

“Trust, Then Verify”: When and Why People Fact-Check Partisan Information

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Using two experiments, the present studies examine the motivations (accuracy goals versus directional goals) underlying verification intentions and fact-checking. Study 1 explores the role of news article uncertainty and ideological congruence in motivating individuals to fact-check, proposing a mediation model that involves perceptions of speaker credibility and message accuracy. Study 2 complements these findings and tests the ability to reduce ideological bias by providing readers with a forewarning “note from the editor” regarding the partisan nature of the article. The findings point to the importance of considering the motivations for fact-checking and the need to distinguish between “affirming fact-checkers” and “informing fact-checkers.”

Keywords: fact-checking, credibility, motivated reasoning, uncertainty, perceived accuracy

Although a growing literature points to clear benefits of exposure to fact-checking, its potential gains matter only to the extent that people are actually exposed (Graves & Amazeen, 2019). Simply put, while the positive influence of fact-checking in controlled settings is undeniable (for a meta-analysis, see Walter, Cohen, Holbert, & Morag, 2019), it is unclear if these effects can be translated into real-world scenarios where people can voluntarily choose their media diets and fact-checks seem to receive a fraction of the media attention that “fake news” receives (Vargo, Guo, & Amazeen, 2018). Put differently, referring to fact-checking sites takes time and effort, and audiences might be resistant to verify information, particularly when dealing with partisan or controversial issues (Edgerly, Mourão, Thorson, & Tham, 2020). Moreover, extant research points to partisan biases in the selection (Hameleers & van der Meer, 2019), processing (Walter & Salovich, 2021), and sharing (Shin & Thorson, 2017) stages of fact-checking. Thus, the issue of ideological congruence adds another level of complexity to the efficacy of fact-checking. As such, the question of when and why people fact-check becomes increasingly important.

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The present studies aim to address this gap by employing two experimental studies in the partisan context of gun-related policy. Study 1 explored the role of information uncertainty and ideological congruence in motivating individuals to fact-check, proposing a mediation model that involves speaker credibility and message accuracy. Beyond a replication attempt, Study 2 tested the ability to reduce directional, consistency motivations by providing a general warning regarding the partisan nature of the topic.

On Fact-Checking, Its Strengths and Limitations

Although the practice of fact-checking continues to attract much theoretical and empirical interests, the scholarly attention given to its different facets has been uneven. In a recent review, Nieminen and Rapeli (2018) concluded that "most of the literature focuses either on fact-checking as a profession or on its corrective potential" (p. 296). Additionally, studies have attempted to identify the predictors of audience awareness of and attitudes toward fact-checking websites. For example, Shin and Thorson (2017) found that "partisans selectively share fact-checking messages that cheerlead their own candidate and denigrate the opposing party's candidate" (p. 233). Likewise, Edgerly and colleagues' (2020) results indicated that, when news headlines are congruent with ideological leanings, individuals exhibit a greater intent to verify headlines that are perceived to be true. Similarly, studies have illustrated that when individuals are faced with the option to read an incongruent fact-checker, they are more likely to avoid the disconfirming information (Hameleers & van der Meer, 2019). Altogether, these findings paint a somewhat paradoxical image of fact-checking. Although exposure to fact-checking corrects misinformation, individuals often fact-check to confirm preexisting beliefs rather than ensure that these beliefs are accurate. In the following sections, we explore two potential motivations for fact-checking—accuracy goals and directional goals—that arise when people encounter information. We then propose an underlying mechanism that explains when and why individuals choose to fact-check.

Study 1: Fact-Checking Motivations—Accuracy Goals and Directional Goals

It stands to reason that people seek to verify information when they are uncertain of its veracity. This type of uncertainty can arise when desired information is unavailable, ambiguous, or inconsistent, such that "people feel insecure of their own state of knowledge or in the state of knowledge in general" (Brashers, 2001, p. 478). If people perceive that they do not have the desired amount of knowledge on a given topic, they are typically inclined to pursue additional information (Berger & Kellermann, 1994). This is because a lack of knowledge has generally been described as an adverse state of being, which people are motivated to reduce (Reiman, Fusselman, Fox, & Raichle, 1989).

Applying these assumptions to political communication, studies have found that perceived discrepancy in the amount of information possessed and information desired is a positive predictor of policy-related information-seeking (Thompson, Bevan, & Sparks, 2012). Keeping in mind that uncertainty is an uncomfortable state and that voters like being certain (Bartels, 1986), ostensibly, information uncertainty should encourage individuals to turn to fact-checking as a way to address knowledge gaps and reach more accurate conclusions. In fact, studies have found that anxiety associated with uncertainty leads individuals to be more receptive to corrective information and less susceptible to partisan biases (Weeks, 2015). Similarly, Amazeen, Vargo, and Hopp (2019) demonstrated that the need for orientation, an individual-level

need for cues to reduce uncertainty, is a strong predictor of sharing fact-checking content on social media. To this end, if individuals are driven to fact-check to manage perceived uncertainty, situations where news stories raise uncertainty concerns are possible candidates for fact-checking. Therefore, the following hypothesis was posed:

H1: Uncertainty in a news article increases (a) intent to verify and (b) fact-checking behavior.

Uncertainty reduction, however, is not the only motivation driving behavior. Much of the research on political misinformation has repeatedly shown that, in value-laden domains, individuals are less likely to engage in pursuit for the truth and often act to simply affirm preexisting beliefs (Walter et al., 2019). From a normative perspective, while accuracy goals should account for people's intent to fact-check political information, there is a significant body of knowledge that consistently demonstrates that people seek out and interpret information in accordance with their preexisting beliefs and objectives—a phenomenon referred to as motivated reasoning (Chaiken, 1980). Following this view, Taber and Lodge (2006) distinguished between two different motivations to seek out and interpret information: (a) accuracy goals (i.e., the motivation to become more accurate) and (b) directional goals (i.e., the motivation to confirm prior attitudes about the world).

