Fake News Cues:
Examining the Impact of Content, Source, and Typology of News Cues on People's Confidence in Identifying Mis- and Disinformation

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Using a survey of U.S. adults, this research examines the content, source, and typology cues that people rely on when assessing misinformation in the news, frequently referred to as fake news, and how those factors impact the confidence they have in their ability to identify fake news. Participants' confidence in recognizing fake news was significantly affected by their patterns of looking at news cues, such as a story's URL and author, as well as by their engaging in their own research and seeking out news that confirms what they already believe. These findings signal a need for increased, continuous news literacy education designed to empower the public to push back against the seedy allure of fake news and other forms of misinformation that pose as legitimate, objective news.

Keywords: confidence, credibility, disinformation, misinformation, fake news, news cues

The term "fake news" is most often used to describe information spread through news-oriented sources that knowingly or unknowingly contain misinformation with the potential to misconstrue otherwise legitimate information in ways that may confuse news consumers and spread false information (Cadwallader, 2018; Tandoc, D. Lim, & Ling, 2020; Tandoc, Z. W. Lim, & Ling, 2019; Wardle, 2019). While the implications of the label "fake news" remain a contentious issue, media scholars broadly agree that misinformation in the news has shifted the ways in which news is produced, consumed, and shared while also further eroding public trust and confidence in journalism. These scholars have noted that as the proliferation of fake news widens across social media channels, so too does its potential to cause harm to individuals, organizations, ideologies, and political processes (Chen, 2017; Tandoc et al., 2019, 2020).

This was perhaps most notable during the 2020 U.S. presidential election, when multiple social media platforms such as Twitter, Facebook, and Instagram began removing content deemed to be

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untruthful, misleading, or otherwise purposefully damaging (Denham, 2021; Garcia-Navarro, 2021). While social media platforms continue to push back against labeling themselves as news publishers, they nonetheless remain a critical source of news sharing and engagement. At least one recent study indicated that more than half of individuals who rely on social media for news and news-oriented information say they expect to encounter fake, miscontextualized, or misleading news there (Shearer & Mitchell, 2021). This suggests that news consumers on social media and other platforms may not trust all the news content they encounter and yet may still feel confident in their ability to recognize fact from fiction in the content they consume (Basol, Roozenbeek, & van der Linden, 2020; Nielsen & Graves, 2017; Sharma et al., 2019).

This raises the question then of what exactly makes people confident in their ability to recognize fake news. Regardless of how they choose to interact with such content—either in dispelling or publicly disproving news they believe to be fake, sharing that content, or disregarding the content—people increasingly expect to see, and believe they can recognize, fake news broadly in news content (Byrd & John, 2021; Shearer & Mitchell, 2021). As more people connect with each other and with information in social media spaces, they are more and more likely to engage with content and sources that confirm what they already believe to be true, regardless of whether the information they encounter is actually true or comes from a reliable or verifiable source (Winter, Metzger, & Flanagin, 2017). Additionally, there is a greater likelihood that people will encounter complex forms of fake news—which include the overt (e.g., fictionalized events) and the subtle (e.g., content that appears to come from reliable sources, or content that has been slightly altered or miscontextualized)—that challenge their ability to parse fact from fiction for themselves.

While some scholars and practitioners have prescribed possible solutions to combat fake news, suggesting machine learning tools or means of improving individual levels of confidence in identifying fake news, analyses of what exactly may cue people's confidence in recognizing fake news remains sparse. That confidence is a crucial element in reducing the spread of mis- and disinformation, which otherwise sows confusion, mistrust, and partisanship, and undermines informed analysis (Nyilasy, 2019; Sharma et al., 2019; Tandoc et al., 2020). By examining emergent typologies of fake news and considering ways in which people perceive the credibility of news content and sources, this study advances understandings of how certain nuances of news may drive perceptions of fake news and bolster confidence in recognizing mis- and disinformation—an important step in the process of developing improved confidence in identifying those materials and taking action to correct them (Wesslen et al., 2019).

This survey of U.S. adults analyzes the impact on people's confidence in identifying fake news based on the content and source credibility cues they look to when assessing fake news, as well as the contextual elements within content that they rely on and their evaluations of fake news typologies. The results indicate that confidence in identifying fake news is drawn from a notable dependence on particular cues and personal research to determine whether a story contains mis- or disinformation.

