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The Importance of Source and Credibility Perception in Times of Crisis: Crisis Communication in a Socially Mediated Era

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Social media are invaluable sources of information during organizational crises. Although recent research confirms this fundamental role in crisis communication, this article is aimed at deepening the understanding about the role of the source of information in this socially mediated era by comparing the organization and the employee as communicators. As social media lack traditional gatekeeping processes, dynamics of both source and content credibility are assessed. The findings, based on an experimental design, advocate that judgments of organizational reputation are not only dependent on the crisis-response strategy, but also depend on the source and perceptions of source and content credibility.

Organizational-crisis situations are omnipresent in today's society, affecting numerous individuals and organizations, as well as society in general. Organizational crises are characterized by the rapid succession of emotional and stressful events, typically involving and affecting multiple stakeholders (Mcdonald, Sparks, & Glendon, 2010). Organizations aim to contain the rapid succession of negative and complex events without intensifying the crisis, to protect the organization from financial and reputational damage (Coombs, 2007). To do so, organizations have a plethora of crisis-response strategies and communication sources at their disposal (Benoit, 1997; Coombs, 2006, 2007). Despite the use of (several) crisis-response strategies, the prevention of reputational damage is often infeasible (Coombs, 2007), implying the importance of additional communication aspects.

Social media outlets have become mainstream venues for crisis communication between organizations and publics (Freberg, 2012; Freberg, Palenchar, & Veil, 2013; Jin, Liu, & Austin, 2011; Sutton, Palen, & Shklovski, 2008). These outlets are typically more dialogic, interactive, and immediate than classical media (Schultz, Utz, & Goritz, 2011; Utz, Schultz, & Glocka, 2013). Therefore, these outlets might be vital assets when informing publics that seek crisis-related information. Especially Twitter is gaining prominence as a viable source of information in times of crisis (Westerman, Spence, & van der Heide, 2012). This has important implications for organizations in terms of organizing and controlling the public debate in times of crisis and warrants an alternative communicative approach in the public sphere (Fournier & Avery, 2011).

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The current prominence of socially mediated crisis communication enlarges the role and influence of other information sources (Westerman et al., 2012), such as the employees of the stricken organization. Twitter users, whether these are individual employees or the organization itself through the authentic and verified Twitter account, independently publish information online without the interference of editors or media gatekeepers (Westerman et al., 2012). Therefore, organizations, themselves, are no longer the sole online source for the formation of public perceptions, because employees can equally influence online discussions about the organization (Helm, 2011; van Zoonen, van der Meer, & Verhoeven, 2014).

Although information is readily available on Twitter, the credibility of such information is often debatable (Sutton et al., 2008). All Twitter users (employees and organizations) have their own motivations and agendas for producing content. These motivational assumptions may have important implications in terms of information processing of those receiving the content, i.e., crisis communication sent by either the organization or the employees might be received differently by the mass public. We argue that, especially, employees can prove to be trustworthy as autonomous sources of information, which is considered a crucial element in the online shaping of organizational reputations (Helm, 2011). As such, more credible sources for crisis information (i.e., employees) might be available to the public. Therefore, it is important to understand how the public assesses source and content credibility during a crisis and how this influences the effectiveness of crisis-response strategies. This is done on the conjunction that online communication by employees may be seen as more credible and strengthens the credibility of crisis communication. In turn, this may enlarge the positive effects and diminish the negative effects on the organizational reputation resulting from crisis communication.

To assess the effectiveness of crisis communication, we draw on the well-established situational crisis communication theory (SCCT; Coombs, 2007). Yet, how people evaluate different crisis-response strategies from different sources on social media is less well established. Therefore, we adopt an information processing perspective. As credibility is generally acknowledged to be a key determinant for source evaluation (Reich, 2011; Shoemaker & Vos, 2009), especially in risk and crisis communication (McComas & Trumbo, 2001; Vaagan et al., 2010), we strongly argue that the effectiveness of crisis-response strategies depends on the evaluation of source and content credibility. The purpose of this article is to deepen the understanding of crisis communication on Twitter by examining the mediating role of credibility evaluations in the effect of crisis strategies communicated by employees versus organizations. This article adds to the current literature on crisis communication by including the communicative role of independent information sources—i.e., employees of the stricken organization—in times of organizational crisis. This article experimentally examines the role of source and content credibility through which crisis-related information is received, examining the following research question: What is the role of the source of information and the perceptions of credibility in the effects of crisis communication on post-crisis evaluations of organizational reputation?

LITERATURE REVIEW

The goal of crisis-response strategies is to protect or restore the organization's reputation and the trust of consumers and other stakeholders (Utz et al., 2013). A reputation is defined as the evaluation of organizations' ability to meet stakeholder expectations based on its performance

(Coombs, 2007). Reputations, in turn, are widely recognized valuable and intangible assets, because they attract customers, talent, and top-employees, and create competitive advantage (Fombrun & van Riel, 2004). As such, any crises, as it disrupts the organization's operations, is a threat to the reputation (Coombs, 2007). In this sense, organizational reputations are formed through the information that is received about the organization (Fombrun & van Riel, 2004), indicating the fundamental importance of communicative aspects during a crisis.