Directionally motivated reasoning is particularly likely when the relevant issue is political in nature (Kunda, 1990; Taber & Lodge, 2006). People do not evaluate political information evenhandedly but rather use it as an opportunity to affirm preexisting beliefs. Hence, information that supports one's beliefs is taken at face value while information that challenges existing beliefs tends to be called into question and scrutinized (Kunda, 1990; Walter & Tukachinsky, 2019). This means that people often perceive arguments that align with their previously held attitudes to be stronger and more credible than opposing arguments. It is unsurprising, therefore, that studies repeatedly find that fact-checking carries stronger effects on message-relevant beliefs when the corrective information is ideologically congruent (versus incongruent) with the audience's preexisting belief (e.g., Amazeen, Thorson, Muddiman, & Graves, 2018; Thorson, 2016). This tendency to readily accept ideologically congruent information while being suspicious and skeptical toward incongruent information may also affect people's motivation to fact-check. Simply put, individuals may be reluctant to fact-check information if they think it may contradict their positions while being all too eager to fact-check if the information is likely to validate their positions. Following this logic, the second hypothesis is proposed:

H2: Ideological-congruence of a news article with people's preexisting beliefs decreases (a) intent to verify and (b) fact-checking behavior.

The Mediating Role of Speaker Credibility and Message Accuracy

To gain a better understanding of the process underlying fact-checking behavior, we considered two potential mediators that can account for the indirect effects of information uncertainty and ideological congruence on fact-checking behavior—judgments of speaker credibility and message accuracy. First, *speaker credibility* (also known as *source credibility*) refers to perceptions of a source's ability or motivation to offer accurate and truthful information, with studies demonstrating that speakers deemed trustworthy or

having relevant expertise tend to enjoy higher credibility ratings (Hovland & Weiss, 1951). In the persuasion literature, source credibility is defined as "the attitude toward a source of communication held at a given time by a receiver" (McCroskey, 1997, p. 87) and is typically based on perceptions of source expertise, trustworthiness, and goodwill (Pornpitakpan, 2004). Source credibility is viewed as a heuristic that people rely on when lacking the motivation or ability to carefully attend to the information (for a review, see Eagly & Chaiken, 1993). Keeping everything else equal, information attributed to credible sources is more likely to be trusted (Pornpitakpan, 2004). Following this logic, if there is uncertainty regarding the expertise or the trustworthiness of a source, their perceived credibility should suffer, which may hinder the overall impact of a message. If people cannot trust the source of the message, they will be more likely to verify and fact-check the information.

This scenario, however, assumes that people are driven by accuracy motivations rather than directional motivations. In the latter case, assessment of the source is likely to be influenced by preexisting beliefs and the ideological position of the source. As argued by Lewandowsky, Ecker, Seifert, Schwarz, and Cook (2012), "judgments of a source's credibility are themselves a function of beliefs: If you believe a statement, you judge its source to be more credible" (p. 119). According to this view, judgments of credibility are subject to motivated reasoning similar to other beliefs or attitudes. Speakers who deliver ideologically congruent messages should be judged as more credible, which in turn should reduce intent to fact-check. Conversely, people would be more likely to distrust speakers of ideologically incongruent information, which may lead to greater intent to fact-check. Consequently, source credibility may mediate the effect of message-related uncertainty and ideological congruence on verification intentions.

Second, similar to speaker credibility, the perceived accuracy of a message (also referred to as "message credibility") can play an important role in explaining decisions to fact-check. *Message credibility* is defined as "an individual judgment of the veracity of the content of communication" (Appelman & Sundar, 2016, p. 65) and is often evaluated using perceptions of accuracy, believability, and authenticity. Messages perceived as accurate tend to be more effective in shaping subsequent judgments (Appelman & Sundar, 2016). In the context of misinformation, Mena (2019) illustrated that perceived message accuracy can serve as a mediator between forewarnings and intentions to share false information, such that forewarnings can reduce perceived message accuracy, which in turn lowers the likelihood that people will share information. Based on this, we anticipate that raising uncertainty regarding the message will reduce perceived message accuracy, increasing people's likelihood to fact-check the information.

Analogous to source credibility, however, judgments regarding the accuracy of the message can be colored by individuals' preexisting beliefs. In line with this logic, ideological congruence should enhance perceived message accuracy, ultimately reducing the likelihood of fact-checking the information. Hence, while it seems logical that message uncertainty, speaker credibility, and message accuracy should be deeply intertwined, it remains to be seen how this relationship manifests itself in value-laden domains. After all, when it comes to ideological disagreements, research has shown that people are not necessarily guided by accuracy motivations (Kunda, 1990; Taber & Lodge, 2006).

Finally, when investigating the conditions under which people fact-check, it is important to distinguish between intentions and actual behavior. Behavioral intentions can explain a considerable portion

of actual behavior, but intention is an imperfect predictor (Sutton, 1998). It can be helpful, therefore, to include both behavioral intentions and actual behavior when trying to predict fact-checking behavior (Ajzen & Fishbein, 1977). Further, skepticism toward new information and fact-checking are often lauded as positive behaviors (Vraga & Tully, 2019). Yet, verifying information can be time-consuming and can require significant effort to complete (Tandoc et al., 2017). As a result, actual fact-checking behavior may require stronger motivations to complete than self-reported fact-checking intentions (Edgerly et al., 2020). Accordingly, while fact-checking is believed to be more likely to occur under conditions of uncertainty and ideological congruence, it is not known if these motivations are strong enough to lead individuals to engage in actual fact-checking behavior. To account for this potential discrepancy between positive response biases and behavior, both fact-checking intentions and actual fact-checking behavior should be assessed. This section can be summarized in the following two hypotheses:

H3: The effect of news article uncertainty on fact-checking is serially mediated through (a) perceptions of speaker credibility and intent to verify information, as well as through (b) perceptions of message accuracy and intent to verify.

