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**DOI**

[10.4324/9781003043409-15](https://doi.org/10.4324/9781003043409-15)

**Publication date**

2022

**Document Version**

Final published version

**Published in**

Social Media and Crisis Communication

**License**

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[Link to publication](#)

**Citation for published version (APA):**

van der Meer, T. G. L. A., & Jin, Y. (2022). Crisis misinformation and corrective strategies in social-mediated crisis communication. In Y. Jin, & L. Austin (Eds.), *Social Media and Crisis Communication* (2nd ed., pp. 130-141). Routledge. <https://doi.org/10.4324/9781003043409-15>

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## CRISIS MISINFORMATION AND CORRECTIVE STRATEGIES IN SOCIAL-MEDIATED CRISIS COMMUNICATION

*Toni G.L.A. van der Meer and Yan Jin*

Even before “fake news” (Ireton & Posetti, 2018) became a widely recognized global challenge to the press and networked information systems, crisis scholars have cautioned the threat of false information to public communication, especially in times of crises. Coombs (2014) argued that the understanding of misinformation is essential to the base knowledge for crisis communicators. Focusing on the nature of false information and the negative consequences of its spread, communication and public relations scholars have studied informational falsehood under the umbrella of either misinformation or disinformation (e.g., Southwell et al., 2018; van der Meer & Jin, 2020), depending on whether it is unintentionally created/shared or deliberately created to harm others. Regardless, organizations and crisis practitioners must fight misinformation timely and strategically (Coombs, 2014).

The social-mediated crisis communication domain is flooded with misinformation in various forms, causing misperception and trigger negative crisis outcomes due to publics’ emotional and behavioral reactions based on information disorder and perception distortion (van der Meer & Jin, 2020). For a crisis-stricken organization, whose reputation, operation, and/or stakeholders may be threatened by misinformation, it becomes more important yet tougher than ever to fight back. Against the backdrop of far-reaching consequences of misinformation during a crisis, studies have addressed, for example, how to dispute crisis misinformation messages effectively online (van der Meer & Jin, 2020) and what type of corrective strategy is most successful (Jin et al., 2020).

To provide an overview and synthesis of existing misinformation and corrective communication theories and empirical evidences that are directly relevant to social-mediated crisis communication, this chapter defines crisis

misinformation, illustrates a typology of misinformation characteristics, identifies key actors in crisis misinformation spread, and recommends corrective communication strategies for organizations to consider in fighting misinformation in social-mediated crisis communication.

## Defining Crisis Misinformation

In crisis communication, the term “misinformation” has been predominantly used to describe false information about a crisis (e.g., Coombs, 2014; van der Meer & Jin, 2020). In the context of social-mediated crisis, misinformation can include not only false information about a crisis (e.g., crisis severity) but also false information about an organization that is affected by a crisis and/or held responsible for crisis resolution (van der Meer & Jin, 2020).

Jin et al. (2020) provided a working definition of *crisis misinformation*: “false information about any aspect of an ongoing crisis or any incorrect information that can lead to a crisis according to factual evidence from credible source(s) (e.g., the organization, news media, third-party experts, and government agencies, and internal/external witnesses).” The scholars further argued that crisis misinformation can lead to publics’ *crisis misperception* about any aspect of a crisis and might cause intentional/unintentional damage to an organization’s reputation and/or operation if the crisis misinformation is not intervened and corrected effectively (Jin et al., 2020). Depending on the degree of information incorrectness, we further posit that two types of misinformation can occur in a given social-mediated crisis:

- *Completely false* information, which reflects Tan et al.’s (2015) definition of misinformation as “explicitly false” information as falsified by expert consensus (p. 675).
- *Incomplete* information, which is one type of misinformation that leads to individuals’ false belief (Southwell et al., 2018), which can be regarded as partially correct or half-truth. However, if the missing part of the information is not supplied or the partial truth is intentionally promoted, there can be damaging consequences. Using an example from public health literature, doing exercise is a correct complementary therapy for depression treatment; however, when it is being communicated as an alternative therapy to the standard medical treatment, such information becomes incomplete, thus misleading and potentially causing harm (Glazer, 2013) such as antidepressant rejection.

