republicans and Democrats were recruited based on the prescreening data on Prolific.

3.2.1.1 Study Materials

To measure public perceptions of individual fact-checking sites, I first identified a list of professional fact-checking sites. While there were 58 fact-checking outlets in the U.S. as of 2020 (Stencel and Luther 2020), there was a need for criteria that assess whether these sites fulfilled the norms of fact-checking practice. The criterion used in Study 1 was Facebook’s past and current U.S.-based fact-checking partners since Facebook started fact-checking partnership program in December 2016. As of August 2020, at the time of Study 1, fact-checking sites listed in Table 3.1 were fact-checking partners with Facebook, except for ABC News and Snopes, which previously were partners but had left the program by then. I also added

the Washington Post Fact Checker given its prominence in the fact-checking movement although it had never joined Facebook’s fact-checking program. This approach heavily relied on Facebook’s source quality assessments, which I assumed were likely based on careful investigation to inform their huge investment—which is known to have costed them an annual spending of approximately \$100,000 for each fact-checking partner (Welch 2019).

Table 3.1: List of Fact-checking and Conventional Sources in Studies 1 and 2

Study 1	Study 2	
Fact-checking	Fact-checking	Conventional
FactCheck.org (A)	FactCheck.org (A)	CBS
Lead Stories (N)	Lead Stories (N)	CNN
PolitiFact (N)	PolitiFact (N)	Fox News
Science Feedback (N)	Science Feedback (N)	Huffington Post
Snopes (N)	Snopes (N)	MSNBC
ABC News (P)	Reuters (P)	NBC
Associated Press (P)	USA TODAY Fact Check (P)	New York Times
Reuters Fact Check (P)	Washington Post Fact Checker (P)	PBS
USA TODAY (P)	Daily Caller Check Your Fact (L)	USA TODAY
Washington Post Fact Checker (P)	The Dispatch (L)	Washington Post
AFP United States (L)		
Daily Caller Check Your Fact (L)		
The Dispatch (L)		
Weekly Standard (L)		

Note: Letters inside parentheses indicate institutional affiliations of fact-checking sites: A: Academic, N: Non-profit, P: Prominent Media, L: Less Prominent Media.

To compare fact-checking sites by organizational affiliations, I follow Graves (2018)’s categorization that included academia (e.g., FactCheck.org), non-profit organizations (e.g., PolitiFact,² Snopes), and news media. I further categorize media-affiliated sites into prominent media (e.g., Washington Post Fact Checker) and less prominent media (e.g., AFP United States), depending on the relative degree of public awareness of these sites.³ Because FactCheck.org is the only fact-checking site that is affiliated with academia (University of Pennsylvania) and given its leading role in the fact-checking movement (established in 2003),

²PolitiFact was originally owned by the Tampa Bay Times, but was acquired later by the Poynter Institute, a non-profit organization, in February 2018 (Sharockman 2018).

³Fact-checking sources recognized by more than 30% of the respondents were considered as fact-checking sources affiliated with “prominent media” (Study 1: PolitiFact, Washington Post Fact Checker, ABC News, Associated Press, Reuters Fact Check, USA Today; Study 2: PolitiFact, Washington Post Fact Checker, USA Today Fact Check, Reuters) whereas those recognized by 30% or less were categorized into “less prominent journalism” (Study 1: AFP United States, Daily Caller Check Your Fact, The Dispatch, Weekly Standard; Study 2: Daily Caller Check Your Fact; The Dispatch).

FactCheck.org is presented as its own name, rather than its affiliation, when presenting the results (e.g., Figures 3.1 and 3.3).

3.2.1.2 Measures

To measure awareness of and trust in individual fact-checking sites, I adopted two questions from Pennycook and Rand (2019). Given the list of fact-checking sites, respondents were first asked whether they recognize each of the sources, indicating either “yes” or “no.” Second, they were asked the degree to which they trust each source, on a unipolar five-point scale (“not at all” “entirely”). In accordance with Pennycook and Rand (2019)’s approach, which assumes people are capable of assessing unfamiliar sources and often do so in their everyday life, I asked respondents to indicate their levels of trust in not only the sources that they recognize, but also the ones that they did not recognize.

To assess public appraisals of fact-checking and the news media at the macro-level, I measured trust in fact-checking and the news media in general. Because people tend to perceive “the mass media” or “the news media” as similar concepts with conventional media (Ladd 2012), I adapted a question from the American National Election Studies (ANES) (2018 ANES pilot study; ANES 2018) to measure public trust in the news media in general.⁴ Participants were asked to indicate the degree of their “trust and confidence in the mass media - such as newspapers, TV, and radio - in reporting news fully, accurately, and fairly,” on a unipolar five-point scale that ranged from “not at all” to “a great deal.” To measure trust in fact-checking sites collectively as a genre, the same question wording was used, but the phrase “the mass media” was replaced with “fact-checking sources in general.”

Fact-checking familiarity, which refers to the degree of familiarity with professional fact-checking sources, was measured using the number of recognized sources among the four major fact-checking sites: FactCheck.org, PolitiFact, Washington Post Fact Checker, and Snopes. These four sites were established in the 2000s at the beginning of the fact-checking movement and are often identified as the major fact-checking outlets in the U.S. (Graves 2016). For these four major fact-checking sites, the median number of recognized outlets among the respondents was two. The binary measure of fact-checking familiarity was constructed as a median split, given my focus on group differences rather than individual heterogeneity

⁴“Conventional sources” are defined as “news sources with the most online traffic” (Pennycook and Rand 2019), thus referring to news outlets that are most frequently viewed by the general public. Ladd (2012) examined public trust in conventional media by using questionnaires that asked the degree of trust in “the press” or “the news media.” It was found that people’s opinions about conventional media stayed consistent across different wordings and that most Americans had concrete understanding of and firm opinions about conventional media (Ladd 2012). Pennycook and Rand (2019) and Ladd (2012) use the term “mainstream media,” but I refer to them as “conventional media” given the partisan connotations attached to the term “mainstream media” in recent years.

(Iacobucci et al. 2015). Respondents were considered as being familiar with fact-checking if they recognized two or more of these major fact-checking sites, and unfamiliar if they recognized one or none.

3.2.2 Study 2 Materials and Methods

A total of 1,000 adults residing in the U.S. were recruited on February 27, 2021 via the survey platform Prolific. Equal numbers of Republicans and Democrats were recruited using the prescreening data on Prolific.

3.2.2.1 Study Materials

Professional fact-checking sites and conventional outlets listed in Table 3.1 were incorporated in Study 2. To identify professional fact-checking sites, in addition to the criterion used in Study 1 (i.e., fact-checking partners of Facebook), I additionally considered verified signatories of the International Fact-Checking Network (IFCN) in Study 2. This selection criterion ensured that the chosen fact-checking sites were assessed by independent reviewers at the IFCN and were verified as complying with the IFCN codes of principles that require non-partisanship and the transparency of sources, funding, methods, and corrections. Using this criterion, I narrowed down the list of fact-checking sites in Study 2 to those that were both Facebook’s fact-checking partners and IFCN signatories as of February 2021.⁵ Washington Post Fact Checker and Snopes—which were IFCN signatories but not Facebook partners then—were kept on the list given their prominent status in the fact-checking movement.⁶

As for conventional news outlets, I followed Pennycook and Rand (2019), who identified mainstream outlets as 20 news outlets with the most US online traffic according to a Pew report. Among the sources that Pennycook and Rand (2019) studied, I selected 10 outlets. These outlets were recognized by more than 90% of respondents in their first study and more than 70% of respondents in their second study. Two of the selected conventional outlets had their standalone fact-checking sites endorsed by the IFCN. These outlets were presented with and without the labels “Fact Checker” (Washington Post, Washington Post Fact Checker)

⁵In Study 1, fact-checking source names were presented as they appeared in Facebook’s description of their fact-checking program (e.g., “Reuters Fact Check”). In Study 2, I presented the source name as they appeared in the IFCN signatories (e.g., “Reuters”). One exception was “Check Your Fact,” whose name itself did not clearly made connection with its parent outlet, The Daily Caller. Given that its inclusion to Facebook program caused intense debate on the partisan impartiality of Facebook (Levin 2019), I presented this outlet as “Daily Caller Check Your Fact.”

⁶In compiling the list of fact-checking sources, I included the Associated Press (AP) in Study 1, but inadvertently excluded it from Study 2. Given that the AP is not an outlier in Study 1, there is little reason to believe that this omission changes the result. I nevertheless regret the error because AP has been a consistent member of both the IFCN signatories and Facebook’s fact-checking program since 2017.

and “Fact Check” (USA Today, USA Today Fact Check), consistent with how these outlets label their specialized fact-checking unit.

3.2.2.2 Measures

Similar to Study 1, given the list of fact-checking and conventional sources, respondents first indicated whether they recognized each of the sources. After that, they indicated the degree to which they distrusted or trusted each source on a five-point scale. In Study 2, I deviated from Pennycook and Rand (2019)’s unipolar trust measure. To capture varying degrees of both trust and distrust assessments, I instead used a bipolar scale ranging from “strongly distrust” to “strongly trust,” with a middle category, “neither trust nor distrust.”

Unlike Study 1 where the trust question on conventional media referred to “the mass media - such as newspapers, TV, and radio,” in Study 2, the question simply referred to “the news media” following the 2020 ANES time-series questionnaire (ANES 2020). This revision was made to focus respondents’ attention to news organizations, rather than the various means of mass communication. Compared to Study 1, the question wording was further simplified to avoid double-barreled wording: 1) “trust and confidence” to “trust,” 2) “fully, accurately, and fairly” to “accurately.” To measure trust in fact-checking in aggregate, the phrase “the news media” was replaced by “fact-checking sources in general.” Both questions were asked on a five-point bipolar scale ranging from “strongly distrust” to “strongly trust.”

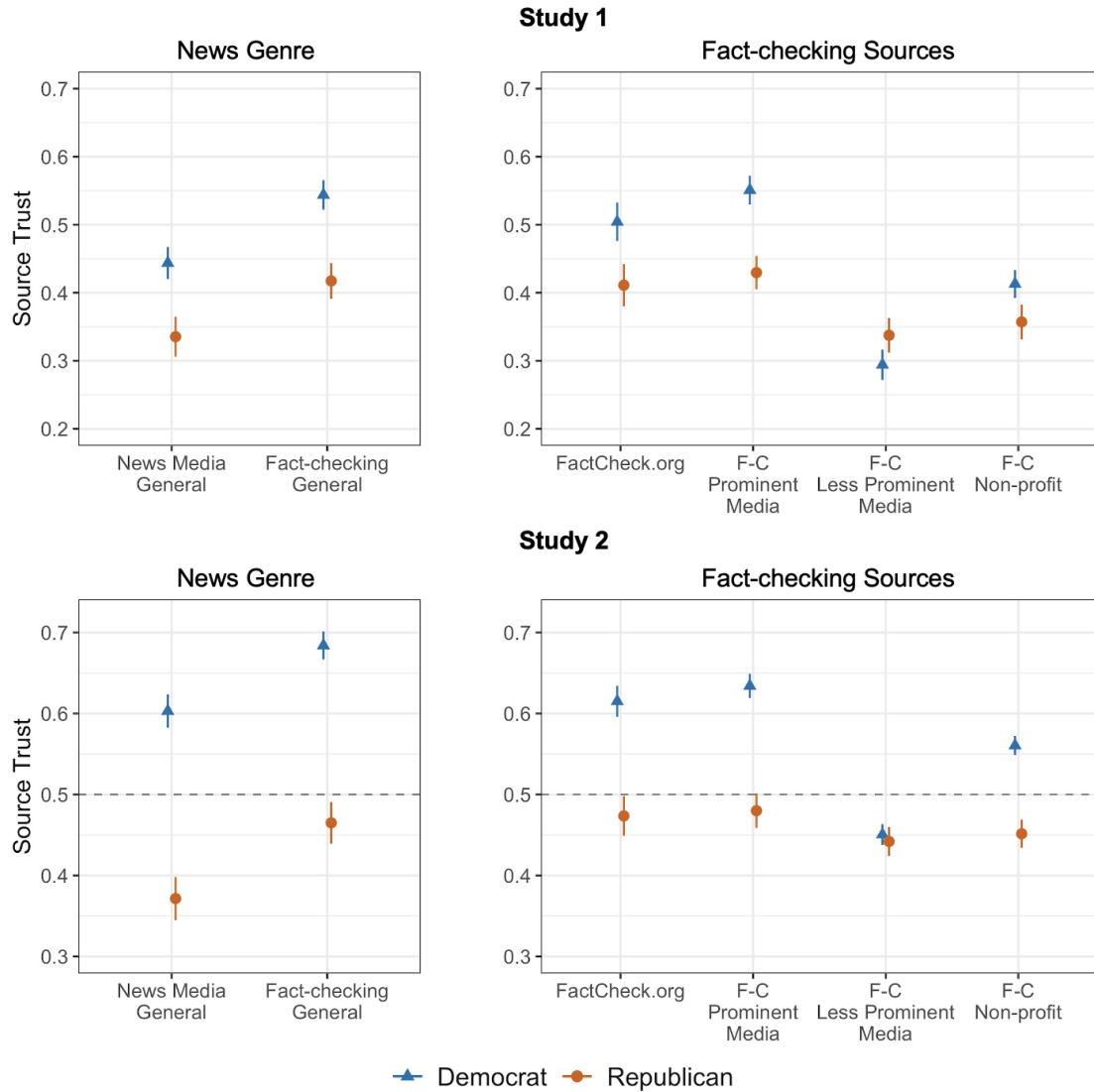
Fact-checking familiarity, or the degree to which individuals were familiar with major fact-checking outlets, was measured in the same way as Study 1. Among the four major fact-checking sites (FactCheck.org, PolitiFact, Washington Post Fact Checker, and Snopes), the median number of recognized outlets was two in Study 2 as well. Respondents were considered as being familiar with fact-checking if they recognized two or more of these fact-checking sites and unfamiliar if they recognized one or none.

3.3 Results

3.3.1 Fact-checking in General and as Individual Sources

At the level of general category, people tend to trust fact-checking more than the conventional news media, as shown in Figure 3.1 (H1). Figure 3.1 also compares the level of trust in the category and individual sources. Fact-checking in general was trusted similarly or slightly more than individual fact-checking sites affiliated with the academia or prominent media, and significantly more trusted than those affiliated with less prominent media or non-profit organizations (RQ1).

Figure 3.1: Trust in the News Media, Fact-checking in General, and Fact-checking Sources by Affiliation



Note: Means and 95% confidence intervals by news genres and fact-checking sources. Source Trust is scaled to range from 0 to 1. In Study 1, it was measured on a five-point unipolar scale (“not at all” to “entirely”). In Study 2, it was measured on a five-point bipolar scale (“strongly distrust” to “strongly trust”; the midpoint (dashed line on .5) indicates “neither distrust nor trust”). Tables C.2-C.5 in supplementary materials present these results in tabular form.

When general categories are considered (“News Genre” pane in Figure 3.1), both Democrats and Republicans trusted fact-checking more than the news media in both studies ($ps < .01$; t-statistics in Tables C.2-C.3 in supplementary materials). At the macro level, Republicans trusted both fact-checking and the news media to a lesser extent than Democrats in both studies. The tendency to favor fact-checking more than conventional media is also reflected in partisans’ perceptions of bias from each category. While only one out of ten partisans thought most news organizations were unbiased (Study 1: 10.0% Democrats, 10.0% Republicans; Study 2: 10.8% Democrats, 7.8% Republicans), a greater number of partisans perceived most fact-checking sites as unbiased (Study 1: 52.5% Democrats, 24.4% Republicans; Study 2: 57.4% Democrats, 25.8% Republicans).⁷

The tendency to trust the genre of fact-checking (“Fact-checking General”) more than individual fact-checking sources (“Fact-checking Sources” pane) was more prominent among Democrats than Republicans. Among Democrats, fact-checking in general was significantly more trusted than FactCheck.org ($p < .05$) and fact-checking sites affiliated with less prominent journalism or non-profits in both studies ($ps < .01$; t-statistics in Tables C.4-C.5 in supplementary materials). Fact-checking in general was also trusted significantly more than fact-checking sites tied to prominent journalism as well, but only in Study 2. Among Republicans, the degree to which the genre was trusted more than sources was relatively weaker. For instance, fact-checking as a genre was trusted to a similar extent with FactCheck.org and sites affiliated with prominent journalism. Republicans still trusted the genre more than fact-checking sites tied to less prominent journalism or non-profits ($ps < .01$), but these gaps were smaller than the case of Democrats.