H4: The effect of ideological congruence on fact-checking is serially mediated through (a) speaker credibility and intent to verify information, as well as through (b) message accuracy and intent to verify.

Given prior evidence suggesting that uncertainty leads to information-seeking and that anticipation of ideologically congruent corrections leads to greater fact-checking behavior, it stands to reason that people will be more likely to seek fact-checking content under conditions of uncertainty and ideological congruence. In other words, people should be more likely to fact-check information in situations where they notice a lack of certainty concerning the topic and anticipate that the correctional content sought will be ideologically congruent. That said, there is scant research examining the conjoint effects of these two variables and therefore not enough grounds for a hypothesis, yet there may be interaction between perceptions of uncertainty and ideological congruence. Therefore, we also propose the following research question:

RQ1: Is there an interaction between the ideological congruence of a news article and its uncertainty with respect to effects on (a) intent to verify information and (b) fact-checking behavior?

Method: Study 1

Design and Participants

The current study employed a 2 (ideologically congruent/ideologically incongruent) x 2 (with uncertainty/without uncertainty) factorial design. On December 9, 2019, 263 participants who were 18 years or older, English-speaking, and self-identified as either Democratic or Republican were recruited from Qualtrics to participate in a study dealing with "exposure to messages." After removing incomplete responses, the final sample included 236 participants and, on average, 12 ($SD = 4.83$) minutes were required to complete the entire procedure. Using previous studies that examined the influence of motivated reasoning as a benchmark (e.g., Hameleers & van der Meer, 2019), an a priori power analysis (with

G*Power; Faul, Erdfelder, Buchner, & Lang, 2009) indicated that approximately 190 participants are needed to record a weak to moderate effect size ($f = .30$, $\alpha = .05$, $1-\beta = .80$).

The majority of the sample were female (69.1%), and the average age was 42 ($SD = 14.93$). The sample was predominately White (66.5%), followed by Black (22%), Hispanic (5.1%), Asian (4.2%), and other (2.1%). Nearly 72% of the sample had either attended or graduated from college, and 62.7% were employed either full or part time. To ensure a relatively equal representation of self-identified Democrats and Republicans, soft quotas (50% and 50%) were set for participants' political affiliations, resulting in the recruitment of 125 (53%) Democrats and 111 (47%) Republicans.

Procedure and Material

After passing the political affiliation screener (removing self-identified independents), participants were randomly assigned to read one of four versions of the same news article that varied its political position on gun policy and the level of uncertainty attributed to the speaker. In particular, the news article was manipulated to either provide arguments in support of restricting gun ownership ("gun control") or removing restrictions on gun ownership ("gun rights"), resulting in participants being exposed to messages that were either congruent or incongruent with their political affiliations (for a similar approach, see Hameleers & van der Meer, 2019). In addition to the gun-related positions of the article, we also manipulated the level of uncertainty around the speaker's partisan claims concerning gun-related policies (pro-gun or pro-gun control; see supplementary materials for a complete version of the stimuli).²

The messages used a typical news article template and ranged from 402 to 578 words, depending on the condition. Adapted from Graves and associates (2018), the news article, attributed to a "Pennsylvania-based newspaper," covered the "London Global Forum on Guns," providing an interview with Erica Taylor, the founder of a fictitious group, "Responsible Firearms International" (gun-rights condition) or "Citizens for Gun-Free Streets" (gun-control condition). Using an interview format, both versions of the article included four false statements (e.g., "virtually 100% of shooters have some kind of a mental illness history"). Depending on the experimental condition, all false statements advocated for either less restrictive gun ownership rules ("Empirical data shows that semiautomatic rifles were used only in 1% of severe mass shootings where five or more people are either shot or killed") or more restrictive gun ownership rules ("Empirical data shows that semiautomatic rifles were used in 29% of severe mass shootings, where five or more people are either shot or killed"). The false statements used in this experiment were selected because they were previously fact-checked and found to be completely false. By focusing on falsifiable claims, we were able to create logically equivalent conditions that differed only with respect to the direction of the false claim. For instance, while in reality, semiautomatic rifles were used in 15% of severe mass shootings, the pro-gun-rights condition inflated the number to 29%, whereas the pro-gun-control condition reduced it to 1%. Gun rights was selected as the topic of interest because it is of high-issue importance and is accessible to many people. Several studies have shown that content must be of sufficient personal importance to elicit the desire to seek additional information as well as other motivated behaviors (Mullinix, 2016). Widespread

² Please see the supplementary file at: <http://www.filedropper.com/supplementarymaterial>

issue accessibility should also ensure that most people would have at least a passing familiarity and would not need lengthy background information.

Beyond manipulating the ideological congruence of the false claims made by the partisan speaker, participants were exposed to news articles that differed with respect to the uncertainty regarding the speaker's claims. In the uncertainty-inducing conditions following each false statement, the interviewing journalist questioned the speaker's claims by requesting further evidentiary support. For example, after the speaker wrongfully claimed that semiautomatic rifles were used in 1% (pro-gun-rights condition)/29% (pro-gun-control condition) of severe mass shootings, the interviewer asked for the source of the empirical data. In turn, the speaker failed to provide the source and simply restated the false claim. In line with standards of journalistic practice, the interviewer maintained impartiality by not directly contradicting the speaker but rather by requesting supporting evidence. This format allows the interviewer to highlight any doubt around the speaker's evidence without directly alerting participants that the message content is false. This approach was selected to avoid confounding effects that could occur if participants estimated their perceived uncertainty using their political ideology. The manipulation of message content also maintains focus on message effects.

Measures

Manipulation Checks

Participants were asked whether the position of the speaker at the Global Forum on Guns "Favors gun rights (fewer restrictions to gun ownership)," "Favors gun control (more restrictions to gun ownership)," or "Not sure." Additionally, participants were asked to what extent the comments made by "Erica Taylor (the speaker at the Global Forum on Guns)," were questioned by the journalist conducting the interview, ranging from (1) "Strongly disagree" to (7) "Strongly agree" ($M = 4.63$, $SD = 1.91$).