To better understand misinformation types and, in turn, how to fight misinformation crises, we further elaborate on the most prominent characteristics of crisis misinformation by integrating current studies in crisis communication and misinformation.

## Characteristics of Crisis Misinformation: Different Shades of Facticity

The concepts of crisis communication and misinformation are interrelated in various ways. First, during crisis situations, both public and private organizations commonly are challenged with the (online) presence of inaccurate information. The situational complexity and uncertainty that come with crises give rise to an immense information need among stakeholders to understand the situation at hand that often requires (immediate) action (Thelwall & Stuart, 2007). Yet, especially in the initial phase of a crisis, little information or conclusive knowledge is readily available. In an effort to nevertheless make sense of the crisis, misinformation might prevail in the absence of fact-based information. Accordingly, previous crisis research has demonstrated the omnipresence of inaccurate information in crisis communication. For example, during the Ebola outbreak, most (re)tweets were found to contain misinformation (Oyeyemi et al., 2014). The spread of inaccurate information can further complicate the solving of a crisis or even result in further escalation of the situation.

Second, not only can a crisis situation give rise to a flow of inaccurate information, but misinformation can also be considered the origin of a crisis. In today's information environment, commonly defined as a post-truth era (Van Aelst et al., 2017), every situation or organization can fall victim to misinformation. Inaccurate interpretation of situations or the spread of false information can form fertile ground for a crisis to originate. If such situations, often characterized as occurring in public or media debates and being emotionally loaded rather than data-based, remain unmanaged it could threaten an organization. In the time that the stricken organization is trying to provide factual evidence to debunk inaccurate information, the damage might have already been done. For example, an organization's reputation might have already been negatively affected in light of false accusations, consumers have grown skeptical about whether they can trust certain products, or panic has already broken out about a potentially dangerous situation while in fact nothing is the matter. A crisis caused by misinformation can be categorized as a victim-cluster crisis as the organization has overall weak attributions of crisis responsibility (Coombs, 2007). Yet, denying the accuracy of such information can be a communicative challenge that takes considerable effort and time, especially since (factual) information or (organizational) sources nowadays can easily be dismissed as "fake news" (Bennett & Livingston, 2018; Jahng et al., 2020). Particularly when organizations are accused or undergoing a crisis, they suffer a credibility disadvantage which will complicate fighting false information. In sum, misinformation can either further escalate an existing crisis or spark a new crisis situation. In order to understand how organizations should respond to the spread of inaccurate information, it is essential to recognize where and why such information gets circulated.

Misinformation can reach audiences via numerous channels and platforms. Overall, scholars are mainly concerned with the role social and new media play in the dissemination of inaccurate information (Lewandowsky et al., 2012; Vraga & Bode, 2018). While the internet has made information and news easily accessible to a large pool of audiences, it also brought forward an information environment that is flooded with, for example, biased narratives, false information, and conspiracy theories (Törnberg, 2018). The absence of gatekeeping functions and the option to self-select sources and content online give reason for concerns regarding the blurring of information and misinformation on online platforms (Vraga & Bode, 2018). The extent to which information is catchy, rather than its truthfulness, drives the spread of news on social media (Radzikowski et al., 2016). Accordingly, scholars agree that misinformation is generally fabricated and disseminated via social media (Tandoc et al., 2018) and research has observed how inaccurate information diffuses faster, farther, and deeper in digital news settings as compared to true news (Vosoughi et al., 2018). Hence, today's news environment is less organized through centralized processes of strict news verification; in the digital setting each news item, whether true or false, can spread like wildfire. In the context of issue management, it is essential that organizations monitor social media to see if any misinformation is fabricated or spread as correct that could potentially affect the organization's legitimacy (Jahng et al., 2020). Since anyone can circulate whatever untruthfulness they find online and easily reach a large audience, it is crucial for organizations to understand the intentions that underlie the design and spread of misinformation.