3.3.2 Familiarity with and Trust in Fact-checking Sources

Across the two studies, a majority of people were unfamiliar with most professional fact-checking sites. For instance, less than half of the respondents recognized major fact-checking sites such as FactCheck.org (49% in Study 1, 43% in Study 2), PolitiFact (46% in Study 1, 45% in Study 2), and Washington Post Fact Checker (47% in Study 1, 35% in Study 2). Another major non-profit fact-checking site, Snopes, was relatively more recognized (60% in Study 1, 63% in Study 2), but still relatively unknown compared to conventional outlets

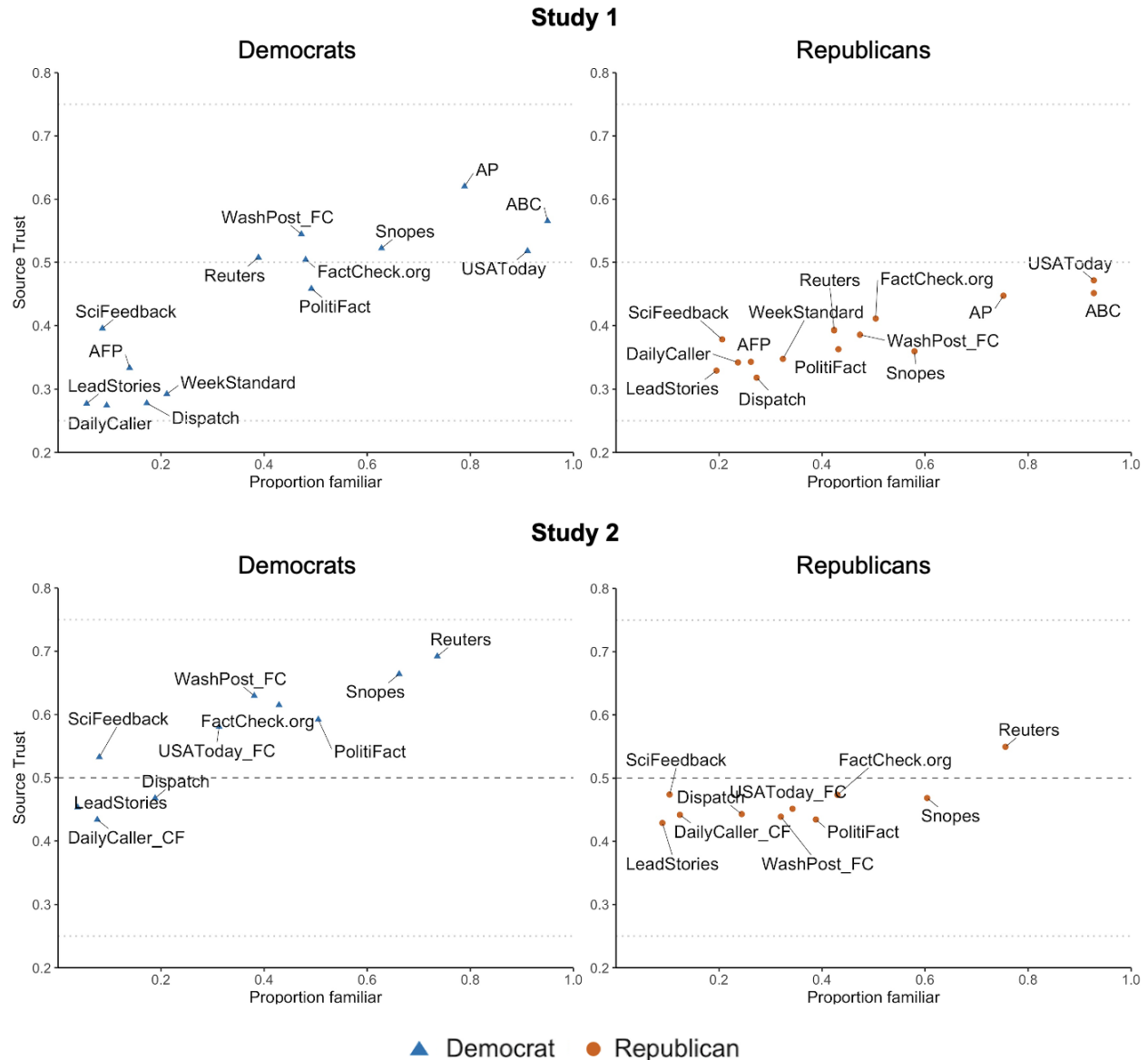
⁷A majority of Republicans thought most conventional media “favored Democrats” (Study 1: 56.7%, Study 2: 63.2%). Most Democrats also perceived conventional media as biased, but with “similar numbers of outlets favoring either Democrats or Republicans” (Study 1: 64.7%, Study 2: 64.4%). Such bias perceptions were weaker toward fact-checking. Compared to conventional media, a relatively smaller number of Republicans thought most fact-checking sites “favored Democrats” (Study 1: 41.4%, Study 2: 43.2%) and fewer Democrats perceived “equal numbers of fact-checking sites as favoring either party” (Study 1: 30.8%, Study 2: 27.0%). More details are provided in Figure C.1 in supplementary materials.

that were recognized by more than 90% of participants (familiarity rates for all sources by partisan groups are presented in Tables C.6-C.8 in supplementary materials).

What does relatively low familiarity with fact-checking sites imply for public trust in them? To answer this question, Figure 3.2 illustrates the relationship between source familiarity and trust at the source level. In this figure, familiarity is measured as the proportion of respondents that recognize each source, and source trust indicates the average level of trust in each source. Source familiarity and trust in fact-checking sources were positively associated among both partisan groups (H2). Surprisingly, familiarity and trust had a positive relationship not only among Democrats, but also among Republicans who are likely to encounter uncongenial fact-checking coverage and are known to be more suspicious of fact-checking (Ferracioli, Kniess and Marques 2022; Shin and Thorson 2017).

In Study 1, source familiarity and trust were highly correlated among both Democrats ($r = .86, p < .01$) and Republicans ($r = .89, p < .01$), with one key substantive partisan difference. Among Democrats, many of the fact-checking sources, especially those that people were more familiar with, were highly trusted (i.e., above the “Somewhat” response (midpoint)). However, among Republicans, average trust ratings of even the most familiar fact-checking sites stayed below the “Somewhat” response. This difference suggests a limit to which recognizing a site can be associated with a high level of trust among Republicans. The positive relationship between source familiarity and trust was also found in Study 2, with a clearer partisan difference. The association between familiarity and trust was again statistically significant among both Democrats ($r = .92, p < .01$) and Republicans ($r = .72, p < .05$). Although the magnitude of correlation was greater among Democrats, Republicans also tended to trust fact-checking sites more when they recognized them. This finding implies that low trust in fact-checking sites is related to low public awareness of those sites.

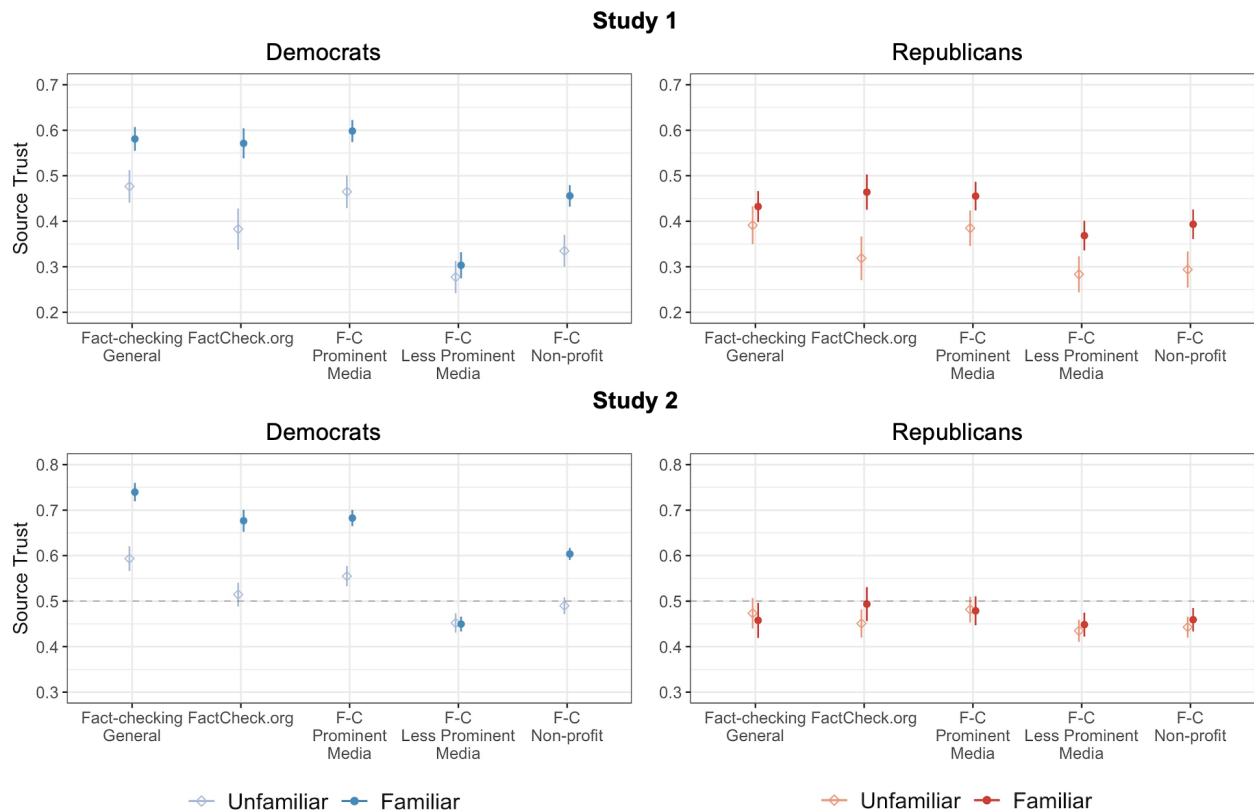
Figure 3.2: Familiarity with and Trust in Fact-checking Sources by Partisan Identity: Source-level Comparisons



Note: *Proportion familiar* indicates the proportion of respondents who recognized each source. Source Trust is scaled to range from 0 to 1. In Study 1, it was measured on a five-point unipolar scale (“not at all” to “entirely”). In Study 2, it was measured on a five-point bipolar scale (“strongly distrust” to “strongly trust”; the midpoint (dashed line on .5) indicates “neither distrust nor trust”). Tables C.6-C.7, C.9-C.10 in supplementary materials present these estimates in tabular form.

In addition to Figure 3.2 that examines fact-checking familiarity and trust by comparing different fact-checking sites, I further examine this relationship by comparing different groups of individuals. Figure 3.3 compares individuals familiar with major fact-checking sites (“familiar individuals”) and those unfamiliar with major fact-checking sites (“unfamiliar individuals”). Respondents were categorized by fact-checking familiarity, a median split of the number of recognized major fact-checking sites.

Figure 3.3: Familiarity with and Trust in Fact-checking Sources by Partisan Identity: Individual-level Comparisons



Note: Means and 95% confidence intervals by news genres and fact-checking sources. Source Trust is scaled to range from 0 to 1. In Study 1, it was measured on a five-point unipolar scale (“not at all” to “entirely”). In Study 2, it was measured on a five-point bipolar scale (“strongly distrust” to “strongly trust”; the midpoint (dashed line on .5) indicates “neither distrust nor trust”). The binary measure of fact-checking familiarity categorized respondents as being *familiar* if they recognized two or more of four major fact-checking sites (FactCheck.org, PolitiFact, Washington Post Fact Checker, Snopes), *unfamiliar* if they recognized one or none. Tables C.12-C.13 in supplementary materials present these results in tabular form.

As shown in Figure 3.3, familiar individuals trust the fact-checking genre (“Fact-checking

General”) and specific sites (the second through fifth items in Figure 3.3) to a greater extent than unfamiliar individuals. Among Democrats, familiar individuals trusted fact-checking in general and sources of different institutional ties (academia, prominent journalism, non-profit) significantly more than unfamiliar individuals ($ps < .01$ in both studies; t-statistics available in supplementary materials). However, familiar and unfamiliar individuals did not differ much in their trust in fact-checking sites affiliated with less prominent journalism (Study 1: $p = .26$; Study 2: $p = .86$).

A similar pattern was found among Republicans, but only in Study 1. Among Republicans, familiar individuals trusted fact-checking sources of any affiliations significantly more than unfamiliar individuals ($ps < .01$ in Study 1). However, familiar and unfamiliar individuals did not differ much in their trust in fact-checking in general (Study 1: $p = .13$; Study 2: $p = .55$). Moreover, in Study 2, familiar individuals trusted FactCheck.org more than unfamiliar ones ($p < .10$). However, familiar and unfamiliar individuals did not differ much in their trust in sources of other affiliations (prominent and less prominent journalism, nonprofit) ($ps = .35 - .90$). I explain a likely reason for this difference between the two studies in the following section on the use of unipolar and bipolar scales in Studies 1 and 2 respectively.

Overall, familiarity with fact-checking sources is positively associated with trust in them, not only among Democrats who are typically believed to be favorable to fact-checking, but also among Republicans who are often thought to be resistant to fact-checking. Familiarity still makes less of a difference for trusting fact-checking sites among Republicans compared to Democrats. These patterns were found across the two studies, both as differences across sites and individuals.

3.3.3 Unipolar vs. Bipolar Measures of Source Trust

A key difference between Studies 1 and 2 was the two different modes of trust measure—unipolar (“not at all,” “barely,” “somewhat,” “a lot,” “entirely”) and bipolar (“strongly distrust,” “distrust,” “neither distrust nor trust,” “trust,” “strongly trust”) scales—leading to two interesting observations. First, when respondents can indicate the degree of both trust and distrust using the bipolar scale, the substantive meaning of partisan differences is further clarified, compared to the unipolar scale that captures only the degree of trust, but not distrust. In Figures 3.1 and 3.2, under unipolar scales (Study 1), only the partisan difference in the degree of trust (e.g., Democrats trust fact-checking ‘more’ than Republicans) can be detected. Using bipolar scales (Study 2), the substantive meaning of this difference is clarified. Democrats tend to strongly “trust” fact-checking outlets (above

the midpoint) whereas Republicans lean toward “distrusting” fact-checking outlets yet quite close to neutral attitudes (below but near the midpoint).