Literature Review

More than 3 billion people globally now use social media, representing nearly 40% of the world's population (Williams, 2017). Many users navigate between multiple platforms daily, seeking out interactivity with other users regardless of existing policies or norms that may prevent other users from such

engagement. Such is the case for journalism, where audiences find journalists who are more connected, interactive, and reciprocal to be more credible than those who are less so (Borger, van Hoof, & Sanders, 2016; Jahng & Littau, 2016; Lewis, Holton, & Coddington, 2014). Nearly two thirds of social media users in the United States get their news from social media, with many making use of upward of nine platforms daily (Shearer & Gottfried, 2017; Shearer & Mitchell, 2021). This has created an information environment where content focused on breaking news stands out from the mundane, capturing more public attention and spreading more quickly. Snippets of news about natural disasters, developing terrorism attacks, or scientific discoveries have greater potential to reach further and faster through social media than other stories—at the same time, so does content containing information that is misleading or otherwise false (Vosoughi, Roy, & Aral, 2018). On Twitter, for example, fake news travels six times faster than truthful news and is 70% more likely to be retweeted regardless of the news topic (Vosoughi et al., 2018).

This challenges the authoritative and gatekeeping roles of journalists. Social media content is considered news, and often of the reliable kind if its source is an authoritative figure, such as a journalist (Tandoc et al., 2018, 2020). The public also relies on content accessibility and timeliness, and news topic (e.g., politics, sports, science), as well as source cues such as gender, physical appearance, ethnicity, and connectedness to authoritative sources such as government or news organizations (Jahng & Littau, 2016; Morris, Counts, Roseway, Hoff, & Schwarz, 2012; van der Meer, Verhoeven, Beentjes, & Vliegenthart, 2017). However, source quality does not always drive people's decisions about the quality of truthfulness of the news and news-related content they encounter (Westerwick, Johnson, & Knobloch-Westerwick, 2017). In other words, people routinely gravitate toward content that is easier to process, is congruent with their attitudes, and does not force them to question long-held or deeply rooted beliefs (Winter et al., 2017).

As Wardle (2017a, 2019) noted, the lines between truthful news and fake news have blurred dramatically over the past decade as the layers of fake news have grown more intricate. To begin unpacking those—and perhaps more importantly, what to do about them—this study provides a brief overview of the types of fake news circulating alongside truthful news and discusses ways in which people make sense of fake news through the lens of content and source credibility to bolster their confidence in identifying fake news themselves. Understanding what exactly fake news is and what possible cues people may rely on to parse it out from factual information undergirds this study, which is the first of its kind to consider how the public's confidence in recognizing news relies on content and source credibility, contextual elements within news content, and typologies of fake news when separating fact from fiction.

Confidence in Identifying Fake News

Individual confidence develops based on complex information processing (Chaxel, 2016) in which a person analyzes an issue or problem until he or she believes that he or she has arrived at the necessary knowledge or has acquired sufficient skills to handle the issue (Wan & Rucker, 2013). The path to developing confidence in one's ability to assess information is tenuous, because incomplete or incongruous data undermine burgeoning confidence (Burke, 2010). In addition, people will process information in different ways based on the level of confidence they have in the ideas they are evaluating and the perceived relevance of those ideas to each person's life and interests (Wan & Rucker, 2013). The more relevant the information is to the person, the greater the depth of his or her cognitive processing. Confidence also is affected by

circumstance and social comparison: In certain situations, people will over- or underestimate confidence in their own abilities when they feel their knowledge is being judged against others' (Matz & Hinsz, 2000; Tirso & Geraci, 2020). This confidence also often comes without a nuanced understanding of what drives it. In the case of identifying fake news, for example, people may indicate that they are confident in their ability to recognize fake news, but what exactly makes them confident in their assessment is unclear.

When one is examining potential misinformation, cognitive processing involves determining the veracity of news content; this can require heavy mental lifting, especially if a person hasn't cultivated news literacy skills to help process that information. Becoming confident in one's own ability to identify fake news requires navigating the labyrinth of data they encounter every day to determine what is objective, legitimate news and what is misinformation masquerading as "real news." While machine learning and other digital tools, along with informed users, may help social media platforms identify and restrict fake news (Lyons, 2018; Sharma et al., 2019), individual confidence in recognizing fake news provides a keystone step in the process. Facebook and other platforms that are critical in the dissemination of news-oriented content continue to develop tools that empower individuals to be more confident in identifying fake news first so they can then be more prepared to take action against such content (Hutchinson, 2020; Lyons, 2018).