Speaker Credibility

Adapted from Flanagin and Metzger (2000), the perceived credibility of the speaker was assessed by asking participants to evaluate Erica Taylor on a seven-point semantic differential scale, which included five sets of diametric adjectives: "Untrustworthy" to "Trustworthy;" "Undependable" to "Dependable;" "Dishonest" to "Honest;" "Unreliable" to "Reliable;" and "Insincere" to "Sincere," respectively ($M = 4.48$, $SD = 1.82$, $\alpha = .96$).

Message Accuracy

Adapted from standard thought-listing procedures (e.g., Petty & Cacioppo, 1986), participants were given unlimited time to list up to 10 statements they recalled from the news article. Then, each participant was asked to revisit their own listed statements and code each one on a five-point scale ranging from (1) "Completely true" to (5) "Completely false." If the statement was irrelevant, participants were instructed to classify it as "Not applicable." A perceived accuracy index was calculated by averaging all message-relevant

statements and then reversing the scale, such that higher scores indicated greater perceived accuracy ($M = 3.81$, $SD = 1.09$).

Intent to Verify

Adapted from Flanagin and Metzger (2000), intent to verify the news article was gauged with a seven-item Likert-type scale that asked participants how likely they were to engage in seven different news verification behaviors, including "Check to see that the information in the article is complete and comprehensive." The response options ranged from (1) "Not at all likely" to "Extremely likely" ($M = 4.47$, $SD = 1.66$, $\alpha = .94$).

Fact-Checking Behavior

At the end of the study, participants were told that the "article they just read was a subject of a recent fact-check by a leading fact-checker." Participants were then provided with an option to read the fact-checking message and its verdict regarding the accuracy and factuality of the news article. If participants selected "yes" (128; 54.2%), they were provided with fact-checking messages related to the claims made in the article.

Results and Discussion: Study 1

Manipulation checks performed as expected. Participants in the gun-rights condition perceived the speaker to be less favorable to gun ownership restrictions (70.4% versus 23.5%) compared with their counterparts in the gun-control condition who viewed the speaker as being favorable toward restrictions to gun ownership (80.2% versus 16.5%); $\chi^2 = 77.07$, $p < .001$. Likewise, participants in the uncertainty condition, on average, were more likely to agree that the journalist conducting the interview questioned the comments made by the speaker ($M = 4.88$, $SD = 1.96$) compared with participants in the condition without uncertainty ($M = 4.38$, $SD = 1.83$); $t(234) = 2.01$, $p = .046$, $d = 0.26$.

In contrast with H1a, message uncertainty did not significantly increase participants' verification intentions ($t(234) = 1.78$, $p = .08$), though participants in the uncertainty condition reported somewhat higher intentions to verify the article ($M = 4.66$, $SD = 1.72$), compared with those in the no uncertainty condition ($M = 4.28$, $SD = 1.59$). Likewise, against our prediction (H1b), message uncertainty did not affect the likelihood to fact-check the news article ($\chi^2 = 0.23$, $p = .63$). Thus, the data did not support H1.

Further, there was no significant difference between participants in the ideologically congruent condition ($M = 4.45$, $SD = 1.72$) and those in the ideologically incongruent condition ($M = 4.48$, $SD = 1.61$) with regard to intent to verify the information ($t(234) = 0.18$, $p = .86$). Likewise, although participants in the ideologically incongruent condition were more likely to fact-check the news article compared with their counterparts in the ideologically congruent condition (56.3% versus 43.8%), the difference was only borderline significant ($\chi^2 = 3.03$, $p = .082$). Hence, there was no support for H2.

RQ1 was tested with a simple moderation model in PROCESS (Hayes, 2018; Model 1) treating ideological congruency and message uncertainty as predictors of verification intentions and fact-checking behavior. There was no support for an interaction effect on intention to verify ($b = .43$, $SE = .43$, $p = .33$, 95% CI [-.43, 1.28]) or fact-checking behavior ($b = .45$, $SE = .53$, $p = .40$, 95% CI [-.60, 1.49]).

To test H3 and H4, we used sequential mediation models in PROCESS (Hayes, 2018; Model 6), treating message uncertainty as its main predictor, perceived message accuracy/speaker credibility as first mediators, intent to verify as the second mediator, and fact-checking as the outcome.

Contrary to H3, message uncertainty did not significantly reduce message accuracy ($b = .05$, $SE = .15$, $p = .72$, 95% CI [-.23, .34]) or speaker credibility ($b = -.22$, $SE = .24$, $p = .36$, 95% CI [-.69, .25]). Likewise, the model did not retrieve any indirect effects on fact-checking through message accuracy ($b = -.01$, $SE = .05$, 95% CI [-.14, .06]) or speaker credibility ($b = .00$, $SE = .03$, 95% CI [-.06, .07]). Overall, the explained variance of the model ranged from 2.1% ($R^2_{\text{Cox \& Snell}} = .02$) to 2.8% ($R^2_{\text{Nagelkerke}} = .03$), $p = .18$.

A similar model (Model 6) assessed H4 with ideological congruence (congruent/incongruent) as the main predictor, speaker credibility/message accuracy as first mediators, intent to verify as a second mediator and likelihood of fact-checking as a binary outcome. The results indicated that exposure to an ideologically congruent news article significantly increased message accuracy ($b = .46$, $SE = .14$, $p = .001$, 95% CI [.18, .74]) and speaker credibility ($b = .74$, $SE = .23$, $p = .002$, 95% CI [.28, 1.20]). In turn, both message accuracy ($b = .43$, $SE = .10$, $p = .0005$, 95% CI [.24, .63]) and speaker credibility ($b = .35$, $SE = .06$, $p = .0005$, 95% CI [.24, .46]) increased intent to verify the information. Finally, intent to verify was a positive predictor of fact-checking behavior ($b = .53$, $SE = .10$, $p = .0005$, 95% CI [.32, .73]). The model also recorded significant mediation through message accuracy ($b = .10$, $SE = .04$, 95% CI [.04, .22]) as well as through speaker credibility ($b = .14$, $SE = .05$, 95% CI [.06, .27]). The total explained variance of the model ranged from 19% to 21% ($R^2_{\text{Nagelkerke}} = .21/.19$, $p = .005$). Figure 1 outlines the direct effects of ideological congruence, speaker credibility, message accuracy, and intent to verify on fact-checking behavior.