### **Key Actors in Crisis Misinformation Spread: Veracity Differed by Motivation**

Misinformation can come from a wide array of actors (Ekström et al., 2020). Since receptivity of misinformation can vary strongly conditional upon the motivations of the sender of the message (Chou et al., 2018), it is important to differentiate actors based on their intention to spread misinformation. First, people may spread rumors to evaluate and interpret information in an effort to understand complex situations and, for example, solve crisis problems (Bordia & DiFonzo, 2004). During ambiguous and threatening situations, unverified information, which can end up being either accurate or false, is relied upon for processes of sense making (DiFonzo & Bordia, 2007). As rumors often claim facticity of unsubstantiated information, they can be considered a form of misinformation. Such claims gain their power through how wide the information is spread amongst a network of actors (Berinsky, 2017).

Second, inaccurate information can be created or spread unaware of its lack of veracity. Comparable to the conceptualization of rumors, information is being spread as accurate but, in this case, the information always turns out to

be factually incorrect, which can happen outside of the creator's or sender's awareness. People might interpret certain information incorrectly or share statements they assume to be factual. Despite the accidental character of this form of misinformation, it can still cause substantial harm without the disseminators' knowledge. This accidental spread of untruthful information resonates with the definition of misinformation since it is defined as any type of inaccurate information that is spread without the intention to mislead (e.g., Freelon & Wells, 2020). Such "honest mistakes" in communication can be considered inevitable, especially during crises characterized by high levels of uncertainty and complexity (Hameleers et al., 2020; Hameleers, van der Meer, & Brosius, 2020).

Third, actors may also intentionally design or spread falsehoods. This form of misinformation resonates with what is defined as disinformation, where misleading information is intentionally created or spread to harm others (Freelon & Wells, 2020; Hameleers et al., 2020; Hameleers, van der Meer, & Brosius, 2020). Both financial and ideological reasons exist why actors knowingly spread inaccurate information (Vargo et al., 2018). Financial drivers of the rise of disinformation related to the combination of a higher need to generate traffic to news websites while the number of journalists decreases and ad revenues and readership of news media are sliding (Ihlen et al., 2019). Driven by economic incentives, like online advertising revenue based on page views, actors on (fake) news websites fabricate content that is sensational to attract more clicks and shares. The current state of clickbait-driven news incentivizes speedy publication of attention-grabbing news over fact-based news or processes of verification (Chen et al., 2015). Since large corporations and governmental actors have considerable news value, it can happen that false information about them is fabricated as traffic-generating news. Such falsehoods can have substantial negative effects; for example, when in 2008 it was falsely claimed that Apple CEO Steve Jobs had suffered a heart attack, this news resulted in a drop of 10% in Apple's stock price (Sandoval, 2008). Next to being financially motivated, actors disseminate false information to stir controversy (Vargo et al., 2018). Research in political communication has shown how disinformation can be spread aiming to attack outgroups or political opponents (Tandoc et al., 2018) or augment polarized divides among partisans (Bennett & Livingston, 2018). Accordingly, populist actors are found to intentionally spread false news to fuel dissent among citizens (Bennett & Livingston, 2018). Along the same line, falsehoods might be spread to harm an organization or escalate a public or organizational crisis. Those who hold populist or anti-establishment attitudes might consider corporations or governments as part of the corrupt and evil elites and evaluate them as basically self-interested, dishonest, and misleading publics. This might motivate certain actors or competitors to fabricate and spread disinformation about organizations that, in turn, can result in crises. As these forms of misinformation are intentionally manipulated, it is more likely that actors put considerable effort and resources

into the design of disinformation to make it look authentic and real. For example, the reliance on manipulated visuals (Hameleers et al., 2020; Hameleers, van der Meer, & Brosius, 2020) or even deep fakes (Dobber, 2020) stand a high chance to stir a larger portion of their audience and therewith harm those who they intend to bring down.

As the intention related to the spread of false information can define the different types of misinformation actors or sources, some of them can be considered more harmful than others. The differences between intention to do harm (i.e., actors spreading disinformation) compared to being uninformed or less critical (i.e., actors spreading misinformation or rumors) might determine how difficult it is to persuade actors of what they should believe or understand as factual. Actors who spread honest mistakes or rumors might be easier informed about what is false and what is factual, which might prevent that the misinformation is maintained (online), compared to those sources who intentionally aim to harm certain organizations' reputations. When false information is professionally designed in such a way that it resembles real news, it might be challenging for corporations to persuade the general public about the veracity of this information. Therefore, it is essential for organizations that encounter potential harmful misinformation to monitor what type of actor they are up against when determining their correction strategy.