Although some research has focused on how individuals fact-check in social media spaces (Jun, Meng, & Johar, 2017; McNair, 2017; Wenzel, 2019), relatively little work has been done to understand what components of information cue individuals to fake news and how, if at all, people's belief in their ability to recognize fake news might be impacted by those cues. Schwarzenegger (2020) found through in-depth interviews that individuals develop and hold personal epistemologies for interacting with the news, including varying levels of confidence. This confidence describes "how fit individuals believe they must be to identify false information, confirm trustworthiness, and filter the truth" (Schwarzenegger, 2020, p. 371). In his findings, Schwarzenegger (2020) noted that individuals who expressed higher levels of confidence also believed they could navigate through truthful and fake news and that other less confident individuals likely could not. This confidence is combined with a number of individual factors and may rely, at least in part, on the perceived credibility of media messages.

Previous studies point to cues that influence credibility perceptions and cognitive confidence. For example, Nygren and Guath (2019) found that valuing news as an important commodity was a first step in developing a sense of what makes news credible. Cognitive assessments about credibility also are drawn from impressions about the producer/source of the information, which then affected perceptions of believability (Kim & Dennis, 2019). Confirmation bias also can sway believability and credibility judgments, as well as bolster confidence in one's own assessments, even if the partisan biases are unfounded perceptions (Giner-Sorolla & Chaiken, 1994; Glynn & Huge, 2014; Kim & Dennis, 2019). Similarly, trusting misinformation and conspiracy theories is associated with lower analytic thinking and greater skepticism of media credibility (Nyilasy, 2019). Fortunately, media literacy education efforts can counterbalance some of those negative outcomes. As Paisana, Pinto-Martinho, and Cardoso (2020) found, having greater confidence in one's news literacy was linked to having more trust in news in general and greater suspicion of misinformation online. Other studies suggest that confidence in one's ability to recognize fake news may be a link toward accurately identifying it, given that the ability to delineate between forms of fake news helped enhance trust in news that people saw as credible (Quintanilha, Torres da Silva, & Lapa, 2019).

Multiplex of Misinformation

In their report to the Council of Europe, Wardle and Derakhshan (2017) argue that the collapse of local and community journalism has contributed to a rise in three primary types of fake news: *misinformation*, *disinformation*, and *malinformation*. They define misinformation as false information or misleading content without the intent of harm. This may appear as a social media consumer seeing a headline without reading the included content to gauge its truthfulness, and sharing it as fact or as hearing fake news from a trusted source (i.e., a friend or family member) and passing it along as fact. Disinformation is false information, false context, or fabricated content created and distributed with the intent to cause harm. This may appear as gossip, rumor, or the use of inaccurate information to drive an agenda. Malinformation is generally truthful information manipulated or moved from private to public spaces with the intent to cause harm. This can take the form of harassment or hate speech and often appears in political (or politicized) issues wherein the words of a political candidate or public figure are used out of context to either promote another candidate or agenda or denigrate the original source. Wardle and Derakhshan (2017) contend that by improving the ways in which fake news typologies are identified and dealt with specifically by working with technology organizations, government agencies, news organizations, the public, and other invested parties, the complexities of fake news could begin to be unraveled in ways that could lead toward a more informed public. They, along with other scholars (e.g., Boczkowski, 2016; Brummette, DiStaso, Vafeiadis, Messner, & Flynn, 2017; Wenzel, 2019), point to lower barriers to mass communication and social media, limitations to bias detection in news media spaces, and challenges to traditional cultural institutions such as journalism as drivers of fake news, urging more scholars to offer and examine pathways for improvement.

A number of scholars have taken up this call, focusing on what fake news is and how to find it (Tandoc et al., 2018, 2019, 2020; Wardle, 2017a), what causes people to believe in and share fake news (Allcott & Gentzkow, 2017; Lazer et al., 2018), and the complexities of defining fake news (Tandoc et al., 2019; Wardle, 2017a, 2017b). Because "fake news hides under a veneer of legitimacy as it takes on some form of credibility by trying to appear like real news" (Tandoc et al., 2019, p. 147), the ways in which those deceptions might cue the public warrant examination. In their analysis of research using the term "fake news," Tandoc and his colleagues (2019) offered a typology of fake news, based on levels of "facticity" and "deception," that could be broken down into categorizations of news satire, news parody, fabrication, manipulation, advertising, and propaganda (p. 137).

Wardle's (2017a) work enriches these operationalizations, offering seven types of fake news that she labels as misinformation and disinformation. These include satire or parody, misleading content, imposter content, fabricated content, false connection (e.g., headlines or other components of a story do not support the content), false context, and manipulated content. There are eight motivations behind each of these as well, including provocation, partisanship, profit, and propaganda, each adding to a complex interplay that Wardle (2017a) notes needs closer scrutinization. Understanding the motivation behind the creation and distribution of various forms of fake news can help in more quickly identifying those sources most likely to contribute to their proliferation while recognizing how media consumers engage with different types of fake news and why they can provide clues about who is most likely to recognize, and perhaps correct, fake news.