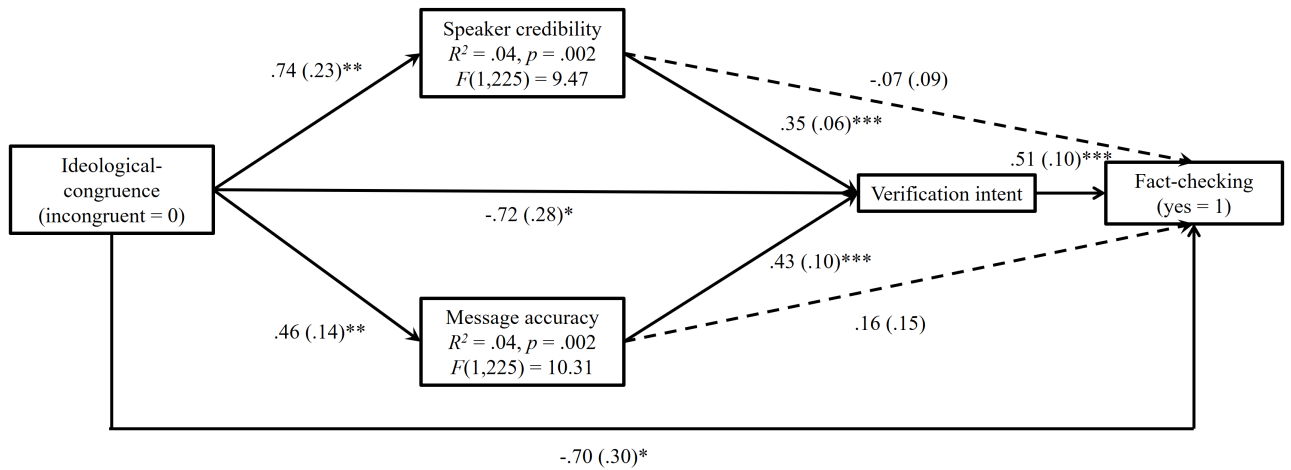


Figure 1. Unstandardized coefficients for the effects of ideological congruence, speaker credibility, message accuracy, verification intent, on fact-checking (Study 1).

*** $p < .05$, ** $p < .01$, *** $p < .001$. The dashed line represents nonsignificant relationships.**

Study 1 examined two potential motivations to fact-check political information, as well as two possible mechanisms that underlie these motivations. The results did not find any significant effect of message uncertainty on speaker credibility, message accuracy, or fact-checking. Notably, the manipulation of uncertainty was unsuccessful, as it did not affect participants' subsequent judgments. To some extent, these results support the view of gun-related policy as a highly partisan issue where judgment is guided more by political ideology than by motivation to reach an accurate belief. For instance, a Pew Research Center (2020) poll found gun control to be one of the most polarizing issues among the American electorate, second only to climate change and the environment. Further, the findings associated with ideological congruence as a predictor of fact-checking behavior can also shed light on this discrepancy. Specifically, while there was no significant direct effect of ideological congruence on fact-checking behavior, participants who were exposed to political messages that were concordant with their beliefs tended to view the speaker as more credible and the message as more accurate. This finding echoes studies that identify ideological congruence as a key predictor of political judgments (for a meta-analysis, see Walter et al., 2019).

The mediation analysis highlighted another interesting aspect of fact-checking decisions. Namely, participants were more likely to fact-check information when they perceived the speaker to be credible and the message to be accurate. Although this finding may seem counterintuitive if we consider people to be guided by accuracy motivations, it can be easily explained within the context of directional goals and motivated reasoning. In particular, prior research indicates that people tend to assume their beliefs are accurate (Fragale & Heath, 2004); therefore, they are motivated to avoid attitude-disconfirming information. Similarly, Hameleers and van der Meer (2019) found that individuals are more likely to decide to fact-check when the information provided in the fact-check is anticipated to confirm attitudes and beliefs than when this information is anticipated to disconfirm these beliefs (see also Edgerly et al., 2020). Likewise, people are more likely to choose to share fact-checks when the information benefits their political party (Shin &

Thorson, 2017). Simply put, individuals fact-check political information as a means to affirm their political beliefs rather than to make those beliefs more accurate.

That said, it is important to consider the limitations of these findings. First, it is a single study, thus there is a need to replicate the findings. Second, the ideological congruence predictor was computed using participants' political affiliation. Although this approach mitigated concerns over making gun-related attitudes particularly salient before exposing participants to the message, it can potentially risk the validity of the findings. Specifically, while political affiliation can map onto gun-related attitudes with considerable precision (Pew Research Center, 2020), it would be more accurate to base ideological congruence on people's actual attitudes toward gun control. Finally, although the findings offer important insights into the motivations that underlie political fact-checking, they fail to offer remedy to motivated reasoning. To this end, Study 2 attempts to replicate these results and address the limitations.

Study 2: Addressing Bias in Fact-Checking Behavior

Traditional interventions that attempt to shift directional-based motivations to accuracy-based motivations have used a variety of incentives such as bonus payments for correct answers (e.g., Khanna & Sood, 2018), textual appeals for accurate answers (e.g., Prior, Sood, & Khanna, 2015), warnings that participants will have to justify their attitudes (e.g., Bolsen, Druckman, & Cook, 2014), or notifications that participants will have to explain their decision-making processes (e.g., Druckman, 2012). These accuracy interventions are limited in scope and applicability, particularly in a journalistic context. Consequently, our second experiment aims to identify an alternative, scalable means of reducing the effects of motivated reasoning on fact-checking behavior by including a "note from the editor" at the beginning of the news article.