## **Corrective Communication and Misinformation Debunking Strategies**

The prevalence and far-reaching consequences of misinformation are nothing new to academic research. Generally, literature acknowledges the complexity of debunking misinformation, especially since empirical results regarding the efficacy of corrective efforts are mixed. Beliefs in misinformation can prevail as corrections can be ineffective, even backfire, and strengthen falsehoods (Lewandowsky et al., 2012). Since questions concerning the effectiveness of debunking misinformation have been an integral aspect of misinformation literature from the start, we see several past meta-analyses that provide an overview of how effective corrective efforts are to fight misperceptions after exposure to misinformation. Taken together, correction attempts are found to help to reduce belief in misinformation when compared with experimental conditions where misinformation remains uncorrected (Blank & Launay, 2014; Walter & Murphy, 2018). The meta-analyses reveal how corrective attempts have a moderate-level effect reducing belief about misinformation (Walter & Murphy, 2018) and that such post corrections on average lessen the effect of misinformation to half of its size (Blank & Launay, 2014). However, in their meta-analysis on the continued influence of misinformation, Walter and Tukachinsky (2020) concluded that the misinformation remains to have a small effect after correction: "Overall,

correction of misinformation does not entirely revert people's attitudes and beliefs to their baseline levels" (p.170).

Studying the aggregated results of multiple studies helped these meta-analyses to list several elements that determine the effectiveness of corrective attempts. First, misinformation is found to be more difficult to debunk for political and marketing topics compared to the context of health (Walter & Murphy, 2018). Second, with regard to the type of corrective strategy, corrective attempts combining retraction with an alternative explanation are most effective compared to fact-checking and appeals to credibility (Walter & Murphy, 2018). Comparably, corrections that rely on an enlightenment procedure, detailing not only that there was misinformation but also why, were more effective compared to warnings of the possible presence of misinformation and social discrediting of the misinformation source (Blank & Launay, 2014). Hence, a coherent description of what actually happened and why is crucial the correct misleading information. Next, it is recommended that a correction criticizes the misinformation source's credibility since source credibility plays a central role in how (mis)information is processed (Walter & Tukachinsky, 2020). Third, the perceived credibility of the source of misinformation is indeed important but the evaluation of the correcting source is found to be less essential in debunking incorrect information. Ideally, the correction comes from the same source as the misinformation (Walter & Tukachinsky, 2020).

Recent research has studied the phenomenon of correcting inaccurate information in the theoretical context of crisis situations and crisis communication. In line with the aggregated findings of the meta-analyses (Blank & Launay, 2014; Walter & Murphy, 2018; Walter & Tukachinsky, 2020), van der Meer and Jin (2020) showed the importance of providing a strong narrative as an alternative explanation for the misleading information. In their experimental design, van der Meer and Jin (2020) relied on two types of corrective information to see which one works best, not only for correcting beliefs but also to mobilize people in terms of engaging in protective actions. Inspired by previous misinformation literature (Lewandowsky et al., 2012), a distinction was made between simple rebuttal (i.e., brief corrective message where simplicity is valued over complexity in the context of information overload and clutter during crisis) and factual elaboration (i.e., a detailed correction reinforcing the correct facts that provide a new narrative that helps recipients abandon initial misinformation). Misinformation beliefs about the severity of a public-health outbreak were effectively countered with both types of corrective information. Yet, while the mere presence of a correction did counter misperception after misinformation, it did not result in behavioral effects. Only in the case of factual elaboration was it found to stimulate individuals' intention to take preventive actions. The new narrative provided in this form of correction was apparently crucial to mobilize respondents' behavioral intentions. Correspondingly, organizational-crisis



research confirmed that factual elaboration outperformed simple rebuttal in correcting misinformation to avoid reputational damage and limit perceived crisis responsibility (Jin et al., 2020). Mediation analyses show that this more elaborated form of correction is more effective because it better sparks emotional responses among people (van der Meer & Jin, 2020) and such messages are perceived to be of higher quality (Jin et al., 2020).