Message and Source Credibility

Appelman and Sundar (2016) previously addressed this in an effort to develop a message credibility scale. Through experimentation based on the findings of a number of media and social sciences studies focused on perceptions and performances of credibility, they found that message credibility and source credibility are distinct, with the latter characterized as authoritative, reliable, reputable, and trustworthy. The credibility of a message is far more complex. Appelman and Sundar (2016) found 10 indicators of message credibility; they suggested that messages are more likely to be perceived as credible when they are complete, concise, consistent, well presented, objective, and representative; contain no "spin"; make use of expert sources; are perceived to have an impact; and are professional. These findings, which echo those of scholars in search of credibility cues in online spaces, and online news more specifically (Chung, Nam, & Stefanone, 2012; Graefe, Haim, Haarmann, & Brosius, 2018; Metzger, Flanagin, & Medders, 2010), suggest the need to consider how people may use content, source, and other credibility cues when assessing fake news. Such a need, combined with emerging typologies of fake news, leads this study to ask the following research questions to explore the impact of multiple factors on the public's confidence in identifying fake news:

RQ1:   *How do the* content *credibility cues that people look to when assessing possible fake news affect their confidence in identifying fake news?*

RQ2:   *How do the* source *credibility cues that people look to when assessing possible fake news affect their confidence in identifying fake news?*

RQ3:   *How do the other cues people look to when assessing possible fake news affect confidence in their own ability to recognize fake news?*

RQ4:   *How do people's perceptions of different possible fake news typologies influence their confidence in identifying fake news?*

Method

This study used an online survey of U.S. adults to examine the research questions. The sample was drawn from a national panel administered by Qualtrics, an online survey firm. Qualtrics recruited participants who were 18 or older and who had at least one social media account. Data were collected in October 2017 from 553 participants. The sample was weighted to control for a greater number of female participants (n = 390, 70.7%) in the pool. The weighted sample yielded a more even gender breakdown, with 50.6% female (n = 390) and 49.4% male (n = 381). Other demographic data from the weighted sample are representative of the U.S. adult population, with 25.1% (n = 193) whose highest education level was high school; 55.9% (n = 431) who had some college or had graduated with a bachelor's degree; and 15.8% (n = 122) who had some graduate education or had earned a graduate or professional degree. Further demographic data are provided in the Results section.

Measures

Dependent Variable: Confidence in Identifying Fake News

The dependent variable in the present research is the participants' confidence in their own ability to identify fake news when they encounter it. In the survey, they were not primed with specific examples of mis- or disinformation because, as Fletcher and Nielsen (2018) found, the public broadly understands "fake news," but does not wade into categorical distinctions. To avoid confusion, participants were asked how confident they are in their ability to recognize news that is made up, which mirrors a similar question asked by Barthel, Mitchell, and Holcomb (2016) in a Pew study. Responses on a 7-point semantic differential scale ranged from 1 (*not at all confident*) to 7 (*very confident*).

Independent Variable: Credibility Factors

To answer RQ1 and RQ2, participants selected the level of importance they assign to content credibility factors and source credibility factors. Participants used a 7-point semantic differential scale, from 1 (*not important*) to 7 (*very important*), to indicate the elements of a news story that have the greatest importance when they are deciding whether it contains fake news. The measures of content credibility factors for RQ1 were drawn from Metzger, Flanagin, Eyal, and Lemus (2003) and Appelman and Sundar (2016): accurate, objective, up-to-date, believable, comprehensive, and authentic. An additional measure of "confirms what you already believe" was added to the survey based on research (e.g., Westerwick et al., 2017; Winter et al., 2017) indicating that people prefer information that does not create cognitive dissonance. The measures of source credibility for RQ2 were tested by Appelman and Sundar (2016) and included authoritative, reliable, reputable, and trustworthy. An additional factor—competent—was added from Jahng and Littau (2016).

Independent Variable: Fake News Cues

RQ3 examined other cues that participants look for when trying to determine whether news stories contain fake news. Participants were presented with a variety of features theorized in other work (e.g., Jun et al., 2017; Tandoc et al., 2019, 2020) as being factors in identifying fake news, such as scrutinizing the headline, sources, visuals and shareability of the story, and trying to find the same information on their own from a different source. Participants noted on a 7-point semantic differential scale the frequency with which they rely on the features (1 = *never* to 7 = *extremely often*).