Media Literacy Interventions

One prominent strand of misinformation interventions derives from work in media literacy. Although many traditional media literacy interventions have focused on younger demographics and the potentially harmful effects of advertising and violent or sexual media content, news media literacy interventions have gained popularity and demonstrated their efficacy (Craft, Ashley, & Maksl, 2017). To this end, news media literacy is associated with greater online news skepticism (Vraga & Tully, 2019) and greater likelihood of identifying fake news stories (Jones-Jang, Mortensen, & Liu, 2019).

Forewarning is one type of media literacy intervention used in online platforms like Facebook. In these contexts, forewarnings take the form of short text that is demarcated from the rest of the content on the page. Given this evidence, we seek to test a new intervention for news consumers, raising the salience of partisan bias and motivated reasoning. By warning audiences that forthcoming news content features a partisan topic, which is likely to invoke directional processing as well as lead to the uncritical examination of "evidentiary" claims, audiences may be more conscious of the reasoning processes they use when approaching this news content. Because research has shown that reflecting on reasoning processes can help prompt accuracy motivations (Druckman, 2012), we believe that partisan forewarning messages should impact evaluations of misinformation. Therefore, in addition to testing for the relationships found in Study 1, we present the following hypothesis:

H5: Exposure to messages that forewarn (text+visual/text) audiences about the presence of partisan content attenuate the effects of ideological congruency on (a) speaker credibility and (b) message accuracy.

Method: Study 2

To build on the findings of Study 1, several changes to the methodological approach were introduced. First, the study employed a more precise measurement of ideological congruence. Specifically, after accessing the questionnaire and consenting to take part in the study, participants were instructed to indicate their agreement with the item "On a scale from 1 (strongly oppose) to 7 (strongly support), please indicate whether you support or oppose more restrictions to gun ownership." Participants who chose (4)—"neither oppose nor support"—were screened out from the study. To reduce potential threats associated with pretesting, this measure was embedded within a battery of foil questions on other partisan issues such as abortion and immigration. Then, to compute the level of ideological congruence, participants' pretest responses were transformed to range from (−3) "highly congruent" to (+3) "highly incongruent" ($M = 0.76$, $SD = 2.25$). Second, given the previous findings, the manipulation of message uncertainty was dropped. Third, to test whether the motivated reasoning biases recorded in Study 1 can be attenuated, we added a forewarning manipulation. Each participant was randomly assigned to one of three forewarning message conditions: (a) a textual forewarning message; (b) a textual forewarning message with a related visual thermometer; and (c) no forewarning.

Beyond these modifications, Study 2 used the same material and closely followed the procedure of Study 1, resulting in a 2 (ideologically congruent/ideologically incongruent) x 3 (textual forewarning/textual+visual forewarning/ no forewarning) factorial design. After removing incomplete responses, 171 participants were recruited on March 2, 2020, using a Qualtrics panel. The majority of the sample was female (61.4%), and the average age was 36.15 ($SD = 13.05$). The sample was primarily White (70.8%), followed by Black (12.3%), Hispanic (8.2%), Asian (7.0%), and other (1.8%). The majority of participants had either attended some or graduated from college (72.6%), and most were employed full or part time (63%). The same measures used in Study 1 were employed in Study 2: speaker credibility ($M = 4.61$, $SD = 1.75$, $\alpha = .96$), message accuracy ($M = 3.96$, $SD = 1.22$), intent to verify information ($M = 4.67$, $SD = 1.51$, $\alpha = .93$), and fact-checking behavior. On average, it required approximately 11 minutes ($SD = 6.24$) to complete the entire procedure.

Results and Discussion: Study 2

Manipulation checks indicate that the article functioned as expected. Participants in the gun-rights condition were more likely to perceive the speaker as favoring gun rights (57; 61.3%) as opposed to favoring gun control (28; 30.1%) or not sure (8; 8.6%). In contrast, participants in the gun-control condition viewed the speaker as favoring gun control (52; 66.7%) as opposed to favoring gun rights (19; 24.4%) or not sure (7; 9%); $\chi^2(2, N = 171) = 25.14, p < .001$.

Resonating with the findings of the first study, the results of Study 2 indicated that there were no significant differences between participants in the ideologically congruent condition ($M = 4.78$, $SD = 1.59$)

compared with those in the ideologically incongruent condition ($M = 4.58$, $SD = 1.46$) with regard to intent to verify ($t(169) = 0.86$, $p = .863$). Furthermore, there was no significant difference between participants in the ideologically incongruent condition (42,44.7%) and those in the ideologically congruent condition (32; 41.6%) with respect to actual fact-checking behavior $\chi^2(1, N = 171) = 0.17$, $p = .682$. Thus, H2 was not supported by the second experiment.

Furthermore, in line with Study 1, the results of the sequential mediation model (Hayes, 2018; Model 6) indicated that exposure to an ideologically congruent news article significantly enhanced perceptions of message accuracy ($b = .40$, $SE = .19$, $p = .033$, 95% CI [.03, .76]) and speaker credibility ($b = .84$, $SE = .26$, $p = .002$, 95% CI [.32, 1.34]). In turn, perceptions of speaker credibility increased intentions to verify ($b = .31$, $SE = .06$, $p = .0005$, 95% CI [.18, .43]) and verification intentions positively predicted fact-checking behavior ($b = .49$, $SE = .13$, $p = .0005$, 95% CI [.32, .73]). Deviating from the findings of Study 1, message accuracy was a nonsignificant predictor of intent to verify ($b = .13$, $SE = .09$, $p = .168$, 95% CI [-.06, .32]). Importantly, the model recorded significant mediation through perceived speaker credibility ($b = .13$, $SE = .06$, 95% CI [.05, .28]) but not through perceived message accuracy ($b = .03$, $SE = .03$, 95% CI [-.01, .12]). The total explained variance of the model was $R^2_{\text{Nagelkerke}} = .15/.16$, ($p = .005$). Figure 2 outlines the direct effects of ideological congruence, speaker credibility, message accuracy, and intent to verify on fact-checking behavior.