Next, crisis research shows how the source of corrective information can play an important role. Contrary to Walter and Tukchinsky's (2020) conclusion based on previous misinformation research, crisis studies show that sources can make a difference in the context of correcting information during crises. As expertise is commonly related to levels of credibility, expert sources should enhance the efficacy of correction attempts (Vraga & Bode, 2018). Vraga and Bode (2018) showed how the inclusion of source information (Centers for Disease Control and Prevention [CDC] and Snopes.com) in the correction message is a necessity to ensure that beliefs based on misinformation about the Zika virus are corrected. Comparably, van der Meer and Jin (2020) demonstrated that both the news media and CDC are more effective in correcting misinformation beliefs about public-health crises compared to social peers. These findings suggest that expert and authority sources (e.g., national news media and government health organizations) are perceived as more reliable sources in times of crisis and are therewith more successful in debunking misinformation and correcting misperceptions. Next, not only is the correcting source found to play an important role, but also, supportive supplemental information from a third actor can boost the attempt to effectively debunk misinformation. In the context of an organizational crisis, the communicative backup of an employee in accompanying the organization in debunking misinformation can help to calibrate people's inaccurate response to a crisis in light of the spread of misinformation (Jin et al., 2020). Employees' authentic communication and first-hand experience can provide additional credibility to the correction attempt of the organization.

Another research avenue has explored the use of pre-warnings or news media literacy (NML) messages as a tool to fight misinformation. Most of the studies focusing on correcting misinformation looked at how post-warning can correct misinformation. Yet, since misinformation can still persist after correction (Walter & Tukachinsky, 2020), communicating the importance of media literacy and source criticism skills might also be a fruitful approach to ensure publics are less affected by misinformation. Although the meta-analysis showed how post-corrections often perform better than forewarnings do (Walter & Murphy, 2018), some studies did show the potential of such forewarning-based efforts. For example, short, scalable misinformation NML interventions can help to decrease the perceived accuracy of misinformation and distinguish it from factual information (Guess et al., 2020), general warnings about misleading information result in people perceiving false headlines as less accurate

(Clayton et al., 2019), and the combination between pre NML interventions and post-correction is the most effective way of fighting inaccurate beliefs based on misinformation (Hameleers, 2020). Such pre-warning messages could be considered by corporations when a crisis hits as strategic tools to beforehand fight the potential spread of false information in the clutter of (online) information during pressing times like crises.

## Conclusion

We close this chapter by pointing out *corrective message credibility* and informational *competition/conflict* as two important future research directions for crisis scholars studying misinformation and social-mediated crisis. First, as van der Meer and Jin (2020) stressed, a crisis-stricken organization, by default, is in a disadvantageous position simply because publics are likely to expect them to fit back information against the organization. Therefore, organizational credibility, pre-crisis reputation, and existing organization-public relationships, among other organizational characteristics, matter to the success of an organization's debunking messages and overall corrective communication efforts. Second, the nature of public relations is centered on managing competition and conflict (Cameron et al., 2007). By fighting crisis misinformation, organizations often unavoidably add conflicting information to the crisis situation (Jin et al., 2020). Thus, organizations should be mindful about any side effect of debunking (or "over-correcting"), which might result in publics frustrated and confused, caught in between two contradictory pieces of information (misinformation [completely false or partially correct] vs. correct information), and feeling even more uncertain about whom to trust and which information should they use to cope with the crisis (Liu & Kim, 2011).

Rabindranath Tagore once said: "Facts are many, but the truth is one." In social-mediated crisis communication, misinformation, the opposite of facts and truth, takes many forms, but we believe the corrective communication approach we recommended – maneuvering debunking strategies according to misinformation characteristics and key players – provides a theory-driven, evidence-based system for crisis scholars and practitioners to further investigate crisis misinformation and devise more effective interventional strategies.

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