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REVIEW

Source credibility effects in misinformation research: A review and primer

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Understanding the role that perceived source credibility plays in individuals' responses to misinformation could help in shedding light on the effects of misinformation exposure and aid in making interventions aimed at tackling its negative consequences more effective. Yet, while persuasion research shows that perceived source credibility consistently predicts attitude change upon exposure to persuasive messages, research examining effects of source credibility in misinformation contexts has yielded inconsistent findings. We conducted a systematic review of misinformation research investigating source credibility effects ($N_{Studies}$ = 91, $N_{Participants}$ = 64,162) and coded various characteristics of individual reported effects ($N_{Effects}$ = 162) to provide a narrative synthesis of the literature and identify potential causes of inconsistent findings. Our synthesis suggests that conceptual factors, such as the conceptualisation of source credibility and its constituent dimensions, underexplored moderators, and methodological factors, such as the operationalisation of source credibility and the relevance of stimulus materials, could explain discrepancies in source credibility effects in misinformation contexts. We provide recommendations for how to conceptualise and operationalise source credibility in a more systematic way and recommend promising avenues for future research that could aid the development of much-needed theoretical frameworks of source credibility effects in misinformation contexts.

Keywords: misinformation, source credibility, persuasion, source expertise, source trustworthiness, source bias

1. INTRODUCTION

The study of how the credibility of sources affects individuals' reactions to information from these sources originated in the domain of persuasion research, with early research showing that highly credible sources tend to be more effective in bringing about opinion change than less credible sources (Hovland & Weiss, 1951). Building on these early findings, a large body of research on source credibility effects in persuasion has been accumulated since, outlining how various aspects of source credibility affect the processes by which individuals change or form attitudes in response to persuasive communications (see e.g., Briñol & Petty, 2009; Pornpitakpan, 2004). Meta-analyses of the effects of source credibility and some of its facets in persuasion-related contexts have yielded average effects that are similar in magnitude to the most fundamental predictors of persuasion, such as message or argument quality (Moradi & Zihagh, 2022; Verma et al., 2023). While these meta-analyses suggest that there is substantial between-study variability in source credibility effect sizes, heterogeneity estimates for effects of other variables in persuasion contexts are of comparable magnitude (Moradi & Zihagh, 2022; Verma et al., 2023), possibly reflecting high levels of heterogeneity in effect sizes in the (social) psychological literature at large (Stanley et al., 2018). In other words, despite the heterogeneity in the magnitude of source credibility effects in persuasion contexts, there is strong, largely unequivocal evidence for their presence.

More recently, the effects of perceived source credibility have been studied in the context of misinformation susceptibility (e.g., Nadarevic et al., 2020; Susmann & Wegener, 2023). Compared to the general agreement on the existence of relatively consistent source credibility effects in persuasion contexts, there appears to be more uncertainty around the presence of similarly consistent source credibility effects in misinformation contexts, an observation also previously made by other researchers (e.g., Ecker et al., 2022; Traberg et al., 2024). The aim of this paper is to shed light on potential causes for these inconsistencies and to provide recommendations for researchers investigating these effects. To this end, we will briefly review the well-established literature on source credibility effects in persuasion. This literature contains valuable insights for the study of these effects in misinformation contexts. We then report the results of a systematic review of misinformation research investigating source credibility effects, to highlight discrepancies in results. Drawing on seminal findings from persuasion research, we provide potential explanations for the discrepancies in misinformation research. Based on that, we will provide theoretical and methodological recommendations for systematically investigating source credibility effects in misinformation contexts.

2. PERSUASION AS A LENS FOR SOURCE CREDIBILITY EFFECTS IN MISINFORMATION

2.1 Similarities Between Persuasion and Misinformation Research

Persuasion research has focused on attitude change as the focal outcome of persuasion, but it has been argued that the same psychological processes involved in persuasion-induced attitude change may operate when persuasion efforts aim to change different psychological constructs, such as beliefs (Briñol & Petty, 2009). Persuasive appeals are loosely defined as communications that aim to change evaluative responses (e.g., attitudes) and/or nonevaluative responses, such as beliefs (Petty & Cacioppo, 1986b), and misinformation is merely defined as any information that is inaccurate, false, or misleading (Pennycook & Rand, 2021). Therefore, the psychological processes involved in belief or attitude change that is brought about by misinformation may be similar to those involved in persuasion. This is but one of the reasons why persuasion research could be a suitable lens to investigate misinformation phenomena. However, only few researchers investigating source credibility effects in

misinformation contexts explicitly do so through the lens of foundational theories of persuasion, such as the ELM (e.g., Sui & Zhang, 2021; Zeng et al., 2023).

Classic paradigms used to investigate persuasion processes are structurally similar to those used in misinformation contexts. In the former, individuals are usually exposed to a persuasive communication before their cognitive responses (i.e., their thoughts about the communication) and evaluative responses (e.g., attitudes, intentions) towards the focal issue are assessed (e.g., Priester & Petty, 1995). In the latter, individuals are usually exposed to misinformation, sometimes followed by a corrective message in the case of misinformation correction (e.g., Pluviano et al., 2020), before completing measures of cognitive responses (e.g., perceived accuracy of the information, reliance on the information to make inferences) and, in some cases, measures of more evaluative or behavioural responses, such as intentions to share the information online (e.g., Pennycook et al., 2020).

Due to these conceptual and structural overlaps, the social-cognitive processes involved in individuals' responses to misinformation may share similarities with the processes underlying persuasion attempts. Even though the study of misinformation could be classified as a part of persuasion research based on these similarities and the aforementioned broad definition of persuasion, we refer to persuasion and misinformation research as two separate fields, not only for ease of comparison, but also for more fundamental reasons. For example, we argue and demonstrate that effects related to source credibility appear to differ between misinformation and persuasion contexts and that many investigations of source credibility in misinformation contexts have not relied on the systematic conceptual and methodological frameworks that have been put forward in foundational theories of persuasion. We will hereafter provide a brief overview of findings from persuasion research on source credibility effects that might be relevant for the study of misinformation, before providing an overview of the misinformation literature on this topic.

2.2 The Roles of Source Credibility in Persuasion and Misinformation Research

Source credibility has been conceptualised in persuasion research to comprise several dimensions, namely perceptions of a source's expertise and trustworthiness and perceptions of source bias (Wallace et al., 2020b). Perceived source expertise is often conceptualised based on the notion of epistemic authority, comprising source characteristics like seniority, professional activities, or education, which predicts individuals' reliance on, and acceptance of, information from that source (Kruglanski et al., 2005). Perceived source trustworthiness refers to individuals' perceptions of a source being honest and perceived source bias entails perceptions of a source having a vested interest in message recipients accepting its communications, as well as perceptions of a source having a skewed perspective on the focal topic (Wallace et al., 2020b). While these aspects of source credibility are related and can co-occur, it is important to note that they can have separate effects. For instance, a source honestly communicating a skewed perspective can be simultaneously perceived as both trustworthy and biased (Wallace et al., 2019). Persuasion research has devoted much attention to disentangling the effects of these source credibility dimensions (e.g., Wallace et al., 2019, 2020b). This research resulted in comprehensive theoretical frameworks that systematically explain a wide range of source credibility effects in persuasion (e.g., Susmann et al., 2022). Misinformation research currently appears to lack such a theoretical framework, which may have contributed to the discrepancies in this literature.

Persuasion research has mostly examined how the credibility of the source of a persuasive message influences individuals' responses immediately upon exposure (e.g., Priester & Petty, 1995) or over time (e.g., Albarracín et al., 2017),

yielding a large body of robust evidence for source credibility effects in persuasion (Pornpitakpan, 2004). Misinformation research has also examined how the credibility of misinformation sources affects the responses of individuals when exposed to misinformation (e.g., Nadarevic et al., 2020). Beyond that, source credibility has also been investigated in the context of the correction of misinformation (e.g., Susmann & Wegener, 2023). In the latter case, research has mainly focused on how the credibility of the source correcting misinformation, usually after an initial exposure to the respective misinformation, influences the effectiveness of the correction (e.g., Vraga & Bode, 2017). Some work on misinformation correction has also investigated how the credibility of exposure sources affects subsequent correction processes (e.g., Westbrook et al., 2023). As we demonstrate in this article, research investigating the effects of source credibility in these misinformation contexts has yielded inconsistent findings, in contrast to the persuasion literature.

2.3 Contemporary Persuasion Theories

The effects of source credibility have been investigated through the lenses of different contemporary theories of persuasion. Among them are dual-process theories, like the Heuristic-Systematic Model (HSM; Chaiken et al., 1989) and the Elaboration-Likelihood Model of persuasion (ELM; Petty & Cacioppo, 1986a), and the unimodel as a single-route account (Kruglanski & Thompson, 1999). Since the HSM and ELM are closely related, we limit our discussion of dual-process theories to the more widely used ELM. All of these theories aim to explain the effects of factors in the persuasion environment, such as information about source credibility, on primary cognitions and evaluative judgments in response to persuasive messages. Newer research on source credibility effects in persuasion has started focusing on secondary or metacognition (e.g., self-validation theory; see Briñol & Petty, 2009, 2022). Misinformation research has to date mainly examined the effects of source credibility on primary cognitions, neglecting their effects on secondary cognitions[1], which is why we focus on persuasion theories examining source credibility effects on primary cognitions.

2.3.1 The Elaboration-Likelihood Model

Dual-process theories, like the ELM, conceptualise information about source credibility as a cue that can influence the persuasiveness of a communication irrespective of, and in different ways than, the substantive arguments of the message (Petty & Cacioppo, 1986a). One of the central tenets of the ELM is that cues like source credibility information can take on different roles in the persuasion process depending on the extent of individuals' motivation and ability to elaborate on a persuasive message (Petty & Cacioppo, 1986a; Susmann et al., 2022). When individuals' motivation and ability to elaborate are low, source credibility information can affect persuasion as a peripheral cue, influencing attitudes in the direction of its valence (i.e., high source credibility increases persuasion), regardless of the substantive message content. Under moderate-elaboration conditions, source credibility information can alter the extent of processing dedicated to the message content (Susmann et al., 2022). Under high-elaboration conditions, source credibility information can act as an issue-relevant argument when it is relevant to the evaluation of the persuasive appeal, or bias message processing. Information about source credibility can bias processing of a persuasive message by affecting the direction of thoughts generated in response to the message. High levels of source credibility can therefore result in the generation of more favourable thoughts in response to the message compared to low levels of source credibility (Susmann et al., 2022). The substantive content of persuasive appeals, however, affects persuasion only when the extent of

[1] For research on metacognitive processes in misinformation contexts unrelated to source credibility see Rapp and Withall (2023).

elaboration is relatively high, according to the ELM (Petty & Cacioppo, 1986a). Beyond determining the effects source credibility can have, the extent of elaboration affects persuasion outcomes, such that attitudes formed under high-elaboration conditions tend to be stronger, more stable, more resistant to change and more predictive of behaviour than those formed under low-elaboration conditions (Petty & Cacioppo, 1986a).

2.3.2 The Unimodel

Compared to dual-process theories like the ELM, which have dominated persuasion research, the unimodel by Kruglanski and Thompson (1999) has received less attention. However, it may provide a more suitable lens for investigating misinformation phenomena. The ELM is mostly informed by research on attitudes and other responses that are mostly evaluative in nature (Petty & Cacioppo, 1986a). The unimodel, on the other hand, builds onto Kruglanski's (1990) lay epistemic theory of the formation of subjective knowledge, which is not only concerned with evaluation in judgments, but also with the accuracy of judgments in relation to a ground truth or a consensus (Kruglanski & Thompson, 1999). Therefore, the unimodel may prove particularly insightful when it comes to the accuracy of individuals' judgments of, and their responses to, misinformation.