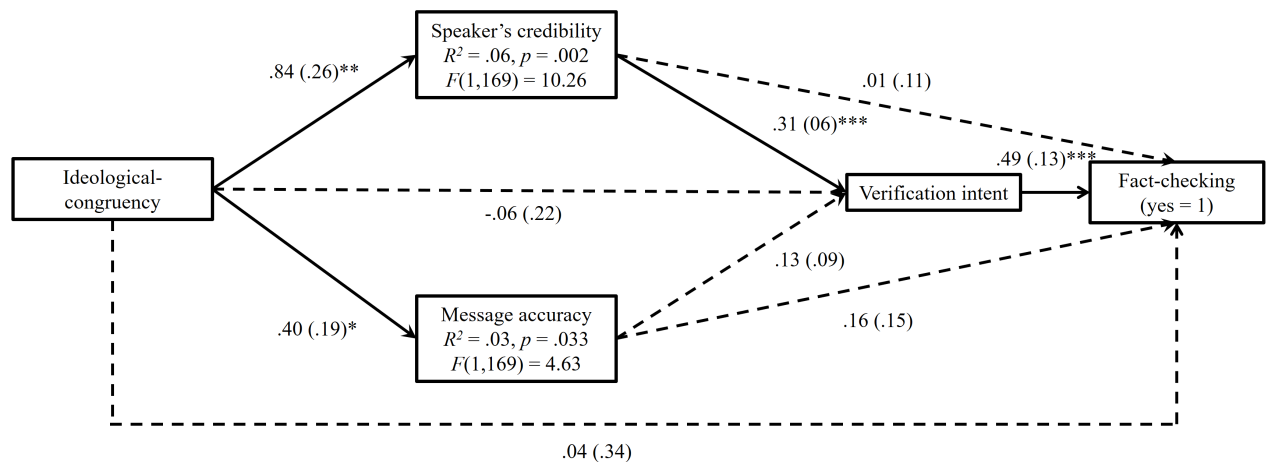


Figure 2. Unstandardized coefficients for the effects of ideological congruence, speaker credibility, message accuracy, verification intent, on fact-checking (Study 2).

* $p < .05$, ** $p < .01$, *** $p < .001$. The dashed line represents nonsignificant relationships.

The ability of forewarnings to attenuate the effects of ideological congruence on perceived speaker credibility and message accuracy was tested with Model 59 (Hayes, 2018). Ideological congruence was entered as a binary predictor, speaker credibility and message accuracy were entered as mediators, intent to verify was entered as the main outcome, and warning type was entered as a multicategorical moderator (with "no warning" as the reference category). Although there was no significant interaction between ideological congruence and text-only warnings ($b = -1.59$, $SE = .63$, $p = .356$, 95% CI [-1.83, .66]), the model identified a significant interaction between ideological congruence and text+visual warnings ($b =$

-1.95, $SE = .65$, $p = .003$, 95% CI [-3.2, -.66], $\Delta R^2 = .05$). As illustrated in Figure 3, a combination of text and visual warnings was able to attenuate ideological biases with respect to source credibility judgments, such that participants who were exposed to ideologically congruent and to ideologically incongruent misinformation did not defer in source credibility judgments. Figure 3 also illustrated that the largest gap in perceived speaker credibility among those exposed to ideologically congruent and ideologically incongruent misinformation occurred within the no forewarning condition. With respect to message accuracy, the analysis did not record any significant interactions between ideological congruence and text-only warnings ($b = -.02$, $SE = .45$, $p = .970$, 95% CI [-.91, .88]), or between ideological congruence and text+visual warnings ($b = .59$, $SE = .47$, $p = .209$, 95% CI [-.33, 1.51], $\Delta R^2 = .01$). These results provide partial support for hypothesis H5. Specifically, text+visual, but not text-only forewarning messages, helped attenuate the effects of motivated reasoning on perceived speaker credibility.

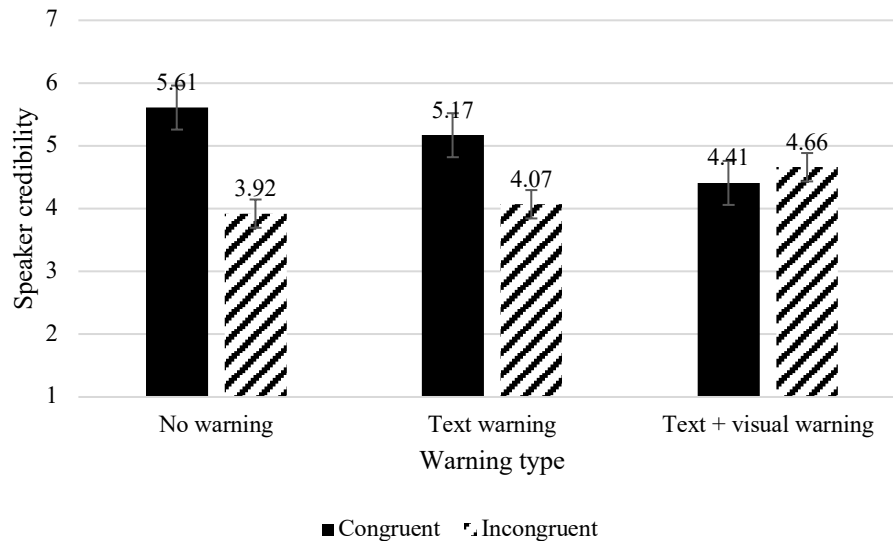


Figure 3. Means (and 95% confidence intervals) of speaker credibility by ideological congruence and warning type (Study 2).