SCCT

In a crisis situation, organizations can adopt several crisis strategies to provide the public with information and to mitigate reputational damage. Crisis-communication theories focus on the effectiveness of different crisis-response strategies that organizations can employ in different types of crises (e.g., Coombs, 2007). The SCCT (Coombs, 2007) provides a framework for understanding how crisis responses may reduce the reputational damage inflicted by the crisis. SCCT entails a mechanism that projects how stakeholders will respond to crisis-response strategies, by identifying how specific facets of the crisis situation influence crisis attributions and reputation evaluations (Coombs, 2007). SCCT posits that three factors in crisis situation influence the reputational threat posed by the crisis: (a) the crisis responsibility, (b) crisis history, and (c) prior reputation. Crisis responsibility refers to the public's evaluation of the extent to which organizational actions caused the crisis. Crisis history refers to organization's past with similar crisis situations, whereas the prior relational reputation refers to how well or poorly stakeholders have been treated in other contexts (e.g., Coombs, 1999; 2006; 2007; Coombs & Holladay, 2008). As an extension to this well-established SCCT model, this study argues that the source of crisis information is an additional predictor in the publics' post crisis reputational evaluations of the organization.

Crisis Response Strategies

SCCT suggests that organizations have several crisis-response strategies that can be used to repair or protect the reputation in times of crisis (Coombs, 2007). SCCT identifies three crisis-response strategies (a) denial, (b) diminish, and (c) rebuild. Any one of these strategies is intended to protect the organizations' reputation. Denial strategies aim at establishing a crisis frame to remove any connections between the crisis and the organization. The rationale behind this is that when the organization is not involved in the crisis, they will not suffer any damage from the crisis. For instance, when rumors about a crisis circulate, organizations could aim their crisis communication at denying any truth to the rumor. Diminish-response strategies, in turn, are aimed at downplaying the crisis itself and the organization's part in the crisis. The organization might accomplish this by arguing that the crisis is not as bad as the public might think, or that the organization lacked control over the situation (Coombs, 2007). This way, organizations might reduce the negative effects of a crisis, because publics may perceive the organization's connection to the crisis and the crisis itself in a less negative manner. Finally, rebuild strategies attempt to improve the organization's reputation by offering material or symbolic aid to those affected by the crisis (Coombs, 2006, 2007). Rebuild strategies are believed to be central to renew reputational assets. Offering compensation or an apology are considered positive reputational actions (Coombs, 2007). Expressing concern for those affected by the crisis and reinforcing this compassion though compensation or apologies tend to reduce feelings of anger (Coombs & Holladay, 2008).

In general, defensive crisis response strategies—i.e., denial and diminish strategies—are deemed less effective than strategies that offer an apology—i.e., rebuild strategies (e.g., Coombs & Holladay, 2008). Similarly, empirical findings show that when organizations are confronted with a crisis, a rebuild strategy leads to the most positive reputational restoration (e.g., Coombs & Schmidt, 2000). In conclusion, although research indicates that denial strategies are most often adopted by organizations, these strategies might not be the most effective strategies (Kim, Avery, & Lariscy, 2009). Hence, the following hypothesis is formed:

H1: Organizational responses attributing responsibility for a crisis (i.e., rebuild strategy) yield stronger positive effects on postcrisis evaluations of organizational reputation while defensive strategies yield negative effects (i.e., denial and diminish strategies).

Importance of Information Source

The increasing dependence on social media in crisis situations gives rise to questions about the importance and evaluation of information sources. The attributions of the crisis are negotiated in the direct and dialogical (online) communication among organization and employees, together with all other interested parties. Direct crisis communication of organizations and employees is not subjected to media gatekeeping processes, hence; stakeholders have to determine the relevance, newsworthiness, and credibility of the information they receive (Utz et al., 2013). The effectiveness of these communication efforts is increasingly dependent upon the evaluation of source and content credibility (e.g., Westerman et al., 2012). Generally, in disseminating the response strategies, organizations rely on communicative sources such as official press releases, spokespersons, other official and recognizable organization channels, and the media. An often underutilized communicative potential to address publics are the organization's employees. Yet, internal stakeholder theory emphasizes the crucial role that employees play in the protection of organizational reputation in times of crisis. This is based on the notion that employees are ''closer'' to the organization than other stakeholders (Johansen, Aggerholm, & Frandsen, 2012, p. 273). Employees, as an independent credible information source, can provide inside information and make the organization more agile to dialogic communication (Frandsen & Johansen, 2011).

Employees are an independent and distinct source of information from official organizational sources. Employees can utilize their own private social media channels to inform others. As such, they do not communicate as institutional entities, but as individuals. Although they are affiliated with the organization, they communicate on a personal title. Thus, employees are not restricted in their online communication by the organization, neither are they forced by the organization to say specific things on their personal Twitter.

H2a: The positive effect of a rebuild strategy on organizational reputation is stronger when the employee is the source of crisis communication rather than the organization itself.

H2b: The negative effect of denial and diminish strategies on organization reputation is weaker when the employee is the source of crisis communication rather than the organization itself.

Credibility

In times of crisis, publics seek information to deal with uncertainty (Weick, 1995; Westerman et al., 2012). Social media have become a heavily used channel through which publics receive crisis-related information (Spence, Lachlan, & Griffin, 2007). However, as information through these channels is not subjected to media gatekeepers or journalistic scrutiny, users need to determine the credibility of the sender and the content themselves (Kent, 2013). Credibility refers to judgments made by a perceiver about the believability of the content and/or the communicator (O'Keefe, 2002). Hence, credibility can either refer to the credibility of the content that is communicated—i.e., content credibility—or the credibility of the communicator—i.e., source credibility. Research on source credibility has focused on the expertise and trustworthiness of the communicator, *casu quo* the source, as perceived by the public (Yang, Kang, & Johnson, 2010). Content credibility refers to perceptions of quality, accuracy, and currency of the message itself (Metzger, Flangin, Eyal, Lemus, & McCann, 2003).

Although in traditional media the sources and information are checked on veracity, thus ensuring some extent of source and information credibility (Salcito, 2009), this process is absent on social media. On social media, users personally determine the believability of the communicator, as the gatekeeping function shifts from the producers of content to the consumers of content (Shoemaker & Vos, 2009; Westerman et al., 2012). Credibility can be viewed as a perception and not something inherent within a channel. Hence, different communicators within a channel may yield different perceptions of credibility.

To deepen the understanding of how online information is processed and credibility evaluations are made, we build on information-processing literature (e.g., Metzger, Flanagin, & Medders, 2010; Sundar, 2008; Sundar & Nass, 2001; Walther, 1992). The social information processing theory (Walther, 1992) and the Modality, Agency, Interactivity, and Navigability (MAIN) model (Sundar, 2008) suggest that people use whatever information a channel provides to make judgments about others, thus including the sources of the communicated content.

Within information-abundant environments, such as social media, heuristic processing is a common means for coping with information overload and uncertainty (Sundar, 2008). The abundance of information sources makes traditional notions of credibility originating from an authority (e.g., an organization) problematic (Metzger et al., 2010). Social media's ability to aggregate information and connect individuals provides new potential for information and peer-to-peer credibility assessments (Flanagin & Metzger, 2007). Research on online information processing suggests that people rarely verify online information and use verification strategies that require less time and mental effort, such as source information (Metzger et al., 2010). Research on information processing supports these findings, and suggests that people who seek information online cope with information search and overload through using strategies that minimize cognitive effort (Metzger et al., 2010; Sundar, 2008; Walther, 1992). People do so by using cognitive heuristics. These heuristics entail information processing strategies that consist of useful mental short cuts, rules of thumb, or guidelines that aid information processing and reduce cognitive overload (Metzger et al., 2010). Metzger et al. (2010) identified five key heuristics through which credibility assessments are made: reputation, endorsement, consistency, expectancy violation, and persuasive intent.

In the context of SCCT and credibility perceptions, the reputation and persuasive intent heuristic are especially prevalent (Coombs, 2007). The reputation heuristic, referred to as ''authority'' by Sundar (2008, p. 84), signals the reliance on prior reputation and name recognition as sources of credibility (Metzger et al., 2010). However, individual employees are often not to blame for the organization being involved in the crisis. Rather, the organization itself is ''at a credibility disadvantage for being involved in the crisis'' (Veil & Ojeda, 2010, p. 415). Therefore, it is important for organizations to communicate accurate information promptly and efficiently to increase credibility (Veil & Ojeda, 2010). Yet, employees may be perceived as more credible sources than the organization itself. In addition, employees have a stronger psychological dimension, as they are closer to the organization and the crisis than other stakeholders (Johansen et al., 2012). As such, when a crisis occurs, employees can promptly engage in communicative actions trying to make sense of the crisis situation from an *eyewitness* point of view (Frandsen & Johansen, 2011; Morris, Counts, Roseway, Hoff, & Schwarz, 2012). We argue that employees are often not burdened with the credibility disadvantage organizations suffer as a result of the crises.

The persuasive intent heuristic posits that there is an ulterior motive on the part of information source, which negatively affects credibility perceptions (Metzger et al., 2010). Research on electronic word of mouth (eWOM) has already established that online, user-generated messages are perceived as more credible than organization-directed messages (e.g., Charron, Favier, & li, 2006; van Noort & Willemsen, 2012). Likewise, Flanagin and Metzger (2000) concluded that commercial information, in general, is viewed as less credible. Moreover, Fournier and Avery (2011), noted that social media are intended for users, rather than institutions, as such institutional sources are, by definition, susceptible to more public scrutiny. In addition, Coombs and Holladay (2008) noted that in online crisis communication, the emphasis is on assessing the credibility and validity of information and its sources. To do so, people determine the motives behind a message and have frameworks to assess the credibility of sources. Although institutional sources often have an ulterior motive, or second (hidden) agenda (e.g., protecting their reputation or increasing sales figures), employees are deemed to be less bound by such motives. As such it is expected that:

H3: Source and content credibility have a positive effect on post-crisis evaluations of organizational reputation.

H4: The effect of source and content credibility on post-crisis evaluations of organizational reputation is stronger when employees are the information source rather than the organization as information source.

Reputation

As noted, credibility can be assessed from two different perspectives, source credibility and content credibility (Metzger et al., 2003; Yang, Kang, & Johnson, 2010). Source and content credibility are critical to establish positive postcrisis outcomes. Credibility is closely related to perceptions of reputation (Coombs & Holladay, 2002), as enhanced credibility facilitates the development of a more favorable organizational reputation (Coombs & Holladay, 2008). Organizational reputation develops through the information the public receives in the interaction with the organization or its employees. Publics seek to reduce uncertainty in crisis situations (Weick, 1995), as such perceptions of credibility of information are crucial to make sense of the situation (Westerman et al., 2012). Hence, the effect of the communication strategy on reputation is likely to be mediated by perceptions of credibility. Prior research indicated that organizational (i.e., source) credibility mediates the effect of crisis response on postcrisis reputation (Claeys & Cauberghe, 2012). By the same token, we hypothesize that perceptions of content credibility mediate the effect of crisis response on post-crisis reputation. Hence, crises-response strategies that are perceived as more credible are more likely to reduce reputational damage (Claeys & Cauberghe, 2012).

H5: The effects of crisis-response strategies on the organization's reputation are mediated by perceptions of source and content credibility in case of the organization and employee as communicator.

METHOD

Participants

Participants ($N = 483$) were recruited from communication courses at the University of Amsterdam. Participants received research credits for their participation. The mean age of the participants was 23.81 ($SD = 9.34$) and 69% were women. In all, 49.9% of the participants reported having a Twitter account. Because half of the respondent did not have a personal Twitter account, they might be less experienced and knowledgeable about Twitter as an information source. Therefore, we have controlled for respondents' possession of a personal Twitter account. Notably, tweets are easily searchable and accessible also for those not in the possession of a personal Twitter account. It is the open-by-default, private-by-effort nature of Twitter that makes this channel omnipresent in organization–public communication (Marwick & Boyd, 2010; Westerman et al., 2012).

Procedure and Design

The experiment had a 2 (source: organization, employee) $\times$ 3 (crisis-response strategy: denial, diminish, rebuild) design. First, participants were familiarized with the crisis situation by means of an article on the Dutch press association web site. The German carmaker Mercedes-Benz was used in a fictional scenario. The article of the well-known Dutch press agency, named ANP, contained a visible image of the logo of ANP and the text started with ''Amsterdam (ANP).'' As such, the respondents could identify the source of the text as a neutral press agency. The article, 129 words long, reported that there had been hundreds of accidents due to technical malfunctions with the throttle of the Mercedes-Benz B-class cars. The article further reported that five people have been seriously injured, of which two are still in critical condition. Subsequently, participants were randomly assigned to one of six conditions, containing a crisis response strategy, either by Mercedes-Benz' verified Twitter account or an employee of Mercedes-Benz. After which, source credibility, content credibility, organizational reputation, and finally demographics were assessed. On the last page, participants were thanked for their efforts and debriefed. We explained that the situation was fictional and solely created for the purpose of this study. We emphasized that Mercedes-Benz did not experience any technical malfunction in the Mercedes-Benz B-class cars, nor were there any accidents or any injuries.

Experimental Materials

To manipulate the source, participants were exposed to the Mercedes-Benz NL verified Twitter timeline or the timeline of an employee of Mercedes-Benz NL. To maintain the highest possible external validity, we manipulated the entire timeline of the official account, thus, offering participants a full timeline of tweets as they would encounter in real life. To make a clear distinction between the Twitter accounts, the employee account was personalized with a personal biography of the employee. The biography of the fictional employee Michael van der Houwen (a rather typical Dutch name) stated that he is a sales employee at Mercedes-Benz Netherlands, a father of two children, happily married, and lives in Nieuwegein (a small village in The Netherlands). Additionally, the profile picture of the employee's Twitter account showed a middle-aged man and on the left side of the account several personal pictures of the employee were displayed. The account showed that the employee had over 10,000 tweets, 1,523 followers, and followed 1,648 other Twitter users. The background of the Twitter timeline was simply blue, as is common for simple Twitter accounts. On the other hand, the organization's Twitter account had a more professional touch, compared to the employee's account. The biography of the Mercedes-Benz NL account stated that this was the official account of Mercedes Benz from The Netherlands and contained some contact information. A logo showed that this was the verified account of the organization and the background showed a picture of racetrack and contained links to the Facebook, Google Plus, LinkedIn, and YouTube pages of Mercedes-Benz. This account had a total of 2,469 tweets, over 16,500 followers, and followed 1,009 other Twitter accounts. In general, most elements of the Mercedes-Benz account were based on the actual Twitter account of this organization, to strive for external validity. An example of both the employee account and the organization account are shown in Appendix A. In turn, each crisis-response strategy contained four tweets that were visible on the Twitter account timeline of either the organization or the employee. The content of the tweets was kept comparable between the two sources to ensure that the general messages would be the same. As such, the final results will expose the pure and mere effect of the source of the messages and avoid that the found difference might be explained due to variance in message content. Note that, on Twitter, messages are restricted to 140 characters. For the denial strategy, this meant that the tweets contained texts such as: ''We cannot be held accountable for any problems with the Mercedes-Benz B-class vehicles 1/2;'' ''because there is nothing we could do about this whatsoever 2/2.'' The diminish strategy, included tweets as: ''Fortunately of the more than 6000 models sold by Mercedes NL there were only 30 reports of accidents.'' Finally, the rebuild strategy included tweets stating that ''Mercedes sincerely apologizes to all those that have been victimized by the deficiencies to the Mercedes-Benz B-class cars.''

Measures

The online questionnaire following the experimental conditions was used to assess source credibility, content credibility, and organizational reputation. Source credibility was measured using five items from the scale by Metzger, Flanagin, and Zwarun (2003). This scale is based on a literature review performed by Flanagin and Metzger (2000) who identified believability, accuracy, trustworthiness, bias, and completeness of information as the most consistent dimensions of source or media credibility. As such, participants indicated their agreement with the statements on seven-point Likert scales, for example: ''The sender of these Twitter messages is biased'' and ''The sender of these Twitter messages is believable'' ($\alpha = .79$, $M = 4.44$, $SD = 1.09$). In turn, content credibility was assessed by using six items from Metzger et al. (2003). The scale included the elements accuracy, objectivity, importance, currency (up-to-date), believability, and coverage. Items include: ''The information provided in the message is objective'' ($\alpha = .84$, $M = 3.93$, $SD = 1.13$). To assess organizational reputation we adopted the scale previously used by Coombs and Holladay (2002) using five items: (a) ''The organization is concerned with the well-being of its publics,'' (b) ''The organization is basically dishonest,'' (c) ''I do not trust the organization to tell the truth about the incident,'' (d) ''Under most circumstances, I would be likely to believe what the organization says,'' and (e) ''The organization is not concerned with the well-being of its publics'' ($\alpha = .79$, $M = 4.24$, $SD = 1.10$).

Manipulation Check

Two items, at the end of the questionnaire, checked the manipulation of the source and the crisis-response strategy. First, to check the manipulation of the source, respondent indicated who the sender of the message was; the answer categories were (a) Mercedes-Benz or (b) a Mercedes-Benz employee. Second, to check the manipulation of the crisis-response strategy, respondents indicated whether the Tweets contained either (a) an apology, (b) an attempt to trivialize the situation, or (c) or a denial of any problems. It was also assessed whether participants were able to recall the specific car model. Respondents were provided with five different options of Mercedes-Benz models as answer category, almost 80% correctly identified the Mercedes-Benz B-class car. A chi-square test confirmed the successful manipulation of the source of the messages ($\chi^2 = 125.17$, $p < .001$). Finally, the manipulation for crisis response was also successful; the majority of the participants correctly identified the crisis response strategy they saw ($\chi^2 = 198.03$, $p < .001$).

RESULTS

Analysis

This study was aimed at ascertaining whether evaluations of credibility mediate the relationships between crisis-response strategies and organizational reputation. We tested our hypotheses using a multiple mediation approach (Preacher & Hayes, 2008). The model depicted in Figure 1 was estimated for the employee ($N = 223$) and the organization ($N = 252$) condition separately. Indirect pathways were estimated using bootstrapping. We extracted 1,000 samples to calculate

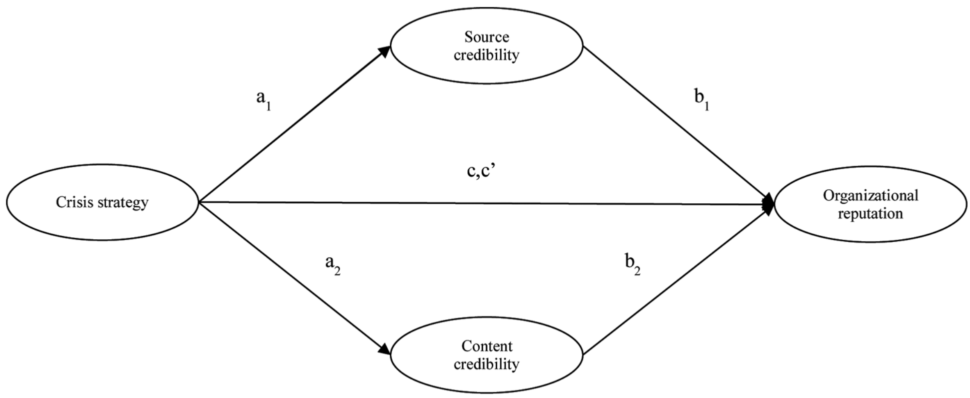

FIGURE 1 Mediation model: Effect of crisis-communication strategy on organizational reputation via source and content credibility.

the indirect effects with a 95% confidence interval for the given indirect effect. The null hypothesis that x has no indirect effect on y through m is rejected when the confidence interval does not include zero. The total effect constitutes of the sum of direct and indirect effects—i.e., $c = c' + a1b1 + a2b2$. Table 1 reports the results in terms of effect sizes and significance of the mediation model for the employee and organization condition.

Respondent's possession of a personal Twitter account was included in these multiple mediation analyses as a covariate. Controlling for this variable did not alter the effect sizes and p-values in the initial model. Accordingly, there was no sign of significant correlations between having a Twitter account and any other variables within the model. Effects were also robust when controlling for age, educational level and gender.

Hypothesis Testing

The first hypothesis posits that a rebuild strategy yields a more positive evaluation of organizational reputation than defensive strategies. In general, the results indicate that both denial ($b^* = -.19$, $p < .001$) and diminish ($b^* = -.10$, $p < .05$) strategies negatively affect postcrisis evaluations of organizational reputation. On the contrary, a rebuild strategy is found to have a significant positive effect on organizational reputation ($b^* = .31$, $p < .001$). Therefore, hypothesis 1 is supported.

Hypothesis 2a predicts that the positive effect of a rebuild strategy on organizational reputation is stronger when employees are the source of information, rather than organizations. In turn, hypothesis 2b states that the negative effects of denial and diminish strategies are weaker when employees are the source of information, rather than the organization. Indeed, with respect to the direct effect of the crisis-response strategies on organizational reputation important differences emerge. As shown in Table 1, a denial strategy yields a significant negative effect on reputation when the organizations employs them ($b^* = -.32$, $p < .05$), however; this effect does not hold in the employee condition ($b^* = -.21$, $p = n.s.$), indicating the absence of further

TABLE 1
Results of mediation model for organization and employee condition: Effect of crisis-communication strategy on organizational reputation via source and content credibility

Condition	a_1	a_2	b_1	b_2	*c (total)*	*c' (direct)*	*Indirect effect 1*	*Indirect effect 2*	R^2 *reputation*
Organization as sender X denial	–.19 (.14)	–.23 (.15)	.15 (.06)**	.43 (.06)****	–.44 (.15)***	–.32**	–.03 (.03) [–.11, .00]	–.10 (.07) [–.25, .00]	.54 f(3,252) = 34.16
Employee as sender X denial	–.09 (.17)	–.56 (.16)****	.22 (.05)****	.44 (.06)****	–.48 (.16)***	–.21 (.13)	–.02 (.04) [–.10,.07]	–.25 (.08) [–.43, –.11]	.59 f(3,223) = 39.18
Organization as sender X diminish	–.02 (.13)	–.32 (.15)**	.16 (.06)**	.43 (.06)****	–.30 (.14)**	–.16 (.12)	–.003(.02) [–.06, .04]	–.14 (.06) [–.27, –.03]	.53 f(3,252) = 31.99
Employee as sender X diminish	–.09 (.16)	–.29 (.15)*	.21 (.05)****	.46 (.06)****	–.16 (.15)	–.004 (.12)	–.02 (.04) [–.10, .06]	–.13 (.07) [–.29, –.01]	.58 f(3,223) = 37.88
Organization as sender X rebuild	.22 (.13)*	.59 (.15)****	.16 (.06)**	.38 (.06)****	.78 (.14)****	.52 (.13)****	.04 (.03) [–.00, .12]	.23 (.07) [.10, .39]	.56 f(3,252) = 39.06
Employee as sender X rebuild	.18 (.17)	.88 (.15)****	.22 (.05)****	.43 (.06)****	.65 (.15)****	.24 (.14)*	.04 (.04) [–.01, .12]	.37 (.09) [.53, .17]	.59 f(3,223) = 39.36

* = $p < .10$, ** = $p < .05$, *** = $p < .01$, **** = $p < .001$.

deterioration of organizational reputation as a result of the crisis. Diminish strategies, in turn, show a similar trend, although both effects are insignificant, the effect size for the organization is larger ($b^* = -.16$, $p = n.s.$) than for employees ($b^* = -.004$, $p = n.s.$). Finally, when rebuild strategies are employed to respond to a crisis, the effects on organizational reputations are stronger when the organization communicates the crisis strategy ($b^* = .52$, $p < .001$), rather than the employees ($b^* = .24$, $p < .10$). Hence, hypothesis 2a is not supported, whereas the results corroborate the reasoning reflected in hypothesis 2b.

Hypothesis 3 predicts that source and content credibility have a positive effect on postcrisis evaluations of organizational reputation. In accordance, both source ($b^* = .45$, $p < .001$) and content ($b^* = .19$, $p < .001$) credibility, regardless of organizational or employee tweets, were found to have a positive effect on organizational reputation.

In turn, hypothesis 4 posits that the effects of source and content credibility on postcrisis evaluations of organizational reputation are stronger if the employees are the information source, rather than organizations. In Table 1, a clear picture can be observed that is in line with these expectations. First, regardless of the applied strategy, the effect of source credibility on reputation is clearly higher for employees (denial: $b^* = .22$, $p < .001$; diminish: $b^* = .21$, $p < .001$; rebuild: $b^* = .22$, $p < .001$) compared to the organization (denial: $b^* = .15$, $p < .01$; diminish: $b^* = .16$, $p < .01$; rebuild: $b^* = .16$, $p < .01$). Second, despite the applied strategy, the effect of content credibility on reputation is higher for employees (denial: $b^* = .44$, $p < .001$; diminish: $b^* = .46$, $p < .001$; rebuild: $b^* = .43$, $p < .001$) compared to the organization (denial: $b^* = .43$, $p < .01$; diminish: $b^* = .43$, $p < .001$; rebuild: $b^* = .38$, $p < .001$). Hence, hypothesis 4 was supported.

Hypothesis 5 reflects the assumption that the effects of crisis-response strategies are mediated by the perceived content credibility. These effects are again depicted in Table 1. All but one indirect effect of crisis-response strategy on organizational reputation through content credibility are significant. A denial strategy employed by the organization did not yield a significant negative effect on reputation through content credibility ($b^* = -.10$, CI95% [–.25, .00]); the same pathway yields a significant indirect effect for employees ($b^* = -.25$, CI95% [–.43, −.11]). With regard to diminish strategies there is a full mediation in the organization condition ($b^* = -.14$, CI95% [–.27, −.03]) and the employee condition ($b^* = -.13$, CI95% [–.29, −.01]). Finally, the effects of the rebuild strategy on reputation through content credibility are significant in the organization condition ($b^* = .23$, CI95% [.10, .39]) and the employee condition ($b^* = .37$, CI95% [.17, .53]). Notably, this effect is stronger for employees than for organizations. Hence, the results provide support for hypothesis 5.

CONCLUSION

This study observed the importance of source and content credibility in crisis communication in the era of socially mediated crisis communication. As such, these findings shed light on the importance of strategically matching the crisis-response strategy and the source for organizations to optimize their crises responses. The authors of this article set out to advance knowledge about crisis-communication effectiveness by including the communicative role of employees as independent actors in times of organizational crisis. The findings are in line with Jin et al. (2011), who emphasized the importance of matching crisis situation and the source of information, i.e., social media. We add to these findings that not only social media are important for crisis response, but that the employees as an online source of information can provoke favorable effects on reputation through source and content credibility.

In fact, the negative effect of denial and diminish strategy on organizational reputation was found to be less profound when communicated by employees, compared to the organization. Looking at the indirect effects through content and source credibility, employees yield stronger and more favorable effects for organizational reputation. These results strongly advocate that judgments of organizational reputation are not only dependent on the crisis-response strategy, but also depend on the source and more specifically on perception of credibility. This is especially true for rebuild strategies, where evaluations of content credibility significantly boost the effectiveness of employees' communication. Additionally, the findings imply that employees communicate defensive strategies most effectively, rather than the organization, which supports the idea that communication efforts are increasingly dependent upon evaluation of source and content credibility (Westerman et al., 2012). In this socially mediated communication era, publics determine the relevance, newsworthiness, and credibility of the information they receive (Utz et al., 2013). Evidently, employees play an important role in the protection of organizational reputation in times of crisis, as they provide credible information to interested publics. In sum, evaluations of credibility are of increasing importance in online crisis communication as is the role of employees.

DISCUSSION

Limitations

Certainly, more questions await future investigations, as the experiment included only a single crisis scenario and one specific public. First, the employee condition concerned the Twitter account and communication of a sales employee. Inclusion of an employee with a different function within the organization might change the final outcomes, which could have critical practical and theoretical implications. Future research could focus on other employee types as a source for crisis communication, such as a strategic communications employee, an executive employee, or a regular employee who is engaged in whistleblowing about the crisis. Additional experiments are needed to examine whether the effects of information and source hold valid across different sources and crisis situations.

Second, in this experimental design the exposure to the organization's Twitter account and the employee's account only included crisis-related tweets. The respondents' exposure to only crisis-related tweets might have caused external validity problems. Future research should include personal tweets on the employee's Twitter account and more official tweets on the organization's account unrelated to the crisis. Moreover, a difference in the wording of the crisis-related tweets between the organization and the employee might provide some additional insight in the underlying mechanisms of the effects of source communication on credibility assessments and public evaluations. Now respondents might assume that the employee is only towing the organization's line in terms of crisis communication. In addition, in this experiment the number of tweets and followers between the organization and the employee account were different. Although this allowed us to maintain high external validity future research might examine possible confounding effects of different numbers of tweets and followers on perceptions of credibility. By the same token, certain tweet characteristics, such as hashtags and hyperlinks embedded in the tweets, warrant further empirical examination in relation to perceptions of credibility.

Third, additional research is needed to further investigate the dynamics underlying the relationship between crisis-response strategy, source of communication, and communication outcomes. This study only scratched the surface of communication outcomes—i.e., focus on evaluations of organizational reputation—resulting from crisis-response strategies. Future research could delve into the role of secondary crisis communication (Utz et al., 2013), which becomes more apparent in today's socially mediated communication realm. Moreover, future research should examine whether additional mediators or communication outcomes need to be considered. For instance, earlier research implies conversational human voice (Kelleher, 2009) and perceived message interactivity (Lee & Park, 2013) might be of particular importance for effective online public relations practice (Liu et al., 2011).

Finally, the findings of this study are difficult to generalize across scenarios, as only one specific scenario was explored, namely a product-recall crisis for Mercedes. Future research could delve into the influence of source type when multiple scenarios are provided. However, by providing a starting point in exploring source influence in crisis communication, this study provides a solid foundation for understanding organizational-crisis communication and the role sources play in it. Despite these limitations, this study is considered to provide a valuable foundation as a starting point to understand and investigate the role of the source and credibility in organizational-crisis communication.

Implications

The findings from this study have several theoretical and practical implications for public relations in the evolving media landscape. This study contributes to theoretical developments in the field of public relations in at least three ways. First, we add to the SCCT by showing that the source of information has a profound impact on the effectiveness of crisis-response strategies. Hence, in an era characterized by online data abundance the source of information and perceptions of credibility shape the reputational thread in times of organizational crisis.

Second, from an information processing perspective this study shows that in times of organizational crises, cognitive heuristics—i.e., reputation heuristic and persuasion intent heuristic—help to understand the mechanisms proposed by SCCT for anticipating publics' response to crisis communication strategies. Third, organization–public relationship theory suggests that to maintain positive impressions of reputation, organizations must place emphasis on maintaining high-quality relationships with employees and other organization publics (Yang, 2007). In times of crisis and the accompanying uncertainty, such relationships are under pressure. This study shows that employees can play a central role in maintaining public relations. Because employees, as information providers through personal accounts, yield stronger positive effects, while diminishing negative effects on public evaluations of organizational reputation, than organizational information sources. In fact, the findings of this study suggest that, in line with internal-stakeholder theory, employees have a pivotal task in contributing to the public's evaluation of organizational reputation and harnessing the organization from further reputational damage, thereby supporting the reasoning that employees' are invaluable assets in sense giving to complex crises related situations from their 'eye-witness' point of view. Notably, the communicative actions of employees are especially dependent on evaluation of source and content credibility. Although the importance of interactivity is often theorized in this era of socially mediated communication, our findings advocate the importance of perceptions of credibility. As such, this study provides additional support for the hypothesis that organizations in crisis situations start at a credibility disadvantage for their involvement in the crisis. However, publics do not seem to attribute such evaluations to the employees of these stricken organizations. Regardless of crisis-response strategy, employees' communication yields stronger effects on reputation than organizational communication, for both perceptions of source and content credibility.

The findings also shed light on the importance of strategically matching the crisis-response strategy and the source, for organizations to optimize their crisis responses. Organizations and employees should collaborate in crisis responses. Employees can provide inside information and make the organization more agile to dialogic communication, which is especially important because crisis situations often demand prompt and dialogic communicative actions to reduce uncertainty. Although this article is exploratory in nature, the findings advocate the importance of source and content credibility as well as the role of employees in the era of socially mediated crisis communication.

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APPENDIX A

FIGURE A1 Example Twitter account employee.

FIGURE A2 Example Twitter account organization.