In contrast to the ELM, which implies a qualitative difference between persuasion processes based on cues like source credibility and persuasion processes based on substantive content, the unimodel conceptualises persuasion as a singular process whereby substantive content and cues like source credibility are functionally equivalent in serving as evidence individuals can draw conclusions from (Kruglanski & Thompson, 1999). Like the ELM, the unimodel also assumes that the extent of elaboration shapes the nature of persuasion processes. However, the unimodel posits that the extent of elaboration determines reliance on available information in the persuasion environment depending on the structural properties of the information, not based on whether it is information about source credibility or substantive content (Kruglanski & Thompson, 1999). More specifically, when source credibility information requires little effort to process (e.g., it is a concise, simple text), it affects persuasion mainly under low-elaboration conditions. However, when it is effortful to process (e.g., it is a long, complex text), it affects persuasion mostly under high-elaboration conditions. Kruglanski and Thompson (1999) argue that cues like source credibility information take on different roles than message arguments in most persuasion studies because of the structural properties of these types of information in these studies. Classic persuasion studies usually operationalise cues like source credibility information such that they are easier to process than the substantive content of persuasive appeals. Hence, they are more readily considered by individuals with limited motivation or capacity to elaborate. However, if cues like source credibility are made relatively more effortful to process than substantive content, the former will exert weaker effects on persuasion than the latter when elaboration is constrained to be low (Kruglanski & Thompson, 1999; Pierro et al., 2004).

The unimodel implies not only that source credibility information and substantive content can have similar effects, but also that they can be equally valid sources of evidence, which can both differ in their strength and relevance to the focal judgment (Kruglanski & Thompson, 1999). In line with this assumption, the reduced impact of source credibility information under high-elaboration conditions that is often observed in persuasion studies can simply be explained by the fact that, most of the time, it is less relevant to focal judgments than the actual message content. This is empirically supported by research demonstrating a relevance override in persuasion showing that any subjectively more relevant information overrides the

effects of any subjectively less relevant information, regardless of whether the information constitutes substantive content or source credibility information (Pierro et al., 2004).

Although some studies investigating source credibility effects in misinformation contexts have drawn on insights from the ELM (e.g., Sui & Zhang, 2021; Zeng et al., 2023), none have explicitly considered the unimodel in their theorising, to the best of our knowledge, despite its potential relevance in this context. Given the aforementioned conceptual and methodological similarities between misinformation and persuasion research, it is surprising that persuasion theories have not been applied more widely to the study of misinformation. In the remainder of this article, we will provide an overview of misinformation studies investigating source credibility effects and interpret select findings through the lens of these persuasion theories to provide potential explanations for discrepancies in the misinformation literature as well as recommendations for how they could be resolved.

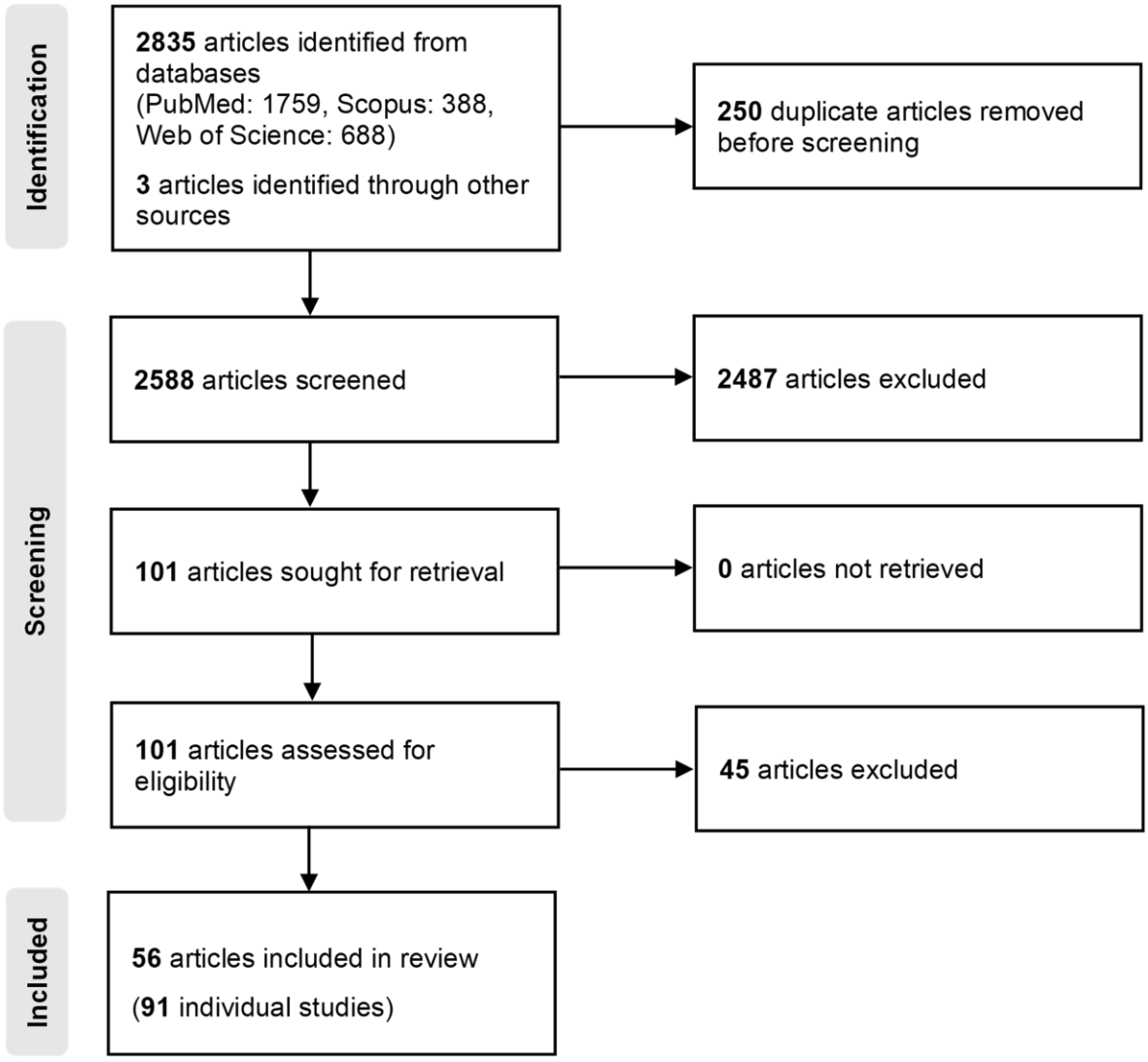
3. METHODS

As mentioned previously, research on source credibility effects has yielded inconsistent evidence in the context of misinformation (previously noted by, e.g., Ecker et al., 2022; Traberg et al., 2024). Some misinformation studies have provided evidence for source credibility playing a role in misinformation processes (e.g., Reins & Wiegmann, 2024), partly yielding strong effects of source credibility (e.g., Nadarevic et al., 2020). Others have provided no or inconsistent evidence for effects of source credibility (e.g., Littrell et al., 2024; Pehlivanoglu et al., 2021; Schaewitz et al., 2020). To investigate the extent of these inconsistencies and identify factors that may have caused them, we reviewed extant empirical research on source credibility effects in misinformation contexts. We first conducted a systematic review of both experimental and correlational research investigating source credibility effects in misinformation studies. The main goal of this systematic review was to provide a comprehensive overview of the conceptually and methodologically diverse studies on this topic and their findings. To this end, we defined broad inclusion criteria that allowed for the inclusion of all studies that investigated any effects of source credibility or its constituent dimensions (i.e., bias, expertise, trustworthiness), even when this was not the primary focus of these studies. Then, we synthesised the results of this systematic review by providing an overview of the identified effects and interpreting them narratively through the lens of the persuasion literature on source credibility effects.

We intentionally decided to provide a narrative synthesis of the results of this systematic review, rather than a quantitative synthesis (e.g., a meta-analysis), to allow for an overview that captures the substantial heterogeneity in study designs, outcomes, and moderators in this literature. For instance, some studies investigate the effects of measures of perceived source credibility (dimensions) on cognitive outcome variables, such as reliance on misinformation when making subsequent inferences (e.g., Westbrook et al., 2023), and others estimate effects of manipulated source credibility (dimensions) on behavioural outcome variables, such as self-report measures of misinformation sharing intentions (e.g., Buchanan, 2020). Only a narrative synthesis allowed us to capture the full diversity of this literature and provide a high-level overview of a variety of source credibility effects from studies employing different designs and investigating various moderators and outcome variables, as was the main goal of this review. In other words, this review does not aim to provide precise effect size estimates of specific types of source credibility effects. Future research could provide such estimates based on meta-analyses of smaller subsets of the literature that are similar in their design, as well as the moderators and outcome variables they examine. The present review serves mainly to illustrate inconsistencies in the broader

Figure 1

Flow Diagram of Literature Search and Screening Steps



literature and provide recommendations that could help resolving them.

We conducted a non-registered systematic review based on the recommendations outlined in the PRISMA guidelines (Page et al., 2021). We aimed to identify experimental and correlational studies reporting any effect of source credibility or one of its constituent dimensions (i.e., bias, expertise, trustworthiness) in the context of exposure to, or correction of, misinformation.

3.1 Search Strategy & Eligibility Criteria

We searched Web of Science, Scopus, and PubMed databases for articles on misinformation, disinformation, fake news, or related phenomena that mention credibility, one of its constituent components, or synonyms thereof. The details of the database search, including the exact keywords and filters that were used, can be found in the Supplementary Materials. We additionally searched other sources (e.g., reference lists of relevant articles, personal libraries) for relevant articles. After obtaining basic information (author names, publication date, titles, abstracts, etc.) for all identified entries and screening for duplicate entries, we screened the titles and abstracts of all entries based on the inclusion criteria summarised in Table 1 to assess their eligibility for inclusion in the review. We then screened the full text of all articles, applying the same criteria to the individual studies reported in each article. An overview of the review and screening procedure can be found in Figure 1. As a result of this iterative screening process, 56 articles containing 91 individual studies reporting source credibility effects were included.

3.2 Data Extraction and Coding

For all included studies, each reported effect of source credibility on each dependent variable was coded separately. For each effect identified this way, we coded details about the nature and type of effect, as well as conceptual and methodological factors. In other words, each data point extracted from the identified articles represents an effect of source credibility reported on an individual dependent variable. In addition to coding the statistical significance of reported effects, the focal source credibility dimension and operationalisation, and corresponding outcome variable, various other details were coded. An overview of all coded aspects and the corresponding coding criteria, as well as the dataset containing all coded aspects can be found in the Supplementary Materials.