Study 2 provided additional evidence of the role played by motivational reasoning in encouraging or discouraging people from fact-checking political information. Specifically, the more participants' views on gun policy aligned with the message, the greater accuracy and credibility they assigned to the message and its source, respectively. Then, greater source credibility was translated into increased fact-checking behavior. Notably, however, whereas Study 1 retrieved a significant positive association between perceived message accuracy and intention to verify the information, the same relationship was not recorded in Study 2.

There are several explanations for this result. First, it can be argued that the sample size in the current study was not ideal. After removing responses that were incomplete or indicated no opinion on gun rights, the sample size for this study was relatively small ($n = 171$) in comparison with studies with similar dependent variables (e.g., Metzger, Flanagin, & Zwarun, 2003). Perhaps a larger sample could have

captured a significant mediation effect given the positive association between perceived message accuracy and intention to verify. That said, while the relatively small sample size does limit the power of the study to detect significant effects, the continued presence of significant relationships across the two studies suggests that the magnitude of the effect sizes identified are large enough to detect even with smaller sample sizes. Another explanation could stem from changes to the predictor variable in Study 2. When completing Study 2, participants were asked to rate their support for gun-ownership restrictions on a scale from 1 ("strongly oppose") to 7 ("strongly support"), whereas in the first study political party preferences were used as a stand-in to predict attitudinal congruence and incongruence.

General Discussion

Despite the existing evidence surrounding information-seeking behavior, motivated reasoning, and fact-checking, most studies test the effects of fact-checking exposure rather than when and why people seek out fact-checking content. To this end, the primary objective of this article was to identify the predictors of self-selected fact-checking behavior. Specifically, the goal of Study 1 was to assess how ideological congruency and perceived uncertainty influenced verification intentions and fact-checking behavior in relation to gun policy. Study 2 sought to replicate these findings and identify a potential solution to avoid directional reasoning biases.

The results of Studies 1–2 were somewhat mixed. Findings suggest that message uncertainty did not significantly increase participants' verification intentions; nor did it affect participants' likelihood to fact-check the news article (Study 1). Similarly, there was no significant difference between participants in the ideologically congruent versus incongruent condition regarding intentions to verify or fact-checking behavior (Study 1–2). However, the effect of ideological congruency on fact-checking behavior was mediated by perceived speaker credibility (Study 1–2) and message accuracy (Study 1) and then by verification intentions (Study 1–2). This suggests that even when primed to seek more evidence, people were still no more likely to verify the inaccurate "facts" contained in the news article. Moreover, even though there was no direct effect of ideological congruency on fact-checking, the evidence of a mediated relationship between ideological congruency and fact-checking suggests that directional motivated goals tend to be stronger predictors of fact-checking behavior and result in stronger perceptions of message accuracy and speaker credibility.

Ultimately, findings from both studies point to the need to pursue research questions beyond "who fact-checks" and toward questions like "what motivates people to fact-check." We suggest that there are at least two types of fact-checkers: (a) those driven by directional goals and (b) those motivated by accuracy goals. The former type is represented by individuals who tend to fact-check congruent information when it is perceived to be accurate (Edgerly et al., 2020; Hameleers & van der Meer, 2019). Individuals on this pathway are "affirming fact-checkers," and this type of behavior poses several challenges to the normative function of fact-checking as a curb on misinformation, particularly for partisan topics and identities. Conversely, the latter type is motivated by accuracy goals, and it occurs when individuals are uncertain whether a message is true or false. Individuals on this pathway are "informing fact-checkers," and this behavior is more in line with the normative prospects of fact-checking. However, both types of fact-checkers are not equally represented in the data. Accuracy-driven fact-checking is subordinate to fact-checking that

is driven by directional goals. As such, contrasting with Silverman's (2018) call to "verify, then trust," most people, most of the time, seem to trust and only then verify (para. 19).

The current studies are subject to several limitations that should be acknowledged. First, the sample size for the second study was relatively small compared with others in this research domain. A larger sample would have reduced statistical noise and afforded greater precision (Levine, Weber, Hullett, Park, & Lindsey, 2008). While we should exercise caution when interpreting the results from any one study with a small sample, it is encouraging that the results of the second study largely align with those from the first. Second, the two studies tested a single message regarding gun control. While the two studies presented are closer to a direct replication, several scholars have identified benefits from testing multiple messages such as enhanced generalizability (Judd, Westfall, & Kenny, 2012; Shapiro, 2002). Issues of high importance may also limit the observed effects of framing interventions (Lecheler, de Vreese, & Slothuus, 2009), so alternative issues may be more sensitive to uncertainty manipulations. Further, the current study manipulated message effects only in the form of the political position on gun policy and level of uncertainty attributed to the speaker in the news article. This confines much of the subsequent analyses to main and mediation effects because of exposure to the message content. Further research in this domain could benefit from the inclusion of additional moderating variables such as source credibility to identify any interaction effects between message features and estimated source credibility. Last, the relatively high and skewed level of education in the two samples used in the current study prevented us from testing the role played by education and social media fluency in the process of fact-checking. Given that self-efficacy levels may be different based on such demographic information (Hocevar, Flanagin, & Metzger, 2014), this point should be carefully assessed in future studies.

Moving forward, there seem to be several promising directions for future studies that explore the relationships among fact-checking, motivated reasoning, and misinformation. For instance, studies could examine alternative intervention strategies to attenuate the effects of partisan-motivated reasoning on fact-checking intentions and behavior. Alternatively, research could examine the effects of motivated reasoning goals on behaviors associated with fact-checking and misinformation, such as article-sharing intentions. Last, while ideological partisans make up an important segment of the democratic public, additional studies should examine the motivated reasoning habits and effects of forewarning on independents and ideological moderates. Evidence suggests that strong partisans are more likely to engage in motivated reasoning, so people who are less biased are likely to be more open to fact-checking and accuracy-motivated information-seeking. Therefore, identifying when moderates are likely to fact-check and how they subsequently form opinions could shed light on bipartisan fact-checking solutions.

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