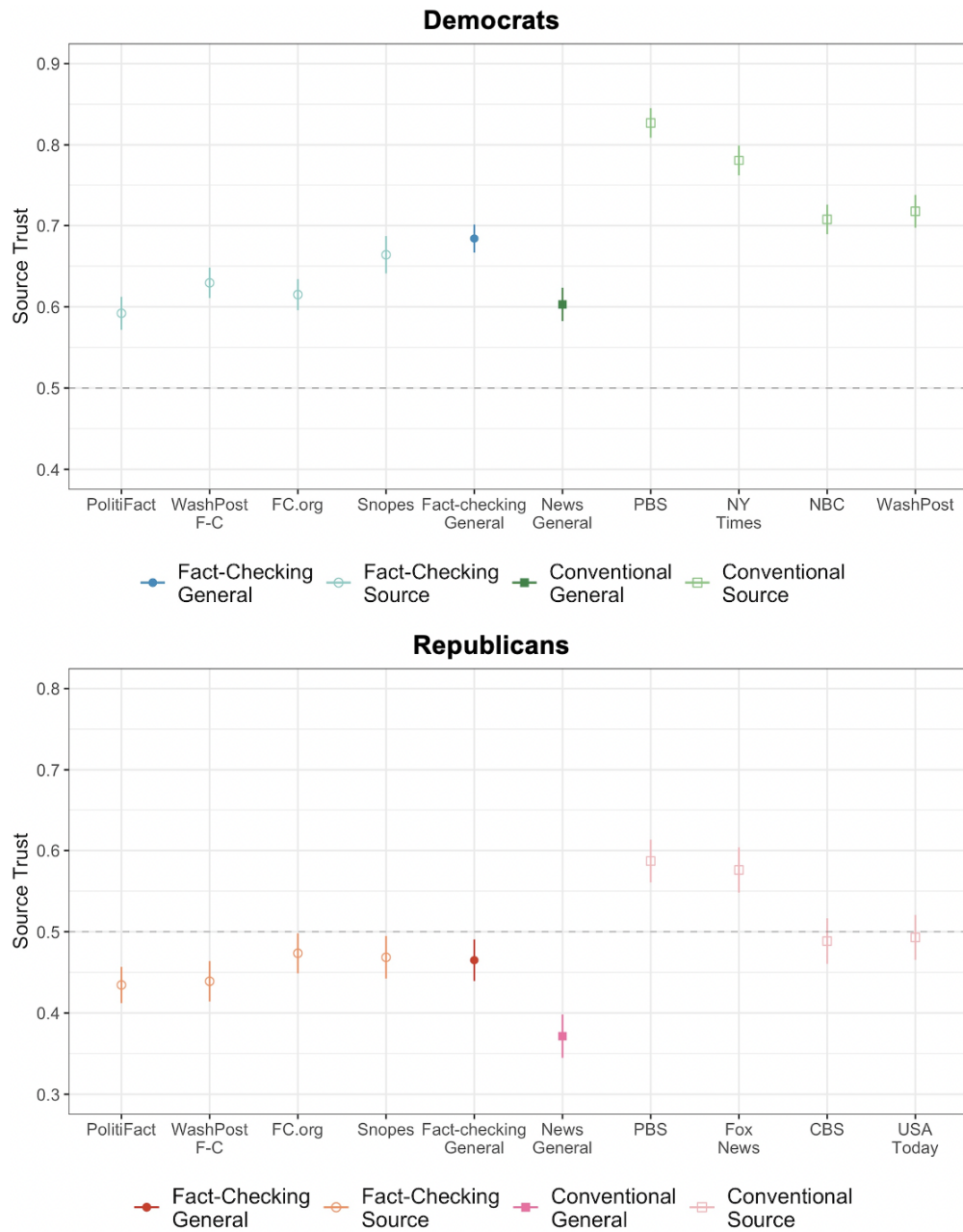
Second, the use of a bipolar scale clarifies the substantive meaning of trust ratings of “unfamiliar” sources. Using unipolar scales of source trust, Pennycook and Rand (2019) speculated that source unfamiliarity was associated with distrust rather than indifference. However, given the unipolar scale, it is possible that both ‘distrust’ and ‘neutral attitudes’ are manifested as responses on the lower extreme of the scale (“not at all”). In Figure 3.3, the use of bipolar scale helps disaggregate these two distinct perceptions. Under unipolar scales (Study 1), trust ratings among partisans unfamiliar with fact-checking lean toward the lower end of the scale, consistent with Pennycook and Rand (2019)’s conjecture based on the unipolar measure. Yet, using bipolar scales (Study 2), it is clarified that people tend to have neutral attitudes (near the midpoint) toward unfamiliar sources, rather than strongly distrusting them (RQ3). Furthermore, compared to unfamiliar partisans, Democrats familiar with fact-checking express stronger trust in fact-checking sites, whereas Republicans familiar with fact-checking still hold neutral attitudes toward fact-checking sources. The use of bipolar scales not only shows that unfamiliar Democrats trust fact-checking sources less than familiar Democrats (a finding detectable by unipolar scales), but also that unfamiliar Democrats tend to hold neutral attitudes toward, instead of strongly distrust, fact-checking outlets (a finding not detectable by unipolar scales).

3.3.4 Fact-checking Familiarity and Trust in Conventional Media

Although fact-checking intends to offer a form of reporting that redresses shortcomings in the conventional media (Dobbs 2012), people do not necessarily trust fact-checking outlets more than conventional outlets (RQ2) as shown in Figure 3.4. As a general genre, fact-checking is trusted more than the news media among both partisan groups (“Fact-checking general” and “News General”). However, when compared to major fact-checking sites (on the left-hand side), there exist conventional news outlets (on the right-hand side) that partisans trust more. For instance, Democrats tend to trust PBS, New York Times, Washington Post, and NBC more than major fact-checking sites. Republicans tend to trust PBS and Fox News more than major fact-checking outlets, and trust CBS and USA Today more than PolitiFact and Washington Post Fact Checker. These results indicate that partisans tend to trust at least one or two conventional outlets more than major fact-checking sites. Average trust ratings for all sources by partisan identity are available in supplementary materials (Tables C.9-C.11).

Among the conventional news outlets in this study, Washington Post and USA Today

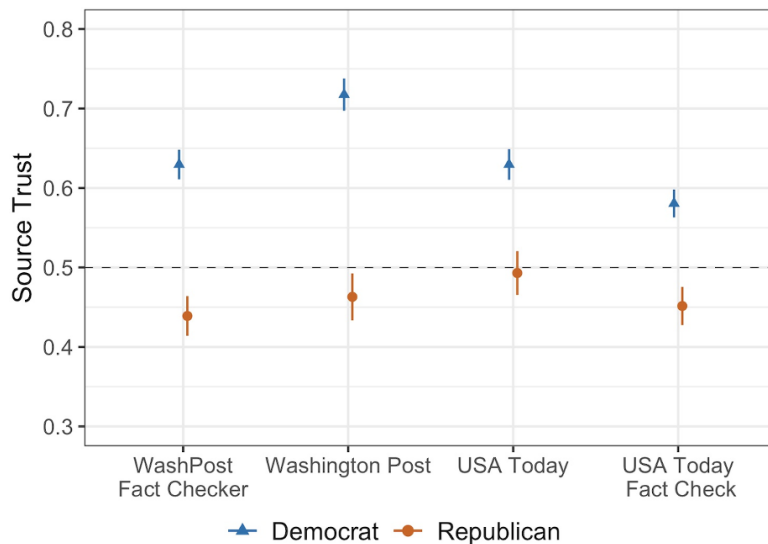
Figure 3.4: Trust in Fact-checking and Conventional Media by Partisan Identity: General and Sources



Note: Means and 95% confidence intervals by news genres and sources. Source Trust is scaled to range from 0 to 1. It was measured on a five-point bipolar scale (“strongly distrust” to “strongly trust”; the midpoint (dashed line on .5) indicates “neither distrust nor trust”). Tables C.10-C.11 in supplementary materials provide these estimates in tabular form.

operate standalone fact-checking sites (Washington Post Fact Checker, USA Today Fact Check). Their practice reflects professional motivation among journalists to adopt fact-checking that was perceived as a reputable style of reporting (Graves, Nyhan and Reifler 2016). Despite its professional prestige, however, partisans from both sides do not necessarily trust the fact-checking extensions more than the parent news outlets. As shown in Figure 3.5, USA Today was trusted significantly more than USA Today Fact Check among both Democrats ($t = 3.70, p < .01$) and Republicans ($t = 2.23, p < .05$). Likewise, Washington Post was trusted more than Washington Post Fact Checker among Democrats ($t = 6.28, p < .01$), though the difference was smaller among Republicans ($t = 1.22, p = .22$).

Figure 3.5: Trust in Conventional News Outlets and Their Standalone Fact-checking Sites by Partisan Identity



Note: Means and 95% confidence intervals by sources. Source Trust is scaled to range from 0 to 1. It was measured on a five-point bipolar scale (“strongly distrust” to “strongly trust”; the midpoint (dashed line on .5) indicates “neither distrust nor trust”). Tables C.10-C.11 in supplementary materials provide these estimates in tabular form.

Regarding the public’s relative trust in fact-checking and conventional media, these results indicate that fact-checking sites are not necessarily trusted more than conventional ones. Both Democrats and Republicans have conventional news outlets that they trust more than fact-checking sites. When conventional news outlets run fact-checking sites, people tend to trust the parent conventional outlets more than their fact-checking extensions.

3.4 Discussion

This study examines public perceptions of fact-checking in the aggregate and as individual sources, with three major findings. First, fact-checking in the aggregate is trusted not only more than the news media in general, but more than individual fact-checking sites affiliated with academia, prominent journalism, or non-profits. Fact-checking sites affiliated with lesser-known media outlets are much less trusted. Second, a majority of Americans do not recognize many of the professional fact-checking sites. Awareness of specific fact-checking sites is positively correlated with trust in them, and this relationship is found among not only Democrats but also Republicans. Third, despite fact-checkers' intentions to complement conventional media with a more reputable form of reporting, fact-checking sites are not more trusted than conventional news outlets. Partisans on both sides have conventional news outlets that they trust more than major fact-checking sites.

These findings help explain why many Americans are favorable to the idea of fact-checking yet rarely visit fact-checking sites. Most people perceive fact-checking as a desirable form of reporting in the aggregate, but many of the same people do not express high levels of trust in specific fact-checking outlets. Furthermore, low familiarity with specific fact-checking sites is correlated with low trust in them. The availability of conventional outlets more trusted than fact-checking sites is another factor that can explain why favorable views to the general practice of fact-checking have not been evolved into a widespread use of fact-checking sites.

Measuring source trust in two ways (i.e., unipolar in Study 1 and bipolar in Study 2) enriches the substantive and methodological contribution of this study. Overall patterns of findings were similar between the two measures, rendering more confidence to substantive implications. Moreover, these multiple measures provide a direct comparison between unipolar and bipolar measures of source trust and clarify how people assess unfamiliar sources depending on available choice sets. Unlike the unipolar measure, the bipolar measure disentangles strong distrust and neutral attitudes, and suggests people lean toward being neutral to, instead of being distrustful of, the sources that they do not recognize.

One interesting finding is that the positive relationship between recognizing and trusting fact-checking sites was found among both Democrats and Republicans. This finding is promising for the prospect of building trust in fact-checking sites across party lines, but also puzzling for three reasons. First, liberal-leaning conventional outlets have been more prominent in the enterprise of fact-checking (e.g., Washington Post Fact Checker), despite the existence of conservative-leaning fact-checking outlets (e.g., Daily Caller Check Your Fact). Second, major fact-checking sites have been more critical of Republicans than Democrats under both Democratic and Republican presidents (Davis 2013; Ferracioli, Kniess and Marques

2022). Third, in recent years, Democratic politicians have more frequently referenced fact-checking to support their claims (e.g., Hilary Clinton during the 2016 presidential election) whereas Republican politicians have been openly hostile to fact-checking (e.g., Matt Maddock, a Republican representative, proposed a bill to fine fact-checkers for errors; LeBlanc and Mauger 2021). Future research can further disentangle the dynamics of fact-checking in partisan politics.

There are a number of limits to this study. The sample is not nationally representative. So the exact findings here may not replicate for the overall U.S. population. Despite this limitation, this study still provides insights on how Americans assess fact-checking at both macro and micro levels. Another limitation is that the results are based on descriptive surveys, which do not directly test causal directions between familiarity and trust, or between attitudes toward fact-checking and those toward conventional outlets. Future research could use experiments to clarify these causal relationships. Lastly, this study did not include behavioral measures of the actual visits to fact-checking sites. One extension of this study could be to pair digital trace data with survey responses to examine how familiarity, trust, and usage of news sources are related to each other.

Looking forward, it is noteworthy that journalists' adoption of fact-checking was largely driven by the concept's prestige in the profession rather than audience demand for a different form of reporting (Graves, Nyhan and Reifler 2016). The current study sheds insights into when people are more likely to trust fact-checking sites and how evidence-based sources build public trust. First, more people are likely to trust fact-checking sites as people become more acquainted with those sites. Future research can explore effective strategies that can increase visits to fact-checking sites and under which conditions those exposures lead to greater trust in and continued use of those sites. Second, more people will trust fact-checking sites if they find these outlets as providing services and information that are useful compared to what is available from conventional outlets. Future studies can investigate public demands for evidence-based reporting and what has not been fulfilled by conventional media. With these next steps, public confidence in, and use of, fact-checking sites can come closer to widespread favorability that many Americans have in the general idea of fact-checking.

APPENDIX A

The Objectivity Dilemma in Delivering Facts

A.1 Experimental Design

A.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)¹

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 implications² 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 A.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.

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

²Facts with *partisan implications* have positive or negative implications for political parties (Jerit and Barabas 2012).

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

- 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).
- 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 A.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 A.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 A.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)

Table A.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

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.

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 A.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 A.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

A.1.2 External Validity of Experimental Stimuli

The design of experimental stimuli reflects reporting practices of professional fact-checking sites. 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 sites produced.

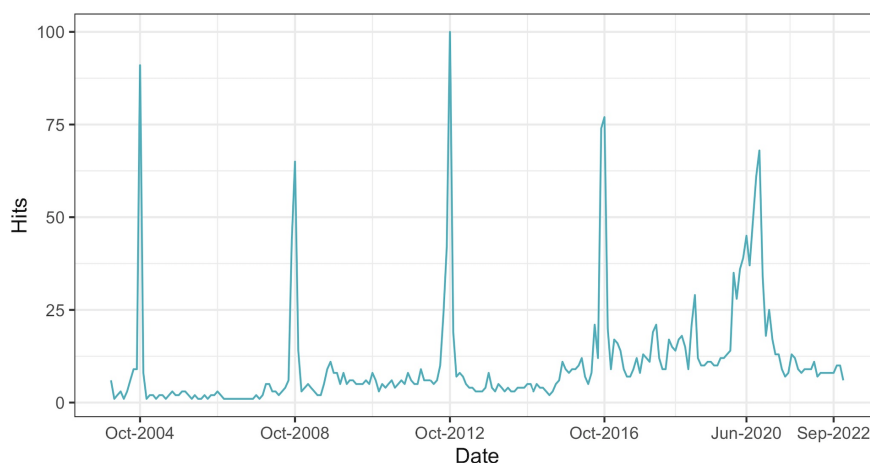
When designing the experimental stimuli, I referred to fact-checking coverage published by various fact-checking outlets at various points in recent years. To illustrate reporting practices of professional fact-checking sites, I present the entire fact-checking coverage of FactCheck.org and Washington Post Fact Checker during October 2016, June 2020, and September 2022 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. October 2016 was chosen because it when the public was relatively more likely to be exposed to fact-checking sites, as shown in Figure A.1.³ 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

³To examine over-time interest in fact-checking among the U.S. public, I retrieved the Google Trends data using the R package ‘gtrendsR.’ Among the topics specified by Google, Figure A.1 is based on the topic ‘fact-checking,’ which includes related search terms such as ‘fact-check,’ ‘fact checking,’ etc.

because it was when the experimental design for this study was being finalized. October 2022 was originally selected as a month prior to elections under the Biden administration, but September 2022 was chosen instead because Washington Post Fact Checker published too few articles (only 3) during October 2022.

Figure A.1: Search Interest in Fact-checking Over Time



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.

(1) Typical headline language in fact-checking coverage

I collected data from the entire fact-checking articles published by FactCheck.org and Washington Post during the months of October 2016, June 2020, and September 2022.⁴ This data collection focused 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: 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.

⁴FactCheck.org archive links: [Oct 2016](#), [Jun 2020](#), [Sep 2020](#); WaPo archive links: [Oct 2016](#), [Jun 2020](#), [Sep 2022](#).