4. RESULTS

Based on the aforementioned coding procedure, we identified and coded 162 source credibility effects reported in the included studies. An overview of all included studies and the coded aspects discussed in this review can be found in the Appendix. The full dataset including coded aspects that are not discussed in detail here is available in the Supplementary Materials. Most of the conceptual and methodological aspects that were coded showed substantial variation between studies. The identified studies cover a broad range of study designs, outcome measures, and topics. Contrasting this heterogeneity, the countries samples were recruited from appear more homogeneous, with WEIRD samples (Henrich et al., 2010), particularly US samples, being most prevalent. Most importantly, there appears to be substantial heterogeneity in the 162 source credibility effects that were identified, with 77 statistically significant effects (47.53%), 65 effects that are not statistically significant (40.12%), and 20 cases where mixed evidence is provided (12.35%). A part of these inconsistencies may be explained by high levels of heterogeneity in effects in the psychological literature at large (Stanley et al., 2018), but the extent of these differences in findings certainly warrants a closer examination of this literature.

In the remainder of this article, we outline how some of the conceptual and methodological aspects that show substantial heterogeneity

Table 1

Inclusion and Exclusion Criteria for Systematic Review

Inclusion criteria	Exclusion criteria
Articles must include a quantitative survey or experimental study.	Articles reporting only qualitative or computational studies were excluded, as were those reporting only [quantitative] analyses of secondary text or social media data.
Articles must investigate effects of source credibility or one of its constituent dimensions (i.e., trustworthiness, expertise, or bias) or related source characteristics (e.g., source reliability, presence of source credibility labels) in the contexts of misinformation exposure or correction.	Articles in which source credibility is only an outcome measure rather than (also) taking the role of a predictor variable, articles about merely descriptive surveys on individuals' information consumption from various sources, articles about the automated detection of misinformation, articles about the effects of presentation order of false information, articles about "misinformation" in the context of eyewitness interviews, articles about "inferred" source reliability (i.e., the degree to which actual communications by a source are accurate), articles strongly conflating source credibility or one of its dimensions with an unrelated source characteristic (e.g., social endorsement) and articles about media literacy interventions were excluded.
Articles must investigate misinformation, fake news, disinformation, bullshit, or fact-checking or correction of any of those types of information or investigate truth-related judgments of true information or information of unspecified veracity.	Articles on conspiracy theories and beliefs, which rarely examine classic phenomena from the literature on attitudes and persuasion, such as source credibility, and articles investigating source credibility effects in domains unrelated to misinformation exposure or correction were excluded.
Articles must be written in an understandable way.	Articles where the abstract or full text did not allow for an assessment of these criteria were excluded.

between studies could help explain inconsistencies in source credibility effects. More specifically, we aim to identify potential causes of heterogeneity in source credibility effects in misinformation contexts by narratively comparing studies reporting evidence for source credibility effects with those that do not and those providing mixed evidence, and by interpreting the available evidence through the lens of persuasion research into source credibility effects.

4.1 Conceptualisation and Operationalisation of Source Credibility

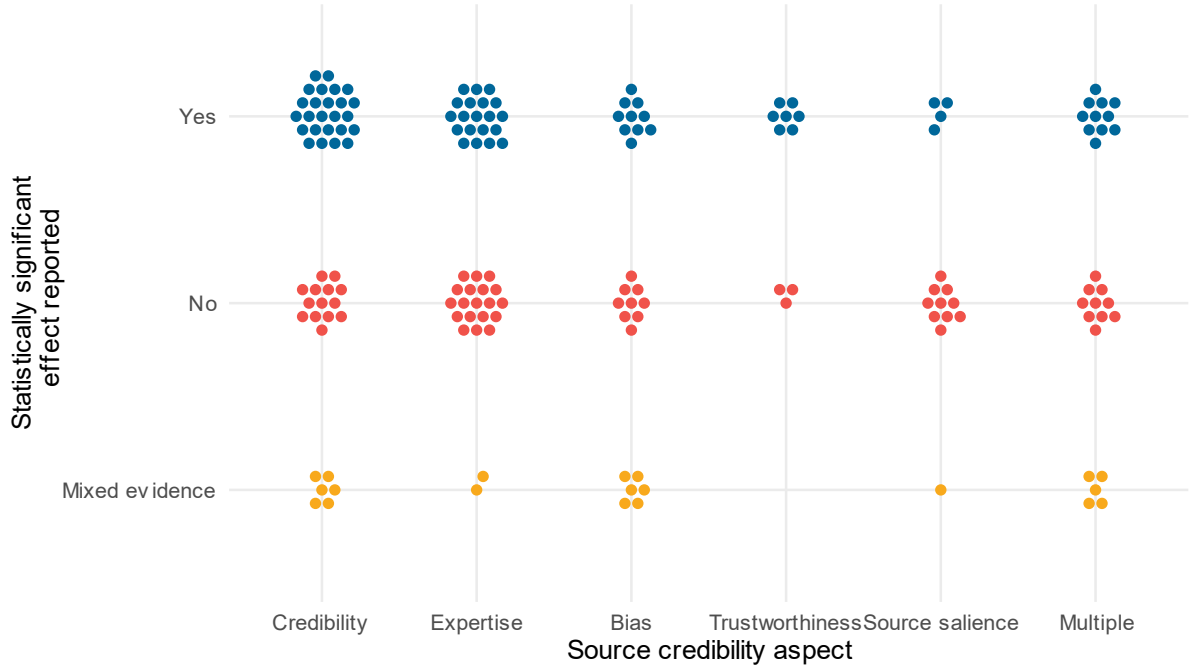
Persuasion research has devoted substantial effort and attention to dissecting the concept of source credibility into its constituent dimensions and disentangling their effects. Hereafter, we demonstrate that the conceptualisation of source credibility appears to be less systematic in misinformation research. We posit that a more systematic approach to conceptualising source credibility and its constituent components could help reconcile discrepant findings in the misinformation literature. Furthermore, we propose that differences in the operationalisation of source credibility across studies could help explain why some misinformation studies find evidence for source credibility effects and others do not.

4.1.1 Dimensions of Source Credibility

Figure 2 provides an overview of all identified effects grouped by the source credibility dimensions they investigated and by whether they are statistically significant or not or provide mixed evidence. The reproducible code to create all figures presented in this article can be found in the Supplementary Materials. While overall source credibility and source expertise have been investigated extensively, source trustworthiness and, to a lesser extent, source bias, have received less attention. Persuasion research has extensively investigated source trustworthiness as one of the pillars of source credibility (e.g., Priester & Petty, 1995, 2003), but this aspect seems to have been neglected in misinformation research. This is surprising

Figure 2

Overview of Identified Effects by Source Credibility Aspects and Statistical Significance



Note. Statistical significance is defined as $p < .05$.

given that perceptions of source trustworthiness (i.e., the extent to which a source is perceived as honest or truthful; Wallace et al., 2020b), might be particularly relevant in the context of misinformation, where assessing the truthfulness of information is central.

This overview also shows that it seems to be relatively common to investigate multiple aspects of source credibility simultaneously. Some studies have done so by, for instance, crossing manipulations of several aspects of source credibility in experimental designs to disentangle their effects (Susmann & Wegener, 2023). However, other studies have done so in ways that could limit the validity of inferences about the effects of any one specific source credibility dimension. More specifically, some studies have conflated several source credibility dimensions or employed experimental manipulations that varied not only source credibility or one of its constituent dimensions, but also unrelated source characteristics. This was the case for studies investigating overall source credibility (e.g., Bauer & Clemm von Hohenberg, 2021; Littrell et al., 2024, Study 3a; Pehlivanoglu et al., 2021, Studies 1 and 2; Zeng et al., 2023), source trustworthiness (e.g., Nadarevic et al., 2020, Studies 3 and 4), source expertise (e.g., Guillory & Geraci, 2013, Study 3), and source bias (e.g., Michael & Sanson, 2021; Traberg et al., 2024, Study 3; Wintersieck et al., 2018, Studies 1 and 2). This occurred, for instance, when researchers conflated the focal aspect of source credibility (e.g., source bias in the form of political slant) with other aspects (e.g., source expertise) by using real-world sources, such as news outlets, that differed not only on the focal aspect, but on others as well. The inferences that can be drawn from these studies about individual source credibility dimensions are limited. More specifically, Susmann and Wegener (2023) have demonstrated that different aspects of source credibility cannot only have additive, but also interactive effects, in misinformation contexts, and have argued that conflating several source credibility dimensions can lead to erroneous conclusions about the focal phenomenon. It is important to note that this does not invalidate all inferences that can be drawn from these studies. Conflating several source characteristics can be justified and relevant, particularly from a practical perspective when, for instance, investigating responses to misinformation from real-world news sources. Nevertheless, it is not the most suitable approach for isolating and disentangling the effects of source credibility and its constituent components.

Several studies experimentally manipulated whether (real) sources were presented alongside the misinformation stimuli or not, sometimes accompanied by credibility ratings, rather than explicitly manipulating or measuring source credibility or one of its aspects, labelled source salience in Figure 2. These studies, which mostly report finding no statistically significant effects of their source manipulations, have been included here because they have been interpreted in the literature as studies failing to provide evidence for source credibility effects (e.g., Ecker et al., 2022; Littrell et al., 2024). However, these studies manipulate the salience or presence of sources, rather than explicitly manipulating or measuring source credibility or one of its constituent dimensions. The absence of effects of these source manipulations could be explained by the fact that the mere presence or salience of a source is a descriptive and non-evaluative cue that cannot be expected to yield the same effects as evaluative cues like source credibility information. Furthermore, studies manipulating the presence or salience of real-world sources suffer from the aforementioned disadvantages of conflating several source characteristics.

Numerous studies have investigated the effects of source credibility in misinformation contexts. Yet, these investigations appear less systematic compared to the study of source credibility and its constituent dimensions in persuasion research. For instance, overall perceptions of

source credibility and source expertise have been studied extensively, but the study of source trustworthiness, a credibility dimension that may be particularly relevant in misinformation contexts, has been neglected. Furthermore, the conflation of multiple source characteristics in operationalisations of source credibility, as well as the lack of research disentangling the distinct effects of different source credibility dimensions (for a notable exception see Susmann & Wegener, 2023), may have contributed to inconsistencies in findings. A more systematic investigation of the potentially distinct effects of source credibility dimensions, which has substantially advanced understanding of source credibility effects in persuasion contexts (e.g., Wallace et al., 2019, 2020b, 2020a), could help resolve these inconsistencies and elevate the understanding of the role of perceived source credibility in misinformation.

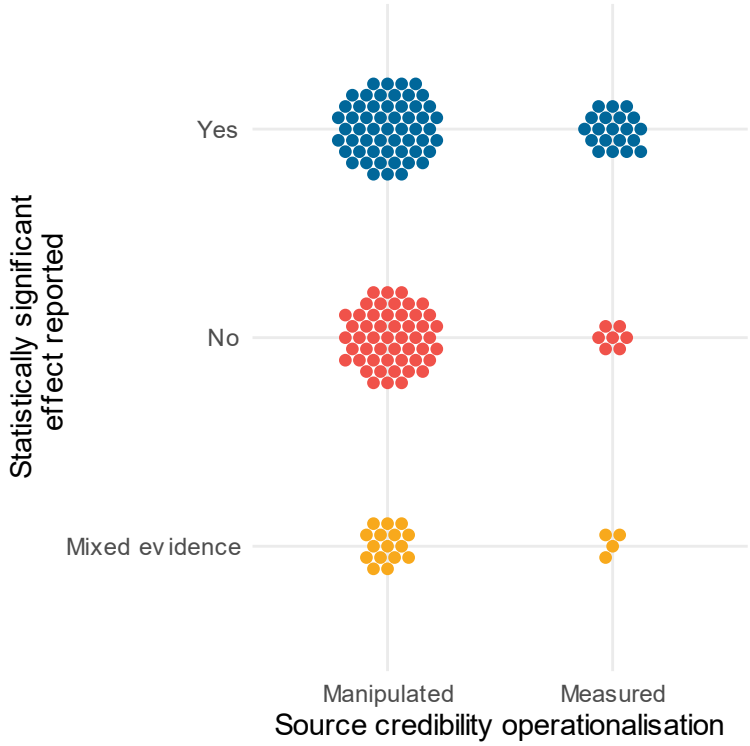
4.1.2 Operationalisation of Source Credibility

When grouping the identified effects (excluding those of source salience) by their statistical significance and by whether source credibility was manipulated or measured (see Figure 3), it appears that the latter tend to yield somewhat more consistent evidence. However, some of these effects of measured source credibility are reported in studies that fail to find statistically significant effects of manipulated source credibility on the focal outcome variable but report significant effects of source credibility measures employed in the same study as evidence for source credibility effects (e.g., Liu et al., 2023; Zhang et al., 2021).