Independent Variable: Fake News Typologies

The final research question empirically tested the fake news typologies proposed in Tandoc et al. (2019) and Wardle (2017a, 2017b) by examining the extent to which people view particular typologies as fake news. In RQ5, participants were asked to designate the extent to which they perceived certain formats to be fake news using a 7-point semantic differential scale (1 = *not at all fake news* to 7 = *totally fake news*). The formats included producing satire that doesn't intend to harm but that may fool people,

impersonating genuine sources, using one-sided facts, and misleading use of information in framing an issue or person.

Results

The dependent variable in this study—confidence in identifying fake news—was examined in a single regression analysis with all the independent variables. The overall regression was statistically predictive of confidence in identifying fake news, $R = .48$, $R^2 = .23$, adjusted $R^2 = .19$, $F(35, 735) = 6.13$, $p < .001$. Checks on regression assumptions did not reveal violations. Cook's distance values were well under 1.0 for each participant, so no significant outliers were present. The largest correlation between predictors ($r = .78$) did not indicate extremely high multicollinearity, and the highest VIF value was 4.37.

Overview of Participants

The sample was weighted to control for a greater number of female participants ($n = 390$, 70.7%) in the pool. The weighted sample yielded a more even gender breakdown, with 50.6% female ($n = 390$) and 49.4% male ($n = 381$). The participants split fairly evenly into three groups based on political ideology: 37.1% ($n = 286$) placed themselves along the liberal spectrum, 32.1% ($n = 247$) identified as neither liberal nor conservative, and the remaining 30.8% ($n = 237$) identified as conservative. The participants' ages ranged from 18 to 84 years. One quarter (25%, $n = 193$) of the participants were 18–29 years old, 37.2% ($n = 287$) were 30–49, 22.5% ($n = 173$) were 50–64, and 15.3% ($n = 118$) were 65 and older. More than three quarters (76.5%) of the participants were Caucasian ($n = 589$).

More than half (56.2%) noted Facebook as their preferred social media platform for getting news, and 57.3% said they sign on to Facebook often with the specific intent of getting news. YouTube and Twitter, to lesser degrees (34.7% and 27.4%, respectively), were frequent choices when seeking news.

Credibility Factors

To better understand how people make decisions about what constitutes fake news and how it might affect their confidence in identifying fake news, participants were asked to indicate the importance they assign to content credibility factors such as comprehensiveness and accuracy, as well as source credibility measures such as authoritativeness and trustworthiness. Table 1 presents the regression findings for RQ1, which centered on the importance people assign to content elements and the connection of those elements to predicting confidence in identifying fake news.

Table 1. Importance of Content Credibility Factors as Predictors of Confidence in Identifying Fake News.

	M	β coefficient	SE	β	p
Confirms what you believe	4.75	.11	.03	.14	.001**
Comprehensive	5.82	.16	.06	.15	.005**
Believable	6.06	−.23	.07	−.20	.001*
Authentic	6.08	−.16	.07	−.13	.029*
Accurate	6.24	.14	.08	.11	.088
Up-to-date	5.98	.04	.07	.04	.537
Objective	5.79	−.03	.05	−.03	.604

Note. M = the level of importance of each element when deciding whether a news story contains fake news, from 1 (*not important*) to 7 (*very important*).
***$p < .001$. **$p < .01$. *$p < .05$.

Standardized β coefficients (shown in Table 1) indicate that among the content credibility variables, comprehensiveness (β = .15; $p < .01$) and confirms what you already believe (β = .14; $p < .01$) are significant predictors of confidence levels while holding all other independent variables constant. Having higher support for the importance of a news story presenting comprehensive information and confirming what you already believe were linked with having greater confidence in identifying fake news. Two other two significant predictors functioned in the opposite direction: Higher beliefs in the importance of believability (β = −.23; $p < .05$) and authenticity (β = −.13; $p < .05$) were correlated with lower confidence in identifying fake news.

Previous research has shown that another dimension of credibility stems from perceptions about the producer of the information. To examine what source cues individuals look to when assessing possible fake news (RQ2), participants rated the level of importance they assign to factors that influence source credibility. Table 2 presents the regression findings for source credibility elements, such as authoritativeness and trustworthiness, and the connection of those elements to predicting confidence in identifying fake news.

As the β coefficients indicate, two variables were statistically significant predictors of confidence level. The source credibility factor of authoritativeness (β = .11; $p < .01$) suggested that the more important people believed an authoritative producer to be as they tried to determine whether a news story contained fake news, the more likely they were to have greater confidence in their ability to identify fake news. Similarly, the more important people believed it was for a news producer to be trustworthy (β = .17; $p < .05$), the more likely they were to have greater confidence in their ability to identify fake news.