- **summary**: a variable that contains the summary of main conclusions of the article (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.⁵
- **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.

Table A.6: Count and Proportion of Fact-checks that Target Political Parties: FactCheck.org and Washington Post Fact Checker

Source	Month/Year	Challenge Republicans	Challenge Democrats	Challenge both	Validate Democrats	Validate Republicans	Total Partisan	Total All
FactCheck.org	10/2016	15 (58%)	7 (27%)	3 (12%)	1 (4%)	0 (0%)	26	28
	06/2020	20 (91%)	2 (9%)	0 (0%)	0 (0%)	0 (0%)	22	47
	09/2022	13 (65%)	7 (35%)	0 (0%)	0 (0%)	0 (0%)	20	26
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
	09/2022	2 (22%)	6 (67%)	0 (0%)	1 (11%)	0 (0%)	9	9

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. Percentages are calculated out of *Total Partisan*.

⁵In most cases, fact-checking articles focus on a single target statement/figure. If a target statement is made by a group that opposes Party A, then the group is considered to be affiliated with Party B (e.g., Lincoln Project’s statement is considered a Democratic claim; [example](#) from WaPo). If a target statement opposes Party A, then the statement is considered to be affiliated with Party B ([example](#) from FC.org). Although it is relatively rare, fact-checking articles sometimes target both parties within a single article. When an article covers more than two statements made by either party, the party that gets corrected for a greater number of statements is recorded for the variable “challenged.” If an article corrects an equal number of statements, the relative degree of ratings is considered. For instance, if Party A gets ‘mostly true’ (one Pinocchio) and Party B get ‘mostly false’ (two Pinocchios) within a fact-check, this is considered as “challenging R” ([example](#) from WaPo).

As shown in the fact-checking headlines published by FactCheck.org and Washington Post Fact Checker during October 2016, June 2020,⁶ and September 2022 (Tables A.7-A.13), 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 describing 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.”

⁶In June 2020, partly due to the COVID pandemic, FactCheck.org published 25 fact-checks on non-partisan targets (usually social media posts).

Table A.7: 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		both

Table A.8: 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 A.9: 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 A.10: 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	Giftng 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 A.11: 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	

Table A.12: The Full List of Fact-checking Articles by FactCheck.org: September 2022

Date	Headline	Deck Summary	Topic	Challenge	Validate
09/02/22	Biden's Campaign-Style Distortions	Biden misstated statistics and misled on COVID, police, ACA, police	COVID, health care, violence	Democrat	
09/07/22	Trump Distorts Facts in Pennsylvania Rally	Trump's false, exaggerated, misleading statements in a rally	election	Republican	
09/07/22	Biden Hasn't Officially Filed for Reelection, Contrary to Social Media Claims	conservative social media's false claims that Biden filed for reelection	election	Republican	
09/09/22	Crist Ads Misrepresent DeSantis Statements on Abortion and Background Checks on Guns	Crist's ad misleads on DeSantis's positions	abortion, gun control	Democrat	
09/09/22	Florida GOP Attacks Crist with Misleading Claims About the IRS and Police	Florida GOP ad distort Democrats' positions	crime	Republican	
09/14/22	Herschel Walker Cites Outdated Crime Figures in False Attack on Raphael Warnock	Walker's falsely claim crimes increased under Warnock	crime	Republican	
09/14/22	Misleading Attack on Murkowski's Gun Vote	Tshibaka misleads on Murkowski's vote	gun control	Republican	
09/15/22	Clinical Trials Show Ivermectin Does Not Benefit COVID-19 Patients, Contrary to Social Media Claims	misinfo from Ivermectin enthusiasts	COVID		
09/16/22	Viral Posts Spin Falsehood Out of Denmark's COVID-19 Booster Drive	misinfo that vaccines are unsafe for those under 50	foreign country		
09/19/22	Republican Talking Point Omits Key Details About Stimulus Payments to Inmates	Reps, not just Dems, voted for stimulus checks to inmates	economy	Republican	
09/19/22	GOP Ad Mischaracterizes Michigan Candidate's Response to 2020 Protests	Rep PAC's ad falsely claims Scholten dismissed the destruction	protest	Republican	
09/20/22	Is the Pandemic 'Over'? Biden Says So, But Scientists Say That's Up for Debate	Biden's claim isn't supported by some scientists	COVID	Democrat	
09/22/22	Johnson's False Claim about Barnes' Tax Plan	Johnson's ad has false claim about Barnes' view	tax	Republican	
09/22/22	NRSC's Misleading Attack on Warnock	NRSC make misleading claims about Warnock's votes	election	Republican	
09/23/22	Q & A on Omicron-Updated COVID-19 Boosters	booster vaccines targeting omicron	COVID		
09/23/22	Biden's Misleading Claims About the Economic Recovery and Unemployment	Biden wrongly credited the Democratic COVID-19 relief bill	economy	Democrat	
09/23/22	GOP Ads Use Outdated Federal Report to Attack Democrats on 'Higher Taxes'	Republican super PAC's false claim about Democratic votes	tax	Republican	
09/26/22	Illinois Law Doesn't 'Eliminate All Restrictions on Abortions,' Contrary to Ad from Advocacy Group	an advocacy group's ad makes a false claim about Democrats' votes	abortion	Republican	
09/26/22	GM, Ford Vehicles Were Donated to Ukraine by Carmakers	instagram post baseless claim about GM, Ford's donations to Ukraine	economy		
09/27/22	Video Makes Baseless Claim About Insurance Coverage of Vaccinated Frenchman	baselessly claim about life insurer refused to pay after getting vaccine	COVID		
09/28/22	Posts Take Biden's Vaccination and Hurricane Prep Comments Out of Context, Again	misleading claim that Biden thinks vaccines protect against storm	COVID	Republican	
09/28/22	Everytown's Misleading Ad on Johnson's Votes 'Against Funding for the Police'	gun control advocacy group's ad misleads Johnson's votes	gun control	Democrat	
09/29/22	COVID-19 Vaccine Opponents Misrepresent CDC Webcast on Causes of Blood Clots	some vaccine opponents misrepresented CDC webinar	COVID		
09/29/22	Biden's Misleading Boast on Medicare Premium Drop	Biden boasted of a decrease in premiums for Medicare	health care	Democrat	
09/30/22	Fetterman Ad Pushes Back on Crime	Ad that support Fetterman (D) may mislead viewers	election	Democrat	
09/30/22	Pro-Dixon Ad Uses 'Joke' About Drag Queens in a Misleading Attack on Whitmer	Republican super PAC use Nessel's quote out of context	election	Republican	

Table A.13: The Full List of Fact-checking Articles by Washington Post Fact Checker: September 2022

Date	Headline	Deck Summary	Topic	Challenge	Validate
09/02/22	Biden's bungled talking point on the muzzle velocity of AR-15s	Biden made a wrong statement about AR-15s	gun control	Democrat	
09/07/22	These Republicans cheered abortion policy going to states. They are also sponsoring a federal ban.	republican lawmakers made contradictory statements	abortion	Republican	
09/08/22	Hillary Clinton's claim that 'zero emails' were marked classified	investigations support Clinton's case	election		Democrat
09/10/22	The Lincoln Project falsely claims Trump has pocketed 'every dollar' he raised	4 pinocchios on anti-Trump ad for not providing evidence	election	Democrat	
09/13/22	Biden's flimsy claim he has the 'strongest' manufacturing jobs record	2 pinocchios on Biden, who used a strange metric	economy	Democrat	
09/22/22	The GOP claim that Democrats support abortion 'up to moment of birth'	GOP claim about late-term abortion is inconsistent with reality	abortion	Republican	
09/23/22	Biden's unwarranted bragging about reducing the budget deficit	3 pinocchios on Biden's claim about budget deficit	economy	Democrat	
09/27/22	The false claim that Senate Republicans 'plan to end Social Security and Medicare'	4 pinocchios on Murray, who conjured up non-existent GOP plan	social security	Democrat	
09/29/22	Stacey Abrams's rhetorical twist on being an election denier	Abrams is playing down past claims about elections	election	Democrat	

As shown in the 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 A.14. 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,”⁷ “Democratic/Republican party,” or “Democrats/Republicans.”

Table A.14: 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 A.15, 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

⁷PolitiFact 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](#))

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.

Table A.15: 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 'C02 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

A.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 A.16: 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	66.9	6.1	16.1	24.2
Most headlines critical of D	7.7	4.5	64.2	8.9	21.2
Roughly equal numbers critical of D and R	79.2	21.3	26.3	53.9	45.4
Most NOT critical of either	4.9	7.3	3.4	21.1	9.2
N	183	182	175	180	720

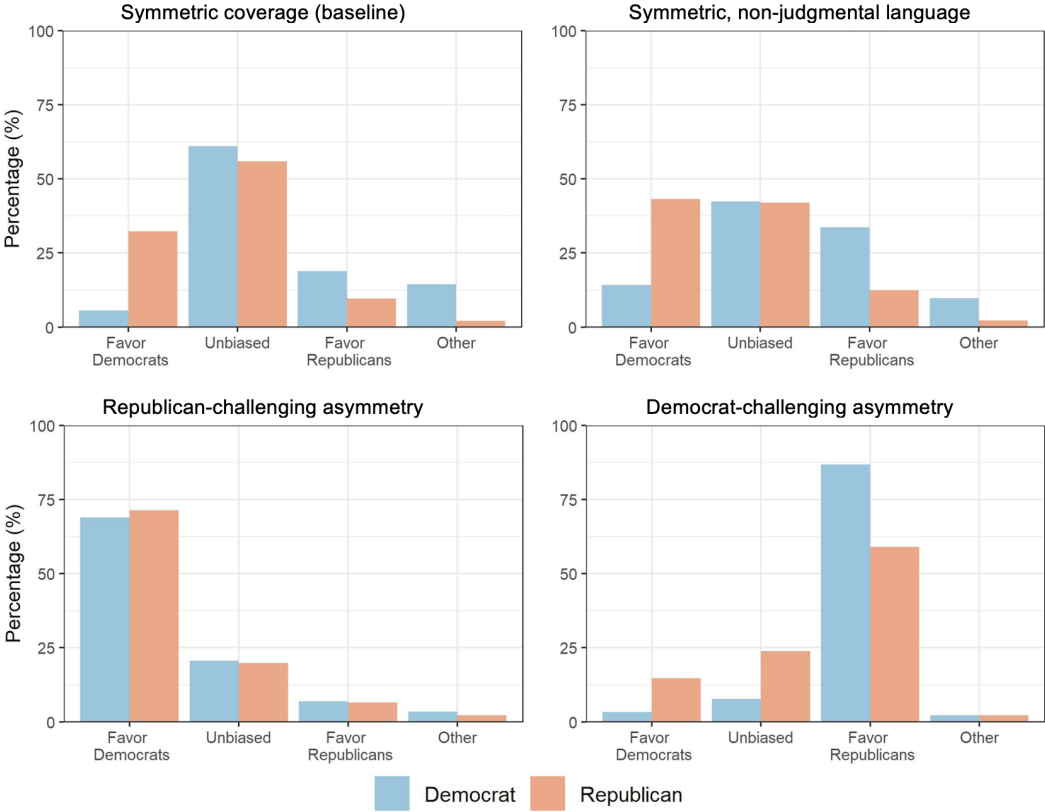
Note: Entries are the percentage of each response per experimental condition.

As shown in Table A.16, 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 A.2: Perceptions of Source Bias by Experimental Conditions



As shown in Figure A.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.

A.2 Distribution of Demographics across Experimental Conditions

Table A.17: Distribution of Demographics by Experimental Conditions

	Experimental Conditions				Total
	Symmetric coverage (baseline)	Uncongenial asymmetry	Congenial asymmetry	Symmetric, neutral language	
Age					
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
Gender					
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
Education					
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
Partisanship					
Democrat	49.2	50.0	49.7	51.1	50.0
Republican	50.8	50.0	50.3	48.9	50.0
N	183	182	175	180	720

Note: The entries are in percentage (%), except for the final row (“N”) that indicates the number of respondents.

A.3 Additional Analyses

A.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 A.18, 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 1.3 in the main text of this paper.

Table A.18: 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 ²	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. * $p < .1$; ** $p < .05$; *** $p < .01$.

A.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 A.19, 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 A.1.

Table A.19: Headlines for the Exploratory Treatment Condition (Neutral Language)

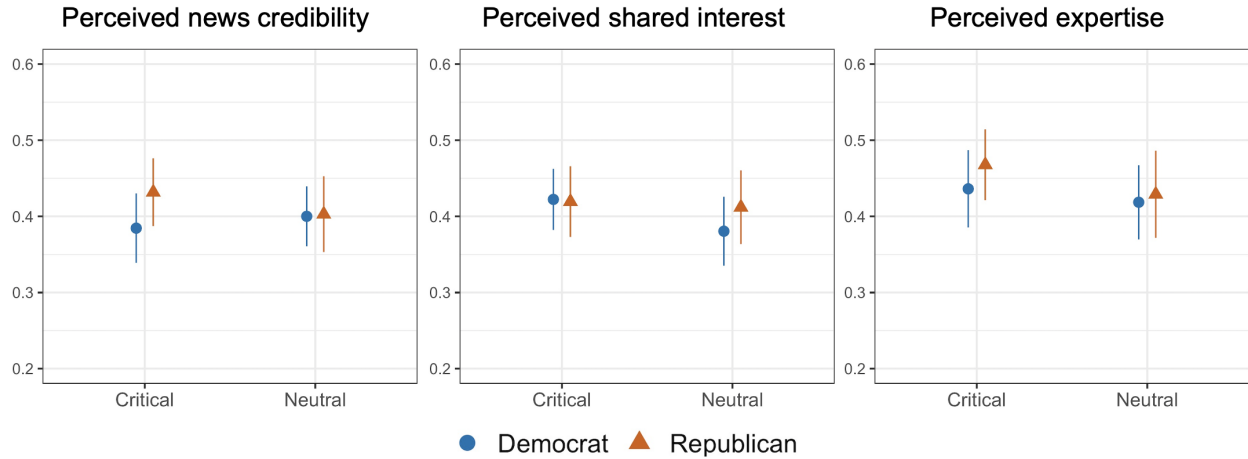
Partisan	• What [Democrats/Republicans] claim about the pregnancy rate among black teenagers
	• [Democratic/Republican] National Committee’s policy proposals for the deportation of illegal immigrants
	• [Democratic/Republican] Senator comments about which president signed the Wall Street bailout into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

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

As shown in Figure A.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.

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.

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



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

Table A.20: 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 ²	-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. * $p < .1$; ** $p < .05$; *** $p < .01$.

A.3.3 Randomized Content Variations within Condition

As described in Section A.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 A.22, A.23, and A.24, 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 A.21.

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 1.3) of the paper.

Table A.21: 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	181
Adjusted R ²	0.15	0.07	Adjusted R ²	0.08	0.05

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 A.22: 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 A.23: 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 A.22 for the description of randomized versions and the entries for the *Difference* column.

Table A.24: 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 A.22 for the description of randomized versions and the entries for the *Difference* column.

A.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?⁸ 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 ($-0.12, p < .01$).⁹ 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.

A.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 α 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.