The apparent tendency that measures of source credibility yield more consistent effects than experimental manipulations is in line with a meta-analysis of factors associated with information credibility perceptions, finding that

Figure 3

Overview of Identified Effects by Source Credibility Operationalisation and Statistical Significance



Note. Statistical significance is defined as $p < .05$.

correlations between source cues and information credibility perceptions were significantly weaker in experimental studies compared to surveys (Ou & Ho, 2024). This phenomenon could potentially be explained by the fact that self-report measures of perceived source credibility are often structurally similar to the self-report outcome variables employed in these studies. As shared variance caused by the use of structurally similar methods to assess different variables can artificially inflate the relationship between these variables (i.e., common method bias; Podsakoff et al., 2024), the tendency of source credibility measures to yield more consistent effects than manipulations may, at least partly, be a methodological artifact. Nevertheless, measuring source credibility and its constituent dimensions may still be worthwhile when, for instance, manipulations of source credibility do not allow for disentangling distinct source credibility dimensions. When doing so, researchers should, however, account for the potential influence of common method bias.

4.2 Relevance of Available Information

In this section, we will examine the role of the relevance of available pieces of information in predicting individuals' reliance on source credibility and substantive information, which has so far not been explicitly considered in misinformation research. The unimodel posits that individuals form judgments in response to persuasive appeals based on available information that is relevant to the focal conclusion (Kruglanski & Thompson, 1999). Building onto this postulate, persuasion research on the relevance override has shown that any subjectively more relevant information will override the effects of any subjectively less relevant information, regardless of whether it constitutes source credibility information or substantive content, given that individuals are able to process all available information (Pierro et al., 2004).

Based on the persuasion literature, we posit that the relevance of all available pieces of information in the misinformation environment could determine whether source credibility will shape their responses. In the context of misinformation accompanied by information about the credibility of its source, this means that the more relevant of the two available pieces of information should be more likely to shape individuals' judgments as long as they have sufficient motivation and ability to process both. For instance, when source credibility information is perceived as more relevant than substantive content, source credibility will exert stronger effects on individuals' judgments than substantive content. Conversely, studies in which source credibility information is perceived as relatively irrelevant compared to substantive content should yield weaker effects of source credibility and stronger effects of the substantive content. Hereafter, we illustrate this relevance-based account of source credibility effects in misinformation.

4.2.1 Relevance of Substantive Content

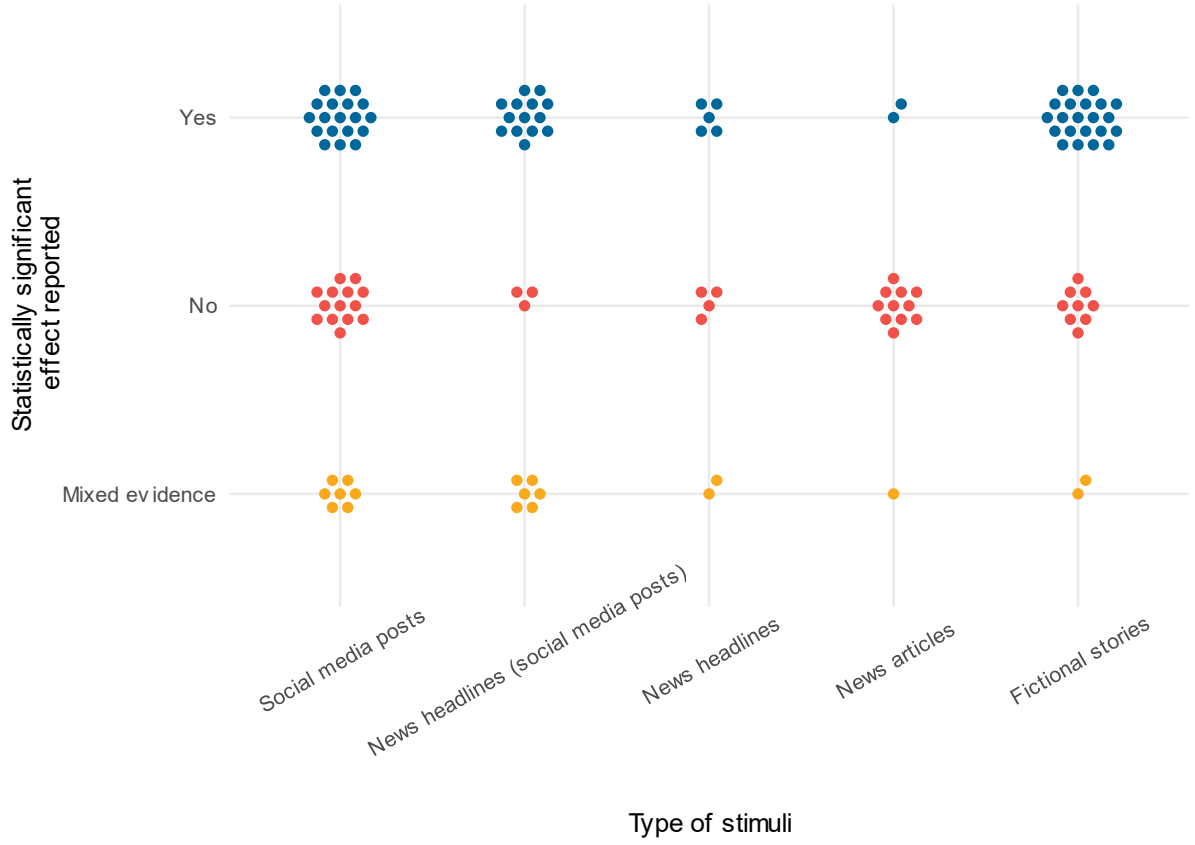
In most misinformation studies, source credibility information tends to be similarly short, often only consisting of the logo and name of a news outlet (e.g., Chae et al., 2024; Traberg & van der Linden, 2022). In contrast, the length of substantive content varies across studies, with some studies employing misinformation stimuli in the form of short news headlines or social media posts and others employing full news articles. Assuming that longer pieces of information will often contain more information that is relevant to the focal conclusion (e.g., evidence that is perceived to be diagnostic of the truthfulness of information), they should, by and large, be more likely to influence individuals' judgments than shorter pieces of information. In other words, source credibility information should be more likely to be overridden by substantive content when substantive misinformation stimuli are longer. To examine this possibility, the identified effects (excluding those of source salience) were grouped by their statistical significance and the types of

misinformation stimuli (i.e., substantive content) for the five most commonly reported types of stimuli among the identified studies in Figure 4.

Based on Figure 4, it appears that shorter misinformation stimuli (e.g., news headlines, social media posts) seem to yield somewhat more consistent effects of source credibility than longer ones, like full news articles. However, since we posit that this occurs due to the relevance of information, this pattern should not be observed in cases where misinformation stimuli are relatively long but contain few references that are relevant to the focal judgment. Studies employing fictional stories pose such an example, as they tend to be relatively long (e.g., 15 or more statements consisting of at least one sentence each), but often contain only few references to the focal misinformation (see e.g., Susmann & Wegener, 2023). In line with our reasoning, these studies do not exhibit the aforementioned pattern. Similarly, Littrell et al. (2024) found evidence for source credibility effects in judgments of pseudo-profound bullshit (Studies 2a and 2b), but not in judgments of true and false news headlines (Study 3a). As bullshit is a type of information characterised by a disregard for truth (Frankfurt, 2009), it likely contains fewer references that can meaningfully serve as relevant evidence for drawing conclusions compared to news headlines. This also becomes apparent when examining the type of statements that are commonly used in research on pseudo-profound bullshit, such as "Hidden meaning transforms unparalleled abstract beauty" (Littrell et al., 2024). When the relevance of substantive content is perceived to be low, the relative perceived relevance of any piece of source credibility information should be higher than when the same source credibility information is presented alongside

Figure 4

Overview of Identified Effects by Type of Stimuli and Statistical Significance



Note. Statistical significance is defined as $p < .05$.

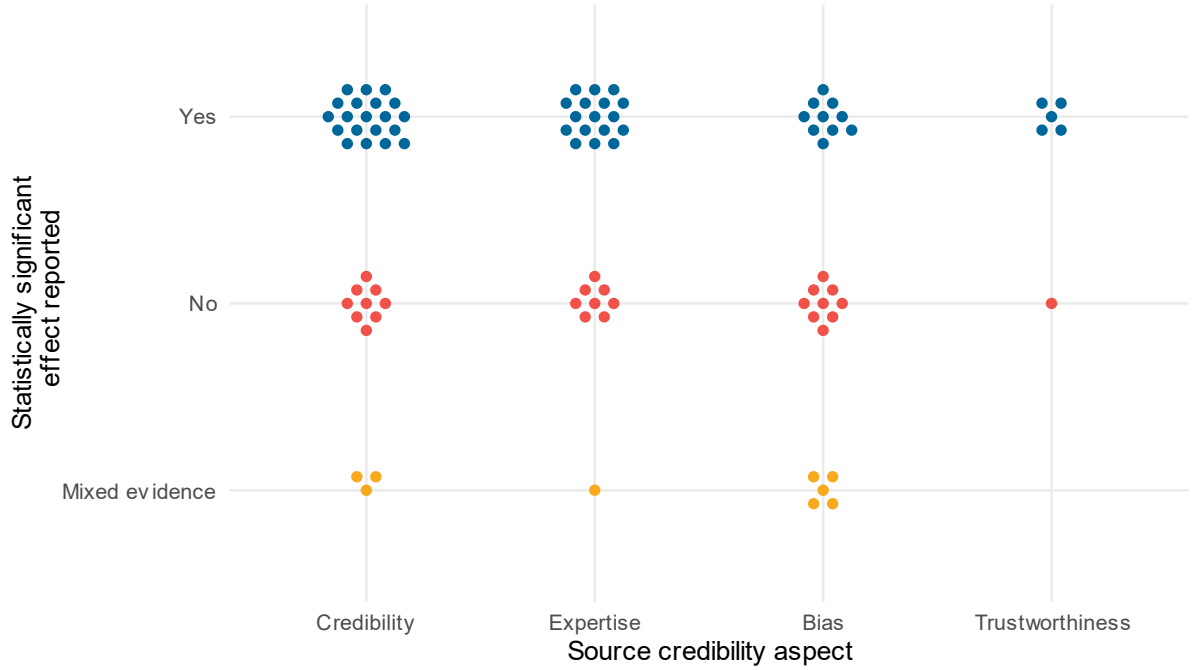
substantive content that is perceived to be more relevant for focal judgments. Higher levels of relative perceived relevance of source credibility information may then increase the likelihood of source credibility effects occurring. In other words, the perceived relevance of source credibility information relative to the perceived relevance of substantive content in the misinformation environment may determine whether source credibility will affect individuals' responses, in line with accounts of source credibility effects based on the unimodel (Kruglanski & Thompson, 1999; Pierro et al., 2004).