Table 2. Importance of Source Credibility Factors as Predictors of Confidence in Identifying Fake News.

	M	β coefficient	SE	β	p
Authoritative	5.45	.10	.04	.11	.009**
Trustworthy	6.20	.17	.08	.14	.039*
Competent	6.05	−.08	.07	−.07	.235
Reputable	6.05	−.09	.08	−.08	.237
Reliable	6.21	.06	.08	.05	.461

Note. M = the level of importance of each element when deciding whether a news story contains fake news, from 1 (*not important*) to 7 (*very important*).
***p < .001. **p < .01. *p < .05.

Fake News Cues

With RQ3, this study empirically tests concepts theorized in previous studies (Jun et al., 2017; Tandoc et al., 2019, 2020) by examining further cues that news consumers rely on when determining whether a story contains mis- or disinformation, such as its origin, author, and sources cited. In Table 3, analysis of the individual variables shows that four were statistically significant predictors of confidence levels. Standardized β coefficients indicate that three cues—location (β = .17; $p < .001$), personal research (β = .13; $p < .001$), and author (β = .12; $p < .05$)—predicted that the more often people looked at those things, the more likely they were to have greater confidence in their ability to identify fake news. Conversely, looking at the sources cited within an article (β = −.15; $p < .05$) when trying to determine if it was fake news was negatively correlated with confidence in identifying fake news.

Table 3. Using Cues Present as Predictors of Confidence in Identifying Fake News.

	M	β coefficient	SE	β	p
Location (i.e., on website/social media feed of a news organization)	5.17	.16	.04	.17	.000***
Personal research (i.e., trying to find different source with same information)	5.23	.13	.05	.13	.006**
Sources cited within story	5.36	−.16	.06	−.15	.010*
Author	5.02	.11	.05	.12	.011*
Links in story to other sources/sites	5.20	.06	.05	.06	.277
Date published	5.13	.05	.05	.06	.301
Appearance (looks like a news story)	5.06	.05	.05	.05	.328
Shareability (story has links to share it on social media/via e-mail/via text)	4.48	.04	.04	.05	.338
Objectivity	5.18	−.04	.06	−.04	.491
Headline	5.35	−.03	.06	−.03	.664
Photos/other visuals	5.28	−.02	.05	−.02	.693

Note. M = how frequently participants look at each feature when trying to determine whether a news story contains fake news.
***p < .001. **p < .01. *p < .05.

Fake News Typologies

Other researchers (Tandoc et al., 2019; Wardle, 2017a, 2017b) have proposed typologies of fake news, which the present study uses in RQ4 to parse the extent to which people perceive various forms of mis- and disinformation to be fake news, and the impact of those beliefs on their confidence in identifying fake news. In Table 4, analysis of the individual variables shows that two were statistically significant predictors of confidence levels. One variable—mocking facts to create humor ($\beta = -.13$; $p < .01$)—had a negative relationship with confidence in identifying fake news, signaling that people who considered mocking facts to create humor to be a more serious form of fake news also had lower confidence in their ability to identify misinformation. From its β coefficient, the other predictor indicates that people who saw impersonating genuine sources ($\beta = .12$; $p < .05$) as a more egregious form of fake news were also likely to feel more confident in their ability to identify misinformation.

Table 4. Extent to Which Mis- and Disinformation Formats Are Considered Fake News as a Predictor of Confidence in Identifying Fake News.

	M	β coefficient	SE	β	p
Mocking facts to create humor	4.89	−.10	.04	−.13	.009**
Impersonating genuine sources	5.46	.12	.06	.12	.045*
Producing satire/parody that doesn't intend to harm but that may fool people	4.89	−.05	.04	−.06	.197
Using false context with genuine information	5.44	−.08	.07	−.08	.205
Using one-sided facts	5.21	.05	.05	.05	.364
Presenting information from multiple sides	3.45	.02	.03	.03	.518
Inserting persuasive or marketing messages	5.20	.03	.05	.03	.556
Creating false content intended to deceive or harm	5.70	−.04	.07	.04	.568
Misleading use of information in framing an issue/person	5.47	.02	.06	.03	.650
Attempting to influence public perception of an issue/person	5.17	.02	.05	.02	.671
Presenting headlines, visuals, or captions that don't support the content	5.40	−.02	.06	−.02	.743
Manipulating genuine content to deceive	5.59	.02	.07	.02	.762

Note. M = extent to which participants perceived certain formats to be fake news, from 1 (*not at all fake news*) to 7 (*totally fake news*).
***$p < .001$. **$p < .01$. *$p < .05$.