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 A.4, all five individual news

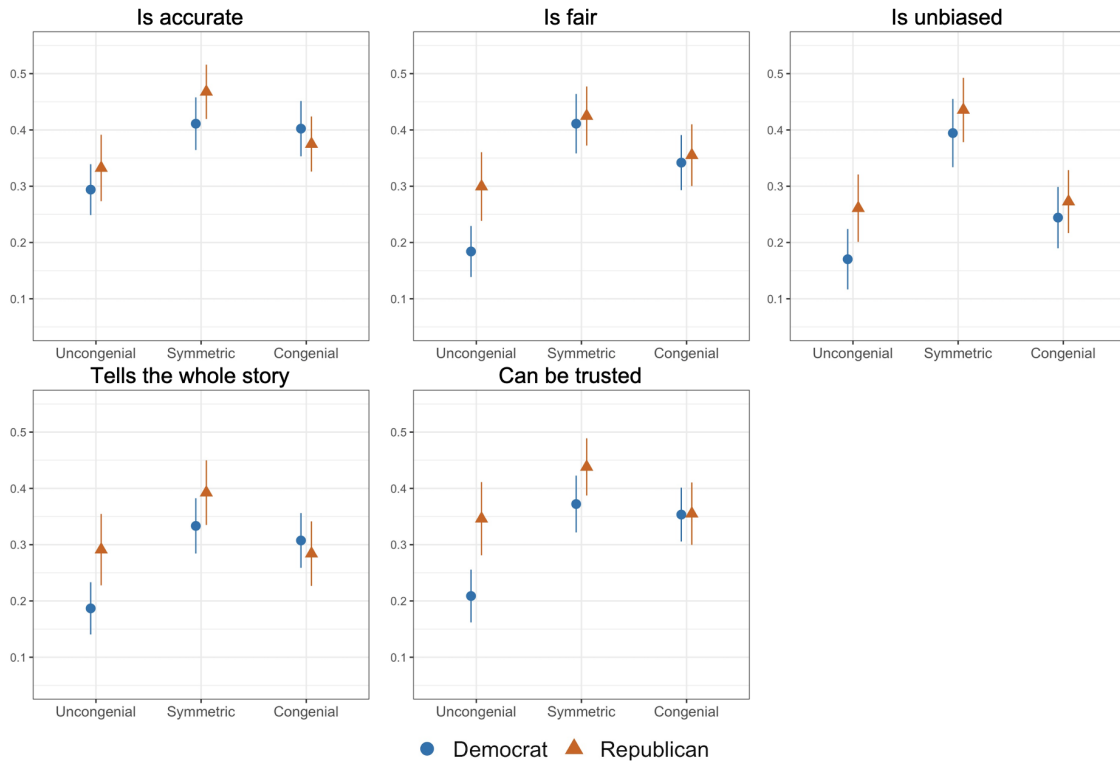
⁸This was an exploratory research question proposed in the preregistration.

⁹From Table 1.3, 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.

Table A.25: Item-total Correlations and Factor Loadings for the News Credibility 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

Figure A.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.

credibility items (accurate, fair, unbiased, whole, 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

construct of news credibility perception.

A.4 Survey Questionnaire

At the beginning of the study, participants were given a consent form that described the study instrument (evaluating online news outlets, reading a set of headlines), ensured that their responses will be kept anonymous and that the study involved 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.

A.4.1 Experimental Treatment

[Instructions]

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** (→) will appear below. Please click it to proceed.

[page break]

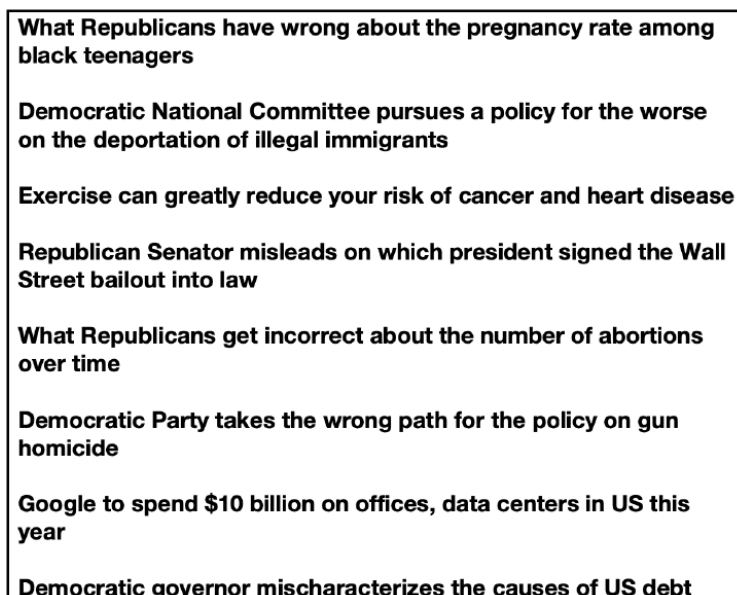
[Experimental Treatment]

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 A.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.*

A.4.2 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) -----
- *The order between the second and third choices was randomized.*

[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)
- *The order between the first and second choices was randomized.*

A.5 Preregistration



CONFIDENTIAL - FOR PEER-REVIEW ONLY News Coverage Balance/Slant and Source Credibility (August 2020) (#45991)

Created: 08/10/2020 05:50 AM (PT)

This is an anonymized copy (without author names) of the pre-registration. It was created by the author(s) to use during peer-review. A non-anonymized version (containing author names) should be made available by the authors when the work it supports is made public.

1) Have any data been collected for this study already?

No, no data have been collected for this study yet.

2) What's the main question being asked or hypothesis being tested in this study?

This study examines how the partisan slant or balance in news coverage affects partisans' perceived source credibility.

1) The more ingroup-challenging information a source contains, the lower the perceived source credibility will be relative to when the source has a similar amount of ingroup- and outgroup-challenging information (the baseline condition).

2a) The more outgroup-challenging information a source contains, the higher the perceived source credibility will be relative to the baseline condition.

2b) The degree to which outgroup-challenging slant increases perceived source credibility will be greater than the extent to which ingroup-challenging slant decreases it.

3a) The more outgroup-challenging information a source contains, the lower the perceived source credibility will be relative to the baseline condition.

3b) The degree to which ingroup-challenging slant decreases perceived source credibility will be greater than the extent to which outgroup-challenging slant decreases it.

4) The degree to which ingroup-challenging slant decreases perceived source credibility will be greater among Republicans than among Democrats.

3) Describe the key dependent variable(s) specifying how they will be measured.

The main dependent variable is perceived source credibility, which will be measured by asking participants to indicate the degree to which they think the website [is fair / is accurate / is unbiased / tells the whole story / can be trusted] [1=not at all, 2=a little, 3=moderately, 4=very, 5=extremely].

4) How many and which conditions will participants be assigned to?

Participants will be randomly assigned to four conditions in which they are given a set of news headlines that consists of:

Condition 1: 3 Republican-challenging, 3 Democrat-challenging, 2 neutral

Condition 2: 5 Republican-challenging, 1 Democrat-challenging, 2 neutral

Condition 3: 1 Republican-challenging, 5 Democrat-challenging, 2 neutral

Condition 4: 3 Republican-referencing, 3 Democrat-referencing, 2 neutral

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

The main analysis will examine the effect of slanted coverage of political parties on perceived source credibility relative to the balanced coverage condition (comparisons of Conditions 1, 2, and 3). The results will be analyzed by using ordinary least squares (OLS) with robust standard errors, with the following model specification: Perceived source credibility = [constant] + rep_chall + dem_chall + pid + rep_chall*pid + dem_chall*pid (rep_chall = 1 if Condition 2, 0 otherwise; dem_chall = 1 if Condition 3, 0 otherwise; pid = 1 if Democrat, 0 if Republican; subjects assigned to Condition 4 will not be included in this analysis). Perceived source credibility will be analyzed using the composite scale of the five items in the source credibility questionnaire.

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.

Participants who do not identify themselves as either a Republican or a Democrat will be excluded.

7) How many observations will be collected or what will determine sample size? No need to justify decision, but be precise about exactly how the number will be determined.

The target sample size is 720. The survey platform will use their prescreening data to recruit an equal number of Republicans and Democrats.

8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)

This study will explore whether the perceived credibility of a website tends to increase when the headlines are presented in neutral non-judgmental language, compared to when it is presented in language that criticizes a particular political party (comparing Conditions 1 and 4). It will also explore whether two dimensions of source credibility (perceived shared interest, perceived relative expertise) are similarly or differently affected by the slant and balance of news coverage. Another exploratory question is whether individuals are (1) more likely to choose to read ingroup-challenging news and (2) more likely to conform their factual belief to the given evidence when a website's news coverage is balanced, compared to when it is slanted. In conducting analyses, the results will be verified for robustness using GLM estimators when appropriate (e.g., ordered logit). For exploratory purposes, prior to the experimental stimuli, there will be questionnaires on thermometer ratings (Democrats, Republicans, Trump, Obama), vote intention for the 2020 presidential election, and the perceptions of mass media and fact-checking websites.

Note: The preregistration is available at: https://aspredicted.org/8T6_2BJ.

APPENDIX B

How Does Topical Diversity Affect Source Credibility?

B.1 Experimental Design

B.1.1 Experimental Stimuli

Participants were randomly assigned to one of the following five conditions:

- Baseline: Only partisan politics
- Treatment 1: Only popular culture
- Treatment 2: Only science
- Treatment 3: Partisan politics & popular culture
- Treatment 4: Partisan politics & science

Baseline: Partisan Politics Only

The headline items 1, 2, 4, and 5 are adopted from the issues on which political elites of both political parties made misstatements (Wood and Porter 2019). Thus, it is plausible to attribute either party as the source of misstatements on each topic. Headline items 3 and 6 also employ issues adopted from Wood and Porter (2019), on which there existed partisan gaps in factual beliefs (solar power, defense spending). To avoid the list of headlines priming negativity besides partisan content, headlines 3 and 6 are presented as interrogative sentences without a reference to a political party. Following fact-checking practices, the headlines are either in the form of corrections to the misstatements or raising questions about factual controversies or confusions. The phrase and tone of the headlines are designed to be similar between [Items 1,2,3] and [Items 4,5,6].

Table B.1: List of Headlines on Partisan Topics

Item	Topic	Headline
1	Black teenager pregnancy	What [Republicans/Democrats] get incorrect about the pregnancy rate among black teenagers
2	Gun homicide	[Republican/Democratic] Party offers misleading statistics on gun violence
3	Solar power employment	Are there more jobs in solar than oil in the US?
4	Abortion	What [Republicans/Democrats] get wrong about the number of abortions over time
5	Immigration	[Republican/Democratic] National Committee misrepresents the deportation rate of illegal immigrants
6	Defense spending	Has US defense spending decreased in recent years?

To ensure that the results do not hinge on the specific associations between topic and political party and the order of headlines, one of the two variations (Version 1 or Version 2) will be randomly displayed, and the order of headlines will be randomized. Although randomizing party reference at the item level is another possibility, I choose this approach to keep the reference to political parties balanced in all conditions.

Table B.2: Two Randomized Variations of the Baseline Condition

Version 1		Version 2	
1-R	What [Republicans] get incorrect about the pregnancy rate among black teenagers	1-D	What [Democrats] get incorrect about the pregnancy rate among black teenagers
2-D	[Democratic] Party offers misleading statistics on gun violence	2-R	[Republican] Party misleads offers misleading statistics gun violence
3	Are there more jobs in solar than oil in the US?	6	Has US defense spending decreased in recent years?
4-D	What [Democrats] get wrong about the number of abortions over time	4-R	What [Republicans] get wrong about the number of abortions over time
5-R	[Republican] National Committee misrepresents the deportation rate of illegal immigrants	5-D	[Democratic] National Committee misrepresents the deportation rate of illegal immigrants
6	Has US defense spending decreased in recent years?	3	Are there more jobs in solar than oil in the US?

Treatment 1: Popular Culture Only

Six headlines on popular culture issues will be presented. Item (a) was adopted from an example of non-political coverage by fact-checking sources introduced in (Graves 2016, p. 90) and published by PolitiFact (Mariano 2011). Item (b) is adopted from Mutz (2007), which uses sports as the topic for the experimental condition of non-political news exposure, and a fact-check published by Snopes on home field advantage (Snopes 2019). Item (d) is

based on LaMarre et al. (2014), where the story of cartoon characters Tom and Jerry were used for the experimental condition of non-political message, and a fact-check published by Snopes on the Disney character Goofy (Evon 2019). Item (d) and (e) are based on Yu (2016), where entertainment issues such as food and movies were chosen as non-political news items, and a fact-check on food published by Snopes (Evon 2020) and an article on Netflix published by Snopes and AP News (AP News 2019).¹ Item (f) is based on Settle and Carlson (2019), where they selected Olympics as one of non-political topics in their treatments,² and an article on Tokyo Olympics published by Snopes and AP News (AP News 2020).³ The order of headlines was randomized.

Table B.3: List of Headlines on Popular Culture Topics

Item	Topic	Headline
a	Cultural figure	Atlanta’s celebrity groundhog, General Beauregard Lee, claims he predicts weather better than Punxsutawney Phil in Philadelphia – it’s mostly true according to meteorologists
b	Sports	What really causes home field advantage in sports – and why it’s on the decline
c	Cartoon	Claim that Disney’s Goofy character actually is a cow lacks evidence
d	Food	Map of America’s favorite restaurants goes viral – but it’s mostly inaccurate
e	Movie	Which movies and shows is Netflix losing versus gaining this year?
f	Sports	What we know about Tokyo Olympics – it will happen, but when?

Treatment 2: Science Only

In choosing the topics, I avoided scientific issues where there exist strong partisan disagreement, such as climate change and fracking (Kahan 2015).⁴ Instead, the list covers less partisan issues (Kahan 2015; Funk 2015), and headline wordings were adapted from articles published from sources such as SciCheck at FactCheck.org and Science category at

¹Snopes previously posted a fact-check “Netflix to Lose the Office Gain Seinfeld Starting in 2021” (<https://www.snopes.com/ap/2019/09/16/netflix-to-lose-the-office-gain-seinfeld-starting-in-2021/>, accessed on February 12, 2020), but as of 2023, the link automatically redirects to an article published by AP News.

²Settle and Carlson (2019)’s choice of non-political topics included the 2016 Emmy nominations, celebrities and body-image issues, the 2016 Olympics, Pokémon Go, and app-enabled transportation services like Uber and Lyft.

³Snopes previously posted a fact-check on “Tokyo Olympics Will Happen but Most Likely in 2021 Not 2020” (<https://www.snopes.com/ap/2020/03/23/tokyo-olympics-will-happen-but-most-likely-in-2021-not-2020/>, accessed on April 5, 2020), but as of 2023, the link automatically redirects to an article published by AP News.

⁴Scheufele and Krause (2019) comment that, compared to political contexts, partisan motivated reasoning can be less pronounced even for scientific issues that have been surrounded by significant political disagreements, including evolution, vaccine mandates, or stem cell research.

Snopes.⁵ The topics included nanotechnology (a fact-check by Slate, Brogan 2016), use of artificial sweeteners in diet soft drink (a fact-check by Snopes, Kasprak 2018*a*), radio waves from cell phone (adopted from a fact-check published by Full Fact (Rahman 2019), physics/astronomy (a fact-check by AP News, Borenstein 2019), biology/genetics (a fact-check on the the genetics of dogs by Snopes, Kasprak 2016) and bioengineered artificial organs (a fact-check by Snopes, Kasprak 2018*b*). The order of headlines was randomized.

Table B.4: List of Headlines on Scientific Topics

Item	Topic	Headline
a	Nanotechnology	Scientists debunk misunderstandings about nanotechnology
b	Artificial sweeteners	Does drinking one diet soda a day really increase the risk of dementia and strokes?
c	Radiation and mobile phone	Scientific reasons why mobile phone towers don't pose a radiation risk
d	Physics/astronomy	Study says universe is expanding faster and is younger than previously thought
e	Genetics/biology	Are dogs really 99.9% wolf, according to genetic analysis?
f	Bioengineered artificial organs	Study on the prospect of artificial kidneys soon replacing dialysis

Treatment 3: Partisan Politics & Popular Culture

Three headlines on partisan issues (from Baseline) plus three headlines on popular culture (Treatment 1) were presented. To ensure that the results do not hinge the specific composition of topics, three out of six popular culture headlines were randomly selected, in addition to one of the three partisan headlines—randomly selected among four sets (A D in Figure B.1). The purpose of randomization across A D was to ensure partisan balance in coverage of partisan topics (i.e., one challenges Democrats, one challenges Republicans, one interrogation without party reference). The order of headlines was randomized.

⁵A source with scientific fact-checks may resemble outlets such as Climate Central, Death Penalty Information Center, or SciCheck at FactCheck.org.

Figure B.1: Randomized Sets of Headlines on Partisan Topics

1-R	What [Republicans] get incorrect about the pregnancy rate among black teenagers	1-D	What [Democrats] get incorrect about the pregnancy rate among black teenagers
2-D	[Democratic] Party offers misleading statistics on gun violence	2-R	[Republican] Party offers misleading statistics on gun violence
3	Are there more jobs in solar than oil in the US?	6	Has US defense spending decreased in recent years?
4-D	What [Democrats] get wrong about the number of abortions over time	4-R	What [Republicans] get wrong about the number of abortions over time
5-R	[Republican] National Committee misrepresents the deportation rate of illegal immigrants	5-D	[Democratic] National Committee misrepresents the deportation rate of illegal immigrants
6	Has US defense spending decreased in recent years?	3	Are there more jobs in solar than oil in the US?

Treatment 4: Partisan Politics & Science

Three headlines on partisan issues (from Baseline) plus three headlines on scientific issues (Treatment 3) were presented. Similar to Treatment 3, to ensure that the results do not hinge the specific composition of topics, three out of six scientific headlines were randomly selected, in addition to three partisan headlines—randomly selected among four sets (A-D in Figure B.1). The order of headlines was randomized.

B.1.2 Topical Scope of Fact-checking Sites

Baseline condition (partisan only) reflects the typical coverage tendency of major U.S. fact-checking sites, such as FactCheck.org, PolitiFact, and Washington Post Fact Checker. To understand their topical scope, I collected data from the entire fact-checking articles published by FactCheck.org and Washington Post during the months of October 2016, June 2020, and September 2022. This data collection focused 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).

The following article-level information was collected:

- 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 (deck summaries below headlines or rating scales)
- **topic:** a variable that records the topic that is mainly addressed in the article. It can take entries such as: “immigration,” “debate,” “economy,” etc.
- **partisan:** a binary variable that takes 1 if the fact-checked target is explicitly a partisan figure or organization, 0 if otherwise.

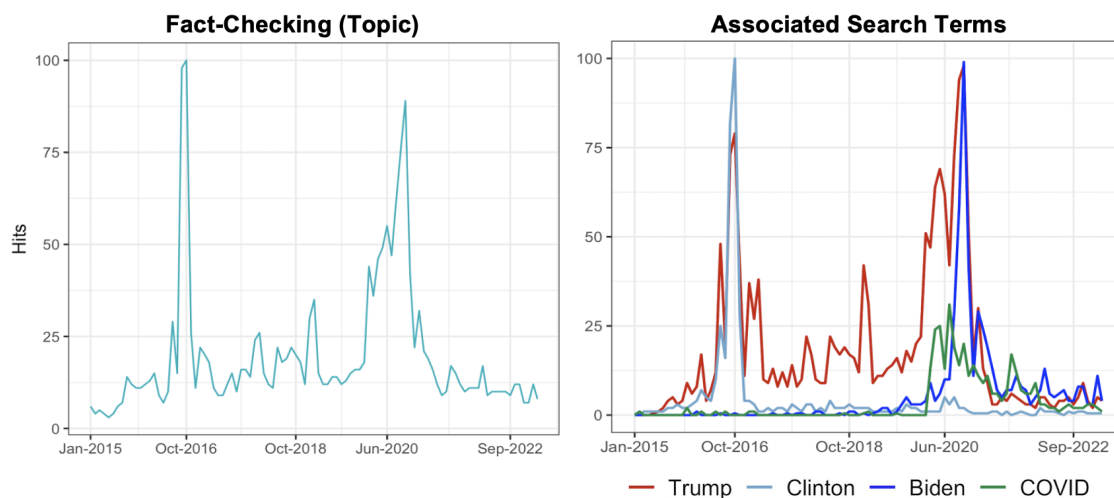
In Tables A.7-A.13, each headline was considered as ‘partisan’ if there was an entry (e.g., “Democrat,” “Republican,” or “both”) in either “Challenge” or “Validate” column. Each headline was considered as ‘non-partisan’ if there was no entry for both “Challenge” and “Validate” columns, in addition to Table A.10 where all headlines were non-partisan. Table B.5 presents the percentage of fact-checks with partisan targets out of all fact-checks per month.

Table B.5: Count and Proportion of Fact-Checks with and without Partisan Targets

Source	Month/Year	Partisan	Non-partisan	Total	% (Partisan/Total)
FactCheck.org	Oct-16	26	2	28	92.6
	Jun-20	22	25	47	46.8
	Sep-22	20	6	26	76.9
Washington Post Fact Checker	Oct-16	26	1	27	96.3
	Jun-20	16	1	17	94.1
	Sep-22	9	0	9	100

Figure B.2 shows the relative search interest in fact-checking among the U.S. public between January 2015 and March 2023. The Google Trends data were retrieved using the R package ‘gtrendsR.’ The first plot shows the relative search interest in the topic “fact-checking” (encompassing search terms such as ‘fact-check,’ ‘fact checking,’ etc.). The second plot illustrates the relative search interest in the topic of fact-checking by associated search terms: Trump, Clinton, Biden, and COVID. The peaks of search interest in fact-checking associated with the presidential candidates overlap with the respective election seasons (Clinton and Trump in fall 2016; Biden and Trump in fall 2020). Public search interest in fact-checking associated with COVID peaked in 2020, yet the relative degree of fact-checking interest in COVID was lower compared to fact-checking interest in presidential candidates. These trends imply that the public strongly associates fact-checking with partisan figures and topics.

Figure B.2: Search Interest in Fact-checking as a Topic and by Associated Search Terms



B.1.3 Manipulation Check

To assess how well participants perceived the key differences across conditions, at the end of the survey, they answered the following question:

“Thinking back to the headlines you were shown, which of the following topics did the headlines cover? (Choose all that apply)”

- Political topics (e.g., immigration, gun control) (1)
- Sports, entertainment, and lifestyle topics (2)
- Science and health topics (3)
- The order of answer choices was randomized.

Following Hauser, Ellsworth and Gonzalez (2018), manipulation check was not placed between the treatment and outcome variables (to prevent unintended influence on observed outcomes). Instead, it was presented at the end of the survey. In analysis, I did not drop respondents who failed manipulation check, because excluding them can bias the results, as Aronow, Baron and Pinson (2019) suggested.

As shown in Table B.6, responses across conditions indicate that the key experimental manipulation in this study—topical scope of coverage—was effective. In all conditions, a majority of responses were consistent with the purpose of study design. In the baseline condition (only partisan topics), 68.3% of the respondents said they were given headlines on political topics. In Treatment 1 (only popular culture topics), 76.0% of respondents recalled they were given headlines on topics such as sports, entertainment, and lifestyle. Among those assigned to Treatment 2 (only scientific topics), 90.0% recalled that they were given

Table B.6: Responses to Manipulation Check by Experimental Conditions

	Treatment Conditions					Total
	Partisan only (baseline)	Popular culture only	Science only	Partisan & Popular culture	Partisan & Science	
Par	68.3	1	1	9.5	6	17.1
Pop	0.5	76	0.5	5	0	16.4
Sci	1	0.5	90	1	11.5	20.8
Par, Pop	1	1	0	45.8	0	9.6
Par, Sci	26.1	1	1.5	6	74.5	21.8
Pop, Sci	0	18.5	5.5	3	0.5	5.5
Par, Pop, Sci	3	1.5	1.5	29.9	7.5	8.7
N/A	0	0.5	0	0	0	0.1
N	199	200	200	201	200	1,000

Note: Entries are the percentage of each response per experimental condition. *Par* = partisan (political topics); *Pop* = popular culture (sports, entertainment, and lifestyle); *Sci* = scientific (science and health); multiple responses were allowed.

headlines on topics such as science and health. In Treatment 3 (mixed coverage of partisan and popular culture topics), 75.7% chose a set of responses that included ‘partisan’ and ‘popular culture’ topics. In Treatment 4 (mixed coverage of partisan and scientific topics), 82% chose a set of responses that included ‘partisan’ and ‘scientific topics.

B.2 Distribution of Demographics across Experimental Conditions

Table B.7: Distribution of Demographics by Experimental Conditions

	Experimental Conditions					Total (%)
	Partisan only (baseline)	Pop culture only	Science only	Partisan & Pop culture	Partisan & Science	
Age						
18-24	26.1	25.5	23	21.4	18	22.8
25-34	32.2	35.5	31.5	29.9	36	33
35-44	17.6	14	17.5	17.4	19	17.1
45-54	7.5	13	11	15.4	13	12
55-64	10.6	7.5	11.5	11.4	9	10
65-	6	4.5	5.5	4.5	5	5.1
Gender						
Female	53.8	54.8	52	53.7	50.5	53
Male	44.2	44.2	47.5	45.3	49	46
Self-identify	2	1	0.5	1	0.5	1
Education						
No college	42.2	40.5	38.5	40.8	34.5	39.3
College	57.8	59.5	61.5	59.2	65.5	60.7
Partisanship						
Democrat	49.7	50.5	50	50.2	49.5	50
Republican	50.3	49.5	50	49.8	50.5	50
N	199	200	200	201	200	1,000

Note: The entries are in percentage (%), except for the final row (“N”) that indicates the number of respondents.

B.3 Key Results in Tabular Form

Table B.8: Treatment Effects of Topical Scope (Pooled Model)

Treatment (Base: Partisan only)	Perceived news credibility	Perceived shared interest	Perceived expertise
Rep	-0.06**	-0.10***	-0.01
	-0.03	-0.04	-0.03
Pop Culture	-0.04	-0.13***	-0.12***
	-0.03	-0.03	-0.03
Science	0.09***	-0.01	0.03
	-0.03	-0.03	-0.03
Partisan/Pop	-0.05*	-0.10***	-0.08***
	-0.03	-0.03	-0.03
Partisan/Sci	-0.02	-0.06*	-0.02
	-0.03	-0.03	-0.03
Pop x Rep	0.05	0.07	0.005
	-0.04	-0.05	-0.05
Sci x Rep	-0.03	0.04	-0.03
	-0.04	-0.05	-0.05
Par/Pop x Rep	0.04	0.05	-0.002
	-0.04	-0.05	-0.04
Par/Sci x Rep	0.03	0.08	0.01
	-0.04	-0.05	-0.04
Constant	0.43***	0.48***	0.48***
	-0.02	-0.02	-0.02
N	500	500	500
Adjusted R2	0.04	0.03	0.04

Note: Entries are the ordinary least squares (OLS) regression coefficients with robust standard errors are in parentheses. *Rep* = 1 if Republican, 0 if Democrat. *Pop* = 1 if Treatment 1 (popular culture only), 0 otherwise. *Sci* = 1 if Treatment 2 (science only), 0 otherwise. *Par/Pop* = 1 if Treatment 3 (partisan + popular culture), 0 otherwise. *Par/Sci* = 1 if Treatment 4 (partisan + science), 0 otherwise. All variables were coded to range from 0 to 1. * $p < .10$; ** $p < .05$; *** $p < .01$.

Table B.9: Conditional Treatment Effects of Topical Scope by Partisan Identity

Treatment (Base: Partisan only)	Perceived news credibility		Perceived shared interest		Perceived expertise	
	Democrat	Republican	Democrat	Republican	Democrat	Republican
Pop Culture	-0.04	0.01	-0.13***	-0.06*	-0.12***	-0.12***
	-0.03	-0.03	-0.03	-0.04	-0.03	-0.04
Science	0.09***	0.06*	-0.01	0.03	0.03	0.004
	-0.03	-0.03	-0.03	-0.04	-0.03	-0.03
Par/Pop	-0.05*	-0.01	-0.10***	-0.05	-0.08***	-0.08**
	-0.03	-0.03	-0.03	-0.04	-0.03	-0.03
Par/Sci	-0.02	0.01	-0.06*	0.02	-0.02	-0.01
	-0.03	-0.03	-0.03	-0.04	-0.03	-0.03
Constant	0.43***	0.37***	0.47***	0.38***	0.48***	0.47***
	-0.02	-0.02	-0.02	-0.03	-0.02	-0.03
N	500	500	500	500	500	500
Adjusted R2	0.05	0.01	0.03	0.01	0.05	0.03

Note: Entries are the ordinary least squares (OLS) regression coefficients with robust standard errors are in parentheses. *Pop* = 1 if Treatment 1 (popular culture only), 0 otherwise. *Sci* = 1 if Treatment 2 (science only), 0 otherwise. *Par/Pop* = 1 if Treatment 3 (partisan + popular culture), 0 otherwise. *Par/Sci* = 1 if Treatment 4 (partisan + science), 0 otherwise. All variables were coded to range from 0 to 1. * $p < .10$; ** $p < .05$; *** $p < .01$.

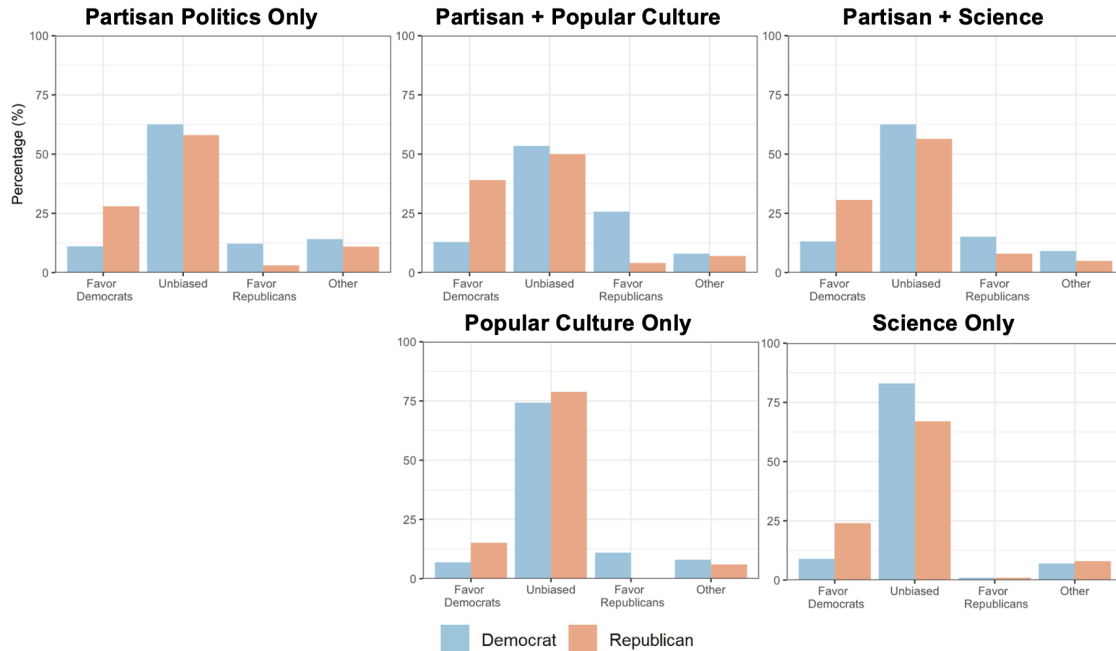
B.4 Additional Analyses

B.4.1 Perception of Source Bias

Because source bias perception has been suggested as a potential third dimension of source credibility (Wallace, Wegener and Petty 2020), I additionally measured perceived source bias. Participants were asked to indicate whether they thought the website tended to be unbiased or biased when presenting information, using the following set of responses: “it is not biased,” “it is biased in favor of Republicans,” “it is biased in favor of Democrats,” and “other” (open-ended response).

There were two interesting patterns in Figure B.3. One interesting finding is that more people find a source unbiased when it specializes in either popular culture or scientific topics (row 2), compared to when the coverage includes partisan topics (row 1). When a source covers only popular culture topics, 74% of Democrats and 79% of Republicans assess it to be unbiased. When a source covers only scientific topics, 83% of Democrats and 67% of Republicans find it to be unbiased. In contrast, when the coverage included partisan topics, 53-63% Democrats and 50-58% of Republicans found the source to be unbiased. Among three topical scopes with partisan topics, the mixed coverage of partisan and popular culture topics was least likely to be considered as unbiased.

Figure B.3: Perceptions of Source Bias by Experimental Conditions



A second pattern is that the hostile media effect, perceiving a source with balanced coverage to be biased in favor of the opposite group (Vallone, Ross and Lepper 1985), is likely to be stronger among Republicans than Democrats. were more likely to assess the source bias to be in favor of Democrats. In all conditions with partisan topics (row 1), the coverage was balanced with the same number of headlines challenging each party. Still, greater proportions of Republicans (28-39%) perceived the source to be biased in favor of Democrats, compared to Democrats (12-26%) who perceived the source to be biased in favor of Republicans. Among three conditions with partisan topics, hostile media tendency was strongest given mixed coverage of partisan and popular culture topics.

B.4.2 Internal Reliability of Source Credibility Measures

As suggested in the preregistration, the items used to measure source credibility perceptions were analyzed for internal reliability. The scree plot analysis suggested three factors (Figure B.4; Cattell 1966). The results of EFA indicated three factors explaining 37%, 19% and 14% of the variance, respectively. Each item loaded on theoretically relevant factors with strong loadings ($> .4$; Worthington and Whittaker 2006).

In confirmatory factor analysis, the three-dimensional solution had acceptable model fit: RMSEA = .066, SRMR = .021, CFI = .985, TLI = .977 (the recommended criteria for

Figure B.4: Scree Plot for Source Credibility Items

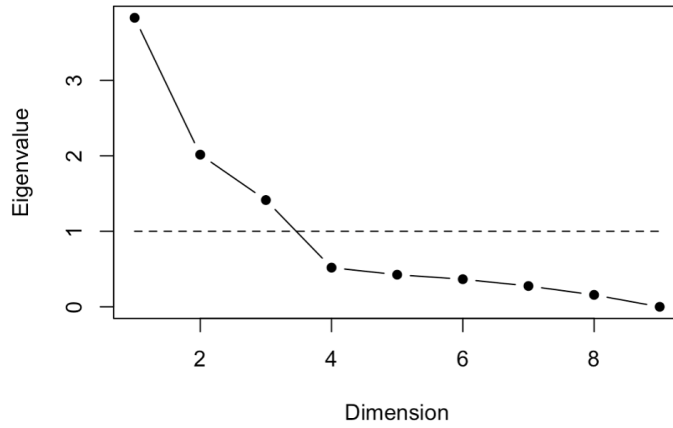


Table B.10: Exploratory Factor Analysis of Source Credibility Items

Items	Factors		
	News credibility	Expertise	Shared interest
is accurate	0.87		
is fair	0.84		
is unbiased	0.72		
tells the whole story	0.84		
can be trusted	0.78		
are concerned about the public interest			1.04
watch out for your interests			0.41
are well trained		0.90	
are experienced		0.89	
Prop variance explained	0.37	0.19	0.14
Cronbach's α	0.91	0.90	0.85

Note: Entries are non-standardized factor loadings. Factor loadings smaller than .4 are not displayed.

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 .69 and .91.

Table B.11: Confirmatory Factor Analysis of Source Credibility Items

		Factor loadings
News credibility		
	is accurate	0.85
	is fair	0.88
	is unbiased	0.69
	tells the whole story	0.85
	can be trusted	0.88
Shared interest		
	are concerned about the public interest	0.85
	watch out for your interests	0.87
Expertise		
	are well trained	0.91
	are experienced	0.90
CFA fit statistics		
	CFI	0.985
	TLI	0.977
	SRMR	0.021
	RMSEA	0.066
	$\chi^2(df)$	129.95 (24)
	N	1,000

Note: Factor loading entries are standardized loadings.

B.5 Survey Questionnaire

The study materials, data, and codes will be made available at an OSF repository upon the publication of this paper. At the beginning of the study, participants were given a consent form that described the study instrument (evaluating online news outlets, reading a set of headlines), ensured that their responses will be kept anonymous and that the study involved 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 an 8-min survey, which was set to be higher than the minimum hourly wage at the time of the study.

B.5.1 Experimental Treatment

[Instructions]

Now, we'd like to show you some **headlines** from an online news outlet.

After reading the headlines, we will ask you some questions about how you **evaluate the website** that reported these news stories. We'd especially like to know how interesting and credible you find the news from this site.

* Once headlines are loaded and ready to display, **an arrow** (→) will appear below. Please click it to proceed.

[page break]

The headlines from the website are listed below. Please take a moment to read the entire list carefully.

When reading the headlines, please think about how you would **evaluate the website**:

- How **credible** (informative, accurate, etc.) does the website seem to you?
- How **interested** would you be in visiting this website and reading more about news stories like these?

Example screenshot of Baseline Condition:



* *PLEASE NOTE:* You **won't be able to refer back** to the headlines once you reach the next screen. So make sure to read the headlines carefully and think about your reactions to the website before you move on to the next screen.

B.5.2 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.

[Perceptions of Shared Interest / Expertise] Based on the headlines you read, how well do you think each of the following describes **the reporters⁶ of the website?**

The reporters of the website...

	Not at all (1)	A little (2)	Moderately (3)	Very (4)	Extremely (5)
Are concerned about the public interest (1)					
Watch out for your interests (2)					
Are well trained (3)					
Are experienced (4)					

Note: The order of items was randomized across respondents.

[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) -----
- *The order between the second and third choices was randomized.*

[page break]

[Manipulation Check] Thinking back to the headlines you were shown, which of the following topics did the headlines cover? (Choose all that apply)

- Political topics (e.g., immigration, gun control) (1)
- Sports, entertainment, and lifestyle topics (2)
- Science and health topics (3)
- *The order of response choices was randomized.*

⁶This question pertains to reporters. Because the website is an inanimate object, it may be less reasonable to assess a website on the given items. Journalists are the ones who select topics and facts to report, are responsible for reporting the information accurately, and offer their assessment of the issue—thus consisting key components of news trust, according to (Kohring and Matthes 2007).

B.6 Preregistration



CONFIDENTIAL - FOR PEER-REVIEW ONLY **Topic Scope and Source Credibility (February 2021) (#59501)**

Created: 02/26/2021 07:32 PM (PT)

This is an anonymized copy (without author names) of the pre-registration. It was created by the author(s) to use during peer-review. A non-anonymized version (containing author names) should be made available by the authors when the work it supports is made public.

1) Have any data been collected for this study already?

No, no data have been collected for this study yet.

2) What's the main question being asked or hypothesis being tested in this study?

This study examines how the scope of topics covered by a news source affects source credibility perceptions.

- 1) Mixing coverage of apolitical issues into the coverage of partisan issues will increase source credibility perceptions compared to when the source covers only partisan issues.
- 2) An exclusive coverage of apolitical issues will increase source credibility perceptions compared to mixed coverage of partisan and apolitical issues.
- 3) The extent to which the coverage of apolitical issues increases source credibility perceptions will be greater among Republicans than Democrats.
- 4) Mixing coverage of scientific issues into the coverage of partisan issues will increase source credibility perceptions compared to when the source covers only partisan issues.
- 5) An exclusive coverage of scientific issues will increase source credibility perceptions compared to mixed coverage of partisan and scientific issues.
- 6) The extent to which the coverage of scientific issues increases source credibility perceptions will be greater among Democrats than Republicans.

3) Describe the key dependent variable(s) specifying how they will be measured.

Source credibility perception will be measured by asking participants to indicate the degree to which they think the website [is fair / is accurate / is unbiased / tells the whole story / can be trusted] (1=not at all ~ 5=extremely). The primary measure of source credibility will be a composite measure of the items that load together in factor analysis.

4) How many and which conditions will participants be assigned to?

Participants will be randomly assigned to one of five conditions in which they are given a set of news headlines purported to come from a new source. The content of headlines will vary as follows:

- Condition 1: 6 items on partisan issues (2 Democrat-challenging, 2 Republican-challenging, 2 no party reference)
Condition 2: 3 items on partisan issues (1 D-challenging, 1 R-challenging, 1 no party reference), 3 items on apolitical issues
Condition 3: 6 items on apolitical issues
Condition 4: 3 items on partisan issues (1 D-challenging, 1 R-challenging, 1 no party reference), 3 items on scientific issues
Condition 5: 6 items on scientific issues

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

The main analysis will examine the effects of topic scope in news coverage on perceived source credibility. The results will be analyzed by using the ordinary least squares (OLS) with robust standard errors, with the following model specification: $Outcome = [constant] + dem + Cond_2 + Cond_3 + Cond_4 + Cond_5 + Cond2*dem + Cond3*dem + Cond4*dem + Cond5*dem$ (dem = 1 if Democrat, =0 if Republican; Cond_n = 1 if the subject is assigned to Condition n, =0 otherwise). For expositional clarity, I may present treatment effects estimated on different subsets of the data (e.g., Conditions 1, 2, 3 or Conditions 1, 4, 5).

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.

Participants who do not identify themselves as either a Republican or a Democrat (e.g., pure independents) will be excluded.

7) How many observations will be collected or what will determine sample size? No need to justify decision, but be precise about exactly how the number will be determined.

The target sample size is 1000. Equal numbers of Republicans and Democrats will be recruited using the survey platform's prescreening data.

8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)

This study will explore whether perceived source credibility is greater when a source specializes in science than in apolitical issues, and whether the coverage of non-partisan issues increases perceptions of shared interest and expertise, reduces source bias perceptions, and increases interest in reading articles and visiting the source. Other exploratory questions are whether the treatment effect of apolitical news coverage is greater than that of scientific news coverage, and whether the coverage of non-partisan news decreases unfavorable feelings toward journalists and out-party hostility. In conducting analyses, the results will be verified for robustness using GLM estimators when appropriate (e.g., ordered logit). To explore the latent structure and traits of source credibility, factor analysis will be used on the source credibility scale items and the items for perceived shared interest and expertise, which will be analyzed both individually and as composite scales based on factor analysis. For exploratory purposes, prior to the experimental stimuli, there will be questionnaires on the perceptions of news media and fact-checking websites and vote decision for the 2020 presidential election.

Version of AsPredicted Questions: 2.00

Available at https://aspredicted.org/MLL_499

Note: The preregistration is available at: https://aspredicted.org/MLL_499.

APPENDIX C

Do People Really Want Corrective Information?

C.1 Distribution of Demographic Variables

Table C.1: Distribution of Demographic Variables

		Study 1	Study 2
Age	18-24	22.2	22.8
	25-34	35.6	33.0
	35-44	19.2	17.1
	45-54	12.6	12.0
	55-64	7.6	10.0
	65-	2.8	5.1
Gender	Female	47.5	46.0
	Male	51.1	53.0
	Non-binary	1.4	1.0
Education	No college degree	34.8	39.3
	College degree	65.2	60.7
Partisan Identity	Democrat	50.0	50.0
	Republican	50.0	50.0
N		720	1,000

Note: The entries are in percentage (%), except for the final row (“N”) that indicates the number of respondents.

C.2 Trust in Fact-checking: General and Sources

C.2.1 Trust in Fact-checking and Conventional Media: In General

Table C.2: Average Trust in Fact-checking and Conventional Media in General: Study 1

	Fact-checking in general	News media in general	Difference between fact-checking and news media (t-statistic)	N
Democrats	0.54	0.44	6.16 ($p < .01$)	360
Republicans	0.42	0.34	4.08 ($p < .01$)	360

Table C.3: Average Trust in Fact-checking and Conventional Media in General: Study 2

	Fact-checking in general	News media in general	Difference between fact-checking and news media (t-statistic)	N
Democrats	0.68	0.60	5.98 ($p < .01$)	500
Republicans	0.47	0.37	4.96 ($p < .01$)	500

C.2.2 Trust in Fact-checking: In General and by Source Affiliations

Table C.4: Average Trust in Fact-checking in General and by Source Affiliations: Study 1

	Democrats	Difference from fact-checking in general (t-statistic)	Republicans	Difference from fact-checking in general (t-statistic)
Fact-checking in general	0.54	NA	0.42	NA
Academic	0.50	2.19 ($p < .05$)	0.41	0.30 ($p = .76$)
Prominent media	0.55	-0.46 ($p = .65$)	0.43	-0.67 ($p = .50$)
Less prominent media	0.29	15.79 ($p < .01$)	0.34	4.28 ($p < .01$)
Non-profit	0.41	8.64 ($p < .01$)	0.36	3.23 ($p < .01$)
N	360		360	

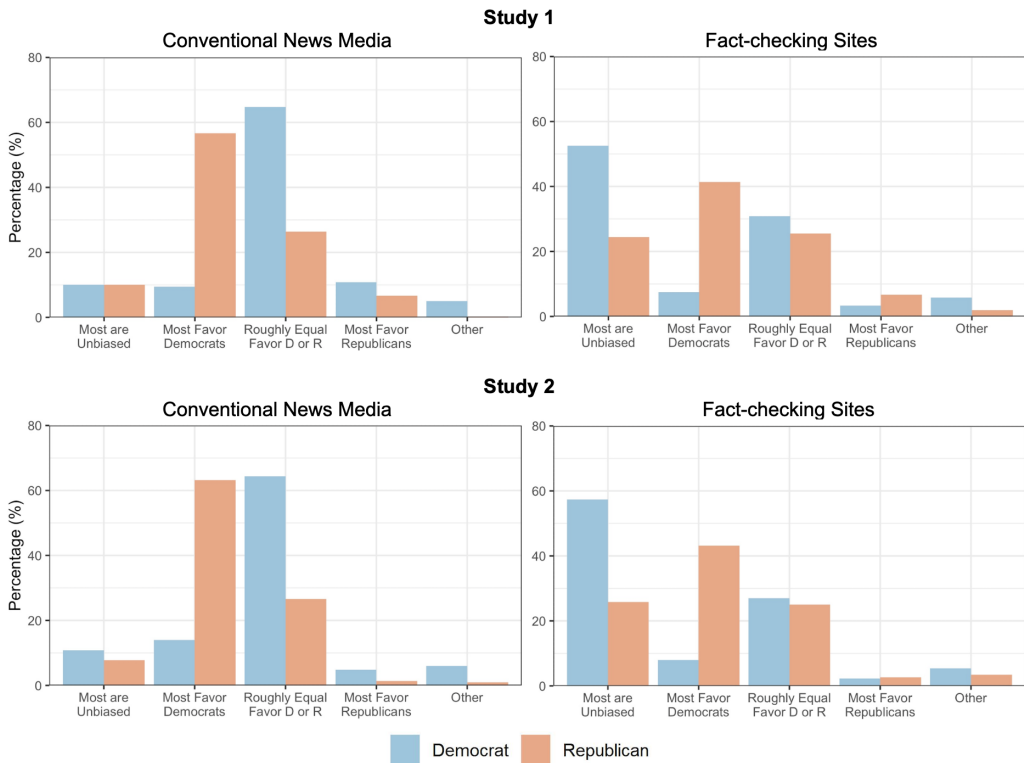
Table C.5: Average Trust in Fact-checking in General and by Source Affiliations: Study 2

	Democrats	Difference from fact-checking in general (t-statistic)	Republicans	Difference from fact-checking in general (t-statistic)
Fact-checking in general	0.68	NA	0.47	NA
Academic	0.62	5.25 ($p < .01$)	0.47	-0.47 ($p = .64$)
Prominent media	0.63	4.30 ($p < .01$)	0.48	-0.88 ($p = .38$)
Less prominent media	0.45	21.27 ($p < .01$)	0.44	1.44 ($p = .15$)
Non-profit	0.56	11.61 ($p < .01$)	0.45	0.85 ($p = .39$)
N	500		500	

C.2.3 Bias Perceptions: Fact-checking and Conventional Media in General

After answering questions related to source trust, participants indicated whether they thought the news media or fact-checking sites in general tended to be unbiased or biased when presenting information: 1) most are not biased, 2) most are biased in favor of Republicans, 3) most are biased in favor of Democrats, 4) most are biased, but equal numbers favor either Democrats or Republicans, and 5) other (open-ended response).

Figure C.1: Perceived Bias of Conventional Media and Fact-checking Sites in General



As discussed in the main text, in both studies, perceived bias of the news media was more prevalent than that of fact-checking sites among both partisan groups. There is an interesting partisan difference in how Democrats and Republicans perceive bias from the media and fact-checking. Among partisans who perceive most news organizations or fact-checking sites as biased, most Republicans think “most outlets favor Democrats,” whereas most Democrats perceive “equal numbers of outlets favor either Democrats or Republicans.” This partisan difference is starker for the news media than fact-checking.

C.3 Familiarity with and Trust in Fact-checking Sources

C.3.1 Familiarity with Fact-checking Sources by Partisan Identity

Table C.6: Familiarity Rate (Proportion Familiar) of Fact-checking Sources: Study 1

	All	Democrats	Republicans	Affiliation
FactCheck.org	0.49	0.48	0.50	Academic
Lead Stories	0.13	0.06	0.19	Non-profit
PolitiFact	0.46	0.49	0.43	Non-profit
Science Feedback	0.15	0.09	0.21	Non-profit
Snopes	0.6	0.63	0.58	Non-profit
ABC News	0.94	0.95	0.93	Prominent media
Associated Press	0.77	0.79	0.75	Prominent media
Reuters Fact Check	0.41	0.39	0.42	Prominent media
USA TODAY	0.92	0.91	0.93	Prominent media
Washington Post Fact Checker	0.47	0.47	0.47	Prominent media
AFP United States	0.2	0.14	0.26	Less Prominent media
Daily Caller Check Your Fact	0.17	0.09	0.24	Less Prominent media
The Dispatch	0.22	0.17	0.27	Less Prominent media
Weekly Standard	0.27	0.21	0.32	Less Prominent media
N	720	360	360	

Table C.7: Familiarity Rate (Proportion Familiar) of Fact-checking Sources: Study 2

	All	Democrats	Republicans	Affiliation
FactCheck.org	0.43	0.43	0.43	Academic
Lead Stories	0.06	0.04	0.09	Non-profit
PolitiFact	0.45	0.51	0.39	Non-profit
Science Feedback	0.09	0.08	0.10	Non-profit
Snopes	0.63	0.66	0.60	Non-profit
Reuters	0.75	0.74	0.76	Prominent media
USA TODAY Fact Check	0.33	0.31	0.34	Prominent media
Washington Post Fact Checker	0.35	0.38	0.32	Prominent media
Daily Caller Check Your Fact	0.10	0.08	0.12	Less prominent media
The Dispatch	0.22	0.19	0.24	Less prominent media
N	1000	500	500	

Table C.8: Familiarity Rate (Proportion Familiar) of Conventional News Sources: Study 2

	All	Democrats	Republicans
CBS	0.93	0.96	0.91
CNN	0.96	0.98	0.93
Fox News	0.94	0.93	0.96
Huffington Post	0.87	0.92	0.82
MSNBC	0.90	0.91	0.88
NBC	0.94	0.95	0.92
New York Times	0.96	0.98	0.94
PBS	0.90	0.94	0.85
USA TODAY	0.93	0.95	0.92
Washington Post	0.94	0.96	0.91
N	1000	500	500

C.3.2 Trust in Fact-checking Sources by Partisan Identity

Table C.9: Average Trust in Fact-checking Sources by Partisan Identity: Study 1

	Democrats	Republicans	Partisan difference (t-statistic)	Affiliation
FactCheck.org	0.5	0.41	4.37 ($p < .01$)	Academic
Lead Stories	0.28	0.33	-2.64 ($p < .01$)	Non-profit
PolitiFact	0.46	0.36	4.37 ($p < .01$)	Non-profit
Science Feedback	0.4	0.38	0.76 ($p = .45$)	Non-profit
Snopes	0.52	0.36	7.38 ($p < .01$)	Non-profit
ABC News	0.57	0.45	5.60 ($p < .01$)	Prominent media
Associated Press	0.62	0.45	8.46 ($p < .01$)	Prominent media
Reuters Fact Check	0.51	0.39	5.32 ($p < .01$)	Prominent media
USA TODAY	0.52	0.47	2.33 ($p < .05$)	Prominent media
Washington Post Fact Checker	0.54	0.39	7.07 ($p < .01$)	Prominent media
AFP United States	0.33	0.34	-0.48 ($p = .63$)	Less prominent media
Daily Caller Check Your Fact	0.27	0.34	-3.36 ($p < .01$)	Less prominent media
The Dispatch	0.28	0.32	-2.08 ($p < .05$)	Less prominent media
Weekly Standard	0.29	0.35	-2.83 ($p < .01$)	Less prominent media
Fact-checking in general	0.54	0.42	7.29 ($p < .01$)	
News media in general	0.44	0.34	5.67 ($p < .01$)	
N	360	360		

Table C.10: Average Trust in Fact-checking Sources by Partisan Identity: Study 2

	Democrats	Republicans	t-statistic	Affiliation
FactCheck.org	0.62	0.47	8.92 ($p < .01$)	Academic
Lead Stories	0.45	0.43	2.11 ($p < .05$)	Non-profit
PolitiFact	0.59	0.43	10.26 ($p < .01$)	Non-profit
Science Feedback	0.53	0.47	4.65 ($p < .01$)	Non-profit
Snopes	0.66	0.47	11.02 ($p < .01$)	Non-profit
Reuters	0.69	0.55	8.20 ($p < .01$)	Prominent media
USA TODAY Fact Check	0.58	0.45	8.53 ($p < .01$)	Prominent media
Washington Post Fact Checker	0.63	0.44	12.02 ($p < .01$)	Prominent media
Daily Caller Check Your Fact	0.43	0.44	0.62 ($p = .53$)	Less prominent media
The Dispatch	0.47	0.44	2.03 ($p < .01$)	Less prominent media
Fact-checking in general	0.68	0.47	13.90 ($p < .01$)	
N	500	500		

Table C.11: Average Trust in Conventional News Sources by Partisan Identity: Study 2

	Democrats	Republicans	Partisan difference (t-statistic)
CBS	0.70	0.49	12.54 ($p < .01$)
CNN	0.70	0.37	17.18 ($p < .01$)
Fox News	0.16	0.58	-22.83 ($p < .01$)
Huffington Post	0.60	0.40	11.75 ($p < .01$)
MSNBC	0.66	0.40	14.23 ($p < .01$)
NBC	0.71	0.48	13.11 ($p < .01$)
New York Times	0.78	0.48	16.29 ($p < .01$)
PBS	0.83	0.59	14.74 ($p < .01$)
USA TODAY	0.63	0.49	12.54 ($p < .01$)
Washington Post	0.72	0.46	7.95 ($p < .01$)
News media in general	0.60	0.37	13.50 ($p < .01$)
N	500	500	

C.3.3 Trust in Fact-checking Sources by Familiarity with Fact-checking

Table C.12: Average Trust in Fact-checking Sources by Familiarity: Study 1

Democrats	Unfamiliar	Familiar	Difference by fact-checking familiarity (t-statistics)
Fact-checking in general	0.48	0.58	-4.65 ($p < .01$)
Academic	0.38	0.57	-6.64 ($p < .01$)
Prominent media	0.46	0.6	-6.06 ($p < .01$)
Less prominent media	0.28	0.3	-1.13 ($p = .26$)
Non-profit	0.33	0.46	-5.65 ($p < .01$)
N	128	232	
Republicans	Unfamiliar	Familiar	Difference by fact-checking familiarity (t-statistics)
Fact-checking in general	0.39	0.43	-1.51 ($p = .13$)
Academic	0.32	0.46	-4.65 ($p < .01$)
Prominent media	0.38	0.46	-2.79 ($p < .01$)
Less prominent media	0.28	0.37	-3.27 ($p < .01$)
Non-profit	0.29	0.39	-3.84 ($p < .01$)
N	131	229	

Table C.13: Average Trust in Fact-checking Sources by Familiarity: Study 2

Democrats	Unfamiliar	Familiar	Difference by fact-checking familiarity (t-statistics)
Fact-checking in general	0.59	0.74	-8.53 ($p < .01$)
Academic	0.51	0.68	-8.99 ($p < .01$)
Prominent media	0.55	0.68	-8.84 ($p < .01$)
Less prominent media	0.45	0.45	0.17 ($p = .86$)
Non-profit	0.49	0.6	-9.93 ($p < .01$)
N	190	310	
Republicans	Unfamiliar	Familiar	Difference by fact-checking familiarity (t-statistics)
Fact-checking in general	0.47	0.46	0.60 ($p = .55$)
Academic	0.45	0.49	-1.73 ($p < .10$)
Prominent media	0.48	0.48	0.13 ($p = .90$)
Less prominent media	0.43	0.45	-0.75 ($p = .46$)
Non-profit	0.44	0.46	-0.93 ($p = .35$)
N	234	266	

C.4 Survey Questionnaire

C.4.1 Study 1

[Trust in News Media in General] In general, how much trust and confidence do you have in the mass media - such as newspapers, TV, and radio - when it comes to reporting the news fully, accurately, and fairly?

- Not at all (1)
- A little (2)
- A moderate amount (3)
- A lot (4)
- A great deal (5)

[Perceived News Accuracy] How often can you find a news source that provides accurate information about what is happening in the country?

- Never (1)
- Some of the time (2)
- About half the time (3)
- Most of the time (4)
- Always (5)

[Misinformation Concern] How concerned are you about the spread of false information through the Internet?

- Not at all concerned (1)
- A little concerned (2)
- Moderately concerned (3)
- Very concerned (4)
- Extremely concerned (5)

[Perceived Bias of Conventional Media] Do you think the news media these days tend to be unbiased or biased when presenting information?

- Most news media organizations are not biased (1)
- Most news media organizations are biased in favor of Republicans (2)
- Most news media organizations are biased in favor of Democrats (3)
- Most news media organizations are biased, but roughly equal numbers favor Republicans and Democrats (4)
- Other (5) -----

Note: The order between (2) and (3) was randomized across respondents.

[page break]

[Instruction about Source Evaluations]

Now you will be presented with a series of online news sources.

We are interested in two things:

- 1) Whether you are familiar with the news source.
- 2) Whether you trust the information that comes from the news source. That is, in your opinion, does the source provide truthful news content that is relatively unbiased and balanced.

[page break]

[Source Familiarity] Do you recognize each of the following websites?

	No (1)	Yes (2)
ABC News (1)		
AFP United States (2)		
Associated Press (3)		
Daily Caller Check Your Fact (4)		
The Dispatch (5)		
FactCheck.org (6)		
Lead Stories (7)		
PolitiFact (8)		
Reuters Fact Check (9)		
Science Feedback (10)		
Snopes (11)		
USA TODAY (12)		
Washington Post Fact Checker (13)		
Weekly Standard (14)		

Note: The order of items was randomized across respondents.

[page break]

[Source Trust] How much do you trust each of the following websites?

(Even for sources that are unfamiliar to you, we are interested in how much you would trust the information they provide.)

	Not at all (1)	Barely (2)	Somewhat (3)	A lot (4)	Entirely (5)
ABC News (1)					
AFP United States (2)					
Associated Press (3)					
Daily Caller Check Your Fact (4)					
The Dispatch (5)					
FactCheck.org (6)					
Lead Stories (7)					
PolitiFact (8)					
Reuters Fact Check (9)					
Science Feedback (10)					
Snopes (11)					
USA TODAY (12)					
Washington Post Fact Checker (13)					
Weekly Standard (14)					

Note: The order of items was kept the same with the preceding matrix on Source Familiarity.

[page break]

[Trust in Fact-checking in General] In general, how much trust and confidence do you have in **fact-checking websites** when it comes to reporting the news fully, accurately, and fairly?

- Not at all (1)
- A little (2)
- A moderate amount (3)
- A lot (4)
- A great deal (5)

[Perceived Bias of Fact-checking in General] Do you think fact-checking websites these days tend to be unbiased or biased when presenting information?

- Most fact-checking websites are not biased (1)
- Most fact-checking websites are biased in favor of Republicans (2)
- Most fact-checking websites are biased in favor of Democrats (3)
- Most fact-checking websites are biased, but roughly equal numbers favor Republicans and Democrats (4)
- Other (5) -----

Note: The order between (2) and (3) was randomized across respondents.

C.4.2 Study 2

[Instruction about Source Evaluations]

We'd like to start by presenting a series of news sources.

We are interested in whether you are familiar with them and whether you trust the information that comes from each source.

[page break]

[Source Familiarity] Do you recognize each of the following websites?

	No (0)	Yes (1)
FactCheck.org (1)		
PolitiFact (2)		
Washington Post Fact Checker (3)		
Snopes (4)		
USA TODAY Fact Check (5)		
Reuters (6)		
Daily Caller Check Your Fact (7)		
Science Feedback (8)		
Lead Stories (9)		
The Dispatch (10)		
PBS (11)		
New York Times (12)		
NBC (13)		
Washington Post (14)		
USA TODAY (15)		
CBS (16)		
CNN (17)		
MSNBC (18)		
Huffington Post (19)		
Fox News (20)		

Note: The order of items was randomized across respondents.

[page break]

[Source Trust] How much do you trust each of the following websites?

(Even for sources that are unfamiliar to you, we are interested in how much you would trust the information they provide.)

	Strongly distrust (1)	Somewhat distrust (2)	Neither distrust nor trust (3)	Somewhat trust (4)	Strongly trust (5)
FactCheck.org (1)					
PolitiFact (2)					
Washington Post Fact Checker (3)					
Snopes (4)					
USA TODAY Fact Check (5)					
Reuters (6)					
Daily Caller Check Your Fact (7)					
Science Feedback (8)					
Lead Stories (9)					
The Dispatch (10)					
PBS (11)					
New York Times (12)					
NBC (13)					
Washington Post (14)					
USA TODAY (15)					
CBS (16)					
CNN (17)					
MSNBC (18)					
Huffington Post (19)					
Fox News (20)					

Note: The order of items was kept the same with the preceding matrix on Source Familiarity.

[page break]

[Trust in the News Media in General] In general, how much do you distrust or trust **the news media** when it comes to providing accurate information?

- Strongly distrust (1)
- Somewhat distrust (2)
- Neither distrust nor trust (3)
- Somewhat trust (4)
- Strongly trust (5)

[Perceived Bias of Conventional Media] Do you think the news media these days tend to be unbiased or biased when presenting information?

- Most news media organizations are not biased (1)
- Most news media organizations are biased in favor of Republicans (2)
- Most news media organizations are biased in favor of Democrats (3)
- Most news media organizations are biased, but roughly equal numbers favor Republicans and Democrats (4)

- Other (5) -----

Note: The order between (2) and (3) was randomized across respondents.

[Trust in Fact-checking in General] In general, how much do you distrust or trust **fact-checking websites** when it comes to providing accurate information?

- Strongly distrust (1)
- Somewhat distrust (2)
- Neither distrust nor trust (3)
- Somewhat trust (4)
- Strongly trust (5)

[Perceived Bias of Fact-checking in General] Do you think fact-checking websites these days tend to be unbiased or biased when presenting information?

- Most fact-checking websites are not biased (1)
- Most fact-checking websites are biased in favor of Republicans (2)
- Most fact-checking websites are biased in favor of Democrats (3)
- Most fact-checking websites are biased, but roughly equal numbers favor Republicans and Democrats (4)
- Other (5) -----

Note: The order between (2) and (3) was randomized across respondents.

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