4.2.2 Relevance of Source Credibility Information

Individuals' reliance on source credibility information could furthermore be gauged based on the perceived relevance of the respective source characteristics to the focal judgment. For instance, perceptions of source expertise, trustworthiness, and overall credibility may be perceived as more relevant to judgments relating to information truthfulness or accuracy than perceptions of source bias, which is often operationalised as the political slant or ideology of a source (e.g., Traberg & van der Linden, 2022) or a source's motives or vested interests (Amazeen & Krishna, 2023). In other words, source expertise, trustworthiness, and overall credibility may be perceived as being more diagnostic of the truthfulness of information than source bias (e.g., advertisers are generally perceived as having a vested interest, but this is not invariably interpreted as a cue that the information they communicate is false), hence individuals may rely more strongly on the former than on the latter in truth or accuracy judgments. Figure 5 provides an overview of the identified effects on cognitive outcome variables, most of which relate to perceptions of information accuracy or truthfulness, grouped by their

Figure 5

Overview of Identified Effects on Cognitive Outcome Variables by Source Credibility Aspect and Statistical Significance



Note. Statistical significance is defined as $p < .05$.

statistical significance and the focal source credibility aspect (excluding effects of source salience and cases with multiple source credibility aspects). As can be seen in Figure 5, effects of source bias on these outcome variables appear to show greater inconsistency compared to overall source credibility, expertise, and trustworthiness. One potential explanation for this pattern is that individuals are more likely to rely on source credibility information when it is perceived as more relevant to the focal judgment.

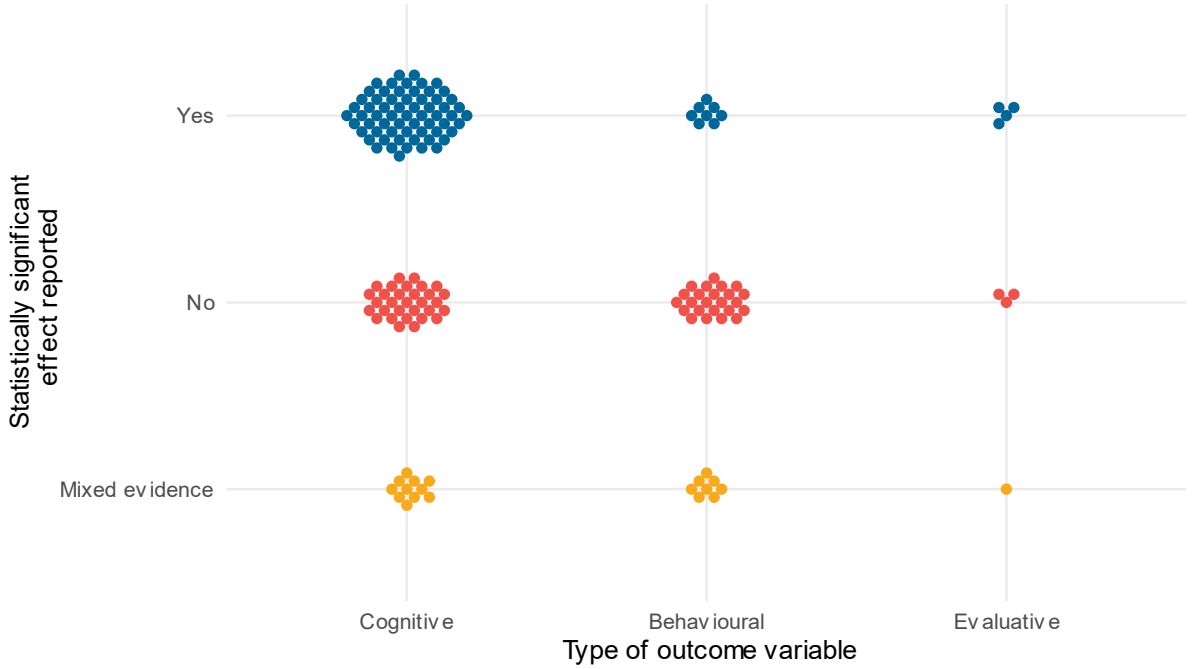
Overall, we posit that reliance on source credibility information and substantive content in forming judgments could be predicted based on the relevance of the pieces of information available in the misinformation environment. In the presence of both substantive content and source credibility information, the piece of information that is perceived as relatively more relevant than the other is more likely to affect individuals' responses. The relative relevance of both pieces of information could be determined by the number of references relevant to the focal judgment a piece of information contains, or the extent to which a piece of information is perceived as diagnostic of the truthfulness of information. This relevance-based account of source credibility effects could explain some of the discrepant findings on source credibility effects in misinformation research based on the unimodel and related research on the relevance override (Kruglanski & Thompson, 1999; Pierro et al., 2004).

4.3 Nature of Outcome Variables

When categorising the outcome variables of the identified effects into cognitive (e.g., perceived information accuracy), evaluative (i.e., attitudes towards vaccination), and behavioural (e.g., vaccination intentions) responses, several things stand out. Most effects reported in the literature pertain to cognitive (111; 68.52%) and behavioural outcome variables (43; 26.54%), while evaluative responses (8; 4.94%) have been neglected in misinformation research on source credibility effects. This is surprising

Figure 6

Overview of Identified Effects on Cognitive Outcome Variables by Source Credibility Aspect and Statistical Significance



Note. Statistical significance is defined as $p < .05$.

given that the persuasion literature on this topic has primarily focused on attitudes (i.e., evaluative responses) as main type of outcome variable. When grouping the identified effects (excluding those of source salience) by their statistical significance and the nature of the outcome variable (see Figure 6)), it appears that there is more (and more consistent) evidence for source credibility affecting cognitive responses compared to behavioural responses. Such a pattern could be expected based on persuasion research showing that responses to persuasive appeals are mainly predictive of behaviours when they processed under certain circumstance (e.g., when the extent of elaboration is high; Petty & Cacioppo, 1986a). Similarly, research from the domain of conspiracy beliefs has shown that beliefs in conspiracy theories only or more strongly translate into behavioural intentions for some individuals (e.g., individuals with a high need to evaluate; Mang et al., 2024). Moderators like these could also explain under what circumstances source credibility effects on cognitive responses translate into behavioural responses in the context of misinformation research, which has not been investigated yet to the best of our knowledge. Furthermore, investigating the effects of source credibility on evaluative responses could not only potentially help in explaining the process by which cognitive responses translate into behavioural responses, but also tackle the current lack of misinformation research on this type of outcome variables.

4.4 The Extent of Elaboration as a Moderator

This section will provide an overview of evidence from misinformation studies investigating the moderating role of the extent of elaboration in source credibility effects. The persuasion literature has consistently shown that individuals' reliance on source credibility information is moderated by the extent of elaboration (Kruglanski & Thompson, 1999; Petty & Cacioppo, 1986a). The unimodel, for instance, predicts that individuals will rely more strongly on information that is easier to process under low-elaboration conditions compared to high-elaboration conditions (Kruglanski & Thompson, 1999). Similarly, except for implying the presence of qualitative differences between source credibility information and substantive content, the ELM predicts that individuals should rely more strongly on source credibility information under low-elaboration conditions than under high-elaboration conditions (Petty & Cacioppo, 1986a). Since source credibility information is usually relatively short and hence easy to process in most misinformation studies, one might expect similar interaction effects in misinformation contexts. Studies investigating the interplay between reliance on source credibility information compared to substantive content and the extent of elaboration in misinformation contexts have yielded inconsistent findings. While some findings suggest that there might be interaction effects between source credibility and the extent of elaboration (e.g., Pehlivanoglu et al., 2021, Study 2), several studies have failed to find evidence for such effects (e.g., Chae et al., 2024; Faragó et al., 2023; Pehlivanoglu et al., 2021, Study 1).

There is some tentative evidence for the extent of elaboration moderating the effects of source credibility in misinformation contexts. Pehlivanoglu et al. (2021, Study 2) found that individuals with low analytic thinking scores perceived true, but not false, news as more accurate when they were presented by credible sources compared to non-credible sources. For true information, these results mirror basic findings from persuasion research that individuals tend to rely more strongly on source credibility information (when it is easier to process than substantive content) under low- compared to high-elaboration conditions (Kruglanski & Thompson, 1999; Petty & Cacioppo, 1986a). The absence of this effect for false information is more puzzling, suggesting that the nature of the interactive effects of source credibility and the extent of elaboration may differ between true and false information. Based on Kruglanski and Thompson's (1999) assumption that the

ease of processing of available information can determine the nature of source credibility effects, this pattern could be explained by Gilbert et al.'s (1990) suggestion that rejecting false information may be more effortful than accepting true information. Incorporating source credibility information into effortful judgments of false information may further increase the level of effort required, potentially resulting in the finding that individuals did not incorporate source credibility information into their judgments of false information under low-elaboration conditions, as they did for judgments of true information.

It should be noted that several studies have failed to provide evidence for any interaction effects between the extent of elaboration and source credibility. For instance, studies manipulating the extent of elaboration by inducing cognitive load have not found evidence for these manipulations affecting reliance on source credibility information (e.g., Chae et al., 2024, Study 3). Studies measuring the extent of elaboration have also failed to find evidence for such effects (e.g., Pehlivanoglu et al., 2021, Study 1). The absence of such moderating effects could occur due to source credibility information and substantive misinformation requiring similar amounts of processing due to any combination of structural information features (e.g., veracity, length, complexity). Since the unimodel considers source credibility information and substantive content to be functionally equivalent when their structural features are held constant (Kruglanski & Thompson, 1999), no preferential reliance on either piece of information would be expected as a function of the extent of elaboration in these cases. However, a detailed examination of this possibility or empirical tests of this explanation exceed the scope of this article.

Overall, the evidence for interaction effects between the extent of elaboration and source credibility in misinformation research is mixed, with several studies failing to find evidence for such effects. The unimodel by Kruglanski and Thompson (1999) could offer potential explanations for the absence of such moderating effects and for their nature when they occur. However, a more systematic and theory-driven investigation of interaction effects between source credibility, the extent of elaboration, information veracity, and other information features, would be needed to test explanations of these findings.

5. RECOMMENDATIONS

Based on our investigation of persuasion and misinformation research into source credibility effects, we identified several factors that could have contributed to the inconsistencies in source credibility effects in the misinformation literature (see Figure 7).

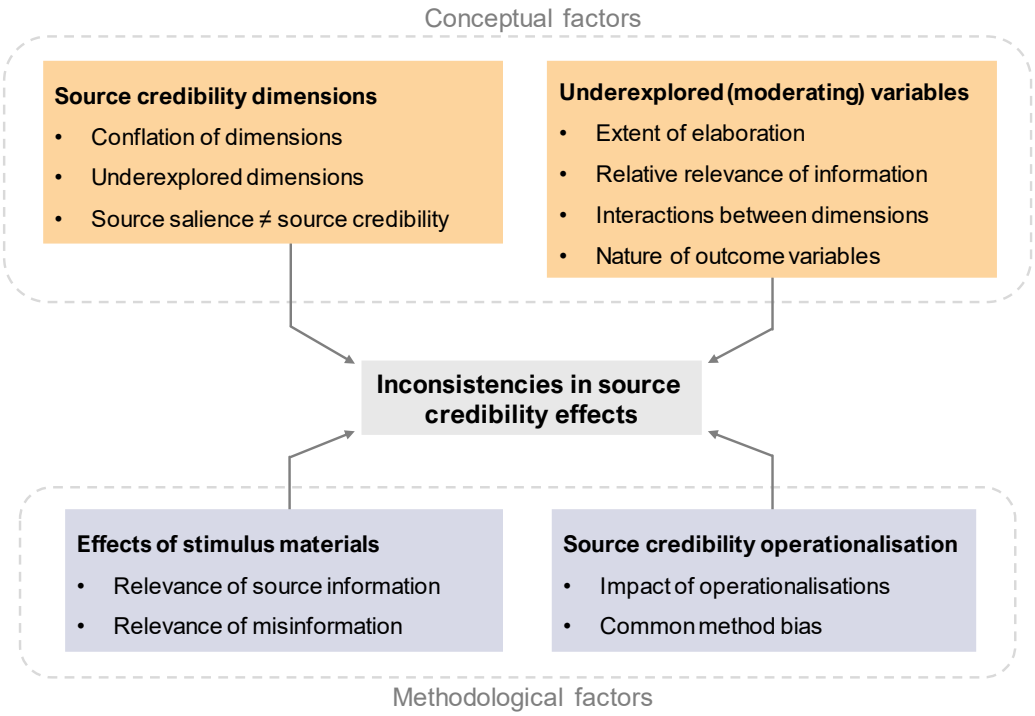
Hereafter, we provide theoretical recommendations which could help develop conceptual frameworks that can systematically explain discrepant findings in the misinformation literature. We furthermore outline promising methodological approaches for misinformation researchers investigating source credibility effects and highlight fruitful avenues for future research.

5.1 Conceptual Recommendations

Our investigation of the misinformation literature on source credibility effects suggests that many previously published studies have conflated different facets of source credibility. Unless this is done systematically (e.g., by crossing manipulations of different source credibility facets), it can limit the extent to which results from these studies are informative about individual source credibility facets and can potentially lead to erroneous conclusions about them, partly due to the fact that different facets of source credibility do not only have additive effects but can also produce interactive effects (Susmann & Wegener, 2023). Disentangling source credibility facets is not possible in all cases, such as when investigating the effects of the credibility of real-world sources that differ

Figure 7

Potential Causes of Inconsistencies in Source Credibility Effects



(non-systematically) on various credibility facets. It is not necessary to do so when the primary goal of a study is to make inferences about the overall credibility of, for instance, real-world sources, but not doing so limits the extent to which these studies allow for conclusions about individual source credibility facets. As is the case for studies investigating the effects of real-world sources, studies investigating source salience rather than source credibility can have high practical and theoretical relevance for the phenomenon in question (e.g., source salience or overall credibility). However, these kinds of studies do not allow for a systematic investigation of the effects of individual source credibility facets. Persuasion research has developed a body of evidence disentangling and isolating the distinct effects of different source credibility facets (e.g., Evans & Clark, 2012; Wallace et al., 2019, 2020a, 2024). Misinformation research, however, currently seems to be lacking similarly systematic research into the distinct effects of these facets (for a notable exception see Susmann & Wegener, 2023).

The lack of studies disentangling source credibility aspects in a systematic way may be the result of many misinformation studies investigating source credibility effects with a strong applied focus. For example, many studies investigated the effects of credibility perceptions of real-world news sources (e.g., Pehlivanoglu et al., 2021; Traberg & van der Linden, 2022) or tested the effectiveness of credibility labels on real-world news consumption (e.g., Aslett et al., 2022). While studies like these are particularly suitable for deriving inferences about specific real-world phenomena, they might not provide the best basis for developing an overarching framework for understanding the effects of source credibility and its constituent dimensions in misinformation contexts. We argue that to fully understand how source credibility and its constituent facets affect responses to misinformation exposure and correction, a more systematic approach to studying these

phenomena is needed, whereby the distinct effects of individual facets of source credibility are isolated and potential interactive effects between them are explored. This would not only be integral to the development of fundamental theoretical accounts of source credibility effects in misinformation contexts, but it could also advance our understanding of source credibility effects in applied settings in which different source credibility facets simultaneously play a role. While the literature on source credibility effects in misinformation contexts suggests that not all findings from persuasion research readily translate into misinformation contexts, the persuasion literature can offer a good starting point for more systematic theorising about the effects of source credibility and its constituent facets in misinformation research.

A more systematic approach to investigating source credibility would not only entail disentangling the effects of credibility dimensions that have been investigated widely in prior research (e.g., bias), but also to shed light on dimensions of source credibility that have received little attention so far. One particular source credibility facet that seems to have been neglected in misinformation research is source trustworthiness (i.e., the extent to which sources are perceived as honest), which is one of the main pillars of source credibility (Wallace et al., 2020b). Since the concept of honesty may be particularly relevant for judgments related to the truthfulness of information, which most misinformation studies entail, investigations of perceived source trustworthiness pose an interesting avenue for future research.

Not only the relevance of information about a particular source credibility dimension, but also the relevance of available information in misinformation environments in general has so far been neglected. More specifically, Kruglanski and Thompson's (1999) unimodel and related persuasion research on the relevance override by Pierro et al. (2004) could help explain when individuals are most likely to rely on source credibility information compared to substantive misinformation content when forming judgments. Building on this research, we propose a relevance-based account of source credibility effects in misinformation which posits that the presence and strength of source credibility effects in misinformation contexts may be determined by the relative relevance of source credibility information compared to substantive misinformation content. In the presence of source credibility information and substantive misinformation content, individuals will rely more strongly on the more relevant of the two, given that they have sufficient cognitive capacities to process all available information. This account suggests that source credibility effects in misinformation may be dependent on the nature of misinformation and source credibility information that is investigated. We propose that the relevance of both types of information to the focal judgment, relative to one another, should be considered when developing theoretical frameworks for studies investigating such effects. This account is but one of many potential explanations for why studies employing different misinformation and source credibility stimuli or measures may yield diverging results. However, regardless of the explanation, we highlight the need for the development and testing of theory-driven explanations for these mixed findings, which are currently lacking in misinformation research.

The need for an overarching theoretical framework is even more pronounced when it comes to the potential moderating role of the extent of elaboration in source credibility effects. The limited number of misinformation studies investigating this interaction has yielded mixed results and does not allow for firm conclusions. Some findings appear to partially align with persuasion research on the unimodel (Kruglanski & Thompson, 1999). While we are hesitant to derive definitive conclusions from the limited body of available evidence on these interaction

effects, we encourage researchers to investigate this matter more systematically. Even though the persuasion literature may not be able to explain all of the currently available findings, we direct readers to this literature, as the field of persuasion has brought forward several theoretical frameworks explaining when individuals engaging in various levels of elaboration rely on the substantive information of persuasive messages or information about source credibility, such as the ELM (Petty & Cacioppo, 1986a), the HSM (Chaiken et al., 1989), and the unimodel (Kruglanski & Thompson, 1999). Because of the previously highlighted similarities between misinformation and persuasion research into source credibility effects, these frameworks from persuasion research, as well as the literature leading to their development, could provide a starting point for the creation of similarly systematic frameworks in misinformation research.

Currently, misinformation research also seems to lack theoretical explanations for the finding that source credibility appears to affect cognitive responses more consistently than it affects behavioural intentions. Moderators of the link between cognitive and behavioural responses identified in research on persuasion (e.g., elaboration extent; Petty & Cacioppo, 1986a) or conspiracy beliefs (e.g., need to evaluate; Mang et al., 2024) could be explored in misinformation research to shed light on this relationship. Furthermore, investigating effects of source credibility on evaluative responses, which have so far been neglected in misinformation research, could help in shedding light on the process by which cognitive responses in this context translate into behavioural responses, as cognitive responses are posited to affect behaviour through attitudes (Petty & Cacioppo, 1986a).

Overall, we highlight the need for a more systematic approach to investigating the effects of source credibility in misinformation research. We argue that this comprises clearly conceptualising source credibility and its constituent components, considering characteristics of both source credibility and substantive information (e.g., relevance to the focal judgment), and accounting for the extent of elaboration as well as the nature of outcome variables. Systematically investigating these aspects of the phenomenon at hand empirically may then, in turn, allow for the development of an overarching theoretical framework that can explain the nature of source credibility effects in misinformation contexts.

5.2 Methodological Recommendations

The aforementioned need for a more systematic approach to conceptually disentangling the effects of individual source credibility facets in misinformation research has important implications for the operationalisation of source credibility in misinformation studies. To apply our recommendation to investigate the distinct and potentially interactive effects of individual source credibility facets, misinformation researchers could employ study paradigms that conceptualise the credibility facets to be investigated as related, but distinct phenomena. Susmann and Wegener (2023) did so by experimentally manipulating source experience (i.e., expertise) and vested interest (i.e., bias) as crossed factors, allowing them to demonstrate that interactive effects between these two source credibility facets can explain findings from previous studies conflating these facets in a more nuanced way. Researchers investigating phenomena that make it difficult to isolate individual source credibility facets in experimental manipulations (e.g., when studying the effects of real-world sources varying on different source characteristics or when investigating effects of source salience) could additionally include measures of these facets to gain a better insight into how these sources differ on these facets, and to be able to test theory about them, albeit not in a way that allows for causal inferences. However, when doing so, researchers should account for common method bias to avoid inflated or otherwise distorted effects of source credibility measures on structurally

similar outcome measures (for remedies against common method bias see Podsakoff et al., 2024).

Disentangling source credibility facets therefore requires not only adapting one's theorising accordingly, but also ensuring that study materials (e.g., experimental manipulations of source credibility) allow for isolating the effects of specific source credibility facets. This can be done, for instance, by pretesting source credibility manipulation materials to ensure that they vary only on the specified facet(s) of source credibility. Such a pretest can take the form of a separate study in which participants rate several sources (i.e., prospective source credibility manipulations) on all relevant credibility facets to identify sources that vary only on the desired facet (e.g., perceived trustworthiness), but not on others (e.g., perceived bias). Should a pretest of source credibility manipulations not be feasible, we recommend researchers to include measures of the focal facets of source credibility and, potentially, any confounding credibility facets, as manipulation checks to ensure that the manipulation tapped into the desired facet of credibility perceptions.

In addition to ensuring that source credibility measures or manipulations only tap into the desired facet(s) of credibility, accounting for the relevance of both source credibility information as well as substantive misinformation content could help in avoiding potential confounds and reducing unwanted noise in the data. This can be done by either holding the relevance of these pieces of information constant across condition, which could be achieved through a similar pretesting procedure as mentioned before, or by measuring the perceived relevance of all relevant pieces of information in the study. Furthermore, studies explicitly manipulating the relevance of source credibility information and/or substantive misinformation content, akin to Pierro et al. (2004), would be highly valuable in advancing understanding of such effects in misinformation contexts. In the absence of such manipulations or measures, the relative reliance on source credibility information and substantive misinformation can be used as a proxy for the relevance of information. For instance, akin to manipulations of argument strength (i.e., strong vs. weak arguments) that are used to examine reliance on message content in persuasion research (e.g., Priester & Petty, 1995), manipulations of information veracity (i.e., true vs. false information) can serve this purpose, such that statistically significant effects of veracity on focal judgments should reflect reliance on substantive misinformation content, given that differences between true and false information are discernible. In addition to potentially allowing for such inferences, manipulations of information veracity can be useful for establishing any potential differences in the psychological processes underlying individuals' reactions to true compared to false information.