Strongest Predictors of Having Confidence in Identifying Fake News

Given the large number of independent variables in the original regression, this research sought to focus on the elements with the greatest impact as predictors of confidence in identifying misinformation. From the previous tables, the 12 statistically significant variables were entered into a stepwise regression, which indicated that six of the predictor variables accounted for most of the variance, $R = .42$, $R^2 = .17$,

adjusted R^2 = .17, $F(6,764)$ = 26.88, p < .000. Checks on regression assumptions did not signal violations. No significant outliers were identified with Cook's distance test. The largest correlation between predictors (r = .67) did not indicate extremely high multicollinearity, and the highest VIF value was 1.53. Overall, about 17% of the variance related to confidence in one's own ability to identify misinformation can be predicted from six variables, which is a small but statistically significant relationship.

Table 5 shows the regression findings for the six strongest predictors of having confidence in one's ability to identify fake news. Based on the β coefficients, only one of the *content* credibility factors—believing it was important to have the content confirm what you already believe—was a significant predictor in confidence (β = .13; p < .001). Similarly, the only *source* credibility cue to be a significant predictor of confidence was believing in the importance of the news producer as an authoritative source (β = .11; p < .01). Three other news cues—looking to the story's URL location (β = .18; p < .001), verifying author's identity (β = .10; p < .05), and conducting personal research (β = .13; p < .01)—were significant predictors of having confidence in the ability to identify fake news. Finally, among the fake news typologies, only one (mocking facts to create humor, β = −.10; p < .003) had a significant impact on confidence, and that relationship was negative. Believing that mocking facts to create humor was a serious form of misinformation was indicative of lower confidence in the ability to recognize fake news.

Table 5. Strongest Predictors of Having Confidence in Identifying Fake News.

	β coefficient	SE	β	p
Location	.17	.04	.18	.000***
Confirms what you believe	.11	.03	.13	.000***
Personal research (i.e., trying to find different source with same information)	.13	.04	.13	.001**
Authoritative	.10	.03	.11	.001**
Mocking facts to create humor	−.08	.03	−.10	.003**
Author	.10	.04	.10	.012*

***p < .001. **p < .01. *p < .05.

Discussion

This study sought to develop a better understanding of how people's experiences and perceptions of fake news influence confidence in their own ability to identify fake news. Specifically, this research examined how that confidence is impacted by (1) evaluating the credibility of news content and sources, (2) looking to further cues, and (3) evaluating the egregiousness of various typologies of fake news. This study fills gaps in the growing body of literature on mis- and disinformation by exploring how people assess their own ability to identify fake news against a framework of contextual elements.

This research began by examining how participants assess the credibility of the sources of news— the people who produce news stories—as well as the content of those stories, and how those assessments influence their confidence in identifying fake news. While participants rated all the content and source credibility items as fairly important in their mean scores, the strongest predictor among the content factors was that participants indicated it was of high importance for the information to support what they already

believe to be true. Simply put: People who felt it was important for content in news stories to confirm what they believe were more likely to have greater confidence in their ability to identify misinformation.

Previous research (e.g., Appelman & Sundar, 2016) established the multiple factors that contribute to content credibility perceptions, but the present study suggests that those characteristics (such as objectivity and accuracy) are not as important to news consumers as experiencing confirmation bias when they process information and develop confidence in recognizing fake news. This finding highlights the continuing need for media literacy education because it appears that although individuals are aware of the importance of looking to content credibility cues when they're trying to determine if a news story contains fake news, they rely more heavily on a desire to have their already-held beliefs reinforced to bolster their confidence in identifying misinformation. Research by scholars such as Mothes (2017) suggests that over time, perceptions of "news quality" in reporting can influence the likelihood that people will find news that they believe supports attitudes they already have and strengthen their belief that the information is valuable. This type of selective exposure, then, can reinforce those attitudes moving forward (Westerwick et al., 2017) with the potential to result in people developing greater confidence in identifying information as legitimate because they apply their value judgments about "real news" when, in fact, such "real news" could contain mis- or disinformation. Future media literacy endeavors must help people acknowledge and confront their own biases for confirmatory information and train them to instead focus on actual content credibility cues.

Credibility assessments also hinge on perceptions about the producers of news. When all the other variables were held constant, authoritative producers were a central predictor of confidence in identifying fake news. People want news producers whom they see as authoritative when they're trying to determine if something is mis- or disinformation—as evidenced in other studies (e.g., Lewis et al., 2014; Loosen & Schmidt, 2012; Tandoc & Vos, 2016)—and they use those credibility cues to feel more confident as they navigate fake news assessments. This finding underscores previous research on the need to investigate source credibility (Appelman & Sundar, 2016; Jahng & Littau, 2016) because of its important role in helping people as they encounter fake news and assisting journalists and scholars with better understanding the attributes that the public looks for when determining whether a news producer is credible.

Among the most striking findings in this research was the reliance on further cues to help people identify fake news, and the connection of that dependence to their confidence in being able to recognize fake news. The cues included in this study empirically tested concepts theorized in other work (Jun et al., 2017; Tandoc et al., 2019, 2020) and confirm their importance. Here, participants said they looked to the cues fairly often, and three items stood out to offer guidance for the future of news literacy education because they show the strongest links between people relying on those cues and feeling more empowered in their fake-news assessments. People who more frequently looked at the location of the news story (such as on the website of a news organization) and the story's author tended to then have higher confidence in their ability to identify fake news. In addition, there was a significant connection between people more often conducting research on their own about the veracity of information they encountered, and having confidence in being able to identify fake news. Knowing how to evaluate information through personal research helps people feel more capable of recognizing fake news when they see it, and it signals the need for continued education on news literacy strategies as fake news morphs into new forms of mis- and disinformation. Taken together, the findings of this research highlight the need for media literacy education to balance its approach

by teaching the importance of looking to news cues, such as location and author, and conducting independent searches to verify information while at the same time being cognizant of not simply assuming that the veracity of the material is supported because it reinforces what they already believe. Critical analysis, though it requires greater mental engagement, is key in applying cues that indicate credibility—which can then bolster confidence in identifying misinformation.

Finally, this study explored people's perceptions about the extent of fake news in various formats. Journalism scholars have delved into defining the complexities of misinformation in its various formats (Tandoc et al., 2019; Wardle, 2017a, 2017b), and this research sought to understand how individuals process those forms in relation to boosting their own confidence in identifying fake news. Participants were asked about the egregiousness of particular forms of fake news, and the various forms of that mis- and disinformation were all rated fairly highly for the seriousness of their violations in the mean scores. Only one form of fake news, however, was among the strongest predictors of confidence, and the relationship was inverted. Mocking facts to create humor was among the forms least likely to be seen as fake news and thus was not highly correlated with confidence in identifying fake news. Despite the effort that has been expended to create typologies to differentiate between the many styles of fake news, it appears that delineating between the different forms of fake news does not significantly boost the public's confidence in recognizing mis- and disinformation.

Conclusion

This research reinforces the importance of assessing multiple cues when determining whether a story contains fake news and points to avenues of focus for news literacy education to elevate people's confidence in their ability to identify fake news.

The reliance on three cues (location, author, and personal research) to determine whether a news story contains fake news provides guidance for endeavors to help people become better at identifying fake news. Continued emphasis on the importance of these cues is essential—particularly conducting personal research and acknowledging biases for confirmatory information—although it appears that expanded education about the usefulness of the other cues could offer people additional ways to assess the veracity of the news and information they encounter. For journalists, this finding also signals a need to investigate why people are less trusting of these other cues, and to adjust their reporting routines to better reflect elements of "good journalism" on which news consumers rely.

The findings in this research also seem to make the case for better media literacy education that focuses on what constitutes news credibility and that identifies the cues that demonstrate credibility. News literacy education efforts must recognize that highlighting particular cues to help identify fake news is not enough in the battle against fake news; the more difficult task of helping people be cognizant of their own bias blind spots must be taken up, with the goal of raising individuals' confidence in their ability to identify misinformation because that confidence is an important step in correctly recognizing fake news (Wesslen et al., 2019).

As with all research, this study presents several avenues for follow-up projects. A next step in survey research could be to use a larger sample of participants and test the influence of political ideology and tribalism, as well as the reliance on social media as a news source, against the variables examined in the present study. Future endeavors should include experiments that test the public's recognition of mis- and disinformation in news stories and in social media posts to test not only people's confidence in identifying it, but also their competence in recognizing fake news.

Projects such as Comprova, CrossCheck, and UK Election Watch have already united dozens of newsrooms and fact-checking organizations in Brazil, France, and the UK in efforts to quell the spread of false and misleading news. The findings of this study, as well as an eye toward more global initiatives such as those previously mentioned, can help lay the foundation for developing a more complete model for identifying and addressing fake news. The findings also suggest that such approaches should consider more fully the nuances that drive individuals' confidence in their ability to parse fact from fiction in the news and how such confidence, when properly informed and harnessed, could help in the continued efforts of news organizations and those who disseminate news on a massive scale (i.e., social media platforms) to quell the creation and spread of fake news.

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