We argue that misinformation researchers investigating source credibility effects would benefit from clearly distinguishing between individual source credibility facets in their measures and manipulations of source credibility, as well as accounting for the relevance of both source credibility information as well as substantive misinformation content. Furthermore, experimental manipulations of veracity could help gauge the extent to which individuals rely on misinformation content compared to source credibility in forming judgments and to explore differences in the psychological processes underlying responses to true and false information. A summary of our recommendations for more fruitful and systematic investigations of source credibility effects in misinformation contexts can be found in Table 2.

6. CONCLUSION

In contrast to persuasion research, which has developed a large and robust body of evidence for the effects of perceived source credibility based on overarching theoretical frameworks,

Table 2

Recommendations for Investigating Source Credibility Effects in Misinformation

Conceptual recommendations	Disentangle source credibility dimensions.
	Investigate interactions between source credibility dimensions.
	Investigate underexplored source credibility dimensions (e.g., source trustworthiness) and outcome variables (i.e., evaluative responses).
	Explore how the relative relevance of source credibility information and substantive content to the focal (truth) judgments shapes source credibility effects.
	Explore moderators and mediators of the link between cognitive and behavioural responses.
	Clarify the role of the extent of elaboration.
Methodological recommendations	Operationalise source credibility dimensions as related but distinct phenomena.
	Include measures of source credibility dimensions when source credibility dimensions are conflated, but account for common method bias.
	Pretest source credibility manipulations to ensure they tap into the correct dimension(s).
	Account for the relative relevance of source credibility information and substantive content when designing studies.

misinformation research has yielded inconsistent findings and appears to lack systematic explanations for these inconsistencies. We narratively synthesised the results of a systematic review of the misinformation literature examining source credibility effects and compare select findings from prior research to the persuasion literature to derive potential explanations for discrepant findings. In addition to suggesting tentative explanations for some discrepancies identified in misinformation research, we provide theoretical and methodological recommendations that could help misinformation researchers investigate source credibility effects more systematically. By doing so, we hope to stimulate the development of much-needed theoretical frameworks for the effects of source credibility in misinformation contexts.

7. DATA AVAILABILITY STATEMENT

Data and reproducible code are available for all studies in the Supplementary Materials that can be accessed here: https://osf.io/7nhcs/

8. CONFLICTS OF INTEREST

The authors declare no competing interests.

9. ACKNOWLEDGEMENTS

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10. AUTHOR CONTRIBUTIONS

V.M. conducted the systematic review and drafted all sections of the paper. K.E., B.M.F., and V.M. reviewed and edited the manuscript.

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11. APPENDIX: OVERVIEW OF IDENTIFIED SOURCE CREDIBILITY EFFECTS

Table 3

Overview of Included Studies Coded by Various Aspects

Authors	Year	Study	N	Sample country	Source credibility aspect	Outcome variable	Source credibility operationalisation	Type of stimuli	Topic of stimuli	Evidence for statistically significant effect
Amazeen & Krishna	2023		760	US	Bias, expertise	MMR vaccination intentions	Manipulated	Social media posts	MMR vaccine	No
					Credibility	MMR vaccination intentions	Measured	Social media posts	MMR vaccine	Mixed
					Expertise	Perceived correction accuracy	Manipulated	Social media posts	MMR vaccine	No
					Bias	Perceived misinformation accuracy	Manipulated	Social media posts	MMR vaccine	No
					Credibility	Perceived misinformation accuracy	Measured	Social media posts	MMR vaccine	Yes
Aslett et al	2022		3337	US	Credibility, source salience	Real-world news diet quality	Manipulated	Various	Various	No
Bauer & Clemm von Hohenberg	2021		1980	Germany	Credibility	Misinformation sharing intentions	Manipulated	News headlines (social media posts)	Immigration	Mixed
					Credibility	Perceived misinformation truthfulness	Manipulated	News headlines (social media posts)	Immigration	Yes
Blom	2021		897	US	Credibility	Perceived misinformation truthfulness	Measured	News headlines	Immigration	Mixed
Buchanan	2020	1	672	UK	Expertise	Misinformation sharing intentions	Manipulated	Social media posts	Immigration	No
		2	674	UK	Expertise	Misinformation sharing intentions	Manipulated	Social media posts	Immigration	No
		3	650	UK	Expertise	Misinformation sharing intentions	Manipulated	Social media posts	Immigration	No
		4	638	US	Expertise	Misinformation sharing intentions	Manipulated	Social media posts	Immigration	No
Buchanan	2021		172	UK	Trustworthiness	Misinformation engagement intentions	Manipulated	News article excerpt	Various	No
					Trustworthiness	Perceived misinformation truthfulness	Manipulated	News article excerpt	Various	No

Chae et al.	**2024**	1	531	Korea	Bias	Agreement with misinformation	Manipulated	News articles	Economic policies	No
		2	904	US	Bias	Agreement with misinformation	Manipulated	News articles	Immigration	No
		3	678	US	Bias	Agreement with misinformation	Manipulated	News articles	Infrastructure policy	Mixed
Clayton et al.	**2019**		3932	US	Bias	Perceived misinformation accuracy	Manipulated	News article excerpts	Political news	No
Di Domenico et al.	**2022**	2	191	US	Expertise	Perceived legitimacy of misinformation	Manipulated	Book covers	Vaccination	Yes
		3	399	US	Expertise	Perceived legitimacy of misinformation	Manipulated	Book covers	Vaccination	Yes
Dias et al.	**2020**	1	562	US	Source salience	Misinformation sharing intentions	None	News headlines (social media posts)	Politics	No
					Source salience	Perceived misinformation accuracy	None	News headlines (social media posts)	Politics	No
		2	1845	US	Source salience	Misinformation sharing intentions	None	News headlines (social media posts)	Politics	No
					Source salience	Perceived misinformation accuracy	None	News headlines (social media posts)	Politics	No
		6	2007	US	Source salience	Perceived misinformation accuracy	None	News headlines (social media posts)	Politics	Yes
Ecker & Antonio	**2021**	1	53	Australia	Expertise, trustworthiness	Belief in misinformation	Manipulated	Fictional scenarios about unfolding news events	Various	No
					Expertise, trustworthiness	Misinformation-based inferences	Manipulated	Fictional scenarios about unfolding news events	Various	Yes
		2	68	Australia	Expertise, trustworthiness	Misinformation-based inferences	Manipulated	Fictional scenarios about unfolding news events	Various	No
		2	65	Australia	Expertise, trustworthiness	Perceived credibility of misinformation	Manipulated	Fictional scenarios about unfolding news events	Various	No
Edgerly et al.	**2020**		841	US	Bias, credibility	Misinformation verification intentions	Measured	News headlines	Politics	Yes
					Bias, credibility	Perceived misinformation truthfulness	Measured	News headlines	Politics	Mixed
Faragó et al.	**2020**	1	1000	Hungary	Bias	Perceived misinformation truthfulness	Measured	News headlines (social media posts)	Various	Yes

		2	382	Hungary	Bias	Perceived misinformation truthfulness	Measured	News headlines (social media posts)	Political news	Yes
Faragó et al.	**2023**		991	Hungary	Source salience	Misinformation sharing intentions	None	News headlines	Various	No
					Source salience	Perceived misinformation accuracy	None	News headlines	Various	No
Folkvord et al.	**2022**		307	Netherlands	Credibility	Critical evaluation of misinformation	Manipulated	News headlines (social media posts)	Climate change, health insurance, vaccination	Yes
					Credibility	Perceived misinformation accuracy	Manipulated	News headlines (social media posts)	Climate change, health insurance, vaccination	Mixed
Garcia-Arch et al.	**2022**		116	Not reported	Expertise	Agreement with misinformation (pre- vs. post-correction score difference)	Manipulated	Pseudoscientific statements	Health	Yes
Geels et al.	**2024**	1	525	UK	Credibility, expertise	Misinformation sharing intentions	Manipulated	Social media posts	Health, grocery prices	Mixed
		2	590	UK	Credibility, expertise	Misinformation sharing intentions	Manipulated	Social media posts	Health, cybersecurity	Mixed
Gierth & Bromme	**2020**		293	Not reported	Bias	Analytic reasoning	Manipulated	Social media posts	Chocolate milk ban in school canteens	Mixed
					Bias	Perceived deception	Manipulated	Social media posts	Chocolate milk ban in school canteens	Mixed
Guillory & Geraci	**2013**	1	90	Not reported	Expertise, trustworthiness	Misinformation-based inferences	Manipulated	Fictional stories	Political corruption	Yes
					Expertise, trustworthiness	Voting intentions	Manipulated	Fictional stories	Political corruption	No
		2	60	Not reported	Expertise	Misinformation-based inferences	Manipulated	Fictional stories	Political corruption	No
					Expertise	Voting intentions	Manipulated	Fictional stories	Political corruption	No
		3	60	Not reported	Trustworthiness	Misinformation-based inferences	Manipulated	Fictional stories	Political corruption	Yes
					Trustworthiness	Voting intentions	Manipulated	Fictional stories	Political corruption	Yes
Ha et al.	**2023**	2	200	US	Credibility	Perceived misinformation truthfulness	Measured	News articles	Smoking cessation	Yes

Houghton et al.	2023	1	72	Not reported	Credibility	Reproduction of false information	Manipulated	Fictional stories	General knowledge	Yes
		2	72	Not reported	Expertise	Reproduction of false information	Manipulated	Fictional stories	General knowledge	Yes
					Expertise	Perceived misinformation truthfulness	Manipulated	Fictional stories	General knowledge	Mixed
		3	105	Not reported	Expertise	Reading time	Manipulated	Fictional stories	General knowledge	No
					Expertise	Response times	Manipulated	Fictional stories	General knowledge	No
Janssen & van Gog	2023		164	Netherlands	Bias	Agreement with source	Manipulated	Social media posts	Politics	Mixed
					Bias	Perceived misinformation truthfulness	Manipulated	Social media posts	Politics	Mixed
Kim & Dennis	2019	1	445	US (partly not reported)	Credibility, source salience	Misinformation believability ratings	Manipulated	News headlines (social media posts)	Abortion	Yes
					Credibility, source salience	Misinformation engagement intentions	Manipulated	News headlines (social media posts)	Abortion	No
		2	501	Not reported	Credibility, source salience	Misinformation believability ratings	Manipulated	News headlines (social media posts)	Abortion	Yes
					Credibility, source salience	Misinformation engagement intentions	Manipulated	News headlines (social media posts)	Abortion	No
Kim et al.	2019	1	590	US	Credibility, source salience	Misinformation engagement intentions	Manipulated	News headlines (social media posts)	Abortion	Mixed
					Credibility, source salience	Perceived misinformation credibility	Manipulated	News headlines (social media posts)	Abortion	Yes
		2	299	US	Credibility	Misinformation engagement intentions	Manipulated	News headlines (social media posts)	Abortion	Mixed
					Credibility	Perceived misinformation credibility	Manipulated	News headlines (social media posts)	Abortion	Mixed
Kirkpatrick	2021	1	358	US	Expertise	Misinformation sharing intentions	Manipulated	Statements	Safety at CERN	Yes
					Expertise	Perceived misinformation threat	Manipulated	Statements	Safety at CERN	Yes
					Expertise	Psychological proximity of misinformation threat	Manipulated	Statements	Safety at CERN	No
Krishna & Amazeen	2022		1067	US	Credibility	Misinformation engagement intentions	Measured	Social media posts	MMR vaccine	Yes
					Credibility	Misinformation engagement intentions	Measured	Social media posts	MMR vaccine	Yes
					Credibility	Perceived correction accuracy	Measured	Social media posts	MMR vaccine	Yes

					Credibility	Perceived correction accuracy	Measured	Social media posts	MMR vaccine	Yes
					Credibility	Perceived misinformation accuracy	Measured	Social media posts	MMR vaccine	Yes
					Credibility	Perceived misinformation accuracy	Measured	Social media posts	MMR vaccine	Yes
Kropf et al.	**2023**		501	Australia	Expertise, trustworthiness	Attitudes towards the organisation	Manipulated	Social media posts	Corporate misconduct	No
					Expertise, trustworthiness	Hypothetical spend	Manipulated	Social media posts	Corporate misconduct	No
					Expertise, trustworthiness	Intentions to seek additional information	Measured	Videos	Vaccine-autism link	Mixed
Lee et al.	**2023**		293	US	Expertise	Heuristic processing	Manipulated	Social media posts	MMR vaccine	Yes
					Expertise	Perceived misinformation credibility	Manipulated	Social media posts	MMR vaccine	Yes
Li & Shin	**2023**	2	340	UAE	Credibility	Trust in correction message	Measured	Social media posts	Electronic cigarettes	Yes
					Bias, expertise	Trust in correction message	Manipulated	Social media posts	Electronic cigarettes	Yes
Littrell et al.	**2024**	1	136	US, Canada	Expertise	Perceived misinformation profoundness	Manipulated	Statements	Pseudo-profound bullshit	No
		2a	143	US, Canada	Expertise	Perceived misinformation profoundness	Manipulated	Inspirational quotes	Pseudo-profound bullshit	Yes
		2b	138	US, Canada	Expertise	Perceived misinformation truthfulness	Manipulated	Inspirational quotes	Scientific bullshit	Yes
		3a	130	US, Canada	Credibility	Perceived misinformation accuracy	Manipulated	News headlines (social media posts)	Various	No
Liu et al.	**2023**		859	Not reported	Credibility	Perceived misinformation credibility	Measured	Social media posts	Health	Yes
					Credibility	Perceived misinformation credibility	Manipulated	Social media posts	Health	No
Michael & Sanson	**2021**	1a	581	US	Bias	Perceived misinformation truthfulness	Manipulated	News headlines	Various	Yes
		1b	201	US	Bias	Perceived misinformation truthfulness	Manipulated	News headlines	Various	Yes
Nadarevic et al.	**2020**	1	87	Norway	Expertise	Perceived misinformation truthfulness	Manipulated	News statements	Various	Yes
		2	91	Norway	Expertise	Perceived misinformation truthfulness	Manipulated	News statements	Various	Yes
		3	64	Germany	Trustworthiness	Perceived misinformation truthfulness	Manipulated	News headlines (social media posts)	Various	Yes

		4	80	Germany	Trustworthiness	Perceived misinformation truthfulness	Manipulated	News statements	Various	Yes
Pehlivanoglu et al.	2021	1	292	US	Credibility	Perceived misinformation accuracy	Manipulated	News articles	Various	No
					Credibility	Perceived misinformation credibility	Manipulated	News articles	Various	No
		2	357	US	Credibility	Perceived misinformation accuracy	Manipulated	News articles	Various	Yes
					Credibility	Perceived misinformation credibility	Manipulated	News articles	Various	No
Pennycook & Rand	2020	2	402	Not reported	Source salience	Perceived misinformation accuracy	None	News headlines (social media posts)	Politics	No
Pluviano et al.	2020	1	90	UK	Expertise	Misinformation-based inferences	Manipulated	Fictional stories	Fictional vaccine	No
					Expertise	Vaccination intention for one's child	Manipulated	Fictional stories	Fictional vaccine	No
		2	90	UK	Trustworthiness	Misinformation-based inferences	Manipulated	Fictional stories	Fictional vaccine	Yes
					Trustworthiness	Vaccination intention for one's child	Manipulated	Fictional stories	Fictional vaccine	No
Reins & Wiegmann	2024	1	400	US	Bias	Misinformation lie ratings	Manipulated	Fictional politician interviews	Various	Yes
		2	640	US	Bias	Misinformation lie ratings	Manipulated	Fictional politician interviews	Various	Yes
Schaewitz et al.	2020		294	Not reported	Credibility	Misinformation sharing intentions	Manipulated	News articles	Various	No
					Credibility	Perceived misinformation accuracy	Manipulated	News articles	Various	No
					Credibility	Perceived misinformation credibility	Manipulated	News articles	Various	No
C. Shen et al.	2019		3476	US	Credibility	Perceived credibility of fake images	Manipulated	Fake images	Various	No
L. Shen & Zhou	2021		996	Not reported	Expertise, trustworthiness	Deliberation intentions	Measured	Videos	Vaccine-autism link	No
Sterrett et al.	2019		1122	US	Trustworthiness	Misinformation engagement intentions	Manipulated	Social media posts	Health	Yes
					Trustworthiness	Perceived misinformation trustworthiness	Manipulated	Social media posts	Health	Yes
Sui & Zhang	2021		415	Not reported	Credibility	Perceived correction credibility	Measured	Social media posts	Nutrition	Yes

Susmann & Wegener	**2023**	1	226	Not reported	Bias, expertise, trustworthiness	Correction believability	Manipulated	Fictional stories	Fictional warehouse fire	Yes
					Bias, expertise, trustworthiness	Misinformation endorsement	Manipulated	Fictional stories	Fictional warehouse fire	Yes
					Bias, expertise, trustworthiness	Misinformation-based inferences	Manipulated	Fictional stories	Fictional warehouse fire	Yes
		2	353	US	Bias, expertise, trustworthiness	Correction believability	Manipulated	Fictional stories	Fictional warehouse fire	Yes
					Bias, expertise, trustworthiness	Misinformation endorsement	Manipulated	Fictional stories	Fictional warehouse fire	Yes
					Bias, expertise, trustworthiness	Misinformation-based inferences	Manipulated	Fictional stories	Fictional warehouse fire	Mixed
Traberg & van der Linden	**2022**	0	656	Not reported	Bias	Perceived misinformation reliability	Manipulated	News headlines (social media posts)	Various	Yes
		1	150	US	Bias	Misinformation sharing intentions	Manipulated	News headlines (social media posts)	Various	Mixed
					Bias	Perceived misinformation accuracy	Manipulated	News headlines (social media posts)	Various	Yes
Traberg et al.	**2024**	3	10541	Not reported	Bias	Perceived misinformation reliability	Manipulated	News headlines (social media posts)	Various	Yes
		4	790	Not reported	Bias, credibility	Perceived misinformation reliability	Manipulated	News headlines	Various	Yes
Visentin et al.	**2019**		400	US	Credibility	Brand attitude	Measured	News headlines	Various	No
					Credibility	Brand trust	Measured	News headlines	Various	Yes
					Credibility	Intentions to spread word-of-mouth	Measured	News headlines	Various	No
					Credibility	Intentions to visit brand store	Measured	News headlines	Various	No
					Credibility	Product purchasing intentions	Measured	News headlines	Various	No
Vraga & Bode	**2017**		1384	US	Expertise	Misperceptions about focal misinformation topic	Manipulated	Social media posts	Zika virus	Yes
Vu & Chen	**2024**		757	US	Expertise	Intentions to follow misinformation recommendations	Manipulated	News articles	Health	No
					Expertise	Misinformation sharing intentions	Manipulated	News articles	Health	No
					Expertise	Perceived misinformation credibility	Manipulated	News articles	Health	No
Wang	**2021**		330	US	Expertise	Perceived misinformation credibility	Manipulated	Social media posts	Genetically modified foods	Yes
Wang	**2023**		264	US	Expertise	Correction message sharing intentions	Manipulated	Social media posts	Genetically modified foods	No

					Expertise	Intentions to add a negative comment to correction message	Manipulated	Social media posts	Genetically modified foods	No
					Expertise	Intentions to add a positive comment to correction message	Manipulated	Social media posts	Genetically modified foods	No
					Expertise	Intentions to like corrective message	Manipulated	Social media posts	Genetically modified foods	Yes
Wertgen & Richter	**2020**	1	63	Germany	Expertise	Perceived comprehensibility of misinformation	Manipulated	Fictional stories	Various	Yes
					Expertise	Perceived meaningfulness of misinformation	Manipulated	Fictional stories	Various	Yes
					Expertise	Perceived misinformation plausibility	Manipulated	Fictional stories	Various	Yes
		2	63	Germany	Expertise	Reading time for spillover sentences	Manipulated	Fictional stories	Various	Yes
					Expertise	Reading time for target sentences	Manipulated	Fictional stories	Various	Yes
Westbrook et al.	**2023**	1	125	US	Credibility	Misinformation endorsement	Measured	Fictional stories	Fictional warehouse fire	Yes
					Credibility	Misinformation-based inferences	Measured	Fictional stories	Fictional warehouse fire	Yes
		2	138	US	Credibility	Misinformation endorsement	Measured	Fictional stories	Fictional warehouse fire	Yes
					Credibility	Misinformation endorsement	Manipulated	Fictional stories	Fictional warehouse fire	Yes
					Credibility	Misinformation-based inferences	Measured	Fictional stories	Fictional warehouse fire	No
		3	251	Not reported	Credibility	Misinformation endorsement	Measured	Fictional stories	Fictional warehouse fire	Yes
					Credibility	Misinformation endorsement	Manipulated	Fictional stories	Fictional warehouse fire	Yes
Wintersieck et al.	**2018**	1	335	US	Bias	Acceptance of misinformation	Manipulated	Political advertisements	Attack on political candidate	No
					Bias	Perceived misinformation accuracy	Manipulated	Political advertisements	Attack on political candidate	No
					Bias	Perceived misinformation usefulness	Manipulated	Political advertisements	Attack on political candidate	No
		2	702	US	Bias	Acceptance of misinformation	Manipulated	Political advertisements	Attack on political candidate	No

				Bias	Perceived misinformation accuracy	Manipulated	Political advertisements	Attack on political candidate	Yes
				Bias	Perceived misinformation usefulness	Manipulated	Political advertisements	Attack on political candidate	No
Wood et al.	**2023**	2505	US, UK	Expertise	Perceived COVID-19 vaccine health risk	Manipulated	News article excerpts	COVID-19	Mixed
Wu & Garrison	**2023**	352	US	Bias, trustworthiness	Misinformation sharing intentions	Measured	Satire & news articles	Various	No
Zeng et al.	**2023**	310	Taiwan	Credibility	Attitudes toward misinformation	Manipulated	News headlines (social media post)	Heart attacks	Yes
				Credibility	Fact-checking intentions	Manipulated	News headlines (social media post)	Heart attacks	Yes
				Credibility	Perceived misinformation credibility	Manipulated	News headlines (social media post)	Heart attacks	Yes
Zhang et al.	**2021**	1198	US	Credibility, expertise	Vaccination attitudes	Manipulated	Social media posts	Vaccination	No
				Credibility, expertise	Vaccination attitudes	Measured	Social media posts	Vaccination